

Project Approval

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

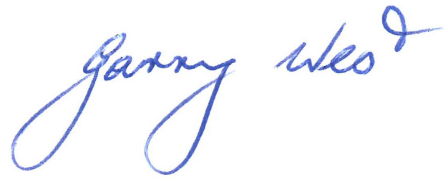
As delegate of the Minister for Planning and Infrastructure under delegation executed on 14 September 2011, we the Planning Assessment Commission of New South Wales (the Commission) approve the application referred to in Schedule 1, subject to the conditions in Schedules 2 to 5.

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.



Member of the Commission



Member of the Commission

Sydney 4 July 2012

SCHEDULE 1

Application No:	06_0220
Proponent:	Armidale Dumaresq Council
Approval Authority:	Minister for Planning
Land:	Part lots 1 and 2 DP 253346 and Part lot 1 DP820271
Project:	Armidale Regional Landfill

TABLE OF CONTENTS

SCHEDULE 2 – DEFINITIONS

SCHEDULE 3 – ADMINISTRATIVE CONDITIONS

- Obligation to Minimise Harm to the Environment
- Terms of Approval
- Limits of Approval
- Structural adequacy
- Subdivision
- Protection of Public Infrastructure
- Operation of Plant and Equipment
- Staged Submission of Plans or Programs
- Compliance

SCHEDULE 4 – SPECIFIC ENVIRONMENTAL CONDITION

- Waste Management
- Landfill Operation
- Soil and Water
- Noise
- Air Quality
- Biodiversity Conservation
- Visual Amenity
- Traffic and Transport

SCHEDULE 5 – ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING

- Environmental Management
- Reporting
- Independent Environmental Audit
- Access to Information

APPENDICES

APPENDIX A – STATEMENT OF COMMITMENTS

APPENDIX B – LAYOUT OF THE PROJECT SITE

APPENDIX C – INDICATIVE FINAL LANDFORM OF LANDFILL AREA

APPENDIX D – INDICATIVE JUNCTION DESIGN

APPENDIX E – BIODIVERSITY OFFSET DIAGRAM

SCHEDULE 2

DEFINITIONS

BCA	Building Code of Australia
CMA	Catchment Management Authority
Construction	The demolition of buildings or works, carrying out of works and erection of buildings and other infrastructure covered by this approval
Council	Armidale Dumaresq Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
DECCW	former Dept of Environment, Climate Change and Water
Department	Department of Planning and Infrastructure
Director-General	Director-General of the Department (or delegate)
EA	Environmental assessment titled Armidale Regional Landfill Environmental assessment (April 2010) and the associated Submissions Report 12 April 2011.
EPA	Environment Protection Authority of OEH
EP&A Act	Environmental Planning & Assessment Act 1979
EP&A Regulation	Environmental Planning & Assessment Regulation 2000
EPL	Environmental Protection Licence
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build
Incident	An incident causing or threatening material harm to the environment, and/or an exceedance of the limits or performance criteria in this approval
Land	In general, the definition of land is consistent with the definition in the EP&A Act.
LEMP	Landfill Environmental Management Plan
Harm to the environment	Harm to the environment involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Minister	Minister for Planning and Infrastructure
Mitigation	Activities associated with reducing the impacts of the Project
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NOW	NSW Office of Water
OEH	Office of Environment and Heritage including the EPA
Operation	The receipt of waste on site and the conduct of waste related operations such as waste compaction, intermediate waste covering and landfill cell capping.
POEO Act	Protection of the Environment Operations Act 1997
Privately-owned Land	Land not owned by the Proponent or where a private agreement does not exist between the Proponent and the land owner
Project	The development described in the EA
Proponent	Armidale Dumaresq Council, or its successor
Reasonable	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.
Rehabilitation	The treatment or management of land disturbed by the project for the purpose of establishing a safe, stable and non-polluting environment
RTA	Roads and Traffic Authority
Site	The land described in Schedule 1
Statement of Commitments	The Proponent's Statement of Commitments in APPENDIX A

SCHEDULE 3

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 construction, operation or decommissioning of the Project.

TERMS OF APPROVAL

2. The Proponent shall carry out the Project generally in accordance with the:
 - a) EA;
 - b) statement of commitments (see APPENDIX A);
 - c) site layout plans and drawings in the EA, (as shown in APPENDIX B); and
 - d) conditions of this approval.
3. If there is any inconsistency between the above documents specified in condition 2, the most recent document shall prevail to the extent of the inconsistency. However, 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 Director-General 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.

LIMITS OF APPROVAL

5. The Proponent shall not exceed the maximum volume for each land-fill cell specified in Table 1. Calculation of the cell-volume shall include the cell cap and intermediate non-waste layers but shall not include the leachate barrier, leachate drainage layer or the re-compacted clay liner at the base of the cell.

Table 1 - Maximum volume for each landfill cell

Cell 1	Cell 2	Cell 3	Cell 4	Cell 5
211,000m ³	211,000m ³	211,000m ³	211,000m ³	211,000m ³

6. The Proponent shall prepare and submit a waste management performance review for the project. The review must:
 - a) be prepared by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
 - b) be submitted to the Director- General at least 12 months before the proposed commencement of each additional landfill cell;
 - c) report on Council's progress in meeting current waste avoidance and resource recovery targets; and
 - d) recommend necessary measures or actions to improve Council's waste avoidance and resource recovery performance to meet current targets.

