Response to Submissions and Statement of Commitments

23 Scrivener Street, Warwick Farm

Project Application No. 08_0088

Submitted to
NSW Department of Planning
On Behalf of Independent Print Media Group Pty Ltd

January 2009 ■ 07546

JBA Urban Planning Consultants Pty Ltd ABN 84 060 735 104 ACN 060 735 104 w jbaplanning.com.au
Level 7, 77 Berry Street North Sydney NSW 2060 t 02 9956 6962 ■ 29 Beach Street Wollongong NSW 2500 t 02 4225 7680

JBA Urban Planning Consultants Pty Ltd operates under a Quality Management System. This report has been prepared and reviewed in accordance with that system. If the report is not signed below, it is a preliminary draft.

This report has been prepared by: Michael Rowe

Signature Date 14/01/09

This report has been reviewed by: Vivienne Goldschmidt

Signature Date 14/01/09

Contents

Attachments

1.0 Introduction

The Environmental Assessment Report (EAR) for a Project Application for a new printing facility at 23 Scrivener Street, Warwick Farm, was exhibited from 13 November to 15 December 2008 and 10 submissions were received. Independent Print Media Group Pty Ltd (IPMG), the proponent for the project, has reviewed and considered the submissions and, in accordance with clause 75H (6) of the *Environmental Planning and Assessment Act 1979,* has responded to the issues raised.

This response should be read in conjunction with the Environmental Assessment Report dated November 2008 and forms part of the project application.

This report sets out IPMG's response to submissions (see **Section 2** and **Attachment A**) and includes a revised Statement of Commitments (see **Section 3**).

Six submissions were received from State government authorities along with four submissions from local residents.

The issues raised by the residents were generally similar in nature and concerned traffic and operational noise generated by the facility and its impact on residential amenity and the horse stables.

In addition, the Department of Planning requested in a letter on 18 December 2008 that the proponent:

- address the potential hazard impacts which had been identified in the EAR; and
- quantify the proposed reduction in greenhouse gas emissions that would be achieved by the proposal.

This report also replaces engineering drawing SK.02 of Appendix C of the EAR in order to correct a minor drafting error (see **Attachment B**).

2.0 Response to key issues

IPMG's response to the submissions made on the project is located at **Attachment A**. The issues raised by the Department of Planning are dealt with in **Sections 2.1** and **2.2** below. Two key issues emerged from the submissions from residents in relation to operational noise and truck movements. These are responded to in **Section 2.3** and **2.4** below.

2.1 Potential hazard impacts

Issue

Regarding potential hazard impacts the Department of Planning requested that IPMG:

- provide information on the arrangements for containing contaminated fire fighting water in the case of a fire involving inks;
- update the base leak frequency information based on the size of valves to which the information applies, and provide clarification on if the frequency used was total frequency or specific for a certain size; and
- undertake a revised risk assessment of fire in the toluene storage bund in the event of a leak or rupture of a storage tank.

Response

A detailed response to the issues raised by the Department of Planning regarding hazard impacts has been prepared by Sherpa Consulting and is located at **Attachment C**. In summary:

- A detailed assessment of contaminated firewater containment will be undertaken in the Fire Safety Study when the detailed design is available.
- The base valve leak frequency was extracted from Hazardous Industries Directorate data (UK Health and Safety Executive, 2002) for block valves sized $<=3$" and 3" to 11". The leak sizes considered were for an equivalent hole diameter of <10mm and 10mm to 25mm, accounting for over 80% of the total leak frequency for each block valve size.
- A revised risk assessment of fire in the toluene storage bund as a result of a storage tank leak was undertaken. The assessment shows that when added to the frequency of the other fire scenarios considered in the Preliminary Hazard Assessment Report, the overall risk does not significantly change.

2.2 Greenhouse gas emissions

Issue

The Department of Planning requested that the proponent quantify the proposed reduction in greenhouse gas (GHG) emissions that would be achieved by the proposed energy efficiency measures.

Response

Initial calculations, undertaken by Heggies, to quantify the proposed reduction in greenhouse gas emissions that would be achieved using the proposed Rotogravure printing presses and major energy efficiency measures has shown the following:

- The installation of the two proposed Rotogravure printing presses will provide a 22% saving over conventional heat set web offset printing. This translates to an annual reduction of approximately 7,857 GHG tonnes/year.

