

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

**DETERMINATION OF A DEVELOPMENT APPLICATION UNDER SECTION 80(1) OF THE
ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979**

I, the Minister for Urban Affairs and Planning, under Section 80(1) of the *Environmental Planning and Assessment Act, 1979* (the Act), determine the Development Application referred to in Schedule 1 by granting consent to the Application, subject to the conditions set out in Schedule 2.

The reason for the imposition of conditions is to minimise any adverse environmental effects of the development, consistent with the objectives of the Act.

Andrew Refshauge MP
Minister for Urban Affairs and Planning

Sydney, 19 December 2000

File No. S99/00247 Pt 7

SCHEDULE 1

Application made by:	State Rail Authority ("the Applicant").
To:	The Minister for Urban Affairs and Planning ("the Minister").
In respect of:	Lots 120, 121, 196 and 198 and part Lot 132 DP 31912, Lots 1 and 2 DP 876781, Lot 2031 DP 815293, Lot 7 DP 31908, Lot 98 DP 31909, Lot 1331 DP 586330, Parish of Rooty Hill, County of Cumberland, in the Penrith Local Government Area.
For the following:	The construction and operation of an intermodal rail freight facility including: an intermodal rail freight terminal; a rail-based grain receival, storage and processing facility; and a sand/sandstone recycling facility including an overland conveyor.
Development Application:	DA No. 170-05-2000 lodged with the Department of Urban Affairs and Planning on 25 May 2000, accompanied by an Environmental Impact Statement prepared by Umwelt (Australia) Pty Limited, and dated May 2000.
Determination:	1) To ascertain the date upon which the consent becomes effective, refer to Section 83 of the Act. 2) To ascertain the date upon which the consent is liable to lapse, refer to Section 95 of the Act. 3) Section 97 of the Act confers on an Applicant who is dissatisfied with the determination of a consent authority a right of appeal to the Land and Environment Court exercisable within 12 months after receipt of notice.

SCHEDULE 2

Conditions of Development Consent

Abbreviations and Interpretation

The Act	<i>Environmental Planning and Assessment Act 1979.</i>
Approval from EPA	means approved in writing by the EPA or as specified as a condition of a licence.
Council	Penrith City Council
DA	Development Application
The Department	the Department of Urban Affairs and Planning
The Director-General	Director-General of the Department of Urban Affairs and Planning or delegate.
DLWC	Department of Land and Water Conservation
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EPA	Environment Protection Authority
EPA Licence	means a licence under the <i>Protection of the Environment Operations Act 1997</i> .
L _{A10} (15 minute)	is the sound pressure level that is exceeded for 10% of the time when measured over a 15 minute period.
NPWS	National Parks and Wildlife Service
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
The Regulation	<i>Environmental Planning and Assessment Regulation 1994.</i>
RTA	The Roads and Traffic Authority
Subject Site	Lots 120, 121, 196 and 198 and part Lot 132 DP 31912, Lots 1 and 2 DP 876781, Lot 2031 DP 815293, Lot 7 DP 31908, Lot 98 DP 31909, Lot 1331 DP 586330, Parish of Rooty Hill, County of Cumberland, in the Penrith Local Government Area.

GENERAL

Obligation to Prevent and Minimise Harm to the Environment

1. There is an obligation on the Applicant to prevent and minimise harm to the environment throughout the life of the project. This requires that all practicable measures to taken to prevent and minimise harm that may result from the construction, operation and where relevant, decommissioning activities.
2. Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report shall be supplied to the Department outlining the basic facts. A further detailed report shall be prepared and submitted following investigations of the causes and identification of necessary additional preventative measures. That report shall be submitted to the Director-General no later than 14 days after the incident or potential incident. The Applicant shall maintain a register of accidents, incidents and potential incidents. The register shall be made available for inspection at any time by the Director-General.
3. The Applicant shall meet all reasonable costs incurred by the Director-General or as otherwise agreed by the Director-General in monitoring the project as required by the Conditions of this Consent.

Adherence to Terms of DA and EIS

4. Development shall be carried out in accordance with:

- (a) DA No. 170-05-2000;

- (b) the Environmental Impact Statement *entitled 'Western Sydney Rail Freight Facility at St Marys'* prepared by Umwelt (Australia) Pty Ltd. and dated May 2000 in accordance with Clauses 54A and 55 of the Regulation and certified in accordance with Section 78A of the Act; and
- (c) the additional information provided to the Department in relation to the development

except as modified by the following conditions.

In the event of an inconsistency between this consent and any of (a), (b) or (c) above this consent shall prevail.

Scope of this Consent

- 5. This consent relates to the following drawings/details submitted to the Department of Urban Affairs and Planning with the Development Application:

Drawing No.	Dated	Description
1294/R02		Figure 4.1 (a) Site Layout (as attached as Figure 1 of Consent)
S00-107/S1/B	June 2000	Sandstone Recycling Facility – General Notes & Drawing Index
S00-107/S2/B	June 2000	Sandstone Recycling Facility – General Arrangement & Sit Plan
S00-107/S3/B	June 2000	Sandstone Recycling Facility – Typical Details
S00-107/S4	June 2000	Sandstone Recycling Facility – Conveyor Layout and Details
S00-107/S5	June 2000	Sandstone Recycling Facility – General Sections
53388	25 February 2000	10,000t Grain Storage and Handling Facilities – Plan
53389	25 February 2000	10,000t Grain Storage and Handling Facilities – elevations
52081		Graincorp – St Marys Office Buildings
GA-10/B		St Marys Intermodal Terminal Layout

- 6. A separate application or details (as necessary) shall be submitted for the separate approval of Council, under the provisions of the *Local Government Act 1993*, for the following
 - (a) the erection of any advertising sign, not being exempt development; and
 - (b) the removal of any tree(s) not indicated on the approved plans and any tree(s) located greater than 3 metres from the building perimeter.

Structural Adequacy

- 7. The Applicant shall ensure that the detailed plans and specifications relating to the design and construction of all structural elements associated with the proposed development are structurally adequate and comply with the Building Code of Australia in accordance with Section 115M of the Act and Clause 81NN of the Regulation.

Compliance

- 8. The Applicant shall comply with all relevant conditions prescribed in Part 7 of the *Environmental Planning and Assessment Regulation 1994*, as required by Section 80A (11) of the Act.

Complaints Procedures

- 9. Prior to the commencement of construction, the Applicant shall:
 - (a) publicise a telephone number on which complaints about the subject development can be registered during the hours of operation specified in this Consent;
 - (b) publicise a postal address where written complaints may be lodged; and
 - (c) ensure that the telephone number and postal address is displayed on the property where it can be read from a public road, for the duration of the development.

The Applicant shall record details of all complaints received and actions taken in response to complaints in an up-to-date log book. The log book shall be made available for inspection upon request by the Director-General, the EPA or the Council; and a summary of complaints received shall be included in the Conditions Compliance Reports.

The Applicant shall ensure that an initial response to complaints is provided to the complainant within 24 hours of receipt. The Applicant shall then:

- (a) investigate the concerns raised by the complainant and undertake all reasonable attempts to determine the cause of concern; and
- (b) if adverse impacts are identified, undertake all practicable measures to modify the activity which may be causing the impacts.

If the Applicant's response does not address the complaint to the satisfaction of the complainant within six weeks, the Applicant shall consult with the Director-General and take any action as directed by the Director-General. This may include a requirement to carry out independent investigations of the relevant environmental impact(s) at the cost of the Applicant.

If an independent investigation is required, the Applicant shall:

- (a) appoint a qualified independent person or team to plan and implement an investigation to qualify the impact and determine the sources of the impact; and
- (b) bear the reasonable cost of the independent investigation and make available plans, programs and other information necessary for the independent person to form an appreciation of the past, present and future works and their effects on the relevant environmental impact(s).

This investigation is to be carried out in accordance with a documented Plan. The Plan shall be designed and implemented to measure and/or compute (with appropriate calibration by measurement) the relevant environmental impact(s) or other relevant concerns of the complainant and specify a monitoring period and reporting schedule.

The independent person or team, the Plan and the timing of its implementation, shall be approved by the Director-General. The independent person or team shall report to the Director-General and the Applicant.

Further independent investigations shall cease if the Director-General is satisfied that the relevant levels are not being exceeded and are unlikely to be exceeded in the future.

Dispute Resolution

10. In the event that the Applicant, Council or a government authority other than the Department, cannot agree on the specification or requirements applicable under this Consent, the matter shall be referred by either party to the Director-General or, if not resolved, to the Minister, whose determination of the disagreement shall be final and binding on the parties.

ENVIRONMENTAL MANAGEMENT

Employment of Environmental Management Representative

11. A suitably qualified Environmental Management Representative (EMR) shall be available during construction activity at the site and be present on-site during any critical construction activities as defined in the Environmental Management Plan (EMP). The EMR shall have responsibility for considering and advising on matters specified in the conditions of approval and compliance with such

and facilitation of an induction and training program for all persons involved with the construction activities. The following information shall be provided to the Director-General:

- qualifications of the EMR and demonstration of compliance with AS/NZS ISO 14012:1996 *Guidelines for Environmental Auditing : Qualification criteria for environmental auditors*;
- role and responsibility of the EMR; and,
- authority of the EMR including details of the Proponent's internal reporting structure. This shall include the authority to stop work immediately if in the view of the EMR an unacceptable impact is likely to occur or to require other reasonable steps to be taken to avoid or minimise any adverse impacts

The EMR shall be approved by the Director-General prior to the commencement of construction.

ENVIRONMENTAL MANAGEMENT PLANS

General Requirements

12. The Applicant shall prepare Environmental Management Plans (EMPs), as outlined in Conditions 13 to 16, for the development in consultation with Council and other relevant agencies and to the satisfaction of the Director-General. The EMPs, including incorporated plans, shall be prepared by suitably experienced qualified person(s) and certified by the EMR prior to submitting to the Director-General for approval. The Director-General must approve all variations to the EMPs, including incorporated plans.

The EMPs shall coordinate and integrate environmental management for construction and the operation of existing and proposed development. The Applicants shall, in consultation with the Director-General, update the EMPs from time to time in order to ensure continuing compliance with the conditions of this consent and all relevant approvals and licenses.

The Applicant shall make copies of the EMPs available to Council and the EPA within 14 days of approval by the Director-General.

Construction Environmental Management Plans

13. The Applicant shall prepare a Framework EMP covering construction activities for the entire site. The Framework EMP shall be consistent with the Conditions of this Consent and include, but not be limited to:
 - (a) environmental objectives for the entire site;
 - (b) minimum environmental standards that are required to be met during the project;
 - (c) environmental management system and management and reporting structure to be adopted;
 - (d) proposed staging of construction;

The Framework EMP must be submitted at least one month prior to construction for approval of the Director-General in accordance with Condition 12.

14. The Applicant shall prepare a detailed Construction EMP for each of the following components of the development:
 - ◆ Intermodal Rail Freight Terminal;
 - ◆ Grain Receival and Processing Facility; and,
 - ◆ Sand/Sandstone Recycling Facility / conveyor system / stockpiling site.

The Applicant shall not commence construction of any stage until a Construction EMP has been prepared and approved for that component in accordance with Condition 12.

The Construction EMPs shall also identify approvals and/or licenses required for construction activities, be consistent with the conditions of this Consent and shall include, but not be limited to:

- (a) Stormwater, water quality and sediment control: This section of the plan shall detail:
 - ◆ drainage design plan showing how stormwater runoff from the construction site shall be conveyed and connected to the trunk stormwater drainage system.
 - ◆ measures to manage erosion and sediment control during construction including location of controls, maintenance and monitoring.
 - ◆ measures to prevent contamination of soils or water during construction.This section shall be prepared in accordance with the requirement set out in the Department of Housing's publication '*Managing Urban Stormwater: Soils and Construction*', 3rd Ed, 1998.
- (b) Noise: This section of the plan shall detail controls and monitoring of noise associated with construction activities, consistent the goals set out for construction noise in Condition 54.
- (c) Air: This section of the plan shall detail measures to monitor and control air quality during construction.
- (d) Traffic: measures to monitor and manage construction traffic entering and leaving the site and the traffic impacts at access points.
- (e) Waste: measures to maximise the recycling of waste material and to store and dispose of construction waste material
- (f) Vegetation management and progressive rehabilitation: measures to ensure that:
 - ◆ any clearing of vegetation is limited to those areas identified in Figure 4.1a (attached);
 - ◆ construction procedures and materials do not damage vegetation including temporary fencing of the areas to which the Rehabilitation and Landscape Plan applies;
 - ◆ all disturbed areas are progressively revegetated;
 - ◆ all revegetation works are planned and implemented to enhance and restore native plants communities; and,
 - ◆ a long term weed management is developed and implemented.
- (g) Pre-construction Compliance: evidence of compliance with all relevant conditions of this Consent.
- (h) Other: all other important environmental management measures.

Operational Environmental Management Plans

15. The Applicant shall prepare a Framework Operational EMP covering the operation of the entire site for the approval of the Director-General prior to the commencement of operation. The Framework Operational EMP shall be consistent with the conditions of this Consent and include, but not be limited to:
- (a) environmental objectives for the entire site;
 - (b) an outline of operation protocols for routine and emergency procedures for the entire site;
 - (c) detail operation protocols for infrastructure utilised by more than one of the facility stages detailed in Condition 16;
 - (d) air quality objectives and strategies for the entire site;
 - (e) noise objectives and strategies for the entire site;
 - (f) soil and water objectives and strategies for the entire site;
 - (g) a Rehabilitation and Landscape Plan (Condition 103); and,
 - (h) the Traffic Management Plan (Condition 66).

16. The Applicant shall prepare an Operational EMP for each of the following components of the development:
- ◆ Intermodal Rail Freight Terminal;
 - ◆ Grain Receival and Processing Facility; and,
 - ◆ Sand/Sandstone Recycling Facility / conveyor system / stockpiling site.

The Applicant shall not commence operation of any stage until an Operational EMP has been prepared, approved and implemented for that stage in accordance with Condition 12.

The Operational EMPs shall be consistent with the Conditions of this Consent and include, but not be limited to:

- (a) environmental objectives for the relevant stage;
- (b) detailed operation protocols for routine and emergency procedures for the relevant stage;
- (c) specific controls to limit the impacts of on-site lighting during any night time operations;
- (d) evidence of compliance with all relevant conditions of this Consent;
- (e) an Air Quality Management Plan for the relevant stage (Condition 29);
- (f) a Noise Management Plan for the relevant stage (Condition 59);
- (g) a Soil and Water Management Plan for the relevant stage (Condition 46); and
- (h) a Waste Management Plan.

The specific controls and Plans required under this condition for each stage of development must have regard to the potential cumulative impacts of the entire site development.

MONITORING, REPORTING AND AUDITING

Adaptive monitoring requirements

17. The Director-General may, in consultation with the relevant government authorities and the Applicant, require the monitoring programs established in the Conditions of Consent and implemented through the detailed Plans in the EMPs to be revised or updated at any time to reflect changing environmental requirements or changes in technology or operational practises. All changes to the monitoring programs shall be incorporated into the appropriate protocol in the EMP(s) and shall be made publicly available.

The Applicant may also request the Director-General to approve revision(s) or updating monitoring programs to reflect changing environmental requirements or changes in technology or operational practises.

Monitoring Records

18. The results of any monitoring required by this Consent must be recorded and retained in the following manner:
- (a) records of the dates, times and the place where the sample was collected and the name of the person who collected the sample;
 - (b) records kept in a legible form, or in a form which can readily be reduced to a legible form and can be readily produced for inspection; and,
 - (c) records kept for at least four (4) years after the monitoring took place.

Independent Environmental Audit

19. Within twelve months of commencement of operations, every three (3) years thereafter and at any additional time(s) as the Director-General may direct, the Applicant shall commission an Independent Environmental Audit of the development in accordance with *ISO 14010 – Guidelines and General Principles for Environmental Auditing* and *ISO 14011 – Procedures for Environmental Auditing* (or the

current versions) and any specifications of the Director-General. The Applicant shall submit 2 copies of the report to the Director-General and one copy to the EPA and Council respectively.

The audit shall:

- (a) be carried out at the Applicant's expense; and
 - (b) be conducted by a duly qualified independent person or team approved by the Director-General.
 - (c) include a compliance audit of the performance of the project against the Conditions of this Consent and statutory approvals;
 - (d) review the effectiveness of the environmental management of the development, including any mitigation works in terms of EPA, DLWC and Council requirements;
 - (e) include the results of environmental monitoring required under this consent and other approvals, including interpretation and discussion;
 - (f) include details of all rehabilitation and landscaping measures undertaken since the last report;
 - (g) include a record of all complaints and the actions taken to mitigate such complaints;
 - (h) include a list of all occasions during the previous year when performance goals have not been achieved, indicating the reason for failure to meet the goals and the action taken to prevent re-occurrence of that type of incident;
 - (i) identify trends in monitoring over the life of the project to date; and,
 - (j) identify environmental management targets and strategies for stages of the development yet to be completed, taking into account identified trends in monitoring results.
20. The Director-General may, after considering an audit report and any submissions made by the EPA, Council or other relevant government agency on the report, notify the Applicant of any reasonable requirements for compliance with this Consent. The Applicant shall comply with those requirements within such time as the Director-General may direct.

OPERATIONAL LIMITS

21. No more than 750,000 tonnes per annum of sand/sandstone shall be processed by the development.
22. The volumes of material stockpiled on site shall not exceed:
- ◆ 4,500 cubic metres at the Precinct C raw material stockpile;
 - ◆ 17,000 cubic metres at the Precinct C product stockpiles; and,
 - ◆ 200,000 cubic metres at the Dunheved Cutting.

This limit for the Dunheved Cutting may be varied on occasion up to a maximum of 220,000 cubic metres to accommodate unusual peak loads subject to the approval of the Director-General. To vary this limit the Applicant shall submit a written request to the Director-General at least one month prior to the intended variation.

23. No more than 150,000 tonnes per annum of grain shall be received or processed by the development.

LIGHTING AND SECURITY

24. The Applicant shall only install outdoor lighting which is mounted, screened and directed in such a manner so as not to create a nuisance to surrounding land uses. The lighting shall be the minimum level of illumination necessary for safe operation. The lighting shall be in accordance with AS 4282 – *Control of the obtrusive effects of outdoor lighting (1997)*.
25. The Applicant shall install and maintain appropriate security fencing around the subject site. The Applicant shall install signs prohibiting entry of unauthorised persons.

WASTE

26. The Applicant must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*.

This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the *Protection of the Environment Operations Act 1997*.

AIR QUALITY

Emission Limits

27. Phosphine emissions from the development shall not exceed 0.0122 g/s (100 % concentration limit).

Note: the Applicant will need to provide specific information about emission points when applying for an Environmental Protection Licence issued by the EPA.

28. The Applicant shall comply with the following air quality performance goals at the nearest residence:
- (a) total dust deposition of 4g/m²/month (annual average);
 - (b) phosphine concentration of 5.6 ug/m³ (3-minute average, 99.9th percentile).
 - (c) total suspended particulate of 90 ug/m³ (annual average); and
 - (d) PM10 concentration of 30 ug/m³ (annual average) and 50 ug/m³ (24 hour);

Air Quality Management Plan

29. The Applicant shall prepare and implement an Air Quality Management Plan for each stage of the project identified in Condition 16 and incorporate this Plan into the relevant Operation EMP.

The Air Quality Management Plan shall address activities likely to generate dust and shall contain, but not be limited to:

- (a) identification of existing and potential sources of dust deposition, TSP, fine particulates (PM₁₀) and phosphine and specify appropriate monitoring intervals, timing and locations having regard to local meteorology and the relevant Australian Standards, identifying the methodologies to be used, including justification for monitoring intervals, weather conditions and seasonal variations. The purpose of the monitoring is to evaluate, assess and report on these emissions and the ambient cumulative impacts with the objective of understanding the development's contribution to levels of dust deposition, TSP, fine particulates and phosphine (Grain Receiving and Processing Facility) in ambient air around the site;
- (b) establishment of a protocol for handling dust complaints that includes recording, reporting and acting on complaints;
- (c) details of mitigation measures to be implemented during normal operations and during periods of extreme climatic conditions where high level dust episodes are likely to occur; and
- (d) a reactive management program detailing how and when operations are to be modified to minimise the potential for dust and phosphine emissions, should emission levels exceed the relevant criteria.

Air Quality Monitoring

30. The Applicant shall:

- (a) undertake monitoring at locations described in the Air Quality Management Plan;
- (b) establish dust deposition, TSP, PM₁₀ and phosphine monitoring locations, including sites for monitoring impacts at the nearest private residences, and locations as specified in the Environment Protection Licence issued by the EPA; and,
- (c) provide all results and analysis of air quality monitoring and details of exceedances and the actions taken to ameliorate impacts in the Independent Environmental Audit as required by Condition 19.

31. Dust deposition gauges must be operated and monitoring must be carried out at the two most sensitive dust receivers located outside the boundary of the premises as approved by the EPA. The monitoring must be undertaken in accordance with:

- (a) Australian Standard 3580.10.01 (1991) Particulates – Deposited Matter – Gravimetric Method. Approved method AM-19 referred to in “Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales, December 1999”.
- (b) Australian Standard 2724.3 (1984) Particulate Matter – Determination of Total Suspended Particulates (TSP) – High Volume Sampler Gravimetric Method. Approved method AM-15 referred to in “Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales 1999”.
- (c) Australian Standard 3580.9.6 (1990) Suspended Particulate Matter – PM10 High Volume Sampler with Size Selective Inlet- Gravimetric Method. Approved Method AM-18 referred to in “Approved Methods for the Sampling and Analysis of Air Pollution in New South Wales 1999”.

Note: Testing methods – concentration limits

Monitoring for the concentration of a pollutant emitted to the air required to be conducted by the EPA's general terms of approval, or a licence under the Protection of the Environment Operations Act 1997, in relation to the development or in order to comply with a relevant local calculation protocol must be done in accordance with:

- ◆ any methodology which is required by or under the POEO Act 1997 to be used for the testing of the concentration of the pollutant; or
- ◆ if no such requirement is imposed by or under the POEO Act 1997, any methodology which the general terms of approval or a condition of the licence or the protocol (as the case may be) requires to be used for that testing; or
- ◆ if no such requirement is imposed by or under the POEO Act 1997 or by the general terms of approval or a condition of the licence or the protocol (as the case may be), any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.
- ◆ The Clean Air (Plant and Equipment) Regulation 1997 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication “Approved Methods for the Sampling and Analysis of Air Pollutants in NSW”.)

32. A meteorological station must be installed and operated by the Applicant at a location determined in consultation with the EPA to measure wind speed and direction.

Air Quality Management

33. All activities occurring at the premises shall be carried out in a manner that minimises or prevents the emission of dust from the premises.

34. The Applicant must not commence any construction activities on the premises related to this development application until it has obtained the EPA's written endorsement of a dust impact assessment of the proposed activities. The EPA's endorsement may be by way of issue of an

Environment Protection Licence for the proposal, pursuant to the *Protection of the Environment Operations Act 1997*.

The dust impact assessment must include:

- (a) a description of all unit operations that are proposed to be carried out on the premises;
 - (b) a process flow diagram identifying all dust emission release points on the premises;
 - (c) a list of all proposed dust control equipment and measures to be applied at each dust emission release point, including estimated dust mitigation performances of the control equipment and measures;
 - (d) predicted aggregate dust emission of all dust emission release points on the premises; and
 - (e) estimated total contribution of the proposed activities to dust deposition rates, Total Suspended Particulate concentrations and PM₁₀ levels at the two most affected receivers located outside the premises boundaries.
35. Only one silo, bin or shed shall be vented at any one time unless it can meet the phosphine levels specified in Condition 27.
36. The overland belt conveyors (for both grain and sand) must have adequate controls to ensure no fugitive dust escape and belt scrapers must be installed to effectively remove material from the underside of each belt.
37. An effective water spray system must be installed at open stockpiles and operated as required to maintain the entire surface of the stockpile and related handling areas in a condition that would minimise the emission of wind blown or traffic generated dust.
38. The Applicant shall ensure that trucks entering and leaving the premises that are carrying loads of potentially dust-generating material are covered.
39. To ensure that any vehicles which leave the site do not track materials on public roads the Applicant shall construct and maintain a wheel wash facility or equivalent to be utilised by all trucks departing the sand recycling facility.
40. When conditions are excessively dusty and the dust emissions from operations cannot be maintained within the air quality goals specified in Condition 28, or when the quantity of water available for dust suppression is not adequate to suppress dust (ie drought), then all dust generating operations shall cease until dust suppression can be adequately carried out.

WATER QUALITY

Pollution of waters

41. Except as may be expressly provided by a licence under the *Protection of the Environment Operations Act 1997* in relation of the development, section 120 of the *Protection of the Environment Operations Act 1997* must be complied with in and in connection with the carrying out of the development.

Concentration limits

42. For each discharge point from the sedimentation dams the concentration of a pollutant actively discharged at that point, must not exceed the concentrations limits specified for that pollutant identified below.

Pollutant	Units of measure	100% concentration limit
TSS	MG/L	40
PH	PH UNITS	6.5-8.5

To avoid any doubt, this condition does not authorise the discharge or emission of any other pollutants.

Note: the Applicant will need to provide specific information about the locations, design sizing of sedimentation basins at time of application for Environment Protection Licence

Note: 'active discharge' is discharge by pumping or other facilitated release.

Stormwater and Sediment Control Performance Goals

43. The Applicant shall take all reasonable steps to minimise soil erosion as well as the discharge of sediment, other pollutants and/or waters during the construction and operation of the project.
44. The Applicant shall direct all surface stormwater runoff from any disturbed areas on the site to the sedimentation basins.
45. The sedimentation basin arrangement must be designed and constructed in accordance with the requirements for Type F and/or D basins outlined in *Managing Urban Stormwater: Soils and Construction* – 3rd Edition, August 1998, to capture all stormwater that drains to it resulting from a 90th percentile, 5 day rainfall event. The sedimentation basin arrangement may consist of more than one sedimentation or stormwater storage basin.

Within five days of the cessation of each storm event waters contained within the sedimentation basins must be:

- (a) treated to comply with the conditions of an Environment Protection Licence issued by the EPA; and
- (b) discharged until sufficient free board is available to contain the surfacewater runoff from the next design storm event.

Each basin used for the capture or storage of stormwater at the premises must be identified by a clearly visible sign placed adjacent to the basin that it identifies. Each sedimentation basin must have a marker (the "sedimentation basin marker") that indicates the level where the basin would contain the designed storm event as identified above.

The level of liquid and other material in each sedimentation basin must not exceed the level indicated by the sedimentation basin marker, except:

- when the basin is receiving stormwater caused by rainfall on the premises; or
- within five days of the cessation of any rain.

Whenever the level of liquid and other material in any sedimentation basin exceeds the level indicated by the sedimentation basin marker, the Applicant must take all practical measures to reduce the level of liquid and other material in the sedimentation basin.

Soil and Water Management Plan

46. The Applicant shall prepare and implement a Soil and Water Management Plan for each stage of the project and incorporate this Plan into the relevant EMP required by Condition 16. This Plan shall be prepared in accordance with the requirements set out in the Department of Housing's publication *Managing Urban Stormwater: Soils and Construction* (3rd Ed, 1998).