Note: The Proponent may submit the report in conjunction with the Annual Review under Condition 4 of Schedule 5 or the Independent Environmental Audit under Condition 8 of Schedule 5.

STRUCTURAL ADEQUACY

7. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures are constructed in accordance with the relevant requirements of the BCA.
Note: Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.

SUBDIVISION

8. Before commencing any work on the site, the Proponent shall register a new lot with the Land and Property Information Centre as generally described by the red out-line shown on the site layout in APPENDIX B.

PROTECTION OF PUBLIC INFRASTRUCTURE

9. The Proponent shall:
- a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the Project; and
 - b) 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

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

STAGED SUBMISSION OF PLANS OR PROGRAMS

11. With the approval of the Director-General, the Proponent may submit any plan or program required by this approval on a progressive basis.

COMPLIANCE

12. The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 4. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity:
- a) take all reasonable and feasible steps to bring the operation back into compliance;
 - b) ensure that the exceedance does not recur;
 - c) consider all reasonable and feasible options for remediation (where relevant) and how to prevent a recurrence and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
 - d) implement remediation and prevention measures as directed by the Director-General,
- to the satisfaction of the Director-General.

SCHEDULE 4

SPECIFIC ENVIRONMENTAL CONDITIONS

WASTE MANAGEMENT

Restrictions on Receipt of Waste

1. The Proponent shall only receive waste on site that is authorised for receipt by an EPL.

LANDFILL OPERATION

Cover Material

2. The Proponent shall ensure that all waste cover material used on site is virgin excavated natural material and/or alternative daily cover, as approved in writing by the OEH.

Security

3. The Proponent shall:
 - a) install and maintain a perimeter fence and security gates;
 - b) ensure that the security gates are locked whenever the site is unattended.

SOIL AND WATER

Discharge Limits

4. The Proponent shall ensure that all surface water discharges from the site comply with the:
 - a) discharge limits (both volume and quality) set for the development in any EPL; or
 - b) relevant provisions of the POEO Act.

Leachate Containment System

5. Each landfill cell must be constructed with a leachate barrier that:
 - a) is designed in consultation with OEH and to the satisfaction of the Director General;
 - b) addresses dispersive soil in the A2 and B soil horizons;
 - c) includes:
 - a re-compacted clay liner or similar material at least 90 centimetres thick with an in-situ co-efficient of permeability of less than 10^{-9} metres per second covering the entire floor and walls of each waste disposal cell;
 - a flexible membrane liner stabilised against or protected from ultra violet light with a minimum co-efficient of permeability of less than 10^{-14} metres per second covering the entire floor and walls of each waste disposal cell;
 - a leachate drainage layer for each landfill cell comprising a minimum 300mm layer of drainage medium:
 - with a permeability of not less than 1×10^{-3} metres per second;
 - which is chemically resistant to leachate;
 - which is capable of withstanding the weight of overlying waste;
6. The leachate collection, conveyance and storage system must:
 - a) be designed in consultation with the OEH and to the satisfaction of the Director General;
 - b) be designed to address dispersive soil in the A2 and B soil horizons;
 - c) not include leachate discharge or disposal except by way of:
 - evaporation;
 - irrigation on to an active landfill cell;
 - re-injection into an active or capped landfill cell;
 - transport to a facility licensed to accept such waste;
 - d) include a leachate storage dam that has a minimum leachate storage capacity of 12 megalitres.
7. The leachate storage dam must:
 - a) be designed in consultation with the OEH and to the satisfaction of the Director General
 - b) be designed to address dispersive soil in the A2 and B soil horizons;
 - c) allow for the level of leachate in the storage dam to be maintained such that there is no overflow
 - d) be designed to contain a 100-year ARI 3 day rainfall event and provide 150mm freeboard for wave action, providing a total storage capacity of 14.6ML.
 - e) include high-level alarm and/or interlock system configured such that the alarm is activated and any pump or gravity flow of leachate to the dam is automatically shut down prior to dam overflow.
 - f) Include a leachate barrier comprising:

- a re-compacted clay or similar material at least 90 centimetres thick with an in situ co-efficient of permeability of less than 10^{-9} metres per second covering the entire floor and walls of the dam/s;
- a flexible membrane liner stabilised against or protected from ultra violet light with a minimum co-efficient of permeability of less than 10^{-14} metres per second covering the entire floor and walls of the dam/s.

Construction Quality Assurance Plan

8. The Proponent shall prepare and implement a Construction Quality Assurance Plan. The plan must:
 - a) be prepared in consultation with OEH by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
 - b) be approved by Director General prior the commencement of construction;
 - c) specify leachate-barrier material selection and construction techniques;
 - d) include a geotechnical assessment and map of suitable construction clay;
 - e) specify validation of thickness and permeability of leachate barrier/s;
 - f) include an environmental-awareness site-induction for construction personnel.

Note: The geotechnical assessment and map must be more detailed than the assessment and map in the EA.