- The proposed use of a flue gas analyser and installation of an economiser will reduce excess air, thus producing a 5% increase in boiler efficiency. This will reduce the requirement for natural gas by 8,800 GJ with a predicted annual GHG reduction of 451 GHG tonnes/year. The calculation was based on annual natural gas requirements associated with combustion of natural gas by the steam boilers at 75% of peak load capacity. (An initial efficiency gain report from the steam boiler distributor (TSG Thermic) indicates that a steam boiler efficiency of about 87% can be achieved when implementing the above recommendations).

Other proposed measures set out in the EAR (see **Section 7.13**) and the Statement of Commitments in **Section 3** of this report will further reduce GHG.

2.3 Noise

Issue

Three residents living on Bull Street and Manning Street made submissions regarding the 24 hour operation of the facility and its potential to generate unacceptable noise at night which would negatively impact on their amenity and horses. The following were identified as potential sources of unacceptable noise at night:

- increased truck movements;
- truck arrivals at the gatehouse;
- loading dock operations; and
- forklift operations.

In addition, concern was also raised regarding noise generated by the day to day operation of squeaking gates and the testing of emergency systems.

Measures suggested by residents to overcome the issues raised above included:

- placing a curfew on the use of the staff car park and main Priddle Street gates during the night between 9pm and 6am;
- implementing noise deterrents such as sound barriers, signage regarding compression breaking, restricted parking, and reduced speed limits; and
- educating truck drivers to make them aware of the impact that noise has on the surrounding residents.

Response

The Acoustical Assessment prepared by Heggies to accompany the EAR (see Appendix L and Section 7.7 of the EAR) assessed the impact of noise on the nearby residential land and stables. The assessment found that the proposed development will have no unacceptable noise impacts. Despite this, IPMG will implement the measures described below to minimise the acoustic impacts generated by the development.

Truck Generated Noise

The Scrivener Street site has always operated as a 24 hour facility and as detailed in Section 7.8 of the EAR and Section 2.4 below, the proposed development only represents 17% of the total truck movements in the precinct, and will result in a reduction in the amount of traffic when compared to the existing facility. Further to this, 70% of the predicted truck movements will occur during daylight hours, which will result in a small number of heavy vehicle movements (approximately 5) between 9:00pm – 6:00am.

To address potential noise generated by truck movements and loading operations in the vicinity of local residences, IPMG will apply a curfew to the staff car park and main Priddle Street entry gates between 9:00pm – 5:00am. During the curfew period traffic will be diverted to the Scrivener Street entry away from the residential uses.

As demonstrated above, the majority of truck movements in the area will not be generated by the proposed development. It should also be noted that the behaviour of truck drivers on the surrounding road network and its impact on the surrounding residences/stables is not the responsibility of IPMG. However, as set out in 3.5 of the Statement of Commitments (see **Section 3**), IPMG will incorporate a set of protocols into site induction, contractor (including driver) induction and the construction tender to deal with potential noise, speeding, and potential 'hoon-like' behaviour on the roads surrounding the site.

Loading Dock Operations
To address the concerns regarding loading dock operation, IPMG will uphold the curfew arrangement agreed upon between the previous owner and Liverpool Council to restrict operations at the north eastern loading dock (near Bull Street) between 7:00am – 9:00pm.

Forklift Operations
In response to concerns regarding noise generated from forklift reverse alarms at night, IPMG will install white noise reversing alarms in all forklifts to eliminate the noise impact of reverse alarms on residents.

Squeaking Gates
The squeaking gates have already been repaired by IPMG in response to complaints.

Emergency Testing Systems
It is a safety requirement that the emergency evacuation system by tested on a weekly basis. The volume of the alarm has been reduced for testing purposes to minimise the impact on the adjoining properties.

The Statement of Commitments has been amended (see **Section 3**) to include measures relating to the curfew and forklift operations.

2.4 Truck numbers

Issue

Two residents were concerned that the facility will result in an increase in truck movements which will make it more difficult for horses and staff to cross Manning and Priddle Streets safely.

They made a number of recommendations such as a safety rail along parts of Priddle Street footpath, flashing lights or a designated horse crossing.

Response

As detailed in Section 7.8 in the EAR and the Traffic Report prepared Transport and Traffic Planning Associates (Appendix M of the EAR), the proposed development will result in a reduction in the number of truck movements when compared to the previous facility operating on the site.