The Soil and Water Management Plan shall contain, but not be limited to:

- (a) management of the cumulative impacts of the development on the quality and quantity of surface and groundwater, including stormwater in storage, sedimentation dams and flooding impacts;

- (b) consideration of opportunities to reuse waste water;
- (c) details of short and long term measures to be employed to minimise soil erosion and the discharge of sediment to land and/or waters;
- (d) management of the impacts of the development on nearby creeks and waterbodies, in particular, South Creek and Little Creek;
- (e) identification of all potential sources of water pollution and a detailed description of the remedial action to be taken or management systems to be implemented to minimise emissions of these pollutants from all sources within the subject site;
- (f) description of monitoring methodologies and standards that would be adhered to;
- (g) identification of the locations where monitoring would be carried out including rationale for site selection;
- (h) detailed description of the monitoring cycle and the duration of each monitoring cycle;
- (i) contingency plans to be implemented in the event of fuel spills or turbid water discharge from the site; and
- (j) a program for reporting on the effectiveness of the sediment and erosion control system and performance against performance goals.

Water Quality Monitoring

47. For each discharge point from the sedimentation dams, the Applicant shall monitor the volume actively discharged to receiving waters. The Applicant shall use the sampling method (by sampling and obtaining results for analysis), units of measure, and sampling frequency specified in the table below:

Pollutant	Units of Measure	Frequency	Sampling Method
pH	pH units	During active discharge (maximum four samples per calendar month)	Grab sample
TSS	mg/L	During active discharge (maximum four samples per calendar month)	Grab sample

Monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with:

- (a) the Approved methods publication; or
- (b) if there is no methodology required by the Approved Methodology Publication, this consent or in the licence under the *Protection of the Environment Operations Act 1997* in relation to the development or the relevant load calculation protocol, a method approved by the EPA in writing before any tests are conducted, unless otherwise expressly provided in the licence.

Note: 'active discharge' is discharge by pumping or other facilitated release.

Surfacewater Management

48. The Applicant shall ensure that no works are undertaken within 40 metres of the top of the bank of South Creek, within 20 metres of the top of banks of Little Creek or within approved bushland regeneration works, with the exception of suitability designed, environmentally sensitive drainage outlets or other works as approved under the Conditions of Consent.
49. The EMR shall certify that all surfacewater management structures as identified in the EIS or required by these Conditions of Consent are in place. Prior to certification, the EMR shall consult with the DLWC to ensure that all reasonable requirements of the DLWC have been met. The certification shall be provided within 6 months of the date of this Consent or within any other time period as agreed by the Director-General, following the EMR's consultation with the DLWC.

50. The Applicant shall amend the design of the sedimentation basins so that they can be drained.
51. The crossing over Little Creek shall be designed so as to avoid where practicable site disturbance and modification of the natural stream profile.

Note: The DLWC shall also be consulted during the concept design stage for any requirements in relation to a permit under Part 3A of the *Rivers and Foreshores Improvement Act* from the DLWC for the construction of this crossing.

52. The Applicant shall construct a grassed catchdrain in place of the proposed grassed levee to SD 2 in Precinct C.

NOISE

Construction Noise

53. The Applicant must implement all practicable measures to minimise noise emissions from the premises during the construction activities.
54. Prior to the commencement of construction activities, the applicant must provide a Construction Noise Management Plan and incorporate this Plan into the relevant EMP as specified in Condition 14. The Plan shall address, but not necessarily being limited to, the following:
- (a) best management practices and mitigation measures to minimise the exceedances of the construction noise performance goals specified in Table A below;
 - (b) equipment used including equipment noise levels;
 - (c) mitigation measures demonstrating best practice including the design and operation of equipment;
 - (d) compliance monitoring methods and program; and
 - (e) contingency measures to deal with incidents when the construction noise performance goals specified in Table A have been exceeded or when noise complaints have been received.

Table A: Construction Noise Performance Goals

Receiver	Construction Noise Performance Goal
	L _{A10} (15 minute)
133 Forrester Road St Marys	51 dB(A)
Camira Street St Marys	45dB(A)
Albert Street Werrington	48dB(A)
199 Forrester Road St Marys	51dB(A)

The Applicant shall monitor construction noise levels to verify compliance with the construction noise goals. Should monitoring indicate exceedance, the Applicant shall implement any additional mitigation measures to ensure that 'best practice' is being implemented.

55. Prior to the commencement of activities on the site which are likely to exceed noise goals specified in Condition 54 the Applicant shall provide a continuous and permanent noise barrier on the southern side of the Railway line at a height of no less than 4 metres in accordance with Control Option 1 in the EIS. The barrier is to be extended east along Camira Street in accordance with the supplementary noise assessment entitled '*Response to issues raised by NSW EPA in regards to the noise impact for the proposed Western Sydney Rail Freight Facility*', prepared by Dick Benbow and Associates dated 7 September, 2000. Details of the noise barrier shall be prepared in consultation with Council and to the satisfaction of the Director-General.

Note: In determining when this condition may need to be triggered, the Applicant may provide the Director-General with noise monitoring information to demonstrate current noise levels at the relevant receptors.

Construction Hours

56. All construction activities including the entry and departure of heavy vehicles shall be restricted to the hours 7:00 am to 6:00 pm, Monday to Friday; 8:00 am to 1:00 pm on Saturdays and at no time on Sundays or public holidays.

Work outside these hours which may be permitted include:

- ◆ any works which do not cause noise emissions to be audible at any nearby residential property;
- ◆ the delivery of materials which is required outside these hours requested by police or other authorities for safety reasons;
- ◆ emergency work to avoid the loss of lives and/or property and/or to prevent environmental harm.
- ◆ works agreed to by the EPA

In such circumstances, prior notification must be provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.

Pile driving operations shall be restricted to the hours of 8.00 am and 4.00 pm, Mondays to Fridays.

Operational Noise Limits

57. Operational noise from the premises must not exceed the noise emission criterion at the specified location, as presented in Table B.

Table B: Operational Noise Limits

Receiver	Daytime (7am to 10pm) $L_{A10(15 \text{ minute})}$	Night Time (10pm to 7am) $L_{A10(15 \text{ minute})}$	Night Time (10pm to 7am) $L_{A1(1 \text{ minute})}$
133 Forrester Road, St Marys	48dB(A)	42dB(A)	52 dB(A)
Camira Street, St Marys	45dB(A)	38dB(A)	50dB(A)
Albert Street, Werrington	48dB(A)	40dB(A)	52dB(A)
199 Forrester Road, St Marys	48dB(A)	40dB(A)	52dB(A)

The noise emission limits apply for winds up to 3 metres per second and Pascal stability class A, B, C, D, E and F.

The noise emission limits identified above apply for prevailing meteorological conditions (winds up to 3m/s), except under conditions of temperature inversions. Noise impacts that may be exacerbated by temperature inversions must be addressed by:

- documenting noise complaints received to identify any higher level of impacts or patterns of temperature inversions;
- where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts under temperature inversions conditions should be developed and implemented.

Note: For the purpose of noise measurements the L_{A10} noise level must be measured or computed at the most affected receiver specified using "FAST" response on the sound level meter over a period of 15 minutes. The measurement location is the receiver boundary or 30 metres from the receiver facade where the boundary is more than 30 metres away from the receiver facade.

Note : For the purpose of noise measurements the L_{A1} noise level must be measured or computed at 1 metre in front of the worst bedroom window using “FAST” response on the sound level meter over a period of 1 minute.

Definition

$L_{A10(15 \text{ minute})}$ is the sound pressure level that is exceeded for 10% of the time when measured over a 15 minute period.

Note: Noise measurement

For the purpose of the noise criteria for this condition, 5dBA must be added to the measured level if the noise is substantially tonal or impulsive in character. The location or point of impact can be different for each development, for example, at the closest residential receiver or at the closest boundary of the development. Measurement locations can be:

- ◆ 1 metre from the facade of the residence for night time assessment;
- ◆ at the residential boundary;
- ◆ 30 metres from the residence (rural situations) where boundary is more than 30 metres from residence.

Hours of Operation

58. The hours of operation shall generally be as follows:

Activity	Monday to Friday	Saturday	Sundays and Public Holidays
Sand Processing Facility	7:00 am – 6:00 pm	8:00 am – 1:00 pm	No activity permitted
Conveyor to Dunheved Cutting	7:00 am – 10:00 pm*	7:00 am – 10:00 pm*	7:00 am – 10:00 pm*
Grain Processing Facility	7:00 am – 6:00 pm	8:00 am – 1:00 pm	No activity permitted
Rail loading/unloading	7:00 am – 10:00 pm*	7:00 am – 10:00 pm*	7:00 am – 10:00 pm*
Road Haulage	7:00 am – 10:00 pm+	7:00 am – 10:00 pm	No activity permitted
Routine Maintenance	7:00 am – 6:00 pm	8:00 am – 1:00 pm	No activity permitted.

*Activities shall be permitted at night time (10:00 pm to 7:00 am) provided the night time noise limits specified in Condition 57 are met.

+ Activities shall be permitted between the hours of 4.30 am and 7.00 am provided that the night time noise limits specified in Condition 57 are met.

Note: ‘No activity’ does not prevent minor activities (such as access to buildings for administrative, security, emergency purposes or operations internal to buildings which do not generate any external environmental impacts).

Noise Management Plan

59. The Applicant shall prepare and implement a Noise Management Plan for each stage of the project identified in Condition 16 and incorporate this Plan into the relevant Operational EMP.

The Noise Management Plan shall contain, but not be limited to:

- (a) noise limits and parameters to be adhered to;
- (b) identification of existing and potential noise sources and their relative contribution to the cumulative noise impacts from the development;
- (c) appropriate intervals for noise monitoring to evaluate, assess and report noise emission levels due to normal operations of the development under prevailing weather conditions;
- (d) an outline the methodologies to be used, including justification for monitoring intervals, weather conditions, seasonal variations, selecting locations, periods and times of measurements, the

- design of any noise modelling or other studies, including the means for determining the noise levels emitted by the development;
- (e) measures to be taken to document any higher level of impacts or patterns of temperature inversions, and detail actions to quantify and ameliorate enhanced impacts if they occur;
 - (f) details of noise amelioration measures, including measures to be used to reduce the impact of intermittent, low frequency and tonal noise (including truck reversing alarms), an on-site heavy vehicle speed limit and reactive management responses for particular noise sources; and,
 - (g) contingency measures to be implemented should noise complaints be received.

Noise Management

60. The Applicant shall ensure that the use of sirens or other devices which may be a noise nuisance shall not be permitted except in the event of emergency or as required under Occupational, Health and Safety Regulations.
61. Prior to the commencement of activities on the site which are likely to exceed noise limits specified in Condition 57 the Applicant shall provide a continuous and permanent noise barrier to the west of the Intermodal Rail Freight Facility for the purposes of achieving noise attenuation in accordance with the limits specified in Condition 57. The location, height and length of the barrier shall be designed to ensure the operation of the development would meet the operation noise criteria as specified in Condition 57. The barrier shall be constructed in the same material for its entire length, and be in a uniform colour in accordance with the *Penrith Development Control Plan 1996 (Industrial Land)*. Details of the noise barrier shall be prepared in consultation with Council and to the satisfaction of the Director-General.

Note: This barrier may be constructed out of shipping containers provided the provisions of this condition are satisfactorily met.

Note: In determining when this condition may need to be triggered, the Applicant may provide the Director-General with noise monitoring information to demonstrate current noise levels at the relevant receptors.

Noise Monitoring

62. The Applicant shall:
- (a) undertake monitoring in accordance with the Noise Management Plans;
 - (b) establish monitoring locations, at sites established in the EIS, unless otherwise agreed by the Director-General; and,
 - (c) provide all results and analysis of noise monitoring and details of exceedances and the actions taken to ameliorate impacts in the Independent Environmental Audits required by Condition 19.

TRAFFIC AND TRANSPORT

Roadworks

63. The Applicant shall design, manage and reconstruct the intersection of Christie Street and Lee Holm Road. The reconstructed intersection shall be designed and constructed to the satisfaction of the RTA and Council and shall include the following works:
- a) Reconstruction of the Lee Holm Rd approach to 4 lanes over a length of approximately 80 metres.
 - b) Reconstruction of the Christie St approach to 4 lanes over a length of approximately 50 metres either side of Lee Holm Road to allow separation of right turning vehicles from through traffic.

- c) Reconstruction and/or relocation of associated pavement, kerb and gutter, earthworks and stormwater drainage for the length specified in item a and b.
- d) Adjustment to existing driveways.
- e) Provision of appropriate line marking and signposting for the length specified in item a and b.
- f) Relocation of utilities including overhead power poles, Telstra, water and gas underground services to suit road works.

These works shall be completed within 12 months of consent, unless otherwise agreed by the RTA.

In the event that the works exceed \$300,000 (CPI adjusted), the Applicant shall provide the cost details to the Director-General. The cost details shall be prepared in consultation with the Council and shall be certified by a suitably qualified independent person as being an accurate estimate. The Director-General, following consultation with the RTA and Council, may require that the Applicant meet any additional expenses if considered reasonable and necessary to achieve the requirements of this condition or may stage certain works on the proviso that the outcomes required under this condition are still met in such a time as to cater for increased traffic impacts.

Note: The purpose of specifying a financial value in this condition is to provide a level of certainty to the Applicant as to its potential financial obligation. This value is based on current (November 2000) estimates of the costs of such works as provided to the Department by the RTA.

64. If, in accordance with Condition 69, the Forrester Rd access is permanently closed to heavy vehicles, the Applicant shall design, manage and construct signals at the intersection of Christie Street and Lee Holm Road. The design of this intersection shall be approved by the RTA and prepared in consultation with Council prior to construction.

Notwithstanding the above, the Director-General may, following a request from Council, require the Applicant to undertake, at its own expense, an independent safety audit of this intersection prior to the Forrester Road access being closed. Following the Director-General's assessment of this audit, the Director-General may require the Applicant to signalise the intersection.

In the event that the works exceed \$150,000 (CPI adjusted), the Applicant shall provide the cost details to the Director-General. The detailed cost details shall be prepared in consultation with the RTA and shall be certified by a suitably qualified independent person as being an accurate estimate. The Director-General, following consultation with the RTA and Council, may require that the Applicant meet any additional expenses if considered reasonable and necessary to achieve the requirements of this condition or may stage certain works on the proviso that the outcomes required under this condition are still met.

The Director General may also request that the balance of any cost savings made following the implementation of Condition 63 to be made available for the purposes of this condition should costs exceed the specified amount.

Note: The purpose of specifying a financial value in this condition is to provide a level of certainty to the Applicant as to its potential financial obligation. This value is based on current (November 2000) estimates of the costs of such works as provided to the Department by the RTA.

65. The Applicant shall make a financial contribution to Council for costs associated with road pavement maintenance for Lee Holm Road. The value of the contribution shall be based on an geotechnical assessment by a suitably qualified and independent person of pavement and traffic usage to be undertaken three years from the date of consent. The actual value of the contribution and the period for distribution shall be determined after assessment in agreement with Council and the Director - General.

Nothing in this condition shall be interpreted as a contribution towards the widening of Lee Holm Road.

Traffic Management Plan

66. The Applicant shall prepare, in consultation with Council and the RTA, a Traffic Management Plan for the project and incorporate this Plan into the Framework Operational EMP required by Condition 15. The Plan shall document measures to be taken to meet the noise criteria, and procedures for traffic monitoring, reporting and response programs to be implemented in the event of complaints.

Traffic Management

67. Full priority of movement shall be given to any transitway that traverses the site. The Applicant shall undertake all reasonable measures to ensure that no trains, trucks equipment etc. shall obstruct any buses on the transitway.
68. Site access at Christie Street shall be arranged so that only 'left-in-left-out' movements are permitted. The intersection of the site access road and Christie Street shall be designed in accordance with Austroads Standards and shall incorporate an acceleration and deceleration lane to the satisfaction of the RTA and Council.

Note: The RTA has confirmed that the provision of a left-in-left-out at Christie Street will not in any way affect the decision on the possible future upgrade of Christie Street.
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69. The Forrester Road access point shall be closed to heavy vehicles if and when the construction of Council's proposed transport interchange/civic place north of St Marys Railway Station commences.

If the proposed transport interchange / civic place and the bus transitway are not developed within three years from the date of consent, the Applicant shall at its own expense, conduct an independent safety audit in consultation with DoT, bus companies and Council, to assess the change in pedestrian and bus activity surrounding the Forrester Road access point, and to assess potential conflicts of site traffic with these pedestrians and buses and provide the Director-General with a report on the safety audit. The independent auditor shall be approved by the Director-General following concurrence from Council. The audit shall be reviewed every two years thereafter, until such time as the Director-General otherwise agrees. Notwithstanding the above, the Director-General may following a request from Council, require the Applicant to undertake, at its own expense, additional independent safety audits of this intersection. If the safe operation of this access cannot be demonstrated to the satisfaction of the Director-General, the Director-General may close this access.

70. The Forrester Road access shall be closed to heavy vehicles between the hours of 10 pm and 7 am.
71. Heavy vehicle movements shall be limited to no more than 50 to and 50 from the Forrester Road access per day.
72. The road, entrance footpath and associated drainage at the Forrester Road access point shall be designed and constructed to the satisfaction of Council. Design plans shall be submitted for the approval of Council prior to construction.
73. The Applicant shall take all reasonable steps to ensure that heavy vehicle site traffic does not use Wordoo Street.
74. All internal site roads and all road connections to Christie Street and Lee Holm Road shall be established and sealed within 12 months of the date of this consent, unless otherwise agreed by the Director-General. The road connection to Forrester Road shall be sealed within six months of the date of this consent.

75. The Applicant shall install internal control points at each access point. These controls shall be at least 30 metres into the site from the street entrance.
76. The Applicant shall ensure that heavy vehicle movements to and from the site do not exceed an average of 314 movements per day (in plus out) over any one week period, and 30 movements per hour (in plus out).
77. The Applicant shall take all reasonable steps to ensure that all product trucks:
- (a) entering/exiting the site between 7 am and 10 pm travel to and from the subject site via Christie Street, Dunheved Road, Werrington Road, Forrester Road, Glossop Street, Great Western Highway and the M4 except if making a local delivery;
 - (b) entering/exiting the site between 10 pm and 7 am are directed to and from Christie Street and Werrington Road;
 - (c) do not enter the subject site other than by internal haul roads indicated on Figure 4.1 of the EIS;
 - (d) do not queue on Christie Street, Lee Holm Road or Forrester Road at any time; and
 - (e) minimise the use of engine/exhaust brakes on nearby Roads.
78. The Applicant shall erect appropriate signs in the weighbridge area(s) and at the exit gates reminding drivers of route restrictions and of their responsibilities particularly in relation to:
- (a) noise minimisation;
 - (b) dust and spillage minimisation;
 - (c) designated routes; and
 - (d) road safety.
79. The Applicant shall provide adequate on-site car parking for employees and visitors in accordance with *Penrith Development Control Plan 1996 (Industrial Land)* and the relevant Australian Standards.
80. The Applicant shall ensure that all loading, unloading or storage of containers is undertaken wholly within designated areas. The Applicant shall ensure that vehicles are not loaded or unloaded at the kerbside, across the public footpath, or in a manner which obstructs vehicular access to the site or parking areas or interferes with landscaping or the riparian zone.

Monitoring of Transportation

81. The Applicant shall provide a weighbridge(s) or an equivalent, accurate, verifiable load-weight cell system.
82. The Applicant shall record in a daily log, the following parameters for all loaded trucks leaving the site:
- (a) type of material transported;
 - (b) tare and load weights;
 - (c) measures to secure load and prevent loss of material during transport;
 - (d) times of departure of each truck; and,
 - (e) the route for departure of each truck from the point of site access to the State Road network.

This log data shall be made available to the Director-General on request.

83. The Applicant shall record in a daily log, the following parameters for all loaded trucks entering the site:
- (a) the type of material transported; and
 - (b) tare and load weights.

This log data shall be made available to the Director-General on request.

84. The Applicant shall record in a daily log, the following parameters for all trains entering the site:
- (a) Type of material transported to site;
 - (b) Type of material transported from the site;

- (c) the volume/weight of materials transported to and from the site;
- (d) times of departure of each train.

This log data shall be made available to the Director-General on request.

HAZARDS AND RISK

Hazard Management

85. For each dangerous goods class specified in the table below, the number of shipping containers located on the site at any time shall not exceed the maximum number of shipping containers containing goods of that dangerous goods class specified in the table.

Dangerous Goods Class	Maximum Number of Shipping Containers
Class 2.1 - flammable gases	6
Class 2.2 - compressed gases	1
Class 2.3 – poisonous gases	1
Class 3 PGI and Class 3 PGII- flammable liquids	5 (combined quantity of Class 3 PGI and Class 3 PGII)
Class 3 PGIII and C1/C2 - combustible liquids	6 (combined quantity of Class 3 PGIII and C1 and C2)
Class 4.1 - flammable solids	30
Class 4.2 – substances that spontaneously combust	1
Class 4.3 - substances that react with water	1
Class 5.1 - oxidising agents	6
Class 5.2 – organic peroxides	1
Class 6.1 - toxic substances	3
Class 6.2 – infectious substances	1
Class 8 - corrosive substances	7
Class 9 - miscellaneous dangerous goods	3

86. The Applicant shall not locate any quantity of dangerous goods of Class 1 (including sub-classes 1.1, 1.2, 1.3 and 1.4) at any point on the development site without the prior written approval of the Director-General. The approval of the Director-General shall be sought on a case-by-case basis and shall be accompanied by a report providing the following information:
- a) the dangerous goods class, quantity and proposed means of storage for the material for which the Director-General's approval is being sought;
 - b) the reason for the location of the particular material on the site;
 - c) the maximum duration of the location of the particular material on the site;
 - d) any approval(s), licence(s) or alteration to a licence(s) obtained, or required to be obtained from a party other than the Director-General prior to the location of the material on the site; and
 - e) the potential impact of the material on other stores of dangerous goods on the site, the likelihood of knock-on events and the effect of the material on the risk impacts posed to off-site receptors.
87. Material of dangerous goods class 7 shall not be located on the site at any time.

88. Any shipping container containing dangerous goods shall not remain on the site for more than 96 hours.
89. The Applicant shall initiate and maintain a Dangerous Goods Register with an aim to ensure the maximum numbers of shipping containers listed under Condition 85 are not exceeded and the in-transit time limit for dangerous goods specified under Condition 88. The Register shall include, but not necessarily be limited to details regarding:
- a) the date and time of arrival of all shipping containers containing dangerous goods;
 - b) the exact location of each of these shipping containers on the site;
 - c) the contents of the shipping container, including details of the dangerous goods class and UN number for all materials within the container; and
 - d) the date and time of dispatch of each of these shipping containers;

The Register shall be made available for inspection by the Director-General at any time.

90. Temporary bunding and spill management devices shall be made readily available on the site to contain and clean-up materials in the event of a release from any shipping container.
91. The development shall comply with the requirements of the *Dangerous Goods Act 1975*, as administered by WorkCover NSW, and if necessary be licensed under that Act.

Pre-Construction Studies

92. At least one month prior to the commencement of construction of the proposed development, or within such further period as the Director-General may agree, the Applicant shall prepare and submit for the approval of the Director-General the studies set out under a) and b) below (the pre-construction studies). Construction other than of preliminary works, shall not commence until approval has been given by the Director-General and, with respect to the Fire Safety Study, approval has also been given by the Commissioner of the NSW Fire Brigades.

a) Fire Safety Study

A Fire Safety Study for the proposed development. This Study shall cover all aspects detailed in the Department of Urban Affairs and Planning'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 Study shall also be submitted for approval, to the NSW Fire Brigades.

b) Hazard and Operability Study

A Hazard and Operability Study focussing on the Grain Reveal and Processing Facility, chaired by an independent qualified person approved by the Director-General prior to the commencement of the Study. The Study shall be carried out in accordance with the Department of Urban Affairs and Planning's *Hazardous Industry Planning Advisory Paper No. 8 - HAZOP Guidelines*.

Pre-Operation Studies

93. No later than two months prior to the commencement of operations of any component of the Intermodal Freight Facility, or within such further period as the Director-General may agree, the Applicant shall prepare and submit for the approval of the Director-General the studies set out under a) to b) below (the pre-operation studies). Operation shall not commence, nor shall freight be received at the Intermodal Freight Facility until approval has been given by the Director-General.

a) Emergency Plan

A comprehensive Emergency Plan and detailed emergency procedures for the proposed development. This Plan shall include detailed procedures for the safety of all people outside the development who may be at risk from the development. The Plan shall be in accordance with the Department of Urban Affairs and Planning's *Hazardous Industry Planning Advisory Paper No. 1 - Industry Emergency Planning Guidelines*.

b) Safety Management System

A document setting out a comprehensive Safety Management System, covering all operations on-site and associated transport activities involving dangerous goods. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures. Records shall be kept on-site and shall be available for inspection of the Director-General upon request. The Safety Management System shall be developed in accordance with the Department of Urban Affairs and Planning's *Hazardous Industry Planning Advisory Paper No. 9 - Safety Management*.

Other Reports

94. At least one week prior to the commencement of construction, the Applicant shall submit to the Director-General, a Pre-Construction Compliance Report detailing compliance with Condition 92. At least one week prior to the commencement of operation, or the arrival of the first freight at the Intermodal Freight Facility, whichever is the sooner, the Applicant shall submit to the Director-General, a Pre-Operation Compliance Report detailing compliance with Condition 93. The Compliance Reports shall include:

- a) dates of study submissions, approvals, commencement of construction, operation and arrival of the first freight at the Intermodal Freight Facility;
- b) actions taken or proposed, to implement recommendations made in the Studies; and
- c) responses to each requirement of the Director-General under condition

95. Twelve months after the commencement of operations of the development or within such further period as the Director-General may agree, the Applicant shall carry out a comprehensive Hazard Audit of the development, and within one month of the Audit submit a report to the Director-General. The Audit shall be carried out at the Applicant's expense by a duly qualified independent person or team approved by the Director-General prior to the commencement of the Audit. Further Audits shall be carried out every three years or as determined by the Director-General and a report of each Audit shall, within one month of the Audit, be submitted to the Director-General. Hazard Audits shall be carried out in accordance with the Department of Urban Affairs and Planning's *Hazardous Industry Planning Advisory Paper No. 5 - Hazard Audit Guidelines*. The Audit shall include a review of the site Safety Management System and a review of all entries made in the incident register since the previous Audit.

96. The Applicant shall comply with all reasonable requirements of the Director-General in respect of the implementation of the any measures arising from the reports submitted in respect of conditions 92 to 95 inclusive, within such time as the Director-General may agree.

OPEN SPACE

97. Within 12 months of consent, the Applicant shall enter into an agreement with the Director-General for the construction of a 2.5 metre wide pedestrian path and cycleway in the corridor on the western side of South Creek, generally in the location shown in Figure 7 (Attachment 2) and based upon any specifications as prepared by the Department. The Applicant shall contribute up to \$360,000 towards the construction of the pedestrian path and cycleway for works such as:

- a) construction materials;
- b) labour;
- c) drainage;
- d) signage;
- e) landscaping;
- f) lighting;
- g) upgrade of access under the rail line;
- h) bridge crossing at Kingsway; and
- i) site management during construction.

The Director-General may allow the Applicant to satisfy part of this condition through the contribution of works in kind or materials which meet specifications at market value. The provision of these materials and/or works shall be at a time and in a manner that is specified by the Director-General.