Leachate Management Plan

9. The Proponent shall prepare and implement a Leachate Management Plan. The plan must:
 - a) be prepared in consultation with OEH and NOW by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
 - b) be approved by Director General prior to the commencement of construction;
 - c) include a water balance for the Project;
 - d) include design specifications for the leachate containment system (see conditions 5, 6 and 7 of this schedule);
 - e) include design specifications that address dispersive soil in the A2 and B soil horizons;
 - f) include a ground and surface water monitoring plan for the site in consultation with NOW. The plan shall include details on:
 - the number, design and location for the monitoring bores, including upstream groundwater bore/s for baseline data collection;
 - timelines for establishment and sampling regime(s) for the monitoring bores;
 - monitoring frequency, including monitoring during rainfall;
 - a schedule of contaminants to be monitored; and
 - reporting requirements for the sampling results.
 - The plan must be submitted to the Director-General within 6 months of the date of this approval and be endorsed by NOW before submission.
 - The Proponent shall install the baseline monitoring bore and implement the baseline monitoring sampling program before commencing construction of the landfill.
 - The Proponent shall implement the approved ground and surface water monitoring plan to the satisfaction of the Director-General.
 - g) ensure all surface waters are directed away from the leachate containment system;
 - h) ensure all lateral flows in the A2 soil horizon are directed away from the leachate containment system.
 - i) ensure any water that contacts waste or leachate is handled as leachate;
 - j) include remedial action plan should leachate escape the leachate containment system.

Stormwater Management

10. Stormwater infrastructure must installed to the satisfaction of the Director General: The design must:
 - a) be prepared in consultation with NOW and OEH and to the satisfaction of the Director General;
 - b) be approved by Director General prior to the commencement of construction;
 - c) direct clean water in overland flow around operational parts of the site;
 - d) prevent cross-contamination of clean or sediment laden water with leachate;
 - e) direct all sediment laden water in overland flow
 - away from the leachate containment system;
 - to a sediment basin with capacity for a 5 day 95th percentile storm with a minimum storage capacity of 5250m³.
 - f) include a dry detention basin below the operational parts of the site with capacity for a 100 year ARI 3 day rainfall event with a minimum storage capacity of 30ML;
 - g) address stormwater run-off from ancillary parts of the site such as the access road.
11. The proponent shall manage the sediment basin so that it maintains capacity to store run-off from the 5 day 95th percentile storm.

Soil and Water Management Plan

12. The Proponent shall prepare and implement a soil and water management plan. The plan must:
- be prepared in consultation with the OEH and NOW by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
 - be approved by Director General prior to the commencement of construction;
 - include design specifications for stormwater infrastructure (see conditions 10 and 11 of this schedule);
 - include design specifications for erosion and sediment control to:
 - minimise erosion and soil-loss;
 - set aside any topsoil in manner appropriate for re-use in site rehabilitation;
 - minimise the tracking of mud and waste by vehicles onto public roads.
 - address the environmental and structural risks of dispersive soils in the A2 and B soil horizons;
 - ensure that watercourse and natural drainage lines maintain natural hydrological flows and geomorphic integrity;
 - address any Harvestable Right Order that might apply;
 - specify work methods within riparian areas and drainage lines in accordance with the *Guidelines for Controlled Activities 2008*.

Bunding

13. The Proponent shall store all chemicals, fuels and oils used on site in appropriately bunded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund, unless double-skinned tanks are used. Any bunds shall be designed and installed in accordance with the requirements of all relevant *Australian Standards*, and/or EPA's *Environmental Protection Manual: Technical Bulletin Bunding and Spill Management*.

Wastewater Management

14. The Proponent shall ensure that:
- The on-site waste water treatment system for staff amenities and vehicle-wash is operated in accordance with an approval under section 68 of the *Local Government Act 1993*.
 - the design of the system is consistent with Council's DCP (if applicable).

NOISE

Operating Hours

15. The Proponent shall comply with the operating hours in Table 2.

Table 2 - Operating Hours

Activity	Day	Hours
Construction	Monday - Friday	7 am – 5 pm
	Saturday	8 am – 1 pm
	Any other time	Only with the prior written approval of OEH and subject to any conditions that may be imposed.
Operation	Monday - Friday	7 am – 5.30 pm
	Saturday	8 am – 6 pm
	Any other time	Only during an emergency. The details of any such incident must be reported in accordance with schedule 5, condition 6.

Noise Limits

16. The Proponent shall ensure that the noise generated by the project does not exceed the emission limits in Table 3.

Table 3 - Noise emission limits dB(A)

Receiver	Limit -
Residences on privately-owned land during construction	LA _{eq} (15 minute) 40dB(A)
Residences on privately-owned land during operations	LA _{eq} (15 minute) 35dB(A)
Residence on privately owned land known as 'Sherraloy' during operation of cell 1 only	LA _{eq} (15 minute) 38dB(A)

Notes:

- LA_{eq} (15 minute) is the level of noise equivalent to the average of noise levels occurring over the measured period (i.e. 15 minutes).
- For the purpose of noise measures required for this condition, the LA_{eq} noise level must be measured or computed at any point within 30 metres of any residence not on the premises over a period of 15 minutes

using "FAST" response on the sound level meter. Where it can be demonstrated that direct measurement at such a location is impractical, an alternative means of determining compliance under Chapter 11 of the NSW Industrial Noise Policy may be acceptable.

- Modification factors in Section 4 of the NSW Industrial Noise Policy apply to the measured noise levels.
- The noise emission limits apply under all meteorological conditions except during rain and wind speeds greater than 3m/s at 10m height; and under "non-significant weather conditions". Field meteorological indicators for non-significant weather conditions are described in the NSW Industrial Noise Policy, Chapter 5 and Appendix E in relation to wind and temperature inversions.