During the assessment tube counts were installed on both Warwick Street (between Manning Street and Hume Highway) and Munday Street (between Manning Street and Governor Macquarie Drive) for the period 18/6/08 to 24/6/08 inclusive. The results indicate that:

- There were 341 Eastbound and 527 Westbound vehicles classified as either Class 6 or more on Munday Street over the week and
- 139 Southwest bound and 296 Northeast bound vehicles classified as Class 6 or higher on Warwick Street over the week.

These volumes equate to between 635 -650 heavy vehicles entering (and a similar number exiting) the precinct per week (620 - 640 over the 5 day weekday period). The proposed development is predicted to generate on average approximately 22 commercial vehicle arrivals per weekday of which 17 -18 will be vehicles which are expected to be Class 6 or higher. On weekends there are likely to be only 7-8 Class 6 or higher arrivals per day. The 17-18 vehicles per weekday volume represent less than 17% of the current heavy vehicle (Class 6 or higher) movements in the precinct.

It should be noted that the surveys were undertaken when Kimberley Clark was fully operational and the Class 6 or higher volume of traffic generated by this operation was estimated to be in the order of 35 articulated vehicle movements per day. As a consequence the proposed development will result in there being less Class 6 or higher vehicle movements within the precinct than when the site was occupied by Kimberley Clark.

The proposed development will result in a reduction in the amount of traffic when compared to the previous facility and therefore reduce the potential for a horse related accident.

As discussed in **Section 2.3**, the behaviour of truck drivers and the safety of pedestrians and horses on the surrounding road network are not only the responsibility of IPMG. In relation to its own operations, IPMG will incorporate a set of protocols for its drivers to deal with potential noise, speeding, and driver behaviour on the roads surrounding the site. Further to this, IPMG would support safety measures implemented by Liverpool Council in the area.

3.0 Statement of Commitments

In accordance with Part 3A of the Environmental Planning and Assessment Act 1979, the following are the commitments made by IPMG to manage and minimise potential impacts arising from the printing facility. These commitments replace the draft commitments included with the EAR.

3.1 Environmentally sustainable development

The proposed development will incorporate the following measures in support of the principles of ESD:

- harvesting of rainwater for reuse for the printing process, irrigation, cooling towers and toilet flushing;
- optimising natural light and installing rotor ventilators for natural ventilation of the new warehouse;
- insulating of walls and roofs in air-conditioned areas;
- insulating valves, pipes and fittings to reduce process heat loss;
- installing lights with high frequency ballasts;
- limiting electric lighting to 400 Lux in office areas;
- using solar powered lighting for façade and external lighting where practicable.

To reduce transport of goods by road IPMG will negotiate and undertake joint planning with ARTC to construct a spur line from the SSFL to enable raw materials to be transported to the site by rail. A reduction of the equivalent of 9 B-double truck movements per week is targeted.

To encourage staff to reduce the use of private vehicles for journeys to/from work, IPMG will implement a Travel Demand Strategy.

IPMG will undertake the following to fulfil Commonwealth and State government legislative requirements:

- Conduct a detailed energy assessment of the proposed facility after 12 months of operations to fulfil NSW government requirements for an Energy Saving Action Plan.
- Conduct a detailed energy assessment of the facility after 12 months of operations to establish actual energy consumption and whether participation in the Commonwealth government Energy Efficiency Opportunities Program is required.

In addition, IPMG will implement the following measures to facilitate operational energy efficiency and reduce GHG emissions:

- Connect the two proposed boilers in series.
- Install a flue gas analyser to display percent oxygen, stack gas temperature, and boiler efficiency.
- Remove scale mechanically or by using an acid cleaner to ensure optimal fuel consumption.
- Power sub-metering to allow for effective monitoring and management of electricity consumption.
- Investigate the use of second generation forklifts utilising an AC drive system.
- Consider a feasibility study into the commercial viability of cogeneration to partially offset the electricity demand for the site.

3.2 Construction Management

IPMG commits to preparing a Demolition and Construction Management Plan for the development. Noise, dust and erosion, and waste arising from demolition and construction will be managed in accordance with the plan.

Safety measures in relation to crane operations will be incorporated into the Plan.

IPMG commits to preparing an Electrolysis Risk Report to the satisfaction of RailCorp.

3.3 Waste management

IPMG undertakes to adopt the following performance targets for the management of waste:

- 85% off-site recycling of demolition wastes;
- 85% off-site recycling of construction wastes;
- 99% recycling, reuse and reprocessing of operational wastes.