98. The Applicant shall ensure that the land located to the west of the bus transitway corridor is rehabilitated and maintained as riparian vegetation in accordance with the Figure 4.1(a) (Attachment 1). In the event that this land is transferred outside the ownership of the SRA, the Applicant shall ensure by way of a covenant on the land title or other such enforceable means, that the land is maintained as riparian vegetation and access for such maintenance is provided for an appropriate state government authority.

VISUAL IMPACT

External Appearance of Buildings and Structures

99. Prior to construction of any permanent buildings, the Applicant shall prepare in consultation with Council a schedule of proposed external finishes for the Sand Recycling and Processing Facility, Freight Terminal and Grain Receiving and Storage Facility to the satisfaction of the Director-General.
100. The finishes of all permanent and temporary structures and buildings are to be maintained and any graffiti or vandalism removed/repaired.
101. Glass used for any external wall finishes shall have a maximum 20% reflectivity index.
102. Containers stored on site shall be stacked no higher than three containers in height (equivalent of 8.7m).

LANDSCAPING

Rehabilitation and Landscape Plan

103. The Applicant shall prepare in consultation with Council a detailed Rehabilitation and Landscape Plan and incorporate this Plan into the Framework Operation EMP required by Condition 15. The Applicant will implement and comply with the Rehabilitation and Landscaping Plan.

The Rehabilitation and Landscaping Plan shall be directed towards:

- (i) integration of rehabilitation and maintenance measures under this Consent with the rehabilitation and maintenance of the entire site;
- (ii) creation and maintenance of appropriate screen planting to soften the visual impact of the development;
- (iii) the use, where appropriate, of advanced and super-advanced plant material at visually prominent locations; and,
- (iv) utilisation of local endemic species or species naturally occurring in the area.

The Rehabilitation and Landscape Plan shall detail the following:

- (v) the characteristics and location of the flora and fauna communities on-site;
- (vi) a program for the active management and maintenance of all preserved, planted and rehabilitated vegetation including watering regimes, fencing, replacement of vegetation that may have died and weed management;
- (vii) a suitable timeframe for the implementation of the landscaping required; and,
- (viii) annual performance outcomes in relation to the implementation of the Plan and a monitoring program to ascertain its effectiveness.

Management

- 104. The Applicant shall ensure that vegetated areas identified in Figure 4.1(a) (attached) are adequately maintained at all times.
- 105. The clearing of trees and vegetation shall be restricted to the areas marked on Figure 4.1(a) (attached).

HERITAGE

- 106. In the event that relics are uncovered during construction, work potentially affecting the relics shall cease immediately and the NPWS or the Heritage Office as relevant be notified and shall not recommence until an assessment of significance has been completed and any necessary approvals are obtained.
- 107. The Applicant shall ensure that works within the Dunheved Cutting do not damage the existing landform.

European Heritage Survey

- 108. The Applicant shall in consultation with Council prepare a European Heritage Survey for the Dunheved Cutting area to record the landform and infrastructure within the Cutting prior to the commencement of any works within the Cutting. The survey shall include a photographic record in colour, monochrome print and colour transparency and be incorporated into a final report in accordance with the guidelines prepared by the Department and the Heritage Office entitled '*How to Prepare Archival Records of Heritage Items*' and '*Photographic Records of Heritage Sites, Buildings and Structures*'. Copies of the report are to be forwarded to Council and Penrith City Library within two weeks of approval by the Director-General.
- 109. The Applicant shall salvage the following articles from the Dunheved Cutting for museum display or adaptive reuse:
 - ◆ the semaphore signal standard located at the western end of the cutting;
 - ◆ the signal standard ladders;
 - ◆ all lever frame or ball point mechanism;
 - ◆ point rodding and signal cable mechanisms; and,
 - ◆ the water column at the western end of the platform.

INFRASTRUCTURE

- 110. The Applicant shall consult with:
 - (a) Sydney Water Corporation Limited;
 - (b) Integral Energy;
 - (c) the relevant local telecommunications carrier; and
 - (d) other relevant service provider(s).

regarding their requirements for the provision of services to the development

111. The Applicant shall identify the services potentially affected by construction activities to determine requirements for diversion, protection and/or support. This shall be undertaken in consultation with the relevant service provider(s). Any alterations to utilities and services shall be carried out to the satisfaction of the relevant service provider(s), and unless otherwise agreed to, at no cost to the service/utility provider(s).
112. The Applicant shall ensure that disruption to services resulting from the proposal are minimised and shall be responsible for advising local residents and businesses affected prior to any disruption of service.

Building Over Sewers

113. The Applicant shall consult with Sydney Water with regard to any works to be constructed over existing sewers. The Applicant shall undertake all reasonable protection measures including the option of pipe relocation, encasing pipes in concrete, and/or designing structures taking into account pipe locations.

CONSTRUCTION NOTES

General

- a) The granting of this consent does not imply or confer compliance with the requirements of the *Disability Discrimination Act 1992*. The Applicant is advised to investigate any liability that may apply under that Act. The current suite of Australian Standard 1428 - Design for Access and Mobility, should be consulted for guidance. The prescriptive requirements of Part 1 of the Standard apply to certain buildings requiring development consent.
- b) This consent does not authorise the encroachment or overhang of any stormwater drainage easement. Any encroachment of other easements must be separately approved by the relevant service authority.
- c) All aspects of the building design shall comply with the applicable performance requirements of the Building Code of Australia so as to achieve and maintain acceptable standards of structural sufficiency, safety (including fire safety), health and amenity for the ongoing benefit of the community. Compliance with the performance requirements can only be achieved by:
- 1) Complying with the deemed to satisfy provisions, or
 - 2) Formulating an alternative solution which:
 - complies with the performance requirements, or
 - is shown to be at least equivalent to the deemed to satisfy provision, or
 - 3) A combination of (a) and (b).

Toilet facilities

- d) Toilet facilities are to be provided, at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out, at the rate of 1 toilet for every 20 persons or part of 20 persons employed at the site.

Each toilet provided:

- (a) must be a standard flushing toilet, and
- (b) must be connected:
 - to a public sewer, or
 - if connection to a public sewer is not practicable, to an accredited sewage management facility, or
 - if connection to a public sewer or an accredited sewage management facility is not practicable, to some other sewage management facility approved by the Council.

The provision of toilet facilities in accordance with this condition must be completed before any other work is commenced.

Signs on Building and Demolition Sites

- e) A sign must be erected in a prominent position on any work site on which the erection or demolition of a building is being carried out:
- (a) stating that unauthorised entry to the work site is prohibited, and
 - (a) showing the name of the person in charge of the work site and a telephone number at which that person may be contacted outside working hours.

This condition does not apply to:

- (c) building work carried out inside an existing building, or
- (d) building work carried out on premises that are to be occupied continuously (both during and outside working hours) while the work is being carried out.

Protection of Public Places

- f) If the work involved in the erection or demolition of a building:

- (a) is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or
- (b) involves the enclosure of a public place,

a hoarding or protective barrier must be erected between the work site and the public place.

If necessary, an awning is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place.

- g) The work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place.

Registered Surveyor

- h) The building(s) shall be set out by a registered surveyor to verify the correct position of each structure in relation to the property boundaries.

A registered surveyor's report confirming the required ground and/or floor levels, is to be obtained prior to work proceeding above the floor level of the building(s).

Building Materials and Wastes

- i) Building and construction materials, plant, equipment and the like are not to be placed or stored at any time on Council's footpath or roadway.
- j) Suitable and effective builder's refuse and waste storage facilities are to be provided on the development site for the duration of construction works.

Ancillary Works

- k) Mailboxes are to be provided on site in accordance with the requirements of Australia Post.

Removal of Temporary Facilities

- l) Any hoarding or similar barrier erected to protect a public place is to be removed from the site prior to the use or occupation of the development.
- m) Any temporary toilet facilities provided during construction works are to be appropriately dismantled, disconnected and removed from the site.
- n) All temporary soil erosion controls employed during construction are to be removed and other permanent measures
- o) All temporary builder's signs or other site information signs are to be removed upon the completion of site works.
- p) Any temporary site access provided for the purpose of construction works is to be removed and the kerb and gutter and/or previous roadworks reinstated in a manner satisfactory to Penrith City Council. Should the reinstatement involve the provision of a new vehicular crossing, layback, kerb and gutter or road shoulder works the separate approval of Penrith City Council is to be obtained (and appropriate fees paid) prior to such works commencing.

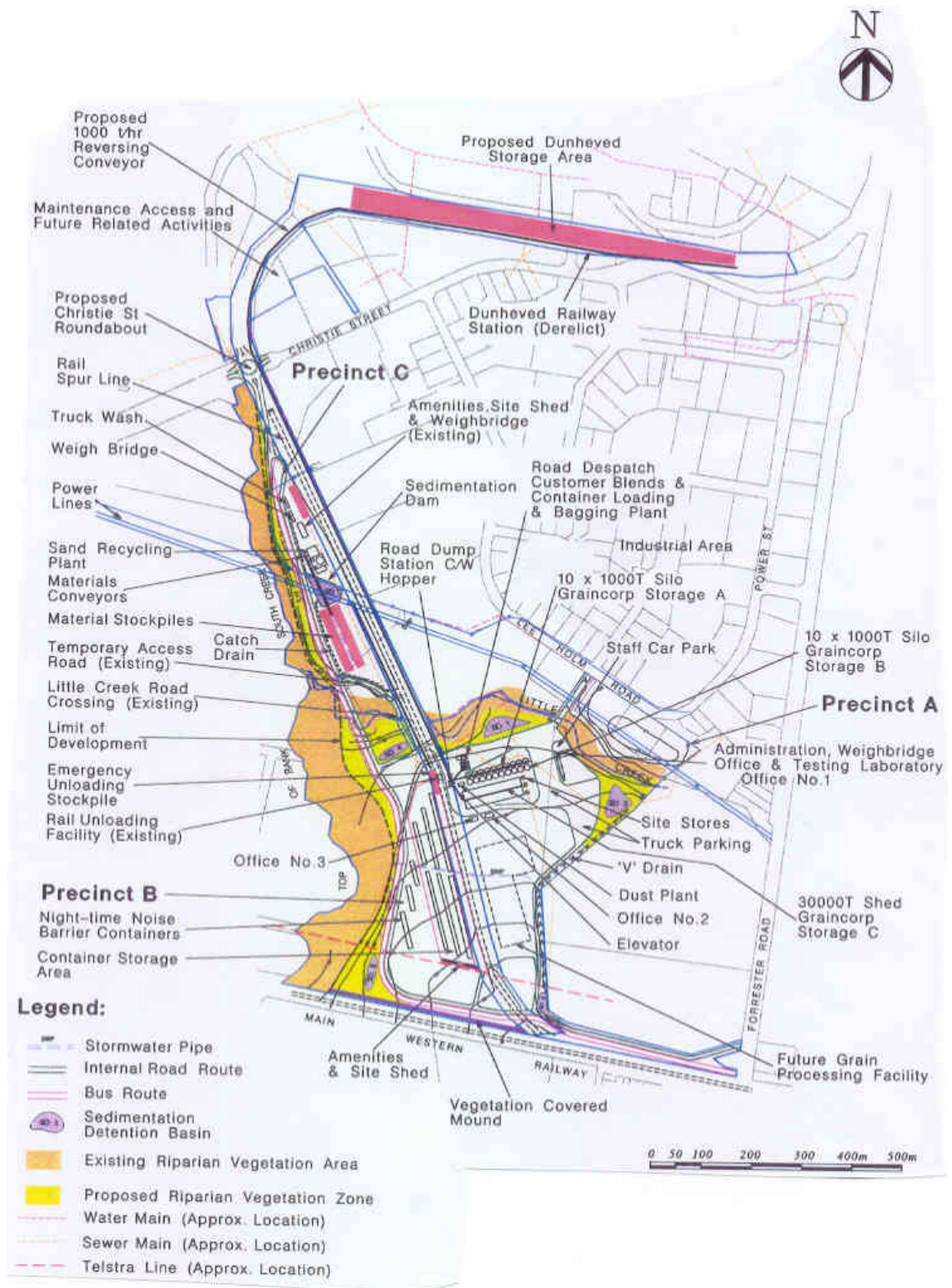
Occupation

- q) The use or occupation of the approved development shall not commence until such time as all conditions of this development consent have been complied with. The use or occupation of the development prior to compliance with all conditions of development consent may make the Applicant liable to legal proceedings.

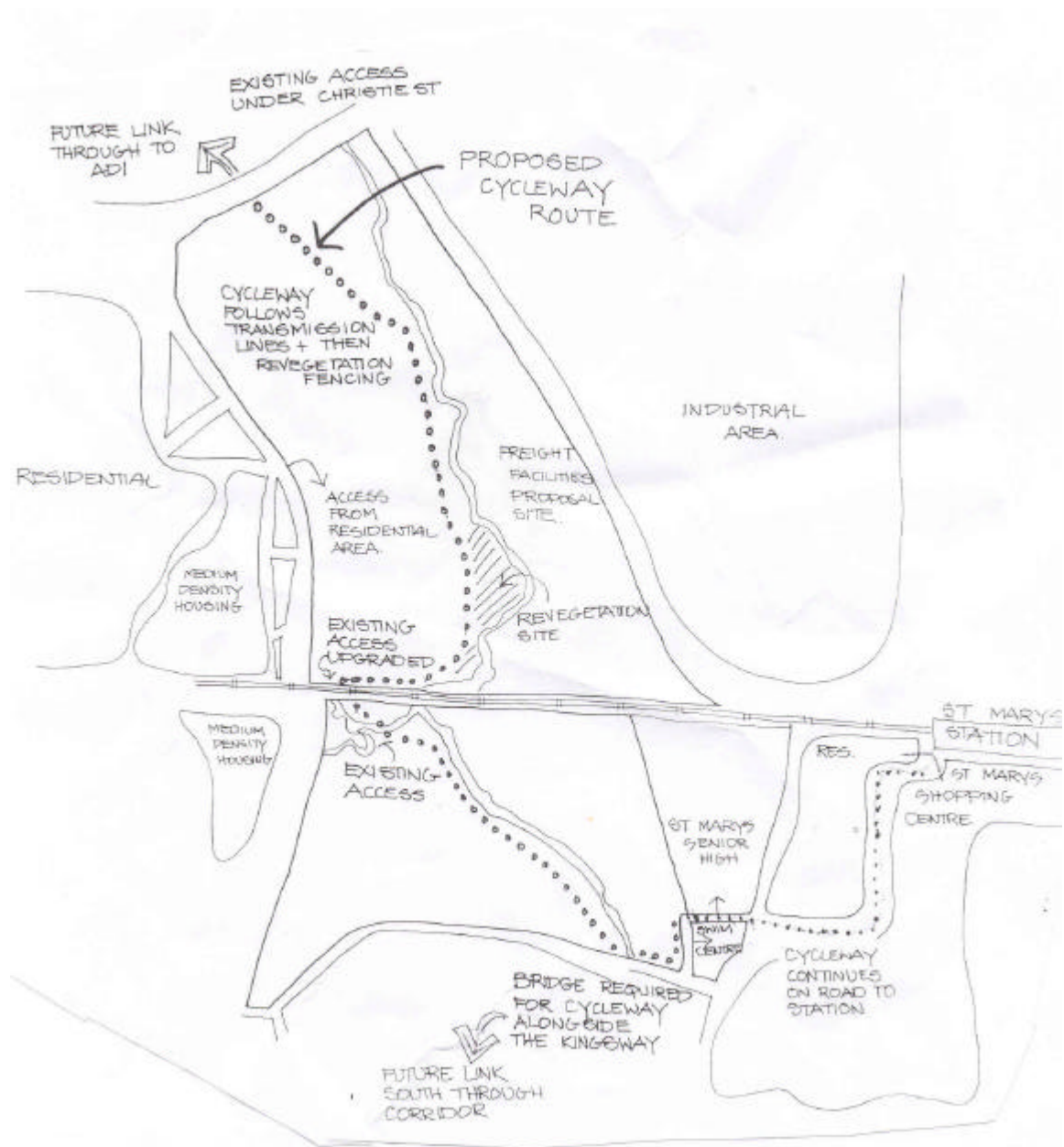
Use of Premises

- r) The use of the approved development shall, at all times, be conducted in a manner consistent with the terms and conditions of this Consent.

ATTACHMENT 1



ATTACHMENT 2





Department of
Urban Affairs and Planning

Assessment Report

Western Sydney Rail Freight Facility

Development Application

by State Rail Authority

For the construction and operation of an intermodal rail freight facility including: an intermodal rail freight terminal; a rail-based grain receipt, storage and processing facility; and a sand/sandstone recycling facility including an overland conveyor in the Parish of Rooty Hill, County of Cumberland, in the Penrith Local Government Area.

**pursuant to
Section 80 of the Environmental Planning and
Assessment Act 1979**

November 2000

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EXECUTIVE SUMMARY

Background

On 25 May 2000, the State Rail Authority lodged a Development Application (DA No. 170-05-2000) with the Department of Urban Affairs and Planning for the construction and operation of an intermodal rail freight facility including: an intermodal rail freight terminal; a rail-based grain receival, storage and processing facility; and a sand/sandstone recycling facility at St Marys, in the Penrith Local Government Area. The total area of the site is approximately 37 hectares. A map of the locality is given in Figure 1.

The subject site is currently being prepared for development under a previous approval granted by the CEO of the State Rail Authority. Works include the filling of the site with 1.5 million tonnes of clean spoil from the Northside Storage Tunnel, the construction of five sedimentation dams, integrated water management structures and over 4.5 hectares of hard-stand area. The State Rail Authority proposes to use these preparatory works as the 'land platform' for the current development proposal.

Statutory Process

The proposed sand/sandstone recycling facility, a component of the proposed development, is prohibited development and as such has been 'called in' as State Significant Development under a declaration made by the Minister for Urban Affairs and Planning on 3 May 2000 under Section 89 of the *Environmental Planning and Assessment Act 1979* (the Act). Section 76A(8)(a) of the Act states that if a project comprises development, part of which is State Significant Development, then all other development comprised in the project is taken to be State Significant Development, and subsequently is to be determined by the Minister. The proposal is also 'designated development' as it is listed under Schedule 3 of the *Environmental Planning and Assessment Regulation 1994* (the Regulation).

The Proposal

The three elements are shown in Figure 3 and described below:

- ◆ a rail-based grain receival, storage and processing facility (Precinct A);
- ◆ an intermodal rail freight terminal (Precinct B); and
- ◆ a sand/sandstone recycling facility (Precinct C, part of Precinct B and the Dunheved Cutting).

Rail Freight Facility

The proposed freight terminal would be operated by FrieightCorp and includes 4.5 hectares of hard-stand area for container storage; an administration building/gatehouse, amenities building, compound and shed for forklifts, perimeter security fencing and associated water management structures. The facility would handle up to 55,000 standard shipping containers per annum and have the capacity to store up to 1,500 containers. On average, the facility would unload and load 15 trains per week.

Grain Receival and Processing Facility

The proposed grain facility would handle up to 150,000 tonnes of grain per annum, including wheat, barley, canola and legumes. It would operate as a public facility and handle grain on behalf of GrainCorp's Trading Division and on behalf of other grain traders on a toll basis. The grain hub would primarily transfer grain from rail to road.

Sand/Sandstone Recycling Facility

This facility would potentially receive up to 750,000 tonnes of crushed sandstone from tunnel and other infrastructure projects in the Sydney metropolitan area. The majority (up to 95%) of this crushed sandstone

would be delivered to the site via rail. This facility would consist of an unloading facility, transfer conveyor system, a processing plant, and a 21,500m³ stockpiling area. Materials in excess of this would be transferred to the 200,000m³ Dunheved Cutting via conveyor for storage.

Combined Elements

In total, the development would employ 36 people (including 9 off-site). The site would generally operate five to six days per week with the exception of rail based activities which would operate 24 hours, seven days per week. Total heavy vehicle traffic has been estimated at 314 trucks per day.

The proposed intermodal rail freight terminal, grain hub and sand/sandstone recycling facility would use the same existing rail spur line and rail unloading facility. Trucks would access the site via a series of connected access roads proposed to loop around the outer edges of Precincts A, B and C and connect to Forrester Road, Lee Holm Road and Christie Street.

Consultation

General Public Interest

The Development Application was exhibited from 8 June 2000 to 10 July 2000. In response to over 1500 notification letters, the Department received two submissions from the general community. In this regard, the general public interest in the proposal appears to be very minor. The issues raised in these submissions related to the works currently being carried out on-site. The only concern raised in relation to the proposal was the possible disruption of passenger trains by freight trains. The EIS notes that freight train movements would be limited during peak hours and there would be no disruption to passenger trains.

Agency Consultation

Some 14 submissions were received from government agencies. No agency objected to the proposal. The issues raised have been considered in assessing and conditioning the proposal. All significant issues raised by these agencies have been addressed and that there are no outstanding issues that would preclude the granting of development consent.

Views of Penrith City Council

Penrith City Council raised a number of issues in their submission, particularly in relation to the likely traffic impacts of the proposal. Council's submission is considered in detail in Appendix A, tagged 'C'. Concerns in relation to the haulage routes to be utilised, site access and compensation for traffic impacts have been taken into consideration in assessing and conditioning the proposal. Council also recommended a number of conditions, which have been incorporated where considered relevant into the recommended Conditions of Consent. The Department has undertaken a lengthy process to resolve the concerns raised by Council including several meetings with Council officers and elected Councillors and detailed consideration of written comments.

Penrith City Council still objects to the staging of the upgrading of the Lee Holm Road/Christie Street intersection. The current conditions require that this intersection is first widened, and then upon closure of the Forrester Road access, is signalised. The Department does not consider that Council's objections have strong foundation. Notwithstanding, the concerns are acknowledged, and the conditions enable Council to initiate an independent safety audit, and if required, signals would be installed prior to the closure of Forrester Road.

Views of the Local Member

The subject land is within the electorate of Penrith where the Local Member is the Hon Faye Lo Po, Minister for Community Services, Minister for the Ageing, Minister for Disability Services and Minister for Women. The Local Member has not expressed any views on the proposed development.

Key Benefits

The proposed development would form an important part of the State Government's Port Link Strategy, aimed at getting more freight onto rail and relieving inter-urban roads of container traffic. It would provide a focus for the development of container based industry in the St Marys area and would serve as a major catalyst to associated employment-generating development in the area. This would be on land that was effectively abandoned and environmentally degraded. Overall, the facility would reduce regional container truck movements through inner Sydney and from country grain terminals, reducing energy usage, road congestion and associated travel times, regional road maintenance costs and greenhouse gas emissions.

The sand/sandstone recycling facility has the potential to receive spoil from major infrastructure and construction projects and to provide an ongoing source of recycled sand. This has the potential to reduce the amount of clean spoil material that is dumped at landfills and to reduce the future reliance on sand from remote places – from where sand is currently trucked into Sydney.

At the local traffic level a number of improvements are proposed including reconstruction and potential long term signalisation of the Lee Holm Road/Christie Street intersection.

In terms of the local environment, construction of the facility has resulted in the re-establishment of the original alignment of Little Creek, which was diverted in the late 1980's, and had been badly eroded, leading to pollution of South Creek.

Riparian planting has also been undertaken along the western and eastern banks of South Creek. This work has been undertaken in conjunction with Greening Australia. As a result of the replanting program, an additional 6.9 hectares of riparian vegetation has been established along the banks of South Creek and Little Creek. Prior to this work being undertaken, the banks of both of these creek systems were in a highly modified and in a badly degraded state.

Key Issues

Traffic and Transport Impacts

The most significant issues raised by Penrith Council related to truck movements and in particular access to the main road system. Whilst the development proposal incorporated three access points: Christie Street, Lee Holm Road and Forrester Road, Council has expressed a strong preference for access to be at Lee Holm Road only.

Council's concerns about Christie Street are related to the proposed Werrington Arterial. As the route and timing of the proposed Werrington Arterial has not been decided by the RTA, these concerns do not have strong foundation. Furthermore, the RTA has assured the Department that the proposed left in – left out access at Christie Street would have no implications for the proposed Werrington Arterial.

Council's concerns about the Forrester Road access relate particularly to potential conflicts with its proposal to operate a new transport interchange and impacts with current levels of pedestrians and buses. Council has no firm details of the transport interchange proposal. The Department's assessment indicates that there would be a very small potential for conflict between pedestrians and buses currently north of the St Marys railway station with site vehicles. In the interim, it is proposed that Forrester Road would have heavy vehicle access and be closed at night. Additional safety audits are proposed at Council's request.

Trucks from the site would use regional roads through the Penrith LGA such as Christie Street, Werrington Road and Glossop Street before accessing major highways such as the Great Western Highway and the M4 Freeway. The upgrading of the Lee Holm Road / Christie Street intersection is seen by the Department as an appropriate developer contribution for the overall increase in traffic from the development. The Applicant is also required to contribute to pavement improvements on nearby roads subject to the assessment of the impacts of the development.

The Department considers that the concerns of Council have been adequately addressed. The Conditions of Consent would ensure that the likely local traffic impacts of the proposal are effectively managed and a number of significant local improvements are proposed to offset the local traffic impacts.

Open Space

The development would result in the loss of open space. As such, the Department considers that there is a strong justification for compensation measures. However, there does not appear to be any scope for adequate compensation within the site the subject of the DA, given the nature of the development site and particularly the constraints associated with land not utilised for development purposes. It is therefore proposed that the Applicant provide a financial contribution to the design and construction of a shared pedestrian / cycleway on corridor land to the west of the site, owned by the Department and the Applicant.

Noise

The assessment in the EIS noted noise levels at some residences would exceed the EPA's noise goals and recommended a number of mitigation measures including limiting the hours of operation for some activities and the construction of noise barriers at the south and western boundaries of the site. The Department endorses these measures and in consultation with the EPA has set operational noise limits for the development.

Other Issues

The Department's assessment also addressed a range of other issues including water quality, air quality, hazards and risk, flora and fauna, heritage and visual impacts. It was concluded that provided the mitigation measures identified in the EIS and this report were implemented, the impacts would be acceptable.

Conclusions and Recommendations

The Department's detailed assessment of the impacts of the proposal concluded that while there was the potential for impacts to occur, particularly in terms of traffic impacts, adequate mitigation measures have been identified to reduce these impacts. The Department recommends that the proposed intermodal rail freight facility be granted consent, subject to conditions.

The recommended conditions of consent are given in Schedule 2 of the Instrument of Consent. These conditions incorporate the Department's conditions and those recommended by the EPA, Penrith City Council, DLWC and the RTA. These conditions include:

- ◆ the construction of permanent noise barriers to the south and west of the site;
- ◆ the construction of a 2.2 km pedestrian / cycleway on DUAP land adjacent to the site;
- ◆ the upgrading of the Lee Holm Road / Christie Street intersection;
- ◆ closure of access to Forrester Road, should Council's interchange proposal at St Marys eventuate;
- ◆ requirements for additional road safety audits at Penrith Council's request;
- ◆ independent environmental audits and independent monitoring, in the event of extended community complaint;
- ◆ the preparation of EMPs for both the construction and operational phases of the proposal; and,
- ◆ relevant environmental goals and emission limits.

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Please note: Figures do not appear in this electronic version. Copies can be inspected at the DUAP Information Centre, ground floor, Governor Macquarie Tower, corner Bent and Phillip Street, Sydney (phone 02 9391 2222) and at Penrith City Council.