17. Before operation commences a noise-easement must be registered on the title of the residual lot containing the dwelling on the farm 'Sherraloy' allowing the noise criteria as specified in condition 16 of this Schedule.
18. The Proponent must prepare and implement a Noise Management Plan (NMP) prior to commencement of operation that covers all premises based activities and transport operations. The plan must:
 - a) be prepared in consultation with the OEH by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
 - b) be approved by the Director-General prior to the commencement of construction;
 - c) include a system that allows for periodic assessment of Best Management Practice (BMP) and Best Available Technology Economically Achievable (BATEA) that has the potential to minimise noise levels from the facility;
 - d) specify effective implementation of identified BMP and BATEA measures, where considered feasible and reasonable;
 - e) include a program for monitoring the noise impacts of the project including real time noise monitors to measure noise emissions during operation;
 - f) include measures to record and respond to complaints;
 - g) include measures for community consultation including site contact details;
 - h) include specifications and protocols for the installation and relocation of mobile noise barriers; and
 - i) describe mitigation measures that would be implemented in the event that a non-compliance is identified with the noise impact assessment criteria in this approval.

AIR QUALITY

Dust

19. All operations and activities occurring at the premises or on a haulage route must be carried out in a manner that will minimise emissions of dust.
20. Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.

Odour

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

Greenhouse Gas

22. The Proponent shall implement all reasonable and feasible measures to minimise:
 - a) greenhouse gas emissions;
 - b) energy use.
23. The Proponent shall prepare and implement a Greenhouse Gas Management Plan in consultation with the OEH and to the satisfaction of the Director-General prior to commencement of operations.

Air Quality Monitoring Plan

24. The Proponent shall prepare and implement an Air Quality Monitoring Plan in consultation with the OEH and to the satisfaction of the Director-General prior to the commencement of operations.

Meteorological Monitoring

25. During the life of the project, the Proponent shall ensure that there is a suitable meteorological station in the vicinity of the site that complies with the requirements in the latest version of Approved Methods for Sampling of Air Pollutants in New South Wales guideline.

BIODIVERSITY CONSERVATION

Biodiversity Offset Package

26. A biodiversity offset package must be implemented to the satisfaction of the Director General. The package must generally conform to Biodiversity Offset Management Plan in the EA prepared by EA Systems (17 February 2010) and include:
- a) the offset areas mapped in the diagram at APPENDIX E;
 - b) ongoing monitoring and review for effectiveness;
 - c) security in perpetuity to the satisfaction of OEH.

Conservation Management Plan

27. The Proponent shall prepare and implement a Conservation Management Plan. The plan must:
- a) be prepared in consultation with the CMA and OEH, by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
 - b) be approved by Director General prior to the commencement of construction;
 - c) generally conform with the recommendations in the Flora and Fauna Assessment in the EA prepared by EA Systems (17 February 2010)
 - d) include detailed specifications for the biodiversity offset package;
 - e) specify minimum qualifications for any person involved in biodiversity management;
 - f) specify a protocol for tree removal. The protocol must include:
 - a construction schedule showing progressive tree removal to the minimum extent necessary;
 - a prohibition on the use of loud or heavy machinery within 100m of the 2009 Little Eagle nest tree during breeding season (August to January);
 - tree tagging for significant trees that can be retained. Significant trees include:
 - individual stands of *Eucalyptus nicholii*;
 - hollow bearing or known habitat trees or stags;
 - individual stands within a critically endangered ecological community.
 - supervision of any tree removal by a suitably qualified person;
 - g) specify Koala management for the site access;
 - h) specify a protocol for isolated finds of Aboriginal artefacts;
 - i) specify any necessary ongoing management measures.

VISUAL AMENITY

Landscaping

28. The proponent shall ensure landscaping and revegetation screens the operational parts of the landfill from Waterfall Way as much as practical and to the satisfaction of the Director General. Any landscaping must be consistent with the Biodiversity Offset Package or Biodiversity Management Plan.

Lighting

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

Signage

30. The Proponent shall not install any advertising signs on site without the written approval of the Director-General.

TRAFFIC AND TRANSPORT

Access Road Work and parking

31. Prior to the commencement of operation the Proponent shall carry out the following work to the satisfaction of the Director General:
- a) construct an AUSTROADS modified BAR treatment to 100km/h standard at the site entrance on Waterfall Way generally in accordance with the diagram in APPENDIX D so through traffic can safely negotiate right-turning vehicles;
 - b) construct an AUSTROADS BAL treatment at the site entrance on Waterfall Way;
 - c) install warning signs and road markings in accordance with RTA requirements;
 - d) provide an entry gate on the access road that is sufficiently distant from the site entry to allow the largest vehicle to stand clear of the public roadway while waiting to enter the site;
 - e) construct and seal an access road from Waterfall Way to the wheel wash facility;

- f) construct a culvert over the affected drainage line/s to allow vehicular access to the landfill during a 1 in 100 year flood event.
- g) construct parking for staff in accordance with *AS 2890 Parking Facilities*.

Note: Any work on Waterfall Way will require a Works Authorisation Deed from the RTA.

Transport Code of Conduct

- 32. The Proponent shall prepare and implement a Transport Code of Conduct for the project to the satisfaction of the Director-General. This code must:
 - a) be prepared in consultation with the RTA by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
 - b) be approved by the Director-General prior to the commencement of operation;
 - c) describe the measures to be implemented to minimise the impacts of the Project on the local and regional road network, including traffic noise.

SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING

ENVIRONMENTAL MANAGEMENT

Construction Management Plan

1. The Proponent shall prepare and implement a Construction Management Plan for the development to be carried out to the satisfaction of the Director-General. The Plan must be approved by the Director General prior to the commencement of work.