3.4 Management of acid sulphate soils and potential salinity

To avoid any impacts of potential salinity IPMG will incorporate the following measures into design and construction:

- Installing and maintaining damp proof courses throughout construction, landscaping and finishing.
- Installing a damp proof membrane beneath any new slabs.
- Minimising the amount of soil disturbance.
- Using corrosive resistant and non-porous materials.
- Minimising leaks from stormwater pipes.
- Where possible and appropriate, maintaining areas of established vegetation, designing new landscaped areas not to be immediately adjacent to buildings and planting local, native species in open areas.
- To manage on-site acid sulphate soils, IPMG will prepare an Acid Sulphate Soils Management Plan in accordance with the NSW Government's *Acid Sulphate Soil Manual.*

3.5 Traffic Management

IPMG will undertake the following to manage any impacts from construction traffic:

- Prepare a Demolition and Construction Traffic Management Plan prior to issue of the Construction Certificate.
- Formalise with ARTC measures to minimise any potential cumulative impacts from construction traffic due to overlap in ARTC's and IPMG's construction programs.
- Incorporate into the construction tender, requirements in relation to safe driving in the vicinity of the stables (see below).

In relation to the management of operational traffic IPMG undertakes to:

- Ensure that its own truck fleet and that of any contractors operate in a safe manner in the vicinity of the surrounding stables. Specifically, IPMG will incorporate a set of protocols into site induction, contractor (including driver) induction and the construction tender to deal with noise (air horns, compression breaking), speeding and potential 'hoon-like' behaviour on the roads surrounding the site, and unnecessary noise at the gatehouse.
- Establish a formal mechanism to record and respond to any complaints from the stables about unsafe and irresponsible driving on the local roads.

3.6 Management of operational noise

IPMG will implement the following measures to manage and mitigate any acoustic impacts to meet the requirements of DECC's *Industrial Noise Policy.*

- Conduct a detailed assessment of plant noise emissions once the precise details of the mechanical plant selection are known and adopt any recommendations made by the report.
- Restrict north eastern loading dock operations to between 7:00am and 9:00pm in order to prevent an exceedance of the sleep disturbance criterion. Roller doors to the loading dock facing Priddle Street will be kept shut at night.
- Ensure security personnel monitor activities within the car park during shift changes to ensure that staff enter and exit with minimum noise generation.

In addition, IPMG will:

- Place a curfew on the use of the staff car park gate and main Priddle Street entry gate to between the hours of 9:00pm and 5:00am to protect the amenity of residents and their horses.
- Install white noise reverse alarms on all forklifts to eliminate the impact of noise from reverse alarms from forklifts at night.
- Monitor noise arising from the ongoing operations of the facility, and establish formal mechanisms to record and respond to any complaints from local residents about operational noise.

3.7 Water cycle management

IPMG will implement the following measures to manage the water cycle on site:

- Ensure that the maintenance and cleaning of vehicles and other plant and equipment is carried out in a manner so that no potential contaminants will be released into any waters, roadside gutters or the external stormwater drainage system.
- Clean up any spillages wastes, contaminants or other materials as quickly as practicable using designated mobile spill kits or other suitable means.
- Install a gross pollutant trap at the end of the new stormwater pipe prior to discharging to the Liverpool City Council stormwater main in Priddle Street.
- Harvest and re-use rainwater, when available, for all printing process and all non potable water usage.

3.8 Hazard management

IPMG will undertake the following in relation to managing hazards and risk during design, construction and operations:

- Prepare the following safety and risk studies in accordance with Department of Planning Seven Stage Approval Process and in accordance with the DGRs:
  - **Design stage:** Hazard and Operability Study; Final Hazard Analysis to update this PHA; Final Safety Study; Emergency Plan.
  - **Construction/commissioning Stage:** Construction Safety Study
  - **Operational Stage:** Safety Management System**;** Independent Hazard Audit.
- Determine through the Hazard and Operability Study whether sufficient safeguards are in place to prevent toluene ingress to the boiler, and whether the timing sequence of the carbon beds in the VRU prevents overheating.
- Develop a Safety Management System in accordance with HIPAP 9.
- Develop an Emergency Plan in accordance with HIPAP 1.
- Confirm that the final layout design for the toluene storage tank bunds complies with the separation distances required under AS1940-2004 (i.e. separation to site boundary, protected places, etc).
- Account in the Fire Safety Study for any enhanced fire systems.
- Ensure that possible overpressure generated by an explosion in the pump room be verified at detailed design stage to ensure that the overpressure at the site boundary would not exceed 7kPa.
- Incorporate in the design the following measures to prevent and manage hazards:
  - sprinklers throughout the existing facility and proposed warehouse in compliance with BCA and insurance requirements;
  - high level gauges and alarms to prevent toluene overfill of the storage tanks;
  - crash barriers with an interlock to shutdown the pumps in the event of a collision or accidental drive-away.
- An evacuation plan will be developed which will account for 'notification of authorities and adjacent companies' (in accordance with section 2.10.2 of HIPAP 1 (DoP, 1993)). This will include mutually agreed contact arrangements.