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1. INTRODUCTION

On 25 May 2000, the State Rail Authority Lodged a Development Application (DA No. 170-05-2000) with the Department of Urban Affairs and Planning for the construction and operation of an intermodal rail freight facility including: an intermodal rail freight terminal; a rail-based grain receival, storage and processing facility; and a sand/sandstone recycling facility at Lots 120, 121, 196 and 198 and part Lot 132 DP 31912, Lots 1 and 2 DP 876781, Lot 2031 DP 815293, Lot 7 DP 31908, Lot 98 DP 31909, Lot 1331 DP 586330, St Marys, in the Penrith Local Government Area. A map of the locality is shown in Figure 1.

One component of the project, the proposed sand/sandstone recycling facility, is prohibited development and, as such has been called in as State Significant Development under a declaration made by the Minister for Urban Affairs and Planning on 3 May 2000 under Section 89 of the *Environmental Planning and Assessment Act 1979* (the Act). Section 76A(8)(a) of the Act states that if a project comprises development, part of which is State Significant Development, then all other development comprised in the project is taken to be State Significant Development. As the proposed intermodal rail freight terminal; rail-based grain receival; storage and processing facility; and sand/sandstone recycling facility would use the same existing rail spur line and unloading facility they constitute one project. Subsequently the proposal is to be determined by the Minister. The proposal is also 'designated development' as it is listed under Schedule 3 of the *Environmental Planning and Assessment Regulation 1994* (the Regulation).

2. RECENT HISTORY OF THE SITE

On 8 May 1987 an assessment was completed by the Executive Council and the then CEO of State Rail under Part 5 of the Act to construct a maintenance centre for Tangara trains on the subject site. Preparatory earth works commenced in 1987, which included the diversion of Little Creek and the construction of a low flow pipe sub-surface draining system in the bed of the creek diversion.

Work on the Tangara maintenance depot was deferred in 1988 due to financial constraints and has subsequently never been constructed. Tangara maintenance is now undertaken at other facilities. On 12 April 1999, the Chief Executive of State Rail completed an assessment in relation to the carrying out of earthworks on the subject site under Part 5 of the Act, which modified the 1987 assessment. The modifications included:

- ◆ removal of development proposed in the 1987 assessment in the area north of Little Creek and to the west of the ADI line;
- ◆ the construction of a rail unloading facility to enable spoil material to be delivered to the site via rail;
- ◆ re-establishing the original alignment of Little Creek and filling of the Little Creek diversion;
- ◆ filling and reshaping of 24 hectares of land (down from the original 33 hectares) to the revised 1 in 100 Year ARI Flood Level (to 24.2 metres AHD) with 1.36 million tonnes of spoil from the Northside Storage tunnel; and,
- ◆ the creation of a buffer from 60 to 120 metres wide between filling activities and South Creek.

This was further modified by an assessment completed on 30 September 1999. These modifications included:

- ◆ extension of preparatory earthworks to include the area north of Little Creek, known as Precinct C, which entailed the filling of this land with approximately 50,000 tonnes of clean fill;
- ◆ construction of a sedimentation basin and catch drains in Precinct C; and,
- ◆ temporary stockpiling of clean fill material on Precincts A, B and C;

The modified proposal includes 33 hectares of land in total and 24.3 hectares of land zoned as a regional open space corridor. To compensate for the loss of this open space, the State Rail Authority dedicated approximately 10.3 hectares of this land for open space, including 6.7 hectares as a riparian vegetation buffer.

The majority of the proposed site is currently being filled and prepared under the modified site approval for rail related development. The State Rail Authority propose to use these preparatory works as the 'land platform' for the current development proposal.

Part of the site, which is not affected by current works, is leased by Penrith Council and utilised as a recycling depot. Should this proposal proceed, Council would need to relocate their recycling operations.

3. SITE DESCRIPTION AND LOCALITY

3.1 PROPERTY DESCRIPTION

The site comprises Lots 120, 121, 196, 198 and Pt Lot 132 DP 31912, Lots 1 and 2 DP 876781, Lot 2031 DP 815293, Lot 7 DP 31908, Lot 1331 DP 586330 and Lot 98 DP 31909, Parish of Rooty Hill, County of Cumberland.

3.2 SETTING

The site covers 37 hectares of land adjacent to and including the former ADI Rail Spur Line which leads off the Main Western Railway to the west of St Marys Railway Station. SRA owns most of the site with GrainCorp and ComLand owning a small portion to the west of the rail line and the rail line respectively. A small portion to the south west of the Dunheved Cutting is currently subject to transfer.

The surrounding land uses are shown in Figure 2. These land uses include:

- an industrial area to the north of Precinct A and bounded by the Dunheved cutting;
- an industrial area to the west of Precinct A;
- Smorgan's site and St Marys Commercial Centre to the south-east of the site;
- St Marys Railway Station to the south of the site;
- St Marys High School to the south of the site;
- South Creek Park to the south-west of the site;
- Kingsway Playing Fields to the south-west of the site;
- Penrith City Archery range to the west of the site;
- Colonial Golf Course to the west of the site; and,
- Dunheved Golf Course to the north-west of the site.

The closest residences are located 330 metres to the north-west of the site.

4. THE PROPOSAL

4.1 INTERMODAL RAIL FREIGHT FACILITY

The proposal is for the construction and operation of an integrated intermodal rail freight facility incorporating three elements as shown in Figure 3.

- ◆ a rail-based grain receipt, storage and processing facility (Precinct A);
- ◆ an intermodal rail freight terminal (Precinct B); and
- ◆ a sand/sandstone recycling facility (Precinct C, part of Precinct B and the Dunheved Cutting).

The total site area of the proposal is approximately 37 hectares and essentially utilises the newly erected land platform that was constructed under an earlier site approval (see Section 2 of this Report).

4.2 RAIL FREIGHT TERMINAL

The proposed freight terminal would be operated by FreightCorp and include 4.5 hectares of hard-stand area for container storage; an administration building/gate house, amenities building, compound and shed for forklifts, perimeter security fencing and associated water management structures.

The facility would be able to store up to 1,500 twenty foot shipping containers (Twentyfoot Equivalent Units (TEU)), in stacks no higher than 8.7 metres (three containers). The containers are predominantly dark, non-reflective colours (red, brown, green, blue and grey). Based on experience, the main product types to be handled and stored on-site would be:

- ◆ machinery;
- ◆ miscellaneous commodities;
- ◆ metals;
- ◆ food and food products;
- ◆ hide, wood and paper;
- ◆ plastics and rubber;
- ◆ chemicals and pharmaceuticals;
- ◆ wool, cotton and fibre; and,
- ◆ oil and oil products.

The facility would handle up to 55,000 standard shipping containers per annum. Each shuttle train would have a capacity of up to 40 TEU. On average, the facility would unload and load 15 trains per week, and no more than three trains per day. The EIS states that the facility would generate up to 67,692 truck movements per annum, 226 truck movements per day, and an average of 15 truck movements per hour. It is proposed to operate the facility 24 hours a day, seven days per week. However, the EIS states that the majority of truck movements to and from the development would be between the hours of 4:30 am and 10:30 pm, Monday to Friday, and 4:30 am to 2:00 pm on Saturday, with minimal truck movements on Sunday. Floodlighting would be provided to allow work to continue at night.

The facility would employ seven full-time personnel on-site and generate an additional nine full-time positions off-site on the rail network. It is proposed to commence construction of the terminal promptly, should approval be granted.

4.3 GRAIN RECEIVAL AND PROCESSING FACILITY

The proposed grain facility would handle up to 150,000 tonnes of grain per annum, including wheat, barley, canola and legumes. It would operate as a public facility and handle grain on behalf of GrainCorp's Trading Division and on behalf of other grain traders on a toll basis. The grain hub would primarily transfer grain from rail to road.

The proposed grain hub would comprise the following facilities:

- ◆ Silo complex for the storage of grain. This would have a capacity of around 20,000 tonnes in the form of twenty 1,000 tonne silos arranged in two rows perpendicular to the rail spur line. The construction of these silos would be in two 10,000 tonne stages. Each silo would be 10 metres in diameter and approximately 20 metres high (including a five metre self-cleaning cone on the bottom). Both the top and bottom of each silo would be connected to tripper conveyors to allow loading and unloading. The height to the top of the enclosed tripper conveyor would be 25 metres.
- ◆ Horizontal storage shed. This facility is expected to have a storage capacity of up to 30,000 tonnes of grain and would be used for medium to long term storage of grain and for bulk storage.
- ◆ Dump stations and elevators. This would be made up of rail and road receipt and unloading equipment so that grain can be transferred directly between road/rail and between the silos, horizontal storage and road/rail transport. The maximum height of the elevators is to be 39 metres.
- ◆ Grading/cleaning equipment to clean incoming grain.
- ◆ Grain fumigation equipment.
- ◆ Equipment for the blending, containerisation and bagging of grain.
- ◆ Weighbridge, offices and laboratory.

◆ Dust Plant to control fugitive emissions

The location of a future grain processing plant, which is not part of the current Development Application is also indicated on Figure 3. A flow diagram of grain hub operations is given in Figure 4.

The grain hub would normally operate from 7:30 am to 5:30 pm, Monday to Friday. Grain receipt by rail would operate 24 hours a day. The grain hub would generate up to 4,000 truck movements per year, 16 truck movements per day and an average of two truck movements per hour. The EIS states that during peak periods the facility would operate over extended hours to meet grain to road and container requirements.

The grain hub would employ five full-time staff. The EIS states that construction of the grain hub is expected to begin within 12 months of development consent being granted.

4.4 SAND/SANDSTONE RECYCLING FACILITY

This facility would have the potential to receive up to 750,000 tonnes of crushed sandstone from infrastructure projects in the Sydney metropolitan area. The majority (up to 95%) of this crushed sandstone would be delivered to the site via rail, however, some 37,500 tonnes per annum is expected to arrive by road as a worst case. This crushed sandstone would be processed and stored on-site. Typically, sandstone spoil contains 15 – 25% of clay fines which would be separated and could be utilised by local brickworks or for other uses.

The majority of outwards sand and sandstone deliveries would be by rail (75%), however some deliveries to Western Sydney would be via road haulage (25%) and it is proposed to dispatch the clay via road haulage. In total, assuming no backloading, the sand/sandstone recycling facility would generate as a worst case up to 72 truck movements per day and eight truck movements per hour.

The proposed processing plant would consist of a rail unloading facility with an emergency storage area adjacent to the unloading station and a processing plant. A transfer conveyor would take the unloaded material directly to an adjacent raw product stockpile area for later processing. These stockpiles would be limited to eight metres in height, with the exception of stockpiles under power lines, which would be limited to four metres in height. The stockpiling site would have the capacity to store up to 21,500 cubic metres of material. Material in excess of the adjacent storage capacity would be transferred to a discussed railway station, known as the Dunheved Cutting, via conveyor. This material would be conveyed back to the plant as required for processing. The proposed conveyor would cross Christie Street in a culvert under the existing road. The Dunheved cutting would have the capacity to store up to 200,000 cubic metres of material.

The Dunheved cutting would be prepared for material storage by removing all rail assets (with the exception of the pedestrian bridge) and the installation of surfacewater management measures, including geotextile cloth and concrete coverings on existing drains. Stockpiling in the cutting would be limited to the cutting floor and would not exceed the cutting depth in height.

Figure 5 details the sand/sandstone recycling process. It is proposed to feed raw materials onto a feed hopper for sorting. Material less than 5 mm in diameter would be directed to the wash plant, while materials from 5 to 40 mm in diameter would be directed to a stockpile. Material greater than 40 mm in diameter would be crushed and reprocessed.

The proposed wash plant would recover silt and clay from the product and produce a clean washed sand of less than 5 mm in diameter. This plant would use a continuous dual belt filter press for separation in a completely enclosed shed. A flocculant would be added to aid in the coagulation of clay fines. It is proposed to continually recycle water through the plant, however make-up water would be sourced from the

St Marys Waste Water Treatment Plant and stormwater collected from the site. The proposed plant has been designed to operate as a zero discharge system.

The proposed sand/sandstone recycling facility would generate 15 full-time positions. It is proposed to operate the processing plant during normal daytime hours, however rail unloading would proceed 24 hours a day.

Construction of the facility is expected to take 18 months and would be divided into the following stages:

- Stage 1 site establishment (4 months);
- Stage 2 belt filter press installation (8 months); and,
- Stage 3 screens crushers and conveyors (6 months).

The life of the facility is expected to be in excess of 20 years. The EIS states that, should the facility be decommissioned the site would be redeveloped for other rail related purposes.

4.5 COMBINED ELEMENTS

The proposed intermodal rail freight terminal, grain hub and sand/sandstone recycling facility would all use the same existing rail spur line and rail unloading facility. Trucks would access the site via a series of connected access roads proposed to loop around the outer edges of Precincts A, B and C and connect to Forrester Road, Lee Holm Road and Christie Street.

5. EXHIBITION AND CONSULTATION

5.1 PUBLIC EXHIBITION

In accordance with the Regulation, the Development Application was advertised in the *Penrith Press* on the 6 June 2000 and 20 June 2000 and the *St Marys/Mt Druitt Standard* on 7 June 2000 and 21 June 2000. The Application and supporting EIS were made available for inspection at the Department's Information Centre in Sydney, the Department's Parramatta Office, Penrith City Council, Penrith Library, St Marys Library and the Nature Conservation Council of NSW for 33 days from 8 June 2000 to 10 July 2000. 16 submissions were received from government agencies and two from the community.

The two community submissions objected to the proposal and made the following comments:

- ◆ noted that the Applicant's current site operations generate unacceptable noise throughout the day and night;
- ◆ noted concern over the use of unsealed roads;
- ◆ noted that these unsealed roads are not wetted and dust is generated; and,
- ◆ noted concerns surrounding the possible disruption of passenger trains by freight trains.

5.2 CONSULTATION WITH PENRITH CITY COUNCIL

As the subject site is within the Penrith Local Government Area, Penrith City Council was invited to make a submission in relation to the Development Application. This submission is assessed in detail in Appendix A and is summarised below.

Council resolved to:

- ◆ ask that the Department consider the impacts of noise across the valley to Werrington;
- ◆ noted concern that the truck movements generated by the proposal would impose a significant additional road maintenance requirement;
- ◆ requested that a working party consisting of traffic stakeholders be formed to consider the likely impacts; and,
- ◆ recommended a range of conditions to be applied to the development including:

- ◆ limiting site access to Lee Holm Road only;
- ◆ widening of Lee Holm Road to 13 metres;
- ◆ additional screen planting; and,
- ◆ compensation for the loss of open space.

Where relevant, these conditions have been incorporated into the recommended conditions of consent.

The Department has undertaken a lengthy process to resolve the concerns raised by Council including several meetings with Council officers and elected Councillors and detailed consideration of written comments. Notwithstanding, Council still has some remaining concerns regarding traffic and access. These issues are discussed in Section 6.1 of this Report.

5.3 AGENCY SUBMISSIONS

The Department consulted directly with the Environment Protection Authority (EPA), the Department of Land and Water Conservation (DLWC), the Roads and Traffic Authority (RTA), the National Parks and Wildlife Service (NPWS), the Department of Mineral Resources (DMR), NSW Agriculture, the Sydney Water Corporation, Telstra, Integral Energy, the Hawkesbury Nepean Catchment Management Trust (HNCMT), the Heritage Council of NSW, NSW Fisheries, Rail Services Australia, ComLand, the Nature Conservation Council of NSW, the Department of Transport (DoT) and Blacktown City Council. Submissions were subsequently received from the DLWC, RTA, NPWS, Integral Energy, HNCMT, Sydney Water, NSW Fisheries, ComLand, DoT, Blacktown City Council and the Heritage Office. No agencies objected to the proposal. The issues raised in the agency submissions are summarised in Appendix B of this Report. It is considered that all issues raised within these submissions have been addressed and that there are no significant outstanding issues that would preclude the granting of development consent.

6. CONSIDERATION OF KEY ISSUES

6.1 TRAFFIC AND TRANSPORT

6.1.1 Existing Traffic Environment

The traffic environment surrounding the proposed development consists mainly of industrial regional roads that link the site to the Great Western Highway and M4 Motorway to the south and The Northern Road to the west. The regional roads in close proximity to the site include Christie Street, Forrester Road, Glossop Street, Werrington Road and Dunheved Road.

Christie Street provides a cross-link between Dunheved Road, Werrington Road and Forrester Road. Two-lane roundabouts are in place at both the Christie Street / Werrington Road and Christie Street / Forrester Road intersections. Christie Street is two lanes wide (with an existing corridor width capable of four lanes) and crosses South Creek and its floodway via a two lane bridge.

Forrester Road to the east of the site, functions as a four lane regional road between Christie Street and Glossop Street. Glossop Street provides the southerly regional road connection extension to the Great Western Highway. South of Glossop Street, Forrester Road narrows to two lanes and provides access to the north of St Marys station and the existing industrial uses in the area.

Lee Holm Road, a local road varying in width from 7.3 metres to 9.3 metres is situated to the north of Precinct A. Lee Holm Road is part of a small network of local roads providing access to the industrial area north of the site. Lee Holm Road provides direct access to the north to Christie Street. Lee Holm Road through Power and Wordoo Streets also provides access to Forrester Road to the east.

6.1.2 Impacts of the Proposal

It is estimated in the EIS that the proposal, at full development, would generate on average 341 vehicle movements including 314 heavy vehicle movements. The EIS predicts that there would be 37 vehicle movements to and from the proposed development including 30 heavy vehicle movements during the peak

hours. Table 1 summarises projected traffic flows from the entire facility.

Table 1 - Projected Traffic Generation of Site at Full Development

Type	Category	Average Daily Movements	Peak Hour Movements
Light	Staff: 27 @ 50% driver	27	7
Heavy	Grain Terminal	16	4
	Sand / Sandstone Recycling	72	8
	Intermodal Rail Freight Terminal	226	18
	Sub-Total – Heavy Vehicles	314	30
All Vehicles	Total	341	37

Proposed Vehicular Access

Three access points to the site are proposed in the EIS:

- ◆ Christie Street – The Christie Street access is proposed as a 24 hour access for light and heavy vehicles primarily to service the Sand Recycling Facility (Precinct C) and the Intermodal Freight Terminal (Precinct B). The construction of a two lane roundabout at the intersection of the site access road and Christie Street is proposed in the EIS. At the approach to the roundabout it is proposed that one lane in both directions be dedicated to the bus transitway and one lane in each direction to the access road.
- ◆ Forrester Road – At the southern extent of Forrester Road, close to the junction with St Marys Railway Station, it is proposed to construct an access road to the site. A 24 metre wide corridor exists connecting the site to Forrester Road running parallel to the Main Western Railway Line. This access road, which is currently the major site access, crosses the railway branch line at grade. This access road (which is currently unsealed) would be upgraded to a sealed 8 metre wide two way driveway under the current proposal. It is proposed that this access way would be used primarily for the Intermodal Rail Freight Terminal in Precinct B. The EIS recommends that the intersection with Forrester Road would be designed to separate site traffic from bus transitway services and would be limited to prevent heavy vehicle movements between 10.00 pm and 7.00 am upon operation of the bus transitway.
- ◆ Lee Holm Road – The third proposed access would be to Lee Holm Road. It is proposed that the access driveway would be two lanes and 10 metres wide. This access is proposed to operate 24 hours a day for light and heavy vehicles primarily accessing the Grain Corp facility in Precinct A. Lee Holm Road would then provide access to the surrounding regional road network through Christie Street and/or Forrester Road north of Glossop Street.

Access Within the Site

It is proposed to construct an internal spine route along the western perimeter of the site to provide access between all precincts and the site access points. The access way would have two 3.5 metre wide lanes and would provide a route between Forrester Road in the south and Christie Street in the north via a new crossing of Little Creek. Under the proposal, there would be links from Precincts A, B and C to the spine road.

The EIS states that the spine road would cross the railway spur line via a level crossing at the southern end. The location of the existing rail unloading facility would allow trains to be unloaded and loaded without blocking the proposed level crossing. The level crossing would however be blocked to vehicular movements when trains were entering or leaving the site. It is estimated in the EIS that this delay would be a maximum of three minutes for each train movement. The EIS does not state how the level crossing would be managed, however, it is assumed that some form of automated signalling system would need to be installed.

The spine road and Precinct A would be connected by an access road north of the unloading facility that crosses the rail spur line at grade. This access way would be closed when trains are loading or unloading (ie. the majority of the day based on up to seven trains per day loading and unloading at the site for up to three/four hours). The existing temporary crossing of Little Creek close to the railway spur line would continue to be used prior to construction of the proposed permanent access way across Little Creek. It is estimated that the spine road would cater for a peak hour maximum two way flow of vehicles of 40 per hour. Light and heavy vehicle parking is proposed in designated areas within each of the precincts adjacent to administration offices.

Bus Transitway

The proposed bus transitway linking the proposed ADI site development and St Marys Station originally ran along the railway spur line. The proposed development through its use of the railway spur line would effectively preclude these plans and force any transitway onto a new alignment.

Whilst the transitway is not subject of the DA, the EIS has considered various options for the relocation of the transitway. The preferred alignment through the site is along the western and southern boundaries of the site running adjacent and to the west of the proposed internal spine road. It is proposed in the EIS that the transitway would also cross the railway spur line adjacent to the spine road at a level crossing. It is suggested in the EIS that the train and bus timetables could be co-ordinated to minimise any conflicts at the level crossing.

Rail

It is estimated that at full development approximately seven freight trains per day would access the site for loading and unloading. It is estimated that the container freight and sand/sandstone facilities would generate three trains each per day. The grain terminal is estimated to generate the demand for two trains per week or the maximum of one train on any given day. It is estimated that the freight trains would have a turnaround time of three to four hours. It is proposed that movements to and from the site would be scheduled to avoid peak rail times on the Main Western Line. It is proposed to load and unload freight trains on the site twenty-four hours a day.

6.1.3 Key Issues

Penrith City Council raised a number of concerns in relation to traffic and access. The Council submission recommended that the proposed development be restricted to one access point at Lee Holm Road and recommended that this road should be widened at the Applicant's expense. Council's submission objected to the Forrester Road access suggesting that pedestrian and bus movements in the vicinity of the access were not compatible with truck movements to and from the site. Council suggested that the Christie Street access to and from the site, proposed as a roundabout in the EIS, was not compatible with the future Werrington arterial road nor the future bus transitway provision. These issues are discussed in detail below.

Forrester Road Access

Penrith City Council is concerned that this access point to the site is located adjacent to the Forrester Road cul-de-sac that provides access to St Marys Railway Station. Council suggests that site traffic, particularly truck movements, would not be compatible with pedestrian and public transport movements associated with the station. Council are particularly concerned by the long term issues associated with potential transport movement conflicts between the site access and the future provision of a transport interchange to the north of St Marys. At this stage there are no current plans for the construction of this interchange but Council have indicated that the timetable for construction and operation is dependant on the development of the ADI site and the operation of the proposed bus transitway.

The Department recognises that the location of the Forrester Road access in the vicinity of the St Marys Station is not ideal in the long term. However, it is appreciated that Forrester Road would be an important site access in the early stages of construction and operation of the proposal prior to the construction of the internal spine road and the Christie Street access. Notwithstanding, the Department accepts Council's

concern that the Forrester Road access would not be compatible with a future high usage bus interchange when operational.

The Department does not agree with Council's view that the access way should not be allowed at all. The Department understands that the current bus usage to the north of the station involves two routes operated by Westbus. These routes access the north of the station during the morning period prior to 7.30 am. The majority of pedestrian movements have been observed to occur on the eastern side of Forrester Road, due to the provision of a footpath, and direct access to the station car park and residential areas to the north. As the majority of pedestrian movements are currently on the eastern side of Forrester Road there would be few potential conflicts with vehicles entering and exiting the site.

To minimise conflicts with existing bus movements, the Department's recommended Conditions of Consent Numbers 69 to 71 require this access to be limited to a maximum of 50 heavy vehicles movements to and from the site each day between the hours of 7.00 am and 10.00 pm. This would also reduce potential noise impacts on residents located on the eastern side of Forrester Road.

The Department concurs with Council's view that the Forrester Road access point to and from the site would be incompatible with a future high use bus rail interchange north of the St Marys railway station. It would also be incompatible if pedestrian and bus movements increased significantly, regardless of whether the proposed interchange is constructed. Accordingly, the recommended Condition 69 requires that upon commencement of construction of the north St Marys bus interchange the access point would shall be closed to all site traffic (except during emergency situations). The condition also requires that the Applicant undertake a traffic and safety audit three years from the date of consent and every two years thereafter. The audit is to assess the change in pedestrian and bus activity and potential conflicts with the site access. Council may request that the Director-General require additional safety audits to be conducted by the Applicant. If the safety audit revealed that the safe operation of this access could not be assured, the Director-General would require this access to be closed prior to the installation of the interchange.

Christie Street Access

The Council and the RTA both indicate that the proposed roundabout at the junction of the site and Christie Street is not favoured. The EIS identifies that the Christie Street alignment is likely to be part of the proposed Werrington Arterial, a route that is proposed to start at the M4 Motorway, extend along Werrington Road and then continue to Christie Street and the northern end of Forrester Road, ultimately linking with the M2. Following consultation with the RTA, the Department has been made aware that there are no plans at this time for the construction of Werrington Arterial in the vicinity of Christie Street. However, the RTA has stated that the proposed roundabout is incompatible with the provision of the proposed Werrington Arterial discussed in the EIS. Council warns that although a signalised intersection would solve the priority issue, a right turn lane to allow access to the site would require the South Creek Bridge to be widened adding a potentially significant extra cost to the provision of the Werrington Arterial.

Penrith Council has since recommended that no access from the development directly onto Christie Street be approved. The Department is concerned that Council is recommending that all access to the site be via Lee Holm Road. This would not only put added pressures on Lee Holm Road but would also result in all movements to and from the site having to cross the railway spur line (refer below) and effectively maximise the traffic impacts of the proposal by concentrating it in the one location.

The Department believes that the more pertinent issues for any access to and from the site at Christie Street are the cost or design implications posed for any future Werrington Arterial proposal. The Department agrees with Council and the RTA that a roundabout at the junction of Christie Street and the site is not the preferred option due to problems of ensuring priority for the bus transitway and the long-term compatibility with the proposed Werrington Arterial. Further, the Department also recognises the concerns of Council in regard to signalising the intersection and the implications on bridge design of a right turn bay.

The Department considers that a left-in-left-out access to Christie Street would appropriately resolve the concerns raised by the RTA and Council. This arrangement would be compatible with any future widening

associated with the proposed Werrington Arterial. If the bus transitway was constructed through the site and crossed Christie Street in this location then traffic lights could be constructed to give the buses appropriate priority. Accordingly, the Department's recommended Condition of Consent No. 68 requires the Applicant to design and construct the intersection of the site access road with Christie Street to provide for left-in-left-out movements only, to the satisfaction of the RTA and Council.

The prevention of site vehicles turning right from Christie Street is unlikely to present a problem as movements from the site with a destination to the east or north can exit from Forrester Road or Lee Holm Road. The disadvantage of a left-in-left-out arrangement at Christie Street is that trucks wishing to turn right into the site would be forced to turn either right at Lee Holm Road or continue along Christie Street to the roundabout at Forrester Road, U-turn and return to the Christie Street access point.