Landfill Environmental Management Plan

2. The Proponent shall prepare and implement a Landfill Environmental Management Plan for the Project to the satisfaction of the Director-General. This plan must:
 - a) be prepared by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
 - b) be approved by the Director-General prior to commencement of operation;
 - c) include detailed baseline data;
 - d) incorporate management plans and programs required by this approval;
 - e) address the Benchmark Techniques in Appendix 1 of *Environmental Guidelines for Solid Waste Landfills (1996, Environment Protection Authority)* and the conditions of this approval;
 - f) describe:
 - statutory requirements (including any approval, licence or lease conditions);
 - any limits or performance criteria; and
 - specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Project or any management measures;
 - a) include a protocol for managing and reporting any:
 - incidents;
 - non-compliances with statutory requirements; and
 - exceedances of the relevant limits and/or performance measures / criteria; and
 - g) include a protocol to:
 - inform the local community and relevant agencies 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; and
 - respond to emergencies; and
 - h) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project.
 - i) include a contingency plan to manage any unpredicted impacts and their consequences;
 - j) include a protocol for periodic review of the plan.
 - k) include a program to monitor and report on the impacts and environmental performance of the Project and the effectiveness of any management measures; and
 - l) include a program to investigate and implement ways to improve the environmental performance of the Project over time.

Closure and Rehabilitation

3. The Proponent shall prepare and implement a landfill closure and site rehabilitation plan. The plan must:
 - a) be prepared in consultation with OEH by a suitably qualified and experienced expert whose appointment has been endorsed by the Director-General;
 - b) be approved by the Director General prior to the commencement of operation;
 - c) describe the final landform generally in accordance with the final landform diagram in APPENDIX C;
 - d) ensure the site including capped landfill cells are equivalent to Class 4 agricultural land under the Agricultural Land Suitability Classification guideline;
 - e) include post-closure monitoring of ground and surface waters; and
 - f) include post-closure monitoring of leachate.

Annual Review

4. One year after the commencement of operations, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:
 - a) describe the operations that were carried out in the past year;
 - b) analyse the monitoring results and complaints records of the Project over the past year, which includes a comparison of these results against the:
 - relevant statutory requirements, limits or performance measures/criteria;

- monitoring results of previous years; and
 - relevant predictions in the EA;
- c) Corroboration of leachate and stormwater monitoring results with modelled conditions;
 - d) identify any trends in the monitoring data over the life of the Project; and
 - e) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; and
 - f) describe what measure will be implemented over the next year to improve the environmental performance of the Project.

Revision of Plans & Programs

5. Within 3 months of the submission of an:
 - a) annual review under condition 4 of SCHEDULE 5;
 - b) incident report under condition 6 of SCHEDULE 5;
 - c) independent environmental audit under condition 8 of SCHEDULE 5,

the Proponent shall review, and if necessary revise the plans and programs required under this approval to the satisfaction of the Director-General.

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

REPORTING

Incident

6. Upon detecting an exceedance of the limits/performance criteria in this approval or the occurrence of an incident that causes (or may cause) material harm to the environment, the Proponent shall immediately (or as soon as practical thereafter) notify the Department and other relevant agencies of the exceedance/incident. Within 7 days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular

7. The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval, and to the satisfaction of the Director-General.

INDEPENDENT ENVIRONMENTAL AUDIT

8. Within a year of the commencement of operations of the project, and every 3 years thereafter, unless the Director-General 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 suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
 - b) include consultation with the relevant agencies;
 - c) assess the environmental performance of the project and assess whether it is complying with the relevant requirements in this approval and any relevant EPL (including any plan or program required under these approvals);
 - d) review the adequacy of any plans or programs required under these approvals; and, if appropriate;
 - e) recommend measures or actions to improve the environmental performance of the project, and/or any plan or program required under these approvals.

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Director-General.

9. Within 6 weeks of the completing of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

10. From the commencement of the construction of the project, the Proponent shall make the following information publicly available on its website as it is progressively required by the approval:
 - a) a copy of all current statutory approvals;
 - b) a copy of the current plans and programs required under this approval;
 - c) a summary of the monitoring results of the Project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;
 - d) a complaints register, which is to be updated on a monthly basis;

- e) a copy of the Annual Reviews (over the last 5 years);
- f) a copy of any Independent Environmental Audit, and the Proponent's response to the recommendations in any audit; and
- g) any other matter required by the Director-General.

APPENDIX A

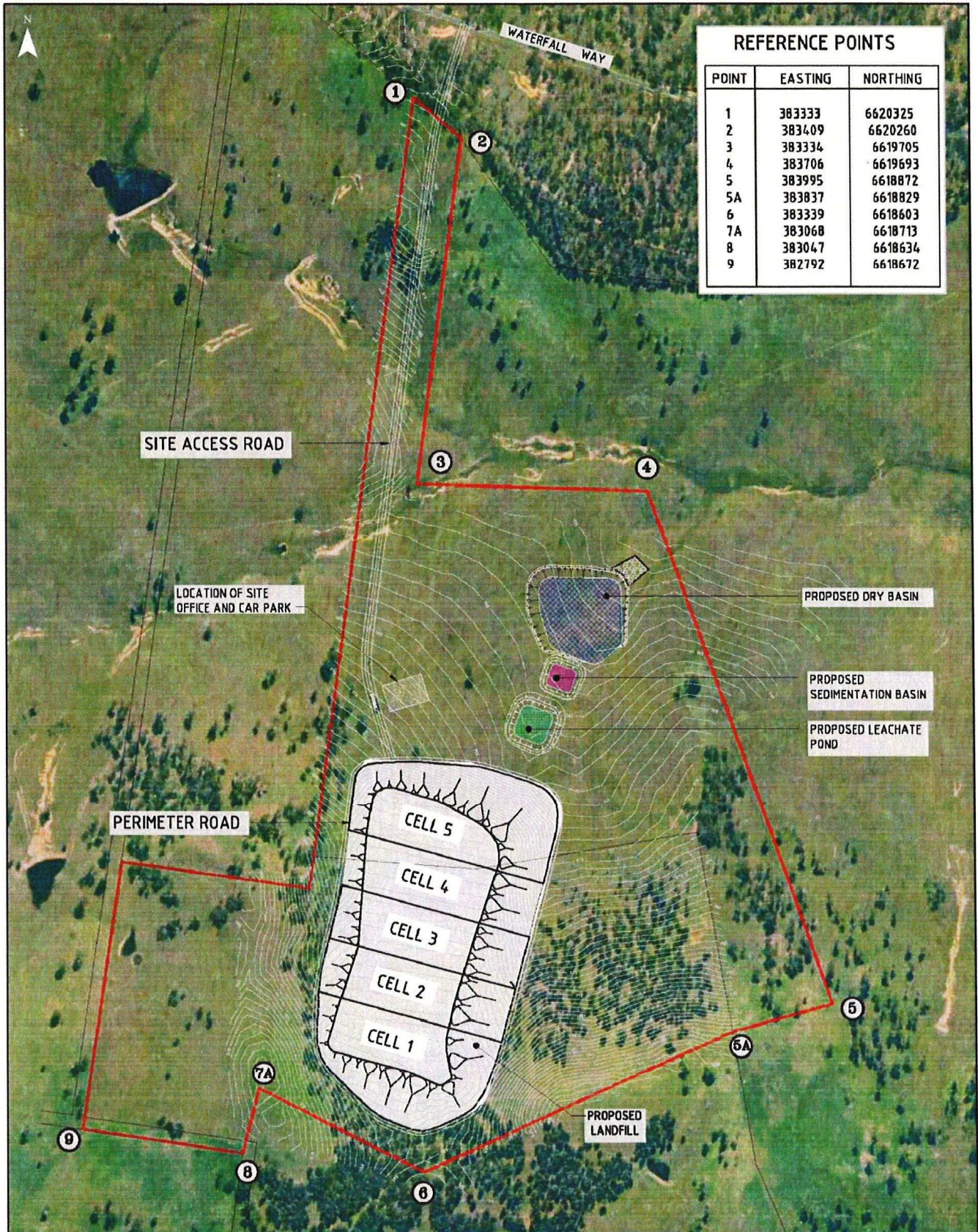
STATEMENT OF COMMITMENTS

Commitments
<p>General Commitments</p> <ol style="list-style-type: none"> The Proponent will undertake the activities, the subject of the Project Approval in accordance with the general descriptions and details provided in the EA, including the mitigation and management measures identified in the EA. The Proponent will gain all necessary approvals and permits supporting both construction and operation. The Proponent will prepare and implement the following management plans for the project: <ul style="list-style-type: none"> A LEMP and associated sub-plans; and A Biodiversity Offset Management Plan The Proponent will ensure that the final design landfill footprint of the proposed landfill facility is determined in consideration of relevant environmental constraints with a view to minimising the potential impacts of the proposal.
<p>Landform and Soils</p> <ol style="list-style-type: none"> The Proponent will implement an Erosion and Sediment Control Plan as part of the LEMP.
<p>Geology</p> <ol style="list-style-type: none"> The Proponent will undertake investigations of the potential geological fault during construction and will then undertake further detailed assessment if evidence of a geological fault is encountered.
<p>Surface Water</p> <ol style="list-style-type: none"> The Proponent will implement a WLMP as part of the LEMP. The Proponent will adopt the Water Sensitive Urban Drainage (WSUD) principles in the design criteria for the control and treatment of drainage runoff. The Proponent will ensure all leachate produced is monitored in accordance with the proposed landfill facility's licensing arrangements under the <i>POEO Act</i>. The Proponent will ensure that monitoring is undertaken as detailed in the Water Quality Monitoring Program and Management Plan.
<p>Groundwater</p> <ol style="list-style-type: none"> The Proponent will implement a Leachate Management System as part of the LEMP and designed in accordance with the relevant <i>Landfill Guidelines Benchmark Techniques</i>. The Proponent will implement a WLMP. The Proponent will ensure that monitoring is undertaken as detailed in the Water Quality Monitoring Program and Management Plan and in accordance with an EPL.
<p>Air Quality</p> <ol style="list-style-type: none"> The Proponent will ensure that air quality management practices identified in the EA will be included in the LEMP.
<p>Greenhouse Gas</p> <ol style="list-style-type: none"> The Proponent will undertake a regular review of the viability of retro fitting the landfill with alternative landfill gas management techniques.
<p>Noise</p> <ol style="list-style-type: none"> As part of the LEMP, the Proponent will prepare a Construction Noise Management Plan in accordance with the relevant <i>DECCW Guidelines</i>.