To minimise the use of the Christie Street / Forrester Road roundabout and to avoid congestion at Lee Holm Road from site vehicles wishing to turn right, the Department proposes to upgrade the Lee Holm Road / Christie Street intersection. The upgrading of this intersection would be consistent with Council's long term plans of linking the ADI site at Christie opposite and to the north of Lee Holm Road.

Lee Holm Road

As indicated above, Lee Holm Road is Council's preferred access for the entire development. Lee Holm Road services an industrial subdivision. Lee Holm Road is generally nine metres wide but has a number of narrower sections. In its submission, Penrith City Council raises concerns about the width of Lee Holm Road and in particular, its suitability to accommodate two-way truck movements. This is despite it being Council's preferred access point. Council has subsequently requested that the Applicant widen the whole of Lee Holm Road to 11 metres (widening to be on the western side) with the assumption that Council would eventually widen the road on the eastern side to achieve the desired 13 metre width. Of particular note, are the location of a number of power poles and Telstra service pits on the western side of Lee Holm Road. The Applicant has suggested that the presence of these services would indicate that any widening on the western side would be extremely costly. The Department accepts the Applicant's position that focussing all site traffic to the Lee Holm Road access point would not be the most efficient outcome for the development.

In general, the Department considers that Council's request for the Applicant to widen Lee Holm Road on the basis of the additional traffic generated by the development cannot be justified. Even if all access to and from the site is limited to Lee Holm Road, the additional traffic would represent an increase of approximately 20% (or 37 trucks) on existing peak hour traffic movements on Lee Holm Road. The Department is concerned that Council's preference that Lee Holm Road be the only access for the development would make internal site traffic movements extremely difficult and reduce the efficiency of the proposal.

Council has also indicated that the Applicant should signalise the intersection of Lee Holm Road and Christie Street. The RTA support the upgrading of this intersection in regard to problems with turning movements due to the narrowness of Lee Holm Road at the intersection (7.3m), potential congestion problems and to improve safety.

The supplementary traffic report to the EIS titled '*Western Sydney Rail Freight Facility, St Marys – Traffic and Access Requirements – August 2000*' indicates that the existing intersection operates at Level of Service B (LoS B) during peak periods with a peak movement delay of up to 26 seconds. As a worst case analysis all of the site traffic was added to the intersection and it was estimated that during the PM peak hour the intersection would perform with a LoS C and a 29 second peak movement delay. The assessment also included the implications for the intersection if Christie Street traffic were to increase by 50%. During the AM peak the intersection was anticipated to operate at LoS C and 34 second peak hour movement delays and at LoS D and 55 second peak hour movement delays during the PM peak.

The Department's requirement for a left-in-left-out treatment of the Christie Street access to the site would lead to a greater use of Lee Holm Road for right turn movements to access the site to that envisaged in the EIS. The requirement for a left-in-left-out treatment removes the need to construct the EIS proposed

roundabout at this intersection. The widening and possible future signalisation of this intersection would also be consistent with Council's long term plans for constructing an ADI site access road that would link to the north opposite the existing Christie Street / Lee Holm Road intersection.

In conclusion, the Department considers that there is no safety or traffic justification for requiring the Applicant to widen the whole of Lee Holm Road in terms of the additional trucks generated by the development. The upgrading of the Lee Holm Road / Christie Street intersection is, however, justifiable and recommended to address the increased congestion and safety issues posed by the development and is in accordance with Council and RTA requests. The proposed development would increase traffic levels on the regional and arterial roads surrounding the development.

The upgrading of the Lee Holm Road / Christie Street intersection is seen by the Department as an appropriate developer contribution for the overall increase in traffic from the development. Accordingly, the Department's recommended Condition of Consent No. 63 requires the Applicant to upgrade the intersection of Lee Holm Road with Christie Street including right turn bays within 12 months from the date of consent, to the satisfaction of the RTA and Council. Condition 69 requires that the Applicant install signals at the intersection after either the closure of the Forrester Road access point or a safety audit of the intersection indicates that signals are required.

Haulage Routes

The EIS does not define haulage routes for heavy vehicles to and from the site. Both Penrith and Blacktown Councils expressed concerns in their submissions in relation to the heavy vehicle numbers to be generated and routes to be taken to and from the proposed development.

At the request of the Department, the Applicant provided further details with regard to the proposed main haulage routes to and from the site for heavy vehicles. Four haulage routes were specified in the *Road Traffic Noise Impact Assessment for the Proposed Western Sydney Rail Freight Facility at St Marys* by Dick Benbow & Associates dated 6 September 2000. The routes are marked on Figure 6 and include:

- ◆ Christie Street to Dunheved Road to the west;
- ◆ Christie Street to Werrington Road to Great Western Highway to the south and west;
- ◆ Christie Street/Forrester Road to Glossop Street to Great Western Highway/M4 to the south and east; and
- ◆ Forrester Road to Palmyra Ave to the north.

Table 2 shows the estimated numbers and proportions of heavy vehicles using the above routes. The table indicates that (excluding the Great Western Highway and the M4 Motorway) there would be no more than three or four heavy vehicle movements in the peak hour on Blacktown City Council's roads. Similarly, the majority of truck movements within Penrith Council would gravitate to the Great Western Highway and the M4 Motorway. All truck movements would be on classified regional roads. There would be no truck haulage from the site using local roads. The Department's recommended Condition of Consent No. 77 requires the Applicant take all reasonable steps to ensure that the routes discussed above are adhered to. Furthermore, the Department's recommended Conditions of Consent Nos. 82 and 83 require the Applicant to maintain log books recording the routes taken by heavy vehicles to and from the site.

6.1.4 Outstanding Council Concerns

Penrith City Council has remaining concerns about the staging and timing of the improvement works to the Lee Holm Road/Christie Street intersection.

With respect to staging, the Department does not consider that Council's position on immediate signalisation of the Lee Holm Road intersection has strong foundation as:

- ◆ the traffic analysis indicates that there is no capacity grounds for signalising this intersection. Even assuming all traffic uses this intersection, the level of service would be satisfactory.

- ◆ The RTA has indicated that there are no safety grounds for signalling this intersection and that the stopping sight distances for trucks are adequate.
- ◆ Council has not provided any technical traffic grounds for signalisation. As indicated above, the traffic intersection analysis and assessment of stopping sight distances indicates there are no technical traffic grounds. Notwithstanding, the Department has been prepared to acknowledge Council's concerns about the safety of this intersection and there are explicit provisions in the conditions for Council to request a safety audit and for this intersection to be signalised prior to Forrester Road being closed should this be necessary.
- ◆ The requirement for signalling this intersection has not been based on direct capacity grounds due to the development, but is intended to be provided as a "work in kind" in lieu of Penrith Council not having a Section 94 Plan. The closure of the Forrester Road access would seem a logical time to initiate this "work in kind" as there would be a greater use of this intersection.
- ◆ It enables the Applicant to stage its costs to better match commercial cash-flow requirements.

With respect to timing, the Department does not accept Council's position that the localised widening of the Lee Holm Road intersection should be constructed prior to any heavy vehicle use to/from the site on the following basis:

- ◆ The condition requires that the intersection be constructed within 12 months of the consent date. This gives complete certainty of when it will be done and avoids any debate about "when heavy vehicles access the site". Similarly,
- ◆ With multiple access points available, the Applicant could potentially encourage a concentration of trucks at other access points over a period of time longer than 12 months purely to avoid the requirement for upgrading the intersection.
- ◆ Even if the Applicant began planning and design of the intersection immediately, it would take possibly up to 6 to 8 months from the date of consent anyway.
- ◆ There is a possibility that the grain terminal may not begin construction within 12 months, so the current condition enables the possibility of attaining the intersection improvements earlier than under Council's suggestion.

6.1.5 Conclusion

Overall, the proposed development would form an important part of the State Government's Port Link Strategy, aimed at getting more freight onto rail and relieving inter-urban roads of container traffic and would have significant regional traffic benefits. It would provide a focus for the development of container based industry in the St Marys area and would serve as a major catalyst to associated employment-generating development in the area. The facility would also reduce container truck movements through inner Sydney and from country grain terminals, road congestion and associated travel times, and regional road maintenance costs.

A number of major local traffic issues have been raised by Penrith Council. The Department has undertaken an extensive process to resolve these concerns including several meetings with Council officers and elected Councillors and detailed consideration of written comments. The outstanding concerns of Council are acknowledged and the Department considers that the issues have been adequately addressed in the conditions. The Department considers that the recommended Conditions of Consent would ensure that the likely local traffic impacts of the proposal are effectively managed. A number of significant local improvements are also proposed to offset the local traffic impacts.

Table 2 – Estimate Daily Heavy Vehicle Movements on Designated Routes

	Intermodal Freight Terminal		Sand/Sandstone Recycling		Grain Hub		Total Trucks		Peak Hour
To/From	%	No.	%	No.	%	No.	%	No.	No.
Forrester Road to Palmyra Ave (North)	12	27.1	5	3.6	15	2.4	11%	33	3.3
Forrester Road/Glossop St to M4 & Great Western Highway (East and South)	35	79.1	20	14.4	25	4	31%	98	9.3
Christie Street to Dunheved Road (West)	20	45.2	35	25.2	10	1.6	23%	72	6.9
Christie Street to Werrington Road to Great Western Highway (South, West and East)	33	74.6	40	28.8	50	8	35%	111	10.5
TOTALS	100	226	100	72	100	16	100%	314	30

6.2 IMPACTS ON OPEN SPACE

6.2.1 Background

Precincts B and C (i.e. the intermodal rail freight terminal and the sand processing facility) are entirely located within an area zoned under the Penrith City Council LEP 201 (1991) as 5(d) – Corridors Zone. This zoning was initiated by the Department in the 1968 Sydney Region Outline Plan, as part of a policy of creating corridors for passive recreation in Western Sydney. The objectives of the corridor zone are:

- (a) to provide land for recreation and community purposes;
- (b) to provide a physical and visual buffer between urban areas; and
- (c) to set aside land for the development of services, facilities and special uses by public authorities for the benefit of the community.

The corridor has been identified as an important link to the ADI site. The Department has already acquired the land zoned 5(d) immediately adjacent to the western side of the site and rehabilitation and improvement works on this land have begun. The area subject to the current DA has historically been less disturbed due to outstanding plans for development by the SRA.

As part of an existing approval for the filling of the site (refer to Section 2 of this Report), the SRA (the land owner) has proposed to rehabilitate and dedicate the western half of Precinct B and C (10.3 hectares) to ComLand for the purposes of:

- ◆ A route for the proposed bus transitway through the site to St Marys Station; and
- ◆ To contribute to the open space corridor proposed in the *Conservation and Recreation Strategy Report: South Creek and Ropes Creek Corridors and ADI Lands* (ERM 1998).

This corridor would provide for the rehabilitation of riparian vegetation listed by NPWS as Sydney River Flat Forest community.

6.2.2 Key Issues

Compulsory Acquisition

When the Department created the Corridor Zone, a compulsory acquisition clause was applied to ensure that existing land owners were not penalised by the new limited zoning. This clause requires the Department to acquire any corridor land upon the request of the owner at market value, including the value of any capital works. Should SRA transfer the subject land into private ownership this clause would effectively act as a safety net to the developer and place the Department at risk of incurring the cost of the development, should it fail to attract the predicted market. Accordingly, a Deed of Release was entered into by SRA and the Department which removes the requirement to include infrastructure costs in payment for compulsory acquisition of the subject corridor land.

Loss of Open Space

Notwithstanding the corridor dedicated under the previous site approval, the current development would further reduce the potential area of open space. This loss of potential open space was not contemplated as part of the previous site approval. Further, given that the Minister has explicitly enabled the development of the sand processing facility in an open space zone, the Department considers that there is a strong justification for significant compensation measures.

Given the nature of development of the site, and particularly the constraints associated with land not utilised for development purposes, there does not appear to be any scope for adequate compensation within the site subject to the DA. However, the Department's current program for restoration of corridor land immediately to the western side of the site on the opposite side of South Creek would present opportunities for future enhancement in this area. In this regard it is proposed that a shared pedestrian / cycleway be constructed by the Applicant in addition to the rehabilitation measures which formed part of the works under the earlier approval.

The concept of a cycleway in this corridor is recognised in Council's Bikeplan and more recently in the Conservation and Recreation Strategy with respect to the ADI site (ERM, 1998). Penrith City Council are fully supportive in their submission to the Department of a cycleway concept. The cycleway is proposed to extend from Christie Street to The Kingsway and St Marys Station over a distance of approximately 2,200m. The cycleway is designed to provide a local route improving access to popular destinations and would:

- ◆ comprise the central section of the long term cycleway supporting future links to the south and north (i.e. ADI site);
- ◆ provide access to and from the residential areas to the west;
- ◆ link the locally and regionally significant recreation facilities existing within the corridor; and
- ◆ provide access through to Ripples Swimming Centre, St Marys High School and St Marys shopping centre and railway station.

A proposed route for this pedestrian / cycleway is given in Figure 7. The cycleway is through land owned by the Department, apart from the access under the railway line which is under the control of the Applicant and sections within existing footpaths and roads owned by Penrith City Council. Aside from the cycleway construction itself, the route would require the upgrading of the railway underpass, particularly with regard to drainage and site lines and a cycleway bridge crossing of South Creek adjacent to the Kingsway. The requirement for a cycleway is recommended in Condition of Consent No.97.

6.2.3 Conclusion

The Department recognises that the landscape and rehabilitation to be undertaken in accordance with the earlier site approval on the western side of the site has the potential to contribute to the protection and enhancement of remaining Sydney River Flat Forest, identified in the *Threatened Species Conservation Act 1995* as an endangered ecological community. The Department's recommended Conditions of Consent No. 14 and 15 would ensure that Environmental Management Plans for both construction and operation stages acknowledge, and where relevant manage these rehabilitation works.

Notwithstanding, the development would lead to an additional loss of a significant area of open space. As there does not appear to be adequate scope for compensation on the proposed development site, the Department recommends that the Applicant contribute to the construction of a combined cycleway / pedestrian route on adjacent public land between Christie Street and St Marys Railway Station.

6.3 NOISE IMPACTS

6.3.1 Existing Noise Environment

The estimation of the existing noise environment in the vicinity of the proposal was based on seven receiver locations as shown in Figure 8. Unattended loggers were placed at three residential areas for a period of seven days in January-February 1999. The locations were:

- ◆ 2 Glossop Street, St Marys – to the east of site;
- ◆ 75 Carinya Avenue, St Marys – to the south of the site; and
- ◆ 31 Albert Street, Werrington – to the west of the site.

Additional unattended noise monitoring was undertaken during a seven day period in December 1999 at sites closely related to the earlier monitoring, namely:

- ◆ 133 Forrester Road, St Marys – to the east of the site;
- ◆ 13 Camira Street, St Marys – to the south of the site; and
- ◆ 1/30-32 Albert Street, Werrington – to the west of the site.

The monitoring was supplemented by attended noise measurements. Background noise levels (LA90) were estimated during the day to be in the range 40-46dB(A) and 35-37dB(A) at all sites.

6.3.2 Environmental Goals

Noise impacts for the development were assessed against the EPA's Environmental Noise Control Manual (ENCM). The EIS states that the assessment also took into account the principles of the EPA's Industrial Noise Source Policy (INSP) which were due to take effect from 1 July 2000.

Construction Noise Goals

The EIS based the construction noise assessment on the criteria of Background plus 10dB(A) from the ENCM based on a construction duration of 4 to 26 weeks. The Department raised concerns with this approach as it is stated within the EIS that construction of the Grain Terminal in Precinct A and construction of the Sand Processing facility in Precinct C is likely to take greater than 26 weeks. The Applicant in subsequent correspondence to the Department and the EPA has revised their construction noise estimates based on the appropriate criteria of Background plus 5dB(A).

Operational Noise Limits

The operational noise limits were based upon the Recommended Outdoor Background Noise Levels for Residential areas near a busy road or industry in the ENCM. The LA90 background acceptable limit for this receiver in the ENCM is specified as 50 dBA during the day and 40 dBA during the night. The noise limits set for the modelled receptors were based on the ENCM table for Recommended Planning Levels which is based upon the background levels measured.

Traffic Noise Criteria

Criteria for noise generated by additional traffic was based on the EPA's Environmental Criteria for Road Traffic Noise. The criteria specifies that the noise limits for land use developments with potential to create additional traffic on existing freeways / arterials (including sub-arterial or regional roads) is 60 dB(A) LAeq during the day and 55 dB(A) LAeq during the night. Where this criteria is already exceeded, the criteria states that:

Where feasible and reasonable, existing noise levels should be mitigated to meet the noise criteria. Examples of applicable strategies include appropriate location of private access roads; regulating times of use; using clustering; using 'quiet' vehicles; and using barriers and acoustic treatments.

In all cases, traffic arising from the development should not lead to an increase in existing noise levels of more than 2 dB(A).

Background Noise Levels

Based upon the December 1999 unattended monitoring, existing background noise levels (LA90) were determined in the EIS for the nearest residences to the site to the east, south and west. The measured background noise levels for these nearest residences are shown in Table 3.

Table 3 – Measured Background Noise Levels (LA90) dB(A)

Location	Daytime 7am-10pm	Night time 10pm-7am
133 Forrester Road, St Marys	46.0	37.1
13 Camira Street, St Marys	40.3	34.6
1/30-32 Albert Street, Werrington	43.0	36.9

By applying the recommended planning level criteria from the ENCM, the EIS determined the relevant noise design objectives for the nearest residences. The noise design objectives are specified in Table 4

Table 4 – Noise Design Objectives dB(A)

Location	Daytime LA10 Noise Objective	Night time LA10 Noise Objective	Night time LA1 Sleep Disturbance Objective
133 Forrester Road, St Marys	48	37	52
13 Camira Street, St Marys	45	38	50
1/30-32 Albert Street, Werrington	48	37	52

6.3.3 Key Issues

Construction Noise

The EIS identifies the main noise producing sources during construction as:

- pile driving (associated with the Grain Terminal Silos);
- grader operation;
- crane operation; and
- truck manoeuvring.

The noise assessment predicts that exceedances of construction noise criteria of up to 9dB(A) would occur under certain weather conditions at all residential locations. It is predicted that during relatively still wind conditions no exceedances of the construction noise criteria are likely. Pile driving operations would however cause exceedances at residences closest to the site to the east under relatively still weather conditions.

The Department considers that construction noise annoyance should be minimal as the noisiest construction activities are relatively short term and the exceedances are relatively minor and would be caused by adverse wind conditions. The recommended Conditions of Consent require the Applicant to prepare a Construction Noise Management Plan as part of the Construction EMP. This plan must detail all mitigation measures to be used with the aim of minimising exceedances. To minimise impacts from pile driving during construction, the Department's recommended Condition of Consent No. 56 requires that these activities are carried out only between the hours of 8.00 am and 4.00 pm Monday to Friday.

Operational Noise

Site Sources

The noise assessment includes modelling of predicted noise levels at the nearest sensitive receptors under a variety of meteorological conditions. The modelling also assesses various scenarios representing the noise generated from the site from normal day and night time operations and maximum (or worst case) day and night operations. It should be noted that the Applicant found that winds are not a feature of the area.

The EIS indicates that exceedances of operation noise objectives are expected from the development particularly during the night time period. The exceedances are estimated to be up to 12 dB(A) at the nearest residence to the south during fairly calm wind conditions and greater exceedances during prevailing wind conditions particularly to the south and west of the site. The main night time noise sources on the site were identified as truck manoeuvring at the freight handling area and forklift operations.

To mitigate the predicted exceedances of the noise objectives the applicant has proposed noise barriers to the south and on the western boundary of the site. Two control options are discussed and modelled in the EIS:

- ◆ Control Option 1 involves the construction of a four metre high acoustic barrier along the southern side of the main western railway line near the Camira Street residences on Rail Access Corporation land.
- ◆ Control Option 2 involves the acoustic barriers to the south within the site to a height of 4 metres. The

barriers envisaged would be located to the south of the freight handling site up to the railway spur line and the on the adjacent side of the spur line between the spur line and the access road. The problem with this option is that a continuous barrier would not be possible due to the spur line.

Both control options include the provision of a five metre high container barrier (two stacked containers high) to the west of the freight handling terminal in Precinct B. The EIS envisages that the container barrier would be maintained at all times. Additional control options addressed in the EIS include restricting access to Forrester Road during the night time, ensuring that locomotives are shut down during loading and unloading operations at night and enclosing significant noise producing items such as the grain elevator motors.

The EIS modelling assessed the predicted noise levels at the nearest residential receptors assuming control options were in place. The EIS concluded that the control options offered significant attenuation noise levels from the site, with Control Option 1 providing the greatest benefit. Minor exceedances during night time operations are still expected, with higher exceedances predicted during strong prevailing wind conditions. No exceedance of sleep disturbance criteria is predicted at any of the nearest residences due to night time operations from the site.

The Department concurs with the proposed control measures as outlined in the EIS and supplementary material, and is satisfied that they would minimise the off site noise impacts from the proposed development. Following advice from the EPA's Noise Assessment Unit, the Department's recommended Condition of Consent No. 57 sets the operation noise limits from the site at residential locations to the east, south, west and north-east during both day and night time operations. These limits apply to all wind speeds up to three metres per second and during temperature inversion conditions. The EPA estimates that the noise limits are unlikely to cause undue impact on the surrounding community.

To ensure that impacts are minimised, the Department's recommended Condition of Consent No. 61 requires the construction of a continuous and permanent noise barrier to the west of the development. Furthermore, recommended Condition of Consent No. 59 requires the Applicant to prepare and implement a comprehensive Noise Management Plan as part of the Operational EMP required for each stage of the development. This plan would include details of periodical monitoring of noise at the nearest residences as established in the EIS, additional noise abatement methods such as on site vehicle speed limits and contingency measures to be implemented should noise complaints be received.

Traffic Noise

The traffic noise assessment in the EIS was based upon traffic counts and noise readings taken at roads in close proximity to the site. The CORTN modelling results indicated that at the main haulage routes i.e. Glossop St North, Forrester Road, Christie Street and Werrington Road would require very large increases in hourly traffic volumes to exceed the additional 2dB(A) criteria. The EIS states that the proposed facility would not generate traffic volumes which would cause exceedances of the criteria at these locations.

The EPA were critical of the approach taken in the traffic noise assessment. This criticism was based upon calculations which focused on the level of additional traffic would be required to exceed a 2dB(A) over existing noise levels on nearby roads when the ECRTN does not allow an automatic 2dB(A) increase. The EPA also requested that further measurement of existing traffic noise levels be undertaken to accurately predict traffic noise impacts of the proposal.

In response to the EPA submission a supplementary report titled, *Road Traffic Noise Impact Assessment for the Western Sydney Freight Facility, September 2000* was prepared by the Applicant. The report defined the traffic routes to be used to and from the site (see Section 6.1 of this Report) all of which are arterial roads. Loggers were also established at four residences in close proximity to the designated traffic routes, namely:

- ◆ 133 Forrester Road, St Marys – to the east of the site in close proximity to the corner of Glossop Street;
- ◆ 16 Rymill Road, St Marys – to the north-east of the site in close proximity to Forrester Road North;

- ◆ 1/ 30-32 Albert Street, Werrington – to the west of the site in close proximity to Werrington Road; and
- ◆ 1 Lockyer Avenue, Werrington – to the west of the site in close proximity of Dunheved Road.

The results of this analysis indicated that existing road traffic noise levels at 133 Forrester Road and 1 Lockyer Avenue would exceed the EPA road traffic noise criteria both during the day and night. Existing road traffic noise levels at the other residences were well below the EPA criteria although this was largely attributed to a relatively large separation distance between the residences and the main road.

The noise impact of the additional truck movements on these locations was calculated based upon the conservative assumption that at least half of the total truck movements from the site would be passing each point. The impact assessment was completed on an hourly basis and estimated that the day time noise impacts LAeq(15hr) would be between 0.3 and 1.2dB(A) at any residence and during the night between 0.1 and 0.9dB(A). The residence at 1/30-32 Albert Street in close proximity to Werrington Road was estimated to experience the highest traffic noise impacts from the proposed development.

The Department considers that the predicted road traffic noise impacts of the proposal are unlikely to be noticed as particularly different to the existing situation. The routes to be used are arterial roads with large existing volumes of heavy vehicle traffic and where nearby residences could expect to be located in a fairly noisy environment. It should be noted that the proposed development has the potential to reduce truck movements in the region and the Sydney metropolitan area by transferring the movement of bulk material and container freight from road to rail.

The Department's recommended Condition of Consent No. 77 specifies the haulage routes recommended to be used from the site. To further minimise traffic noise impacts recommended Condition of Consent No. 70 requires the Forrester Road access point be closed during the night time 10.00 pm to 7.00 am period.

6.3.4 Conclusion

The Department has recommended stringent controls in the Conditions of Consent to ensure that there is minimal off site noise impacts at surrounding residences as a result of the construction and operation of the site. Accordingly, the Department is satisfied that the likely noise impacts of the proposal can be adequately managed, subject to the recommended Conditions of Consent.

6.4 HAZARDS AND RISK

6.4.1 Background

The EIS made only one reference to dangerous goods:

All fuels and hazardous materials used on site would be stored according to best practice guidelines and to meet regulatory requirements.

The 'best practice guidelines' and 'regulatory requirements' are not detailed in the EIS. Accordingly, the Department requested that the Applicant provide further details of the types and quantities of materials to be stored on site. In response, the Applicant provided a '*Precautionary Risk and Hazard Analysis*'. The initial Precautionary Risk and Hazard Analysis assessed the hazards and risk in accordance with the Dangerous Goods Code and did not identify any mitigation measures and, as such, did not satisfactorily address the likely impacts of the proposal. The Applicant subsequently provided the Department with an amended Precautionary Risk and Hazard Analysis. This document assessed the risks and hazards associated with the proposal, equivalent in detail to a Preliminary Hazard Analysis prepared in accordance with the Department's publication 'Applying SEPP 33.' It is noted that State Environmental Planning Policy No. 33 does not apply to the proposal as this policy only strictly applies to development for the purposes of industry. Whilst part of the proposal is on land zoned for industrial use, the intermodal freight terminal (which may pose significant off-site risk if unmitigated) is not within this zoning.

6.4.2 Impacts

Intermodal Rail Freight facility

The Applicant has presented likely maximum numbers of shipping containers to be located on the development site at any time. Numbers of shipping containers have been provided with respect to dangerous goods class:

Dangerous Goods Class	No. of Shipping Containers
Class 2.1	6
Class 2.2	1
Class 2.3	1
Class 3 PGI and PGII	5
Class 3 PGIII and C1/C2	6
Class 4.1	30
Class 4.2	1
Class 4.3	1
Class 5.1	6
Class 5.2	1
Class 6.1	3
Class 6.2	1
Class 8	7
Class 9	3

The quantities of dangerous goods presented in the table would be sufficient to trigger SEPP 33 if the development were for the purpose of industry. The amended Precautionary Risk and Hazard Analysis indicates that other dangerous goods classes would not be present on the site and that the balance of the proposed 1500 shipping containers on site would comprise non-dangerous goods. It is noted that explosives (Class 1) and radioactive materials (Class 7) would not be stored on-site. Figure 9 indicates storage areas for each of the dangerous goods classes to be stored on-site.

In accordance with the principles of multi-level risk assessment, the amended Precautionary Risk and Hazard Analysis identifies that the only credible events that may cause significant off-site impacts, and therefore those events that require full or partial quantification, are Class 3 fires or toxic gas (Class 2.3) releases. The modelling of a toxic gas release from the site was assessed by the Department and found to be adequate. A toxic cloud would extend up to 186 metres (worst-case) which is significantly less than the distance to the closest residence.

Radiant heat modelling from a Class 3 fire was also considered, involving 1, 3 and 5 (maximum inventory) shipping containers. A heat flux of 15 kWm⁻² (in the range that causes structural damage) would be reached at 10, 14 and 18 metres from the Class 3 storage area. It is noted that in all cases, this would not affect storage of other dangerous goods (30 metres away), the nearest school (280 metres away), or the nearest residence (330 metres away). A heat flux of 4 kWm⁻² (range of human injury) would be reached at 22, 32 and 40 metres respectively. This would not affect the closest residences or sensitive receptors (school). The results of the heat flux modelling do not exceed those criteria supported by the Department in *Hazardous Industry Planning Advisory Paper No. 4 - Risk Criteria for Land Use Safety Planning*.

Release of other materials would have a smaller area of affectation than for a Class 3 fire. The most credible events are those related to the release of oxidising agents or ecologically toxic substances. The amended Precautionary Risk and Hazard Analysis highlights the fact that shipping containers would not be opened. The structural integrity of shipping containers is such that it is very unlikely that a leak would occur.

Grain Receival and Processing Facility

Potentially hazardous activities associated with the grain receival and processing facility are dust deflagration (explosion) within grain storages and the fumigation of grain storages. The EIS states that Phosfume, a chemical used to prevent insect infestation of grain, would be used on site. It is stated that storage and handling would be implemented in line with best practice and in line with WorkCover requirements.

The Precautionary Risk and Hazard Analysis provided for the grain processing facility indicates that the only potentially hazardous incident associated with this component of the development is dust deflagration. From the information provided, such an explosion would not produce off-site impacts, nor would it initiate knock-on events with other development components. The explosion mitigation measures proposed are reasonable.

6.4.3 Conclusion

The Department considers that the potential hazards and risks associated with the development are manageable and would not result in significant offsite impacts, subject to the recommended conditions of consent.

In assessing the impacts discussed above, the Applicant assumed that:

- ◆ no shipping container containing dangerous goods would be stored on-site for longer than 96 hours;
- ◆ the number of dangerous goods containers would be limited by class;
- ◆ separation distances would be maintained at all times;
- ◆ no radioactive materials would be stored on-site at any time;

Accordingly, these assumptions have been incorporated into the recommended Conditions of Consent.

To ensure that dangerous goods storage is effectively managed the Department also recommended a number of additional Conditions of Consent. Recommended Condition No. 89 requires the Applicant to maintain a register of all dangerous goods stored on-site. Recommended Condition of Consent No. 90 requires that the Applicant provide temporary bunding and spill management devices to contain and clean up materials in the event of spillage from any shipping container. Recommended Conditions No. 92 to 94 detail reporting requirements to ensure that all mitigation measures detailed in the amended Precautionary Risk and Hazard Analysis and the Consent are implemented in full.

6.5 INFRASTRUCTURE IMPACTS

6.5.1 Existing Infrastructure

There is a complex array of electricity, sewerage, water, stormwater and telecommunications infrastructure traversing the site. The infrastructure includes:

- ◆ An aboveground 132kV electricity transmission line which traverses through the centre of Precinct C and continues east through the north-eastern corner of Precinct A, north of Little Creek. The power line is contained within a 25m wide easement.
- ◆ Two below ground stormwater pipes. The first traverses in an east-west direction through the centre of Precinct A and B towards South Creek. The second pipeline traverses the southern portion of Precinct C.
- ◆ A Telstra Fibre Optic telecommunications line which traverses the southern portion of Precincts A and B in an east-west direction.
- ◆ A water main which traverses the north and north-eastern portion of Precinct A. Three water mains traverse the Dunheved cutting area in a north-south direction.
- ◆ Several sewer mains crossing all precincts and the Dunheved cutting area. The mains include 600mm and 900mm St Marys Carrier mains and the 525mm Little Creek Carrier.

A 132 kV electricity transmission line is proposed within Precinct C of the site. The line would proceed north from the existing line through the centre of Precinct C to Christie Street.

The existing and proposed transmission line and the existing sewers put constraints on potential development including height restrictions in the vicinity of lines and restrictions in terms of clearance and access to transmission towers and sewers.

6.5.2 Key Issues

Availability

The EIS estimates that there is existing capacity available in the water, sewerage and telecommunications infrastructure surrounding the site. It is stated that a new substation would be required to supply power to the entire site.

Sydney Water Corporation (SWC) has indicated that amplification, extension or adjustment of water mains would be required for the development. It states that the details and requirements for any amplification of water infrastructure should be negotiated with SWC through the Section 73 certificate process. The Department's recommended Condition of Consent No. 110 requires the Applicant to consult with the relevant service providers regarding their requirements for the provision of services to the development.

Bus Transitway

With the operation of the freight terminal the proposed bus transitway would no longer be able to operate along the preferred route, the railway spur line. Alternatives are being considered, and the Applicant has made allowance for the construction of a bus transitway along the western perimeter of the development area of the site, parallel to the internal spine road. Further discussion of this issue is contained in Section 6.1 of this Report.

Building Over Sewers

SWC expressed particular concern in its submission with regard to the impacts of the development on existing sewerage infrastructure. SWC state that the Stage 1 filling and the proposed facilities would place a dangerous load on their existing sewer assets including the 600mm and 900mm St Marys Carriers serving a population of 20,000. SWC argue that the affected pipes should be upgraded to cope with the loads or relocated off site at the Applicant's expense. Whilst acknowledging the concerns of SWC, the Department has no control over the placement of fill over sewer lines on the site as these works were undertaken as part of the Stage 1 works approved by the Applicant.

Notwithstanding the Stage 1 filling, the Department notes that part of the grain silo facilities would be constructed over the existing sewers. To ensure any requirements of Sydney Water are adequately met, the Department's recommended Condition of Consent No. 113 requires the Applicant to undertake standard protection measures when building over sewers.

Use of Treated Waste Water

The EIS indicates that the Sand/Sandstone Recycling Facility would use treated waste water from the St Marys Waste Water Treatment Plant. No other details were documented in the EIS. At the request of the Department and SWC further details of the waste water usage was provided. It was indicated that the treated waste water would only be used within an enclosed shed of the sand recycling facility and that no treated waste water would be sprayed or disposed of from the site. It was indicated that a license from WorkCover would be required for the use of the waste water. It is envisaged that the treated waste water would be piped to the site parallel to the Dunheved conveyor route from existing pipelines at the Dunheved Golf Course north of the site.

6.5.3 Conclusion

The Department considers that the proposed development would not pose any significant impacts on existing infrastructure, subject to the recommended Conditions of Consent. To ensure that no services are significantly disrupted by the proposal, the Department's recommended Conditions of Consent numbers 111 and 112 ensure that any service disruption would be minimised.

6.6 HERITAGE

6.6.1 Indigenous Heritage

As part of the EIS, an archaeological assessment of the site was undertaken. This assessment entailed a search of National Parks and Wildlife Service's archaeological sites database and a focused field survey completed in consultation with the Deerubbin Local Aboriginal Land Council.

The review of NPWS's register found no known archaeological sites within the proposed development site. The focused field survey also found no evidence of aboriginal occupation. The survey concluded that the highly disturbed nature of the site including the construction of sewer mains and the scale of filling operations currently under way on most of the site would suggest that no evidence of aboriginal occupation is likely to be found on-site.

6.6.2 Non-Aboriginal Heritage

No heritage item of State, or local significance (as identified in a regional or local environmental plan) is known to exist within the site. A review of heritage studies undertaken in the locality found that the Dunheved Cutting, a component of a railway branch line constructed in 1942 between St Marys station and Ropes Creek, may have some heritage significance. Accordingly, a heritage study of the Dunheved cutting was undertaken as part of the EIS.

The EIS recommends that the cutting be recorded using colour and monochrome print and colour transparency and the following articles would be salvaged from the cutting for museum display or adaptive reuse before it is prepared for the stockpiling of sand/sandstone materials:

- ◆ the semaphore signal standard;
- ◆ the signal standard ladders;
- ◆ all lever frame or ball level point mechanisms;
- ◆ point rodding and signal cable mechanisms; and
- ◆ the water column at the western end of the platform.

6.6.3 Key Issues

Alternatives

The EIS considered a number of alternatives to using the Dunheved Cutting. Use of existing northern and southern rail corridors were ruled out as existing passenger and freight traffic along these lines would severely limit their use. The key advantage of the Dunheved Cutting is that it would allow the storage of large volumes of material from the sand/sandstone recycling facility with minimal environmental impacts. The EIS concluded that the use of the Dunheved Cutting for stockpiling purposes would not limit the future use of the Ropes Creek line as Christie Street has been extended over the railway immediately south of the Dunheved Cutting, blocking rail access between the study area and the Main Western Railway.

Archaeological Significance

The EIS noted that while the rail line as a whole could be classified as rare and of regional significance, this classification is derived from the cutting itself rather than the remaining rail infrastructure. The NSW Heritage Office raised concern over the assessment of significance carried out in the EIS. In particular, the Heritage Office questioned why the EIS did not carry out a comparative analysis of similar items. The

Department notes that the EIS considers the Dunheved Cutting in the context of other military rail projects and the Ropes Creek Rail Line, of which it forms part. To address the concerns raised by the Heritage Office the Department requested information in relation to the comparative significance of the Dunheved Cutting. The additional report concluded that the survival of the Ropes Creek railway precinct and its industrial context makes possible the conservation of a substantially intact functional precinct, in which the railway can be interpreted from substantial remaining fabric within the context of the military-industrial plant.

Management

The Heritage Office recommended that the Applicant consider incorporating in-situ retention of significant fabric relating to the Dunheved Cutting. The Department notes that the significance of the site derives from the landform itself, which would not be altered under the current proposal. The retention of the railway lines, the station and other elements would have considerable impact on the viability of the stockpile operations and the Department does not consider there is significant justification for keeping items in-situ. Notwithstanding, the Department acknowledges the significance of the landform and Condition No. 107 requires that the Applicant ensures works within the cutting do not damage the landform. Furthermore, to ensure that the heritage context of the existing rail infrastructure is recorded prior to the salvaging of infrastructure and the preparation of the cutting for stockpiling, the Department's Condition of Consent No. 108 requires that a heritage survey of the Dunheved Cutting is completed in accordance with the relevant guidelines prepared by the Department and the Heritage Office.

Penrith City Council considered that some rail artefacts proposed to be removed from the cutting could be used as "sculptural elements" along the open space corridor. These artefacts are constructed of metal and timber and are substantially weathered. In particular, some parts have sharp rusted points. Given the highly degraded nature of these artefacts and the recreational use of the open space corridor, the use of artefacts as "sculptural elements" is not recommended. The Department's recommended Condition of Consent No. 109 ensures that the relics to be salvaged are put to adaptive reuse or displayed in museums.

6.6.4 Conclusion

Given the comprehensive nature of the archaeological survey undertaken, the Department is satisfied with the findings of the EIS. It is therefore concluded that the impacts on significant archaeological or heritage impacts resulting from the proposed development would be acceptable, subject to the relevant conditions of consent.

6.7 FLORA AND FAUNA

6.7.1 Existing Environment

Preparatory earthworks (including the emplacement of up to three metres of fill), which formed part of a previous assessment discussed above, are currently being carried out on the subject site. Much of the site has therefore been extensively modified. Under the previous assessment 10.3 hectares has been dedicated for open space purposes, of which 6.5 hectares is to be rehabilitated and maintained as Sydney River Flat Forest to provide a buffer between the development and South and Little Creeks.

6.7.2 Flora

The EIS found no threatened species in the study area and concluded that given the highly modified nature of the site no threatened species were likely to occur. Two distinct vegetation communities were identified on the site: scattered species of Grey Box and Grey Box Iron Bark Woodland surrounding the Dunheved Cutting and tracts of lesser quality remnant Sydney Coastal River-Flat Forest surrounding South and Little Creeks. The EIS noted that Sydney Coastal River-Flat Forest is listed as an "endangered ecological community" under the *Threatened Species Conservation Act 1995* and included an assessment of the likely impact of the proposal on this vegetation community in accordance with Part 5A of the Act. The assessment concluded that the existing remnants of this community would benefit from riparian vegetation extension and reinforcement program to be undertaken under the previous site approval.

6.7.3 Fauna

The EIS concentrated on the habitat of the Green and Golden Bell Frog, which had been found in areas surrounding the site. The study recorded native fauna species characteristic of urban environments such as the Crested Pigeon, Masked Plover, Willie Wagtail and grass skinks. No threatened fauna species were noted during these studies. The EIS concluded that threatened species were unlikely to occur on the site in its current condition.

6.7.4 Key Issues

Cumberland Plain Woodland

National Parks and Wildlife Service (NPWS) noted that the scattered species of Grey Box and Grey Box Iron Bark Woodland located on the slopes of the Dunheved Cutting appears, on the basis of interim mapping, to be a stand of Cumberland Plain Woodland, an “endangered ecological community” under the *Threatened Species Conservation Act 1995*. Further information in relation to this vegetation was requested from the Applicant. This assessment, completed in accordance with Section 5A of the Act by the Applicant concluded that the Dunheved Cutting appears to be mapped incorrectly and notes that patches of vegetation (as shown in the aerial photograph given in Figure 3.2 of the EIS) occur between the cutting and Christie Street. The Department accepts these findings and does not consider that there is likely to be a significant impact on threatened species.

Aquatic habitats

NSW Fisheries noted that the EIS did not assess the impact of the proposal on aquatic habitats. A subsequent assessment found few aquatic species, none of which are threatened species and cited poor water quality as a reason for this. The Department concurs with these findings.

Commonwealth Environment Protection and Biodiversity Conservation Act

The Commonwealth *Environment Protection and Biodiversity Conservation Act* commenced on 16 July 2000. Any actions that have a significant impact on matters of national environmental significance would require Commonwealth approval. No species listed under Commonwealth legislation would be affected by this proposal.

6.7.5 Management

Preparatory earthworks are currently being undertaken on-site and the rehabilitation and expansion of the riparian zone is being undertaken under a separate approval. As such, the management of land clearing and vegetation rehabilitation within the riparian zone is outside the scope of this proposal. The rehabilitation and maintenance of the vegetation communities within the Dunheved Cutting is however recommended. The Department’s recommended Condition of Consent No. 103 requires the preparation and implementation of a detailed Rehabilitation and Landscape Plan to ensure that planting is managed effectively and integrated with the rehabilitation and landscaping of the entire site. This plan requires the implementation of active management practises such as watering regimes and weed eradication and if required replacement of dead vegetation. These landscaping works will also be important for visual screening of the site (refer to Section 6.8 of this Report).

6.7.6 Conclusion

The Department concurs with the assessments of flora and fauna undertaken as part of the EIS and within the additional information provided by the Applicant. The Department considers that, given the retention and rehabilitation of the Sydney Coastal River-Flat Forest in the riparian corridor, compensatory planting and the absence of threatened species within the site, the proposal would not have a significant impact on flora and fauna.

6.8 VISUAL AMENITY

6.8.1 Existing Environment

The site is situated within a visual catchment characterised by the Hawkesbury-Nepean floodplain, including views of the Blue Mountains to the west. The floodplain has little relief, which makes large built structures related to the dominant urban, industrial and commercial existing development conspicuous. Immediately surrounding the proposed site to the south and west are large areas of open space with South Creek and its tributaries running through. South Creek and its tributaries have been extensively degraded by weeds, rubbish and urban development.

The EIS describes three main visual receptors to the site. From the west and north-west through the grassed open space of the golf course with a backdrop of riparian vegetation fringing South Creek. From the south from the school, sporting facilities and residential uses across the railway line built on an embankment through to the industrial uses on the northern side of the line. From the north and east the views towards the site are dominated by large industrial buildings with a backdrop of riparian vegetation associated with South Creek.

High voltage electricity transmission towers crossing Precinct C and surrounding areas intrude on the more distant views.

The Dunheved cutting is located between established industrial areas and is not readily visible from the surrounding area due to its depth (up to 8 metres) and the fact that it is partially obscured by remnant vegetation.

6.8.2 Impacts of Proposal

The assessment of the visual impacts of the proposal was completed by identifying visual transects through the site based upon the key views to the site. The method of assessment was to impose impressions of the facility and the proposed screening vegetation on photographs taken along each of the transects.

The EIS identifies that the main visual elements to the western side of the site would be the 8.7 metre high container stacks, the sand recycling plant, and 8 metre high bulk material stockpiles. It is proposed that all of the built infrastructures on the western side would be dark non-reflective colours. The main visual features to the eastern side of the site would be the grain terminal silos which are designed to be 20 metres high with an enclosed tripper conveyor for each silo extending to 25 metres in height. Elevators are proposed to transfer grain from trains to silos and between the silos. The maximum height of these elevators would be 39 metres. It is proposed that the silos are painted white to reflect heat.

The riparian zone being rehabilitated as part of the Stage 1 filling works along the western boundary of the site is also to be utilised as a visual buffer. The rehabilitation works are estimated to increase the height and density of the riparian vegetation forming an effective visual screen of the site for residences to the west.

Views from the south would be treated with a 3 metre high vegetated bund constructed adjacent to the main western railway line on the site. The EIS states that this screen would be established at the completion of the Stage 1 earthworks and would eventually eliminate the view of the site and surrounding industrial areas from rail passengers and the land uses to the south. Views from the north and west would be shielded from the existing industrial developments surrounding the proposed development.

Although the Applicant proposes to establish the vegetated screens with fast growing native species, the EIS predicts that the plants would not reach a height of 15 metres for up to 15-20 years. The EIS includes a number of photomontages and visual transects from the surrounding viewpoints with the established vegetative barriers. The photomontages indicates that only the tops of the silos would be visible from the

west and that all of the site would be screened to views from the south.

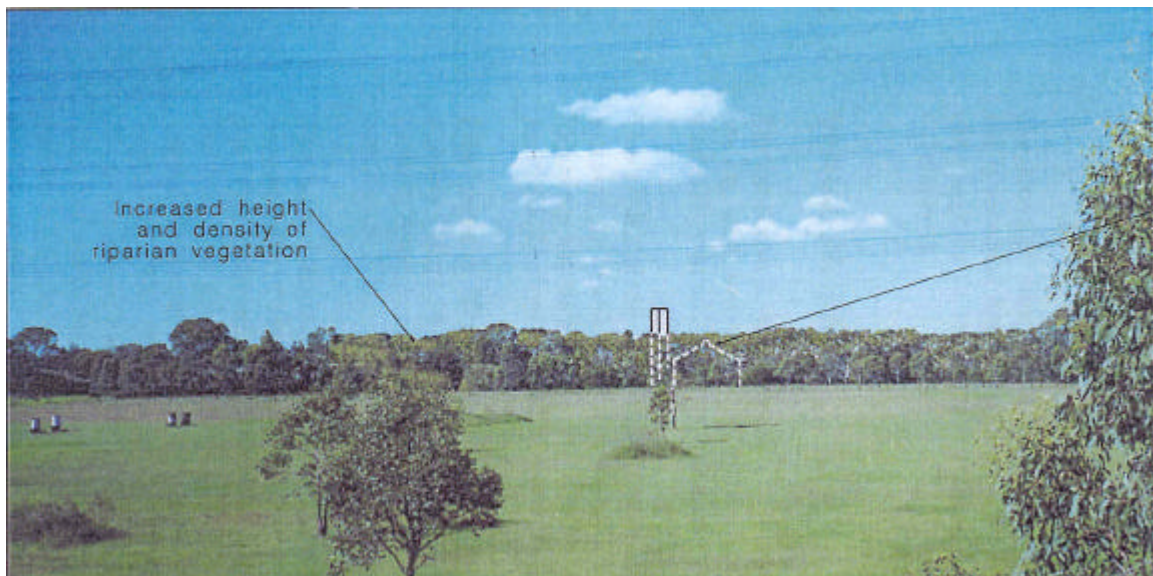
The sand/sandstone stockpile storage within the Dunheved cutting would be at a level no greater than the tops of the embankments of the cutting.



West View from Princess Street to Precinct C



View West from Princess Street to Precinct B



View West from Victoria Street

6.8.3 Key issues

Screen Planting

Penrith Council raised a number of issues in relation to visual impacts. In relation to the riparian zone rehabilitation on the western boundary of the site Council suggests that *'....the proposed screen tree planting will not provide sufficient screening and that additional foreground and boundary planting around the nearby open space will be required to reduce impacts'*. Council has also requested that temporary screening is required prior to the screening vegetation maturing.

The Department does not believe it is necessary nor feasible to require that the Applicant provide additional foreground plantings in the open space area west of the site to improve the visual buffer. The SimmsMetal Limited tower, powerlines and Smorgan's Plant dominate the industrial visual environment. The Department believes that the rehabilitated riparian areas and the vegetated screen at the southern most portion of the site at maturation would provide an effective visual screen.

Council also suggests that the stockpiles within the Dunheved cutting should be screened from those crossing the pedestrian bridge, however, did not recommend a screening method. The pedestrian bridge over the Dunheved cutting is a low volume connection between industrial uses to the north and south. The Department does not believe it is critical to screen the stockpile from this bridge as the proposed development would not alter the current visual environment at this point. The Applicant has indicated that the bridge would be upgraded to prevent access to the activities within the cutting.

The Department's recommended Condition of Consent No. 103 requires the Applicant to prepare a detailed Rehabilitation and Landscape Plan as part of the Framework Operational EMP in consultation with Council. This would ensure that Council's concerns are addressed. The Plan would be directed towards:

- ◆ the use of advanced and super advanced plant material at visually prominent locations (to reduce the timeframe for the effective establishment of visual buffers);
- ◆ maintenance of the screen planting areas; and
- ◆ details of the timeframes for implementation of the appropriate landscaping.

6.8.4 Conclusion

The Department considers that the visual intrusion of the proposal would be acceptable, subject to the recommended Conditions of Consent.

7. CONSIDERATION OF OTHER ISSUES

7.1 AIR QUALITY

7.1.1 Existing Air Quality

The EIS states that the existing air quality of the locality is best described using data applicable to the Western Sydney Region and, more specifically, Blacktown, which is the closest monitoring station to the site. The EIS concludes that background PM₁₀ and TSP are currently within acceptable criteria.

It is noted that pollutant dispersion is influenced by metrological conditions such as wind speed and direction, and temperature inversions. The EIS includes an analysis of local metrological conditions, which has been used in assessing the likely impacts of the proposal.

7.1.2 Environmental Goals

Relevant air quality standards are as follows:

Pollutant	Standard	Averaging Time
Particulate Matter <10 um (PM ₁₀)	30 ug/m ³	annual
	50 ug/m ³	24 hour
Total Suspended Particulates (TSP)	90 ug/m ³	annual
Phosphine	5.6 ug/m ³	3-minute , 99.9 th percentile
Dust Deposition (residential areas)	4g/m ²	month (30 days)

The criteria for PM₁₀ and TSP are standard air quality goals adopted by the EPA in its policy *Action for Air*. The criterion for dust deposition is also a standard air quality goal adopted by the EPA based on the surrounding land uses. In this particular case there is residential development in relatively close proximity to the proposal and, as such, a deposition rate of up to 4 g/m²/month (30 day) is applicable. However, this criterion is a goal for total dust deposition and therefore must include existing dust deposition rates. As data on existing local dust deposition is unavailable, the EIS assumed a background level of 3 g/m²/month. The EPA were not prepared to accept this assumption, but agreed that the earthworks currently being undertaken on site could be a major dust generator.

The operation of the grain terminal would require the use of the pesticide Phosfume. The active ingredient of this chemical is phosphine, a colourless insecticidal gas. Currently, there is no formal assessment criterion for phosphine emissions in NSW. In the absence of formal guidelines, the EPA have recommended that the Victorian EPA design ground level concentration criterion of 5.6 ug/m³ be adopted. As the EIS adopted a phosphine goal greater than the Victorian EPA goal the likely phosphine emissions from the proposal were reassessed accordingly.

7.1.3 Impacts

The EIS states that the major air quality impacts of the proposal would arise from the material processing within the sand/sandstone recycling facility and the grain facility.

As part of the EIS, modelling of eight likely operational scenarios within Precincts A and C were undertaken using the United States EPA *Industrial Source Complex Version 3 (ISC) Short Term Model Version 96113*.

These scenarios were modelled at seven receptors surrounding the site. The locations of these receptors are indicated in Figure 8. These models were based on the a number of assumptions including:

- ◆ maximum product, receipt, processing and shipment;
- ◆ maximum operation hours (with no on-site operations on Sundays and public holidays);
- ◆ baghouse filter use in all vents (grain fumigation);
- ◆ grain density of 700 kg/m³; and
- ◆ soil density of 2300 kg/m³ (eg moist soil).

These models also made assumptions in relation to the location of emission points. In the EIS the exact location of these sources was deferred to the detailed design stage. Accordingly, the Department's recommended Condition of Consent No. 34 requires that a detailed point-source based dust impact assessment be prepared by the Applicant and endorsed by the EPA prior to the commencement of construction.

Intermodal Freight Terminal

The EIS states that emissions would not arise from the work practices proposed. It is noted that operations would involve the movement of sealed containers on a hardstand area and, as such, emissions of dust would be minimal. However, considering the sensitivities of the surrounding land uses, the EIS recognises that management practices would need to incorporate some dust mitigation measures.

Grain Hub

The EIS states that operations including truck movements, the handling of grain and grain fumigation have the potential to generate emissions of dust and phosphine (fumigant) which could adversely effect the local air quality, if not effectively managed. Scenarios 1, 2 and 3 modelled dust generated by the likely standard operations within Precinct A, the on-site grain shipping operation and the worst case operation respectively. The dust levels peaked at Receptor F, located within the Dunheved Industrial Area, but were well within acceptable criteria.

Scenarios 7 and 8 modelled the likely emissions that would be generated during grain fumigation. Scenario 7 modelled the fumigation of one grain silo, while Scenario 8 modelled the fumigation of the storage shed. As it is proposed to only fumigate one grain storage at a time and these storages would continuously vent over a 24 hour period this cumulative assessment represents an absolute worst case scenario. Under this scenario, the maximum fumigant level recorded was 10.83 ug/m³ at Receptor B (to the south of Precinct A) during fumigation of the storage shed. This level would not be acceptable. The EPA requested that a further assessment based on the Victorian EPA phosphine goal be undertaken. This assessment indicated that the level of emissions could be reduced by reducing the volume of fumigant vented. The EPA advise that a release rate not exceeding 0.0122 g/s (100% concentration limit) would achieve the phosphine goal. The Department's recommended Condition of Consent No. 27 limits the emission rate accordingly.

An assessment of the hazards and risk involved with grain fumigation is given in Section 6.4 of this Report.

Sand/Sandstone Recycling Facility

The EIS states that dust emissions could be generated during the handling, processing and storage of product. Scenarios 4 and 5 modelled the likely dust emissions from standard and worst case operations within Precinct C. Ambient dust concentration levels peaked at Receptor C, directly to the west of Precinct C. Dust deposition peaked at Receptor F, directly to the north of Precinct C. These levels would be within the acceptable criteria.