Commitments
<p>Biodiversity Issues</p> <p>17. The Proponent will ensure that the LEMP contains appropriate measures to avoid or reduce secondary/downstream impacts on biodiversity. The LEMP will include the following management sub plans:</p> <ul style="list-style-type: none"> - Native Fauna Management Plan - Fire Management Plan - Pest Management Plan - Disease Monitoring Protocol <p>18. The Proponent will adhere to the mitigation measures identified in the Biodiversity Offset Management Plan.</p>
<p>Socio-Economic</p> <p>19. The Proponent will undertake community consultation as identified in the EA.</p>
<p>Indigenous Heritage</p> <p>20. The Proponent will prepare and implement an Indigenous Heritage Management Plan.</p> <p>21. The Proponent will fence off and avoid significant Aboriginal heritage sites.</p>
<p>National Environmental Heritage</p> <p>22. The Proponent will implement a WLMP to appropriately manage both surface water and leachate during the operational life of the landfill.</p>
<p>Land Use</p> <p>23. The Proponent will build a cattle grid into the access road.</p> <p>24. The Proponent will ensure grazing stock do not enter the landfill area.</p>
<p>Traffic and Transport</p> <p>25. The Proponent will upgrade the T-junction intersection on Waterfall Way.</p>
<p>Hazards</p> <p>26. The Proponent will ensure relevant Materials Safety Data Sheets, spill containment and safety equipment is installed at the proposed landfill facility.</p> <p>27. The Proponent will ensure the proposed landfill facility is fenced to prevent vandalism.</p> <p>28. The Proponent will monitor landfill gas accumulation.</p> <p>29. The Proponent will prepare and implement an Emergency Response Plan for fire protection, flood hazards, and OH&S practices.</p>
<p>Visual</p> <p>30. The Proponent will provide vegetation screening of the landfill facility using plantings of species endemic to the local area.</p> <p>31. The Proponent will maintain all vegetation outside the landfill footprint but within the boundaries of the Project Site for the life of the landfill.</p>
<p>Climate Change</p> <p>32. The Proponent will allow a freeboard in the design of the landfill dry basin (that captures overflows from the leachate pond and sedimentation basin) to capture the 100 year storm event.</p> <p>33. The Proponent will implement and adhere to the mitigation measures identified in the Biodiversity Offset Management Plan.</p>

APPENDIX B

LAYOUT OF THE PROJECT SITE



ARMIDALE DUMARESQ COUNCIL - ARMIDALE REGIONAL LANDFILL FACILITY
INDICATIVE SITE LAYOUT PLAN

Source: AECOM (2008)