Cumulative Impacts

Scenario 6 modelled the cumulative worst-case dust deposition and concentration for simultaneous operations within Precincts A and C. Ambient dust concentration levels peaked at Receptor F, directly to the north of Precinct A. Dust deposition peaked at Receptor D, to the south of Precinct C. These predicted levels are all within the acceptable criteria.

7.1.4 Management

General

The operational scenarios modelled were based on important assumptions which have subsequently been incorporated into the recommended conditions of consent.

The EIS also outlines general and specific control measures that were incorporated into the assessment of likely impacts. General management measures included:

- ◆ regular watering / sweeping of the road surfaces;
- ◆ an on-site speed limit within the site;
- ◆ vegetative screening; and
- ◆ covering of all trucks entering and leaving the site.

These measures, with the exception of vegetative screening and sweeping are standard dust control measures. The Department considers that vegetative screening would have a limited impact on ambient dust concentrations and deposition as this screening would take some time to establish and factors influencing dust dispersion such as wind would blow dust over and through permeable vegetation barriers. The sweeping of road surfaces would serve only to further disperse dust. The Department's recommended Conditions of Consent 38 to 40 requires the Applicant ensure that trucks entering and leaving the site with dusty loads are covered; construct and operate a wheel wash facility and cease dust generating activities when dust goals cannot be adhered to.

Grain Facility

The specific management measures outlined in the EIS for the grain facility include:

- ◆ utilisation of baghouse filters to limit particulate emissions to concentrations less than 0.25 g/m³;
- ◆ wetting of dust from the main dust out loading station bins before being discharged to road vehicles;
- ◆ enclosing of the rail and road loading bays during adverse meteorological conditions;
- ◆ allowing the emission concentration from a fumigated storage to fall to acceptable levels before fumigation in another storage is commenced; and,
- ◆ discharging of fumigate from only one storage at any one time.

The Department considers that these measures, together with the general measures outlined above, would minimise emission levels from the grain facility. The Department considers that the enclosing of conveyors or other such dust minimisation treatment, as proposed for the sand/sandstone facility would also limit dust emissions within this facility to acceptable levels. The Department's recommended Condition of Consent No. 36 also requires that all conveyors be fitted with adequate controls to ensure no fugitive dust escape.

Sand/Sandstone Recycling Facility

The specific management measures outlined in the EIS for the sand/sandstone recycling facility include:

- ◆ clean operating and basic house keeping practises;
- ◆ enclosing of all conveyors;
- ◆ regular application of water to all storage piles; and,
- ◆ investigation of the possibility of installing a fogger or mist application system at the elevator leg.

The Department considers that these measures, together with the general measures outlined above would minimise emissions from the sand/sandstone recycling facility. However, since the modelling completed assumed that soil (stockpiles) would be moist the Department's recommended Condition of Consent No. 37 requires the Applicant to install an effective water spray system for all stockpiles.

7.1.5 Conclusion

The likely air quality impacts of the proposal would be within acceptable limits for dust deposition, TSP, PM₁₀ and Phosphine levels provided that the proposed management measures are implemented. To ensure that these measures are implemented effectively, the Department's recommended Condition of Consent No. 29 requires the Applicant to prepare and implement detailed Air Quality Management Plans. These

plans would detail monitoring methodologies, air quality management practices, complaints handling procedures and reactive management measures to alter operations if the relevant emissions levels are exceeded. The Department's recommended Condition of Consent No. 9 also requires the independent monitoring of dust impacts in the event of extended community complaint to ensure that any complaints in relation to dust are satisfactorily resolved.

7.2 WATER QUALITY

As the proposal involves the stockpiling of sand and sandstone, the handling of large volumes of grain and movement and storage of substances such as chemicals, plastics, metals and oil and oil products, there is a possibility that soil erosion, dust, and leakages of substances stored on-site could affect the quality of surfacewater reserves, nearby creeks and ultimately the Hawkesbury River.

Sydney Regional Environmental Plan No. 20 – Hawkesbury-Nepean River (No. 2) applies to the subject site. This plan aims to protect the environment of the Hawkesbury-Nepean River, with the specific objective of maintaining or improving water quality.

The following assessments of surface and groundwater impacts of the proposal focus on these matters.

7.2.1 Existing Surface Water Impacts

As previously discussed, the site is currently being prepared for development under a previous approval. These works involve the emplacement of fill, the construction of five sedimentation/retention basins, the re-establishment of the original alignment of Little Creek and the construction of substantial hardstand areas in Precincts A and B.

Surfacewater runoff from emplacement areas is currently directed by diversion banks to a series of construction sedimentation basins. Clean waters are directed around the emplacement site by earth embankments. Sediments from stockpiling operations are contained by sediment fencing and water from the basins is used for dust suppression purposes. The surfacewater management structures currently under construction are illustrated in Figure 10.

These surfacewater management structures would form an integral part of the surfacewater management structures required for the current development and the Department's recommended Condition of Consent No. 49 requires that these structures are in place and that all reasonable requirements of the DLWC have been met within six months of the date of Consent.

As part of the EIS, an assessment of the existing water quality of South Creek was completed. This assessment found that the water quality of South Creek is poor and does not comply with ANZECC guidelines for primary contact. This assessment noted an average non-compliance with ANZECC guidelines for conductivity, suspended solids, and turbidity of 85% and unacceptable levels of faecal contamination.

7.2.2 Impacts of the Proposal

The EIS states that the majority of construction works proposed would be located within the sedimentation and erosion control system established under a previous approval. The EIS also detailed the following additional water quality issues for the proposed development:

- ◆ construction of the proposed site access road crossing over Little Creek;
- ◆ construction of a dual lane roundabout adjacent to the Christie Street Bridge (no longer part of the proposal);
- ◆ construction of catchdrains and a sedimentation/detention dam to service runoff from the recycling operations in Precinct C; and,
- ◆ preparation of the Dunheved Cutting Storage area.

Crossing of Little Creek

The EIS states that construction of the proposed access road crossing over Little Creek would take up to two weeks and involve the damming of the creek for two days. This construction would also involve the clearing of some vegetation and the stripping and stockpiling of topsoil from the footprint of the crossing. The design of this crossing has been deferred to the detailed design stage. The DLWC recommends that this structure be designed to minimise disturbance of the riverine corridor and modification of the natural stream profile and maximise the area available for water flow and the movement of flora and fauna. This recommendation is reflected in the Department's recommended Condition of Consent No. 51.

The EIS details the following management measures to be implemented during the construction of this crossing:

- ◆ establishment of silt fences at the downstream limit of disturbance and around the edge of the footprint;
- ◆ construction of rip rap dishdrains at the upstream and downstream toes of the crossing to prevent scouring due to concentrated surface runoff in these areas; and,
- ◆ topsoiling and seeding of finished batters and disturbed areas to minimise sediment generation.

The Department considers that these measures would adequately manage the construction impacts of the crossing. However, silt fences are a temporary management measure only and the EIS does not outline any measures to mitigate the possible water quality impacts of traffic using this road. The Department is concerned that any material spilt on this section of the road would flow directly into Little Creek. Therefore, it is recommended that the Soil and Water Management Plan required by the Department's recommended Condition of Consent No. 46 detail both short and long term surfacewater management measures for the site.

Intermodal Rail Freight Terminal

Surfacewater runoff from the intermodal rail freight terminal would be collected by existing sedimentation Dams SD4 and SD5 which have approximately 1.6 ML and 0.6 ML of storage capacity, respectively. The EIS notes that this storage capacity is 2.5 times larger than the design sediment detention basin capacity recommended in the *Department of Housing's Managing Urban Stormwater* (1998). The EIS states that if the storage capacities are exceeded during major storm events, runoff would be discharged via a broad vegetated area where it would be further filtered and dissipated.

Water from these basins would be used to gravity irrigate the adjacent riparian vegetation. The DLWC raised concerns over the storage of water in sedimentation basins. In response the Applicant has agreed to amend basin designs so they are self-draining. This is reflected in Condition 50.

Roof runoff from the buildings in the terminal would be directed to an existing stormwater system, constructed along the modified alignment of Little Creek prior to it being filled. The EIS concludes that the facility would store sealed containers, and, hence has minimal potential for generation of pollutants in surfacewater runoff. Issues in relation to the possibility of container leakage are discussed in the hazards and safety assessment in Section 6.4 of this Report.

Sand/Sandstone Recycling Facility

The EIS states that all runoff from the proposed sand/sandstone recycling facility would be directed towards a series of catch drains and collected by an existing 2.8 ML Sediment Detention Basin (SD 2). The construction of a 0.5 metre high grassed levee along the western edge of Precinct C would also divert runoff into SD 2. A sump and float controlled pump system would be installed in SD2 to utilise the stored water for sand processing operations. It is proposed to connect SD2 to an existing stormwater pipe via a standpipe to allow controlled discharge to South Creek during extreme wet weather events.

The DLWC raised concern over the potential impacts of the construction of the levee on the flows of South Creek. In response the Applicant proposed to construct a grassed catchdrain in the same area to convey runoff to SD 2. The DLWC confirm that this would address its concerns.

The sand processing plant would include a dual belt press filter system to separate clay and silt from the sand. The water management system required for this operation would be fully contained and the only water discharged from the process would be contained in the product sand and clay and silt cake. The EIS notes that this process would require approximately 4 to 6 m³ of make-up water per hour of operation. This make-up water would be sourced from SD2 and from Sydney Water's St Marys Wastewater Treatment Plant (refer to Section 6.5 of this Report for further discussion of waste water usage).

Dunheved Cutting

The Dunheved cutting has two open concrete drains on either side of the cutting, with partially enclosed crossover channels. Upstream runoff would be conveyed as it is at present, through the existing drains. Once rail infrastructure is removed, it is proposed to lay concrete slabs over the top of the open concrete drains, then cover the slabs and the floor of the cutting with a thick geotextile fabric. A layer of clean filtering sand would be placed on the geotextile over the drains and covered with sand and a second layer of geotextile, which would be removed periodically and replaced or cleaned. The EIS states that this would facilitate effective drainage from the site, minimise the potential for silting up the geotextile fabric and maximise the retention of sediments. The EIS states that bunds would be constructed at either end of the storage area to prevent surface runoff entering the storage area and to contain runoff from stockpiled sandstone spoil. The Department considers that these measures would minimise the potential surfacewater impacts of storage within this cutting.

7.2.3 Conclusion

The majority of the surfacewater issues associated with the subject site relate to the current emplacement of spoil which is not part of the development application. The additional water management structures which are required for this proposal would adequately manage the likely impacts of the development. It is considered that the implementation and effectiveness of these measures is dependent on diligent monitoring and maintenance of infrastructure. To this end, the Department's recommended Condition of Consent No. 46 requires the preparation and implementation of detailed Soil and Water Management Plans.

7.3 SOCIO-ECONOMIC CONSIDERATIONS

7.3.1 Jobs and Investment

The EIS estimates that the proposed facility would result in a capital expenditure of \$21 million for construction. The estimated annual throughput of the total facility is \$1.73 billion comprised mostly of an estimated \$1.7 billion throughput of the Intermodal Freight Terminal.

It is also estimated that the total development would generate 50 positions during construction and 36 full-time positions (9 off-site) during operations. It is estimated that \$1.5 million in wages would be paid per annum to the on site workforce.

The proposed development has the potential to foster the growth in local and regional industries that use containerised freight, bulk grain supplies or bulk sand products.

Penrith City Council estimates that the proposed development would represent 30% of the City's existing Gross Product and would support local businesses through employment and income flow ons. It is further commented in the submission that the facility has the potential to foster the growth of industries that use containerised freight, bulk grain supplies or bulk sand products.

7.3.2 Conclusion

The proposal has the potential to provide a significant contribution to the economy of the region and provide opportunities for employment for people in the area. The proposal is in line with State Government objectives to promote development and employment in Western Sydney.

8. SECTION 79C CONSIDERATION

Section 79C(1) of the *Environmental Planning and Assessment Act, 1979* lists the matters that the consent authority must consider when deciding to approve or refuse a development application. These are as follows:

The provisions of:

- (i) any environmental planning instrument, and
- (ii) any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority, and
- (iii) any development control plans, and
- (iv) the Regulations (to the extent that they prescribe matters for the purposes of this paragraph)

that apply to the land to which the development application relates,

- (a) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality
- (b) the suitability of the site for development
- (c) any submissions made in accordance with this Act or regulations.
- (d) the public interest

8.1 THE PROVISIONS OF PLANNING INSTRUMENTS OR REGULATIONS

8.1.1 Penrith Local Environmental Plan 1996 (Industrial Lands)

This Plan aims to encourage a broad range of industrial uses, which promote economic growth and employment, are consistent with Council's vision and conducted in an environmentally sound manner. Under this plan Precinct A (grain hub), the railway line and the Dunheved storage site (12.3 hectares of land) are zoned 4(a) General Industrial. The development of the grain hub, the rail unloading facility and the Dunheved storage site in this zone is permissible with consent.

8.1.2 Penrith Local Environmental Plan 201 (1991)

This plan aims to encourage the proper management, development and conservation of valuable natural and man-made resources within the rural lands of Penrith. Under this plan Precincts B and C (24.3 hectares of land) are zoned 5(d) Corridors Zone. Within this zone, the proposed rail freight terminal is permissible with consent. However, the development of the sand recycling facility is prohibited development and, as such, the proposal has been declared by the Minister as State Significant Development as discussed in Section 1 of this Report.

The objectives of this zone are as follows:

- (a) *to provide land for recreation and community purposes; and,*
- (b) *to provide a physical and visual buffer between urban areas; and*
- (c) *to set aside land for the development of services, facilities and special uses by public authorities for the benefit of the community.*

As this proposal involves the additional loss (ie beyond that lost as part of the previous approval) of 10.3 hectares of corridor land, the Department considers that major compensatory measures are required. An assessment of the impact of this loss of open space and recommended mitigation measures is discussed in Section 6.2 of this report. This assessment concludes that to adequately compensate for the loss of open space, the Applicant should be required to construct a shared cycleway/walkway on the western side of South Creek predominantly on Department owned land. It is therefore considered that the proposal would be in keeping with the objectives of this zone, subject to the recommended conditions of consent.

8.1.3 Penrith Development Control Plan 1996 (Industrial Land)

The Plan applies to all land which is zoned industrial within the Penrith LGA. The objectives of the plan include the promotion of development of a visually attractive form, design and scale; where urban elements and built forms are integrated with the existing environment.

The proposed development is generally in accordance with the provisions of the DCP except for those related to height and external materials and finishes of the grain terminal.

The DCP sets a maximum of 9 metres for industrial buildings whereas the proposed grain hub in Precinct A would include built elements up to a height of 39 metres. The DCP does make an allowance for variations to the building height limit if it can be demonstrated that:

- (a) the height is in keeping with the character of the locality;
- (b) it is not visually obtrusive;
- (c) the additional height is required due to the nature of the proposed development; and
- (d) the overall design of the development, including landscaping and building materials, reduces the impact of height and bulk of the building.

The structures on the grain hub site are located closest to the existing industrial land uses to the east and north of the site. The grain hub would include twenty 1,000 tonne silos, 20 metres high and with a white paint finish to keep the grain silos cool. A series of connecting conveyors and elevators for part of the grain hub and would be a maximum height of 39 metres. The 20 metre high, 1,000 tonne silos are understood to be the minimum feasible size for this type of storage.

The built elements of the surrounding industry are of a similar bulk and scale to the proposal reducing any visual obtrusiveness. The proposed landscaping shown in the EIS at maturation would provide an adequate screen from the main view sheds to the south and west of the site.

In relation to external materials and finishes the DCP suggests that highly reflective materials, including white or off white metal colours would not be accepted.

An assessment of the visual impact of the grain hub and the recommended mitigation measures are given in Section 6.8 of this report. The assessment concludes that, subject to the provision of adequate landscaping, the visual impacts of the proposed grain hub are acceptable.

8.1.4 City of Penrith Rural Development Control Plan 1991

The Plan applies to all land which is subject to the Penrith Local Environmental Plan 201 (1991) and provides more detailed controls and guidelines for the development of rural land beyond those specified in the LEP. The DCP does not generally envisage industrial development within the subject area and as such most of the provisions specified in the DCP are not applicable to the proposal.

8.1.5 Sydney Regional Environmental Plan No. 20 – Hawkesbury Nepean River (Amen No. 2)

This plan aims to protect the environment of the Hawkesbury- Nepean River System, by ensuring that the impact of future land uses are considered in a regional context. SREP 20 stipulates that total catchment management objectives, environmental sensitivity and alternatives sites must be considered in determining an application. These matters have been given due consideration in Sections 7.2 of this Report.

8.1.6 State Environmental Planning Policy No 11 – Traffic Generating Developments

The aim of SEPP 11 is to ensure that the traffic authority is:

- a) made aware of; and

- b) is given an opportunity to make representations in respect of the development referred to in Schedule 1 or 2.

As freight terminals are listed in paragraph (j) of Schedule 1, this policy applies to the proposed development. In accordance with this policy, a copy of the EIS was forwarded to Penrith City Council and the Roads and Traffic Authority (RTA). Submissions made by Council and the RTA have been taken into consideration in assessing the traffic impacts of the proposal in Section 6.1 of this Report. This assessment concludes that the likely traffic impacts of the proposal can be adequately managed, subject to the recommended conditions of Consent. A requirement for the preparation and implementation of the Traffic Management Plan has been incorporated into the recommended conditions of consent.

8.1.7 State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

SEPP 33 requires consent authorities in assessing Development Applications to have regard to the potential risk and offensiveness of the proposal in terms of impacts on human health, property and the biophysical environment. This plan applies to hazardous and offensive industries that, when all measures proposed to reduce or minimise impacts on the locality have been employed, would still pose a significant risk in relation to human health, life or property or the biophysical environment.

SEPP 33 does not apply to the proposal as the freight terminal is not defined as an industry. Notwithstanding, the provisions of SEPP 33 are relevant to this proposal as there is likely to be storage of dangerous goods on-site. Accordingly, the assessment of hazard and safety issues undertaken in Section 6.4 of this Report is based on the requirements of SEPP 33.

8.1.8 State Environmental Planning Policy No. 55 – Remediation of Land

SEPP 55 aims to provide a State wide planning approach to the consideration of contamination and the remediation of contaminated land. Clause 7 of this policy stipulates that a consent authority must not grant consent to the carrying out of any development on land unless:

- (a) *it has considered whether the land is contaminated, and*
- (b) *if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and*
- (c) *if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.*

It is considered that the subject site is suitable for the proposed development. The site has been filled with clean spoil and the natural geography has been extensively modified under the previous site approval discussed in Section 2 of this Report.

8.2 THE LIKELY IMPACTS OF THAT DEVELOPMENT

The consent authority must consider the likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality. The following are the key issues assessed in the EIS and examined in detail in Section 7 of this Report.

- ◆ traffic and transport issues;
- ◆ loss of Open Space;
- ◆ noise issues;
- ◆ hazard and safety issues; and
- ◆ other issues including indigenous heritage and flora and fauna.

The Department is satisfied that adequate information has been provided in the EIS and in the supplementary information and submissions to fully consider all aspects of the proposal. In addition, based

on the environmental modelling undertaken, the Department considers that the proposal could meet relevant performance criteria and/or goals in relation to the key issues of traffic, noise, air quality, hazards, water quality, heritage and flora and fauna providing mitigation and management measures are applied. The Department has recommended that a number of stringent controls and mitigation strategies which in addition to establishing performance goals for key environmental elements incorporate comprehensive monitoring and reporting requirements. The Department concludes that the likely impacts of the proposal can be adequately managed, subject to the recommended Conditions of Consent.

8.3 THE SUITABILITY OF THE SITE FOR THE DEVELOPMENT

The subject site is described in Section 4 of this Report. Since 1987 the site has been identified for rail related development. Considerations regarding the suitability of this site include the existing infrastructure, surrounding industrial development the proximity of the development to residences and road traffic and transport issues.

8.3.1 Existing infrastructure

The subject site is ideally connected to the main Western Rail Line by a spur known as the Ropes Creek Line. This line is currently used to rail spoil to the site for fill emplacement works. Under the proposal this line would be used to transport freight containers, grain and sand/sandstone spoil to the site, significantly reducing the costs and environmental impacts associated with the creation of a spur line. The main Western Rail Line also has existing capacity to take additional freight traffic.

The Dunheved cutting would also lend itself to the storage of sand/sandstone spoil with minimal preparation. The location and depth of the cutting makes it an ideal location for the storage of such materials as it is protected from the wind and storage would not have any visual impact on the surrounding area.

8.3.2 Proximity of development to sensitive receptors

The existing rail unloading facility is 280 metres from St Marys High School and 330 metres from the nearest residence. The assessment has provided a risk-based approach to determining the likelihood of these properties being adversely affected by the project. This assessment indicated that the performance goals for construction noise, operational noise and air emissions could be met at these properties. The Department notes that the subject site is largely surrounded by industrial land uses and corridor land which provide a buffer between the development and the majority of sensitive receptors. Providing appropriate mitigation provisions were included, the site was not unacceptable based on its proximity to sensitive receptors.

8.3.3 Road traffic and transport issues

The subject site has well established and efficient transport links to local and regional areas in NSW. The location of the facility in an established industrial area would allow local industries to take advantage of its integrated transport options and bulk materials handling capabilities.

8.3.4 Conclusion

Based on the conclusions of the Department's assessment of the proposal, it is considered that the site is highly suitable for an intermodal freight terminal.

8.4 ANY SUBMISSIONS MADE IN ACCORDANCE WITH THIS ACT OR REGULATION

Issues raised in community, agency (including approval bodies) and Council submissions are outlined in Section 5.2 and Appendix A of this Report and considered in Sections 6 and 7 of this Report. It is

considered that all the issues raised in these submissions have been resolved and that there are no significant outstanding issues that would preclude the granting of conditional development consent.

8.5 THE PUBLIC INTEREST

A detailed assessment of the social and economic implications of the proposal is contained in Section 7.3 of this Report. It is estimated that the total development would generate 50 positions during construction and 36 full-time positions (9 off-site) during operations. The proposal has the potential to reduce total truck numbers by replacing road-based transport from nearby industrial areas with rail-based transport.

In completing its assessment, the Department notified 1500 land owners and occupiers surrounding the site and advertised the proposal in the local press on four separate occasions inviting submissions in relation to the proposal. In response, the Department received two submissions. The Department concludes that the potential environmental impacts of the proposal can be adequately managed, and considers that the proposal is in the public interest. To ensure that any community concerns in relation to the construction and operation of the facility are adequately addressed the Department's recommended Condition of Consent No. 9 requires the Applicant to publicise a complaints telephone line, keep an up-to-date log data, investigate any complaints received and if adverse impacts are identified take all practicable measure to modify the activity which may be causing the impact.

9. CONCLUSION

The Department has undertaken a comprehensive assessment of the proposal which has examined issues identified in the EIS, submissions and further information provided by the Applicant. The Department's detailed assessment concluded that the likely impacts of the proposal could be managed to acceptable levels, subject to the recommended Conditions of Consent. The Department has recommended that the Applicant prepare comprehensive Environmental Management Plans for the construction and operation of the proposal to ensure that the mitigation measures and management practices identified are implemented throughout the life of the proposal.

The recommended conditions of consent are given in Schedule 2 of the Instrument of Consent. These conditions incorporate the Department's conditions, and those recommended by the EPA, Penrith City Council, DLWC and the RTA. These conditions include:

- ◆ the construction of permanent noise barriers to the south and west of the site;
- ◆ the construction of a 2.2 km pedestrian / cycleway on DUAP land adjacent to the site;
- ◆ the upgrading of the Lee Holm Road / Christie Street intersection;
- ◆ independent environmental audits and independent monitoring, in the event of extended community complaint;
- ◆ the preparation of Environmental Management Plans for both the construction and operational phases of the proposal; and
- ◆ relevant environmental goals and emission limits.

10. RECOMMENDATION

It is RECOMMENDED that the Minister in considering the findings and recommendations of this report, grant consent to the Development Application submitted by the State Rail Authority, subject to the conditions set out in the Instrument of Consent.

David Gainsford
Development and Infrastructure Assessment

Caitlin Richards
Development and Infrastructure Assessment

Endorsed
Mark Hather
Team Leader Transport and Telecommunications
Development and Infrastructure Assessment

FIGURE 1 A PLAN OF THE LOCALITY

FIGURE 2 SURROUNDING LAND USES

FIGURE 3 A PLAN OF THE PROPOSAL

FIGURE 4 A FLOW DIAGRAM OF THE GRAIN FACILITY OPERATIONS

FIGURE 5 THE SAND/SANDSTONE RECYCLING PROCESS

FIGURE 6 PROPOSED HAULAGE ROUTES

FIGURE 7 PROPOSED ROUTE FOR THE PEDESTRIAN / CYCLEWAY

FIGURE 8 AIR AND NOISE MONITORING LOCATIONS

FIGURE 9 STORAGE LOCATIONS FOR DANGEROUS GOODS

FIGURE 10 SURFACEWATER MANAGEMENT STRUCTURES CURRENTLY UNDER CONSTRUCTION

APPENDIX A

VIEWS OF PENRITH CITY COUNCIL

As the subject site is within the Penrith Local Government Area, Penrith City Council was invited to make a submission in relation to the Development Application. The key issues from this submission are detailed in the table below.

Penrith City Council Comments	Response
◆ Asked that the Department consider the impacts of noise across the valley to Werrington.	The Department have considered all noise impacts associated with the development and, in consultation with the EPA have recommended stringent mitigation, monitoring and reporting requirements to ensure that noise emissions are managed to acceptable levels.
◆ Requested that a working party consisting of traffic stakeholders be formed to consider the likely traffic impacts of the development.	A traffic forum was held on 30 August 2000 to discuss traffic issues in relation to the proposal. This meeting was attended by representatives of the Applicant and their consultants, Penrith City Council officers and Councillors, Jim Robertson MP, representatives of the Dunheved Industrial Park and LendLease, DoT, and the Department. The minutes of this meeting are attached in Appendix C. An additional traffic forum was held on 21 November 2000 attended by representatives of the Applicant, RTA, Penrith Council Officers, Councillors, the Mayor and the Department. The issues discussed at these meetings were taken into consideration in completing the traffic assessment in Section 6.1 of this Report.
◆ Noted concern that the truck movements generated by the proposal would impose a significant additional road maintenance requirement.	Council indicated that it would like to negotiate a road maintenance agreement with the Applicant in the form of a Deed or Agreement. In subsequent discussions between the Department, the Applicant, RTA and Council, it was agreed that the Applicant would upgrade the intersection of Lee Holm and Christie, including suitable right-hand turn bays. The works would be designed and constructed to the satisfaction of the RTA and Council as provided in the Department's recommended Condition of Consent No. 63. Signalisation of the intersection will occur should the Forrester Road intersection be closed or a safety audit of the intersection indicate the need for signals.
◆ Recommended a range of conditions to be applied to the development.	Where relevant, these conditions have been incorporated into the recommended conditions of consent.
◆ Requested that Penrith Development Control Plan 1996 (Industrial Land) be used as the guide for the form and design of all structures on the site.	The proposed development is generally in accordance with the provisions of the DCP except for those related to height and external materials and finishes. (Refer to Section 8.1.3 of this Report). Building heights are in keeping with surrounding industrial development and, with the proposed vegetative screening, would have minimal off-site impacts.

Penrith City Council Comments	Response
	To ensure that the requirements of Council are fully addressed the Department's recommended Condition of Consent number 99 requires the Applicant to prepare a schedule of external finishes in consultation with Penrith City Council.
◆ Recommended that Council pursue some form of compensation for the local community for the loss of open space which would result from the proposal	To ensure that the local community is fully compensated for the loss of open space the Department's recommended This concept has been endorsed by Council. Condition of Consent Number 97 requires the Applicant to construct a pedestrian/cycleway on land owned by the Department to the west of South Creek within six months from the date of consent.
◆ Considered that the rehabilitated riparian corridor should be dedicated to the Department rather than ComLand to ensure that this land is effectively managed	To ensure that this land is maintained subsequent to any land transfer the Department's recommended Condition of Consent Number 98 requires that a covenant on the land title or other such legally enforceable mechanism is put in place to ensure that ongoing maintenance requirements are met. A requirement for specific dedication to DUAP is outside the scope of the Consent.
◆ Opposed the proposed Christie Street access.	Council's concerns about Christie Street primarily relate to the proposed Werrington Arterial and a proposed bus transitway. The Department's recommended Conditions of Consent provide for access to and from Christie Street to be limited to 'left-in-left out' traffic. This arrangement would not preclude the development of the Werrington Arterial or the bus transitway. It is understood that Council now accepts this arrangement
◆ Noted concerns in relation to the Forrester Street access	Council's concerns about the Forrester Road access primarily relate to potential conflicts with its proposal for a transport interchange. If and when this proposal eventuates, the Forrester Road access would be closed to heavy vehicle traffic. Notwithstanding this the Applicant is required to undertake safety audits at this intersection. Should the audits identify potential conflicts the Director-General may close the intersection prior to the interchange being constructed. There would be no truck access permitted to and from the site at this point at night (10 pm to 7 am).
◆ Recommended that all access to and from the site be via Lee Holm Road	The Department considers that Council's request for the Applicant to widen Lee Holm Road on the basis of the additional traffic generated by the development cannot be justified. The Department believes that if Lee Holm Road was the only access for the development truck impacts would be maximised. Retaining left-in-left-out access at Christie Street would minimise potential impacts.

Penrith City Council Comments	Response
◆ Requested that the Applicant widen Lee Holm Road to 11 metres	As discussed above, this work is not considered justifiable as the traffic volumes are very small and the development would only contribute a proportionate impact. Of particular note, there are a number of power poles and Telstra service pits immediately adjacent to the kerb on the western side of Lee Holm Road. This would indicate that any widening on the western side would be prohibitively costly and not justifiable to impose such a cost entirely on the Applicant.
◆ Recommended that the route, configuration and signalisation required for the bus transitway be finalised prior to determining the proposal.	The Department notes that the proposed bus transitway through the site is an option only and outside the scope of the subject development. It is understood that provision of the bus transitway is contingent on the redevelopment of the ADI site. The Applicant has designed the proposed development so as not to preclude the future development of this transitway. The Department of Transport supports the approach the development has taken in incorporating the transitway option into the proposal.
◆ Recommended that night time haulage routes be limited to the Forrester Road / Christie Street / Werrington Road.	The Department notes that the EIS indicates that the Forrester Road access would be closed at night due to expected noise exceedances. Condition 77 requires that the Applicant take all reasonable steps to ensure that heavy vehicles use designated regional roads for access to and from the site.
◆ Recommended that a condition ensuring that train movements to and from the site do not compromise peak hour commuter train movements	The Department notes that this issue is discussed at length in the EIS. The EIS concludes that rail freight movements would occur outside peak commuter hours. The scheduling of rail movements by SRA (the Applicant) is outside the scope of this proposal.
◆ Recommended that the consent reflect the intention to use recycled water from the St Marys Sewage Treatment Plant.	The Department's recommended Condition of Consent No. 46 requires the Applicant to prepare and implement a detailed Soil and Water Management Plan. A provision within this Condition ensures that all options for the use of recycled water would be considered.
◆ Recommended that a Soil and Water Management Plan be finalised prior to the commencement of work	The Department's recommended Condition of Consent No. 14 requires the Applicant to prepare and implement a detailed Construction Environmental Management Plan for each stage of the Project prior to the commencement of construction of that stage. Condition No. 46, as discussed above, requires the Applicant to prepare a Soil and Water Management Plan for the operation of the Facility prior to the commencement of Operation. The Department considers that a requirement for the Applicant to complete a Soil and Water Management Plan prior to the commencement of any work would be unreasonable as issues in relation to construction are separate from operation.

Penrith City Council Comments	Response
◆ Requested that all roads be sealed from the outset	The EIS notes that the project would be constructed in stages as follows: ◆ Rail Freight Terminal Upon development consent; ◆ Grain Receival facility Within 12 months of consent; and, ◆ Sand Recycling Facility staged over 18 months, beginning upon development consent. Due to the proposed staging of the development the sealing of all roads from the outset of the development is not justifiable. To ensure that this is completed to coincide with significant heavy vehicle volumes the Department's recommended Condition of Consent No. 74 requires that all internal link roads are constructed and sealed within 12 months of the date of consent.
◆ Requested that a permanent acoustic barrier be provided in place of the proposed container wall	The Department's recommended Condition of Consent No. 61 requires that a continuous and permanent noise barrier to the west of the freight terminal is constructed prior to the commencement of activities likely to exceed the operational noise limits. This condition also requires that such a wall is constructed in accordance with Penrith Development Control Plan 1996 (Industrial Land). The Department notes that this wall could still be constructed from containers, providing the provisions of this condition are met.
◆ Recommended that the Applicant be required to remove graffiti from any barriers constructed	The Department's recommended Condition of Consent No. 100 requires that the Applicant remove any graffiti from the finishes of all structures and buildings.
◆ Recommended that the noise barrier be screened with plants.	The Department's recommended Condition of Consent No. 103 requires the Applicant to prepare and implement a Rehabilitation and Landscape Plan. This plan would, among other issues, be directed towards the creation and maintenance of suitable screen planting.
◆ Recommended that the traffic noise assessment be revised to account for Council's preferred access – Lee Holm Road.	As discussed above, the use of Lee Holm Road as the sole access point for the development is not justifiable. Accordingly, this request for reassessment, based on the assumption that Lee Holm Road would be the only access point is unnecessary.
◆ Considered that some rail artefacts proposed to be removed from the cutting could be used as "sculptural elements" along the open space corridor.	The EIS proposes to remove the following items: ◆ the semaphore signal standard located at the western end of the cutting; ◆ the signal standard ladders; ◆ all lever frame or ball point mechanism; ◆ point rodding and signal cable mechanisms; and, ◆ the water column at the western end of the platform.

Penrith City Council Comments	Response
◆ Recommended that a full assessment of the significance of vegetation within the Dunheved Cutting be completed.	These artefacts are constructed of metal and timber and are substantially weathered. In particular, some parts have sharp rusted points. Given the highly degraded nature of these artefacts and the recreational use of the open space corridor the use of artefacts as “sculptural elements” is not recommended as children may be injured when climbing on these structures and further weathering may cause some items to disintegrate entirely. Further information in relation to this vegetation was requested from the Applicant. This information included an assessment of the likely impact of the proposal on vegetation within the Dunheved Cutting completed in accordance with Part 5A of the Act. This assessment noted that the scattered species of Grey Box and Grey Box Iron Bark Woodland appears, on the basis of interim mapping, to be a stand of Cumberland Plain Woodland, which is also an “endangered ecological community” under the <i>Threatened Species Conservation Act 1995</i>. This assessment concluded that the Dunheved Cutting appears to be mapped incorrectly and notes that patches of vegetation (as shown in the aerial photograph given in Figure 3.2 of the EIS) occur between the cutting and Christie Street. The Department concurs with these findings and notes that the vegetation on the banks of the cutting would not be disturbed by the proposal.
◆ Noted that should the Christie Street Roundabout be constructed, then some form of compensatory flow capacity for South Creek would need to be provided.	Notwithstanding, the Departments recommended Condition of Consent No. 103 requires the Applicant to prepare and implement a Detailed Rehabilitation and Landscape Plan. This plan would, among other issues, be directed towards the active management and maintenance of all vegetation to be preserved. The construction of a roundabout on Christie Street is no longer part of the proposal. Accordingly, the development does not include any elements which would increase the likely flooding impacts in the locality.
◆ Noted that additional foreground screening would need to be provided to reduce the visual impact of the development and that temporary screening would also be required until vegetation matures.	In describing the existing visual environment, Penrith City Council note that the container stacks, bulk material stockpiles would appear at approximately the same height as the existing ARC Smorgon building. The Department notes that the proposed grain silos would be the same height as the Sims Metal tower. Accordingly, it is considered that on-site screen planting would adequately manage the visual impacts of the proposal. The Department’s recommended Condition of Consent No. 103 requires that the Rehabilitation and Landscape Plan use, where appropriate, advanced and super-advanced plant material at visually prominent locations.

Penrith City Council Comments	Response
◆ Recommends that views from the pedestrian bridge (in the Dunheved Cutting) be screened.	The Department notes that the Cutting is surrounded by mature eucalyptus trees which screen views of both the existing industrial estate and the subject site. The Department does not believe it is necessary to screen the proposed development from this pedestrian bridge.
◆ Recommends that the EMP should be completed and approved prior to any consent being given.	The Department's recommended Condition of Consent No. 12 stipulates that all EMPs are to be prepared in consultation with Penrith City Council and other relevant agencies and to the satisfaction of the Director-General prior to construction or operation.
◆ Recommended that a management / monitoring committee be established to oversee the implementation of the EMP and that Council be represented in this committee.	The Department notes that as this Development is to be determined by the Minister, the Department would be responsible for compliance issues, should the Minister determine to approve the proposal. In Council's view the need for such a committee arises as Council is likely to be the 'first receiver' of any community complaints. In order to ensure that community members know how to make a complaint the Department's recommended Condition of Consent No. 9 requires the Applicant to publicise a complaints telephone line, keep an up-to-date log book, investigate any complaints received and if adverse impacts are identified take all practicable measure to modify the activity which may be causing the impact. Should the Applicant's response not address the complaint to the satisfaction of the complainant within six weeks, the Applicant will be required to inform the Director-General and take any action as directed by the Director-General, including independent investigation of noise, dust of traffic impacts where required.

APPENDIX B

SUMMARY OF AGENCY SUBMISSIONS

Department of Land and Water Conservation

Submissions dated 20 July 2000, 24 July 2000 and 15 September 2000

- ◆ recommended that development be limited to outside 40 metres from the top of the bank of South Creek, and 20 metres from the top of the bank of both sides of Little Creek;
- ◆ noted concern over the possible flooding impacts of the proposal (it is noted that these concerns were in relation to the emplacement of fill which is not part of the current proposal);
- ◆ recommended that sedimentation basin designs be amended so that they are self-draining;
- ◆ recommended conditions in relation to the rehabilitation of native vegetation communities along South and Little Creeks (it is noted that these rehabilitation works would be completed under a previous site approval and are hence outside the scope of the current proposal); and,
- ◆ recommended that the grassed levee proposed within Precinct C be replaced with a grassed catch drain.

Environment Protection Authority

Submissions dated 21 July 2000, 28 July 2000 and 20 October 2000

- ◆ requested additional information in relation to air emissions and the noise impacts of the proposal;
- ◆ recommended a suite of conditions to be applied to the project, should the Minister determine the proposal. Where relevant, these conditions have been incorporated into the Departments recommended Conditions of Consent.

Roads and Traffic Authority

Submission dated 13 July 2000

- ◆ supports the proposal subject to recommended conditions;
- ◆ recommends that all vehicular access to the site be via Lee Holm Road only;
- ◆ notes that the RTA and Council are reappraising transport reservation requirements in the vicinity of the proposal;
- ◆ objects to the proposed roundabout at Christie Street;
- ◆ notes that the RTA does not favour the use of the Forrester Road for site access;
- ◆ notes the proposed relocation of the St Marys Transitway to the west of the rail spur; and,
- ◆ notes that insufficient information in relation to the Transitway crossing with the rail spur is included in the EIS. (The Department notes that the Transitway is not part of the current proposal).

National Parks and Wildlife Service

Submission dated 24 July 2000

- ◆ Supported the proposed habitat enhancement measures and heritage protection measures detailed within the EIS; and,
- ◆ Noted that an eight-part test for Cumberland Plain Woodland was not included in the EIS. This information was subsequently provided by the Applicant and used in assessing the flora and fauna impacts of the proposal.

NSW Fisheries

Submission dated 21 July 2000

- ◆ Noted that the EIS contained no assessment of the aquatic habitats on or adjacent to the site;
- ◆ Noted that the EIS contained no assessment of the potential impact on any aquatic habitat or organisms from the operation of the facility; and,
- ◆ Concluded that the EIS failed to address the issues of threatened species in relation to aquatic flora and fauna. This information was subsequently provided by the Applicant and used in assessing the flora and fauna impacts of the proposal.

NSW Agriculture

Submission dated 14 July 2000.

- ◆ noted that the EIS adequately addressed issues raised previously by NSW Agriculture.

Sydney Water

Submission dated 4 August 2000.

- ◆ Noted that SRA would require a section 73 Compliance Certificate. The Applicant has already applied for this certificate;
- ◆ Noted that no trade Waste Agreement would be required;
- ◆ Noted that impacts on existing sewerage infrastructure were not adequately address in the EIS, however, concluded that some amplification, extension and water mains would be required. It is noted that Sydney Water has signed off on plans for this work;
- ◆ Noted concern over the placement of three metres of fill over existing sewerage pipes (not part of this proposal).
- ◆ requested the Applicant to complete a comparative assessment of the water within South Creek and the waste water from St Marys Sewerage Treatment Plant.
- ◆ requested additional information on the status of internal roads. (This information is already detailed in the EIS.)

A copy of this submission was forwarded to the Applicant and the comments the Applicant provided were used in assessing the water and infrastructure impacts of the proposal.

Department of Transport

Submission dated 11 July 2000

- ◆ supports the proposal on the grounds that it would contribute to the Government's freight related policy goals;
- ◆ agrees with the relocation of the transitway to west of the rail spur line, within a dedicated corridor, subject to the resolution of any environmental issues;
- ◆ supports the consideration of public transport presented in the EIS;
- ◆ recommends that a consent condition require the provision of an adequate corridor for this transitway;
- ◆ suggests that the developer should be liable for any additional cost arising from the relocation of the transitway; and,
- ◆ notes that suitable arrangements to allow buses to cross the rail line would be required.

ComLand

Submission dated 5 July 2000

- ◆ noted that consent to develop their land did not imply ultimate consent to the conduct of the proposed development on ComLand property;
- ◆ noted that negotiation of the proposed land swap and the terms of any lease and/or licence to occupy ComLand property would be subject to commercial terms, yet to be finalised;
- ◆ noted that the proposal would generate negligible demand for the proposed Werrington Arterial; and
- ◆ noted that the EIS discussed proposed roadworks in the context of definite projects.

Hawkesbury-Nepean Catchment Management Trust

Submission dated 11 July 2000

- ◆ raised no objection to the proposal providing that the recommendations within the EIS are implemented and their effectiveness maintained; and,
- ◆ requested a copy of the Minister's Determination.

Integral Energy

Submission dated 12 July 2000

- ◆ noted that Integral Energy would need to establish a Zone Substation to cope with the proposal and the nearby ADI development;

- ◆ noted that there may be an opportunity to utilise land for an electricity easement to the ADI site which would also serve the subject site in the long term; and,
- ◆ noted that at this time it is proposed to supply the site with the additional capacity available at Cambridge Park and Werrington.

Heritage Office

Submission dated 28 August 2000

- ◆ noted that the Dunheved Cutting is identified in the Penrith Heritage Study;
- ◆ requested a comparative analysis with other similar sites. (It is noted that the EIS includes a comparative analysis);
- ◆ suggested that a Conservation Management Plan for endorsement by the Heritage Office be prepared if a final assessment of significance identifies the cutting to be of State significance;
- ◆ noted concern over the proposed removal of rail infrastructure; and
- ◆ suggested that the Applicant be requested to consider alternative stock piling sites.

Blacktown City Council

Submission dated 28 August 2000

- ◆ requested that Council be consulted in relation to any proposed haulage routes which traverse the Blacktown City area. The Department set a letter to Blacktown City Council on 25 September 2000 detailing the proposed haulage impact through Blacktown. This letter noted trucks would only use regional roads (excluding the Great Western Highway and the M4 Freeway) with the Blacktown LGA and that any impacts would be minor.
- ◆ noted that noise impacts needed to be fully addressed.

APPENDIX C**MINUTES OF THE ST MARYS TRAFFIC FORUM****ST MARYS TRAFFIC FORUM**

30th August, 2000 - 11am at St Marys Leagues Club

ATTENDANCE

Name	Organisation	Phone	Fax
Jim Anderson, MP	Member for Londonderry	02 9833 1122	02 9623 1185
Rodney Watson	Londonderry Electorate Office	02 9833 1122	02 9623 1185
David Gainsford	DUAP	02 9391 2095	02 9391 2151
Caitlin Richards	DUAP	02 9391 2176	02 9391 2151
John Thain	Penrith City Councillor	0411 427 812	-
Karyn Paluzzano	Penrith City Councillor	02 4736 7459	-
Craig Ross	Penrith City Council officer	02 4732 7573	02 4732 7879
Charles Waife	Penrith City Council officer	02 4732 7579	-
Neil Hausfeld	Penrith City Council officer	07 4732 7504	
David Taylor	Department of Transport	02 9268 2930	02 9268 2907
Mark Grundy	Dunheved Business Park	02 9673 7100	02 9623 5197
David Trist	Dunheved Business Park	02 9623 1540	02 9623 3469
Joe Lasorsa	FreightCorp	02 9893 2683	02 9893 2691
Bruce Eldridge	FreightCorp	02 8282 8016	02 8282 8012
Michael Murray	FreightCorp	02 8282 8019	02 8282 8012
Gerald Renton	Gerald Renton and Partners	0414 769 651	-
Garrick Madge	Gerald Renton and Partners	0414 807 332	-
Glen Biglund	Graincorp Operations Limited	02 9261 4294	02 9261 4244
Chris Hallam	Christopher Hallam & Associates P/L	02 4573 1619	-
Ian Doyle	Lend Lease Development	02 9833 3077	02 9833 3099
Geoff Fowler	Pymont Raw Materials	02 9833 8081	-
Tony Ellis	Pymont Raw Materials Pty Ltd	02 9251 6644	02 9247 2244
Eric Shegog	Sinclair Knight Merz (Lend Lease consultant)	02 9928 2310	02 9928 2510
Peter Jamieson	Umwelt (Aust.) Pty Limited	02 4950 5322	02 4950 5737
Ian Wisken	The Fifth Estate	02 9232 8282	02 9232 8275
Bill Hurditch	The Fifth Estate	02 9232 8282	02 9232 8275

INTRODUCTION

David Gainsford gave an outline of the purpose for the meeting, being a response to a request by Penrith City Council to discuss traffic options for the Dunheved area in the context of the application for development of the Western Sydney Rail Freight Facility (WSRFF) by State Rail Authority. He confirmed that the outcomes of this meeting would be taken into consideration by DUAP in completing their assessment of the proposal.

OPENING COMMENTS

Bill Hurditch outlined the strategic significance of the WSRFF project and the approach the applicant had taken to transport and traffic. The original configuration, as documented in the EIS, had proposed 3 access points to "spread the traffic load". Revised proposals in response to stakeholder comments included limited use of Forrester Road entrance, and a "left in, left out" access at Christie Street.

Jim Anderson commented on the importance of this meeting to discuss the "cumulative impact" of all new developments on the overall Dunheved Industrial Park. We need to understand and plan for how this will impact existing businesses and how to overcome congestion in Lee Holm Drive especially. He noted that while this may not be the forum for solving everything, it may be a start of a process of overall strategic traffic planning for the St Marys area.

Craig Ross noted that Council had requested the meeting. He noted that the short notice for the meeting meant that only a few Councillors could attend. He asked that we consider holding a follow up meeting to allow other Councillors to attend.

Caitlin Richards said that this forum was for the discussion of issues particular to this proposal. She noted that traffic planning for the broader St Marys area was outside the scope of this proposal. Considering DUAP's 60 day assessment timeframe, the objective of this forum is to discuss issues and concerns which will be taken into consideration by DUAP in completing their assessment of the proposal.

Bill Hurditch outlined the critical timeframe for approval of this project, being the third quarter of 2000.

TRAFFIC STUDIES

Chris Hallam gave an overview of strategic significance of a rail siding in this part of Greater Sydney and said the site selection was not arbitrary, but was unique. This constrains the traffic solutions, but it is very manageable in this context. He said the total traffic numbers are relatively low compared with, say, a McDonalds restaurant.

Mr Hallam:

- ❖ Tabled a copy of his second traffic study completed to answer a series of issues raised by Council, the RTA and DUAP. That study supplemented the one provided in the EIS.
- ❖ Outlined short and long-term access solutions, as set out in his report.
- ❖ Said there was a future long term option for a for 4-lane link down from the Dunheved Industrial Estate for the busway and road, on to Christie Street at the proposed access near South Creek.
- ❖ Noted that the busway and possible Dunheved Estate connections were subject to future planning and decisions, and were not part of this development. However SRA's approach has been to not cut off future options, but to accommodate them in the WSRFF's design envelope.
- ❖ Said he believed that a possible future duplication of the Christie Street bridge could fit with a 4-lane roundabout at the proposed site entrance.
- ❖ Said that if Lee Holm Drive was the only site access option (report, p13), the width of that road is a major constraint and Penrith City Council has allowed successive developments there without addressing this issue.
- ❖ Said that, in terms of traffic numbers and travel times, the Lee Holm Road/ Christie Street intersection would only be a significant congestion point when Christie Street traffic increases in the future.
- ❖ Said that the Forrester Road proposal restricting medium term access to the site is a sensible outcome to minimise any potential conflicts.

Peter Jamieson outlined internal logistics and operability of the WSRFF and outlined the significant operability and safety problems if Lee Holm Road is the only access point.

COUNCIL COMMENTS

Craig Ross outlined Council's concerns. These relate not to traffic volumes, but to the presence of an intersection at Christie Street in close proximity to the bridge. He said Council wants the Werrington Arterial built as a matter of priority, but was concerned with the additional costs of duplicating the bridge over South Creek that may require increased lanes with the inclusion of the Christie Street intersection.

He said Council would like the bus transitway to travel along Forrester Road and to be implemented now, with any funds saved being directed to the development of the Werrington Arterial. This could be coincided with the start of the ADI development.

Council is concerned at the increasing impact of heavy traffic on road maintenance in the general vicinity. Council noted that they would seek an agreement for road maintenance from the applicant outside the terms of any conditions of consent.

Council would like to see the focus for site traffic movements and any possible link to the Dunheved Industrial Park through the Lee Holm Road / Christie Street intersection.

Council also raised issues in relation to the possible flooding impacts of works on the Christie Street Bridge.

POSSIBLE SOLUTIONS

There was a discussion on how to accommodate Council's immediate and longer-term concerns in the context of the WSRFF development.

Ian Wisken suggested that a development consent condition be framed which required the consultative development of a Transport and Traffic Management Strategy over a limited timeframe. Participants could include Council, the Dunheved Business Park, DUAP, ADI/LendLease, RTA, Department of Transport, FreightCorp, Pymont Raw Materials and GrainCorp.

Eric Shegog (SKM) suggested an alternative long-term configuration at the proposed Christie Street access point, with a Links Road connector joining Christie Street opposite Lee Holm Road, allowing for both the transitway and site egress at traffic lights. This suggestion was supported by Dunheved Industrial Park.

Bill Hurditch commented that such a solution was not part of the WSRFF proposal, but it could be incorporated into the proposed Transport and Traffic Management Strategy process.

OTHER COMMENTS AND QUESTIONS

Council asked whether the applicant has undertaken a cost comparison of upgrading Lee Holm Road and building the Christie Street access? What is the potential for increasing container transport with time? What is the potential for generation of local trucks, and the potential for impact on regional roads?

There was a general discussion on cost comparison of trucks versus rail and double handling. Mark Grundy said the rail freight option looked quite competitive for his operations.

David Gainsford (DUAP) said that if the "Left-In, Left-Out" proposal does not compromise the future development of the Werrington Arterial, there should not be a conflict.

Council responded that it would only concur with this if it could be shown that the Werrington Arterial alignment was consistent with the Christie Street access.

Ian Wisken said the problem is that the Werrington Arterial is "not on the RTA's radar at present" and there are at least 5 possible alignments, so the applicant is in a no-win situation in being asked to conform to a possible future plan which is ill-defined.

David Taylor (Department of Transport) said the prime interest of the Department of Transport is that the options for the transitway be preserved. He said the WSRFF development seems to do this adequately. He

said the Department of Transport supports the “bigger picture” of shifting freight movements from road to rail, as it meets Government Policy of getting trucks off the road. He said the Werrington Arterial is not part of current planning because of the prime concern to allocate resources to public transport uses (eg the bus transitway) in the context of the ADI development.

David Trist (Dunheved Business Park) said his organization was very much in favour of the WSRFF development going ahead. He said there seem to be answers to the traffic issues raised. The use of Christie Street is a good idea for best access to the site. The road issues are relatively easy to manage. However he commented that a bus transitway crossing a rail spur is inconsistent with public transport, so a Forrester Road route for the transitway is preferred.

Mark Grundy (Dunheved Business Park) said he would be concerned if Lee Holm Road was made the only access. There is congestion there already.

Mick Murray (FreightCorp) said that FreightCorp needed the 3 site access options for flexibility, both internally and externally. There is also a need to allow for emergency services to access the site from all 3 points.

Glen Biglund (Graincorp) said there needs to be a sensible use of site and its local access points.

Craig Ross (Council) said he was concerned about the Forrester Road end of the site. This access point is for passengers and buses for railway station/Bus interchange. Forrester Road is also narrow at the southern end creating potential problems for truck movements.

David Gainsford (DUAP) asked how the Forrester Road access issue was best resolved.

It was noted that the Smorgon development is conditioned to widen Forrester Road in this area. This work is underway now.

Rodney Watson (for Jim Anderson, MP) asked whether restrictions on Forrester Road access to outside peak hours be a problem? FreightCorp responded in the affirmative, but it depends on what is decided for the Christie Street access.

Ian Doyle (Lend Lease) said they (ADI joint venture) were committed to the REP draft transport options, so we must maintain these options in conjunction with the WSRFF.

It was suggested by David Gainsford that a short term option of restricting movements at the Forrester Road access during daylight hours, with appropriate line marking to avoid conflicts with pedestrians, and closing the access in the medium to longer term (upon the development of a bus interchange) seemed like an adequate response to the issues raised by Council with regard to this intersection.

CONCLUSIONS

Caitlin Richards (DUAP) said that, should DUAP determine to approve the proposal, draft development consent conditions will be issued to agencies and to Council for comment. Further information needs to be obtained from the RTA regarding the planning and alignment for the Werrington Arterial.

The Applicant was requested to draw up two options for the South Creek Bridge duplication (to the south and north of the existing bridge) to show how it is consistent with a Christie Street access.

Craig Ross (Council) asked that the new information discussed today be formalised so that it could be provided to Councilors who were unable to attend.

The meeting concluded at 1.05pm