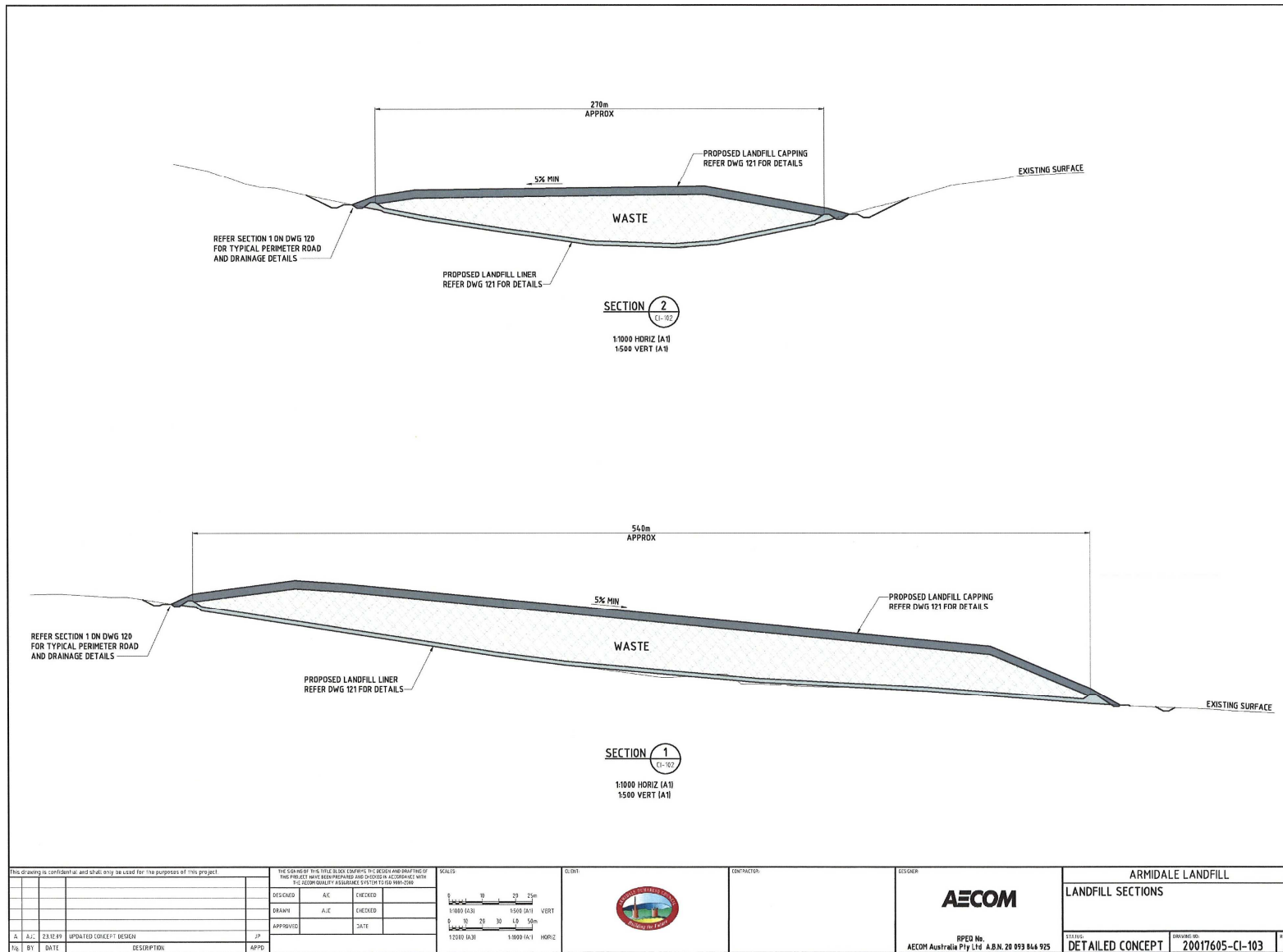
FEB 2010
60011672

0 50 100 200
m

Fig 6

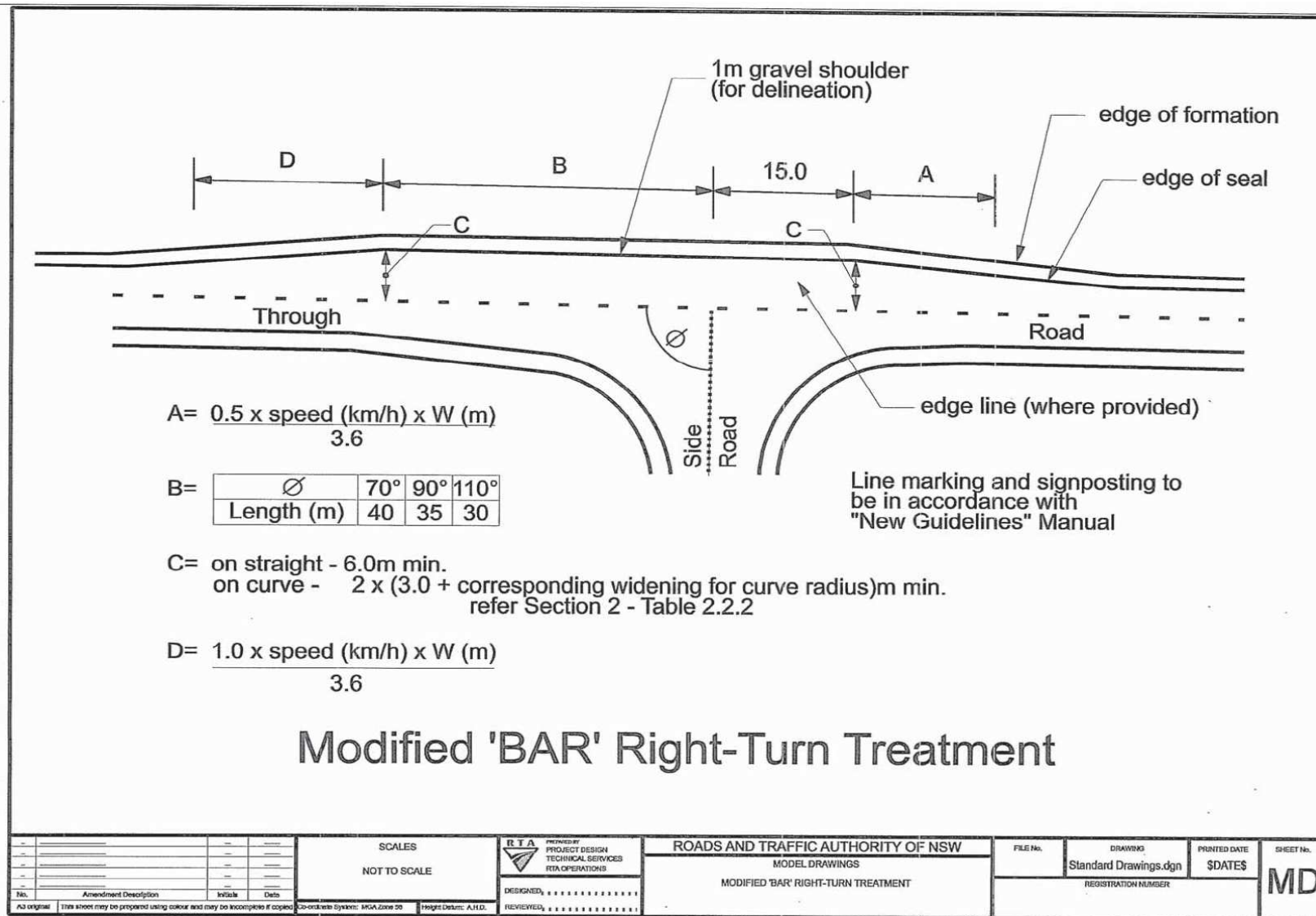
APPENDIX C

INDICATIVE FINAL LANDFORM OF LANDFILL AREA



APPENDIX D

INDICATIVE JUNCTION DESIGN



APPENDIX E

BIODIVERSITY OFFSET DIAGRAM



Legend

-  Stringybark Woodland Offset Area
-  Grassland Offset Area
-  Existing Grassland
-  Existing Sedgeland
-  Existing Stringybark Woodland
-  Proposed Landfill Boundary