To ensure that the redevelopment of the site is managed in a way to prevent any contamination, IPMG will:

- Store and handle all chemicals in accordance with the relevant Australian Standards, NSW EPA guidelines and the *Dangerous Goods Act 1975*; and
- Meet the following chemical storage requirements:
  - store chemicals in covered areas surrounded by an impermeable bund;
  - ensure the capacity of the bund is equal to 110% of the total volume of all vessels contained within the bund;
  - design the bunds to meet NSW EPA Bunding and Spill Management Guidelines so that any spills can be easily recovered and disposed appropriately;
  - check the bunds for spills regularly and keep them well maintained to preserve their capacity and integrity;
  - equip chemical storage areas with basic spill kits to contain and manage small spills; and

- train staff in appropriate chemical storage handling techniques so that contaminant streams are treated appropriately and accidental releases of chemicals to soil or stormwater are prevented.

3.9 Flood management and evacuation

In relation to flood evacuation, IPMG will undertake the following:

- Prepare a flood evacuation plan prior to issue of the Occupation Certificate for the development including flood warning and evacuation procedures.
- Incorporate flood warning and evacuation procedures in the site Emergency Evacuation Plan.
- Install a gate on the shared boundary with VISY to enable evacuation of the site in the event of a major flood.

The proponent will implement the following measures to manage and mitigate any risk arising from flooding:

- Provide 2000 cubic metres of flood storage on site to compensate for the proposed new warehouse.
- Construct the floor levels of the new warehouse and parts of the existing facility above the 100 year flood level plus freeboard.
- Store all potentially hazardous or polluting materials, chemicals or fuels above the 100 year flood event.

3.10 Tree management

IPMG will undertake the following in relation to the management and replacement of trees on the site:

- Replace all trees to be removed with new trees on a like for like basis;
- Engage, where required, an arborist experienced in tree protection on construction sites to monitor any excavation, trenching and filling within the primary root zone of any retained tree;
- Implement during construction the tree protection measures set out with the arboricultural assessment.

Response to Submissions

Attachment A

Attachment A

ISSUES	RESPONSE
NSW Department of Planning	
The Proponent is required to: ▪ provide information on the arrangements for containing contaminated fire fighting water in the case of a fire involving inks; ▪ update the base leak frequency information based on the size of valves to which the information applies, and provide clarification on if the frequency used was total frequency or specific for a certain size; and ▪ undertake a revised risk assessment of fire in the toluene storage bund in the event of a leak or rupture of a storage tank.	Section 2.1 of the Response to Submissions and the letter prepared by Sherpa Consulting (see **Attachment B**) demonstrates that the potential hazards identified in the Department's letter can be adequately addressed.
The Department has requested the Proponent to quantify the proposed reduction in greenhouse gas emissions that would be achieved by the proposed energy efficiency measures.	See Section 2.2 of the Response to Submissions.
NSW Ministry of Transport (MoT)	
▪ The proponent's justification for the variance to the Liverpool DCP Car Parking Provision rate is fully supported. A further reduction is encouraged.	Noted.
▪ The proponent should provide appropriate secure bike storage and cyclist amenities.	The proposed development includes these facilities as detailed in Section 4.4.4 of the EAR and in Figure 17.
▪ The proponent's intention to adjust the boundary of the Southern Sydney Freight Line and intention to develop a Travel Demand Strategy (TDS) was supported. MoT recommended the strategy include: - the use of car share schemes for employees; - potential assistance for employees to access work by public transport through salary package options and other incentives; - preparation of a Travel Access Guide (TAG); and - the provision of adequate and secure bicycle storage and cyclist amenities.	IPMG had previously committed to incorporate most of the recommended MoT initiatives in its TDS and will consider other initiatives when preparing the final TDS. IPMG will also aim to achieve the 25% journey to work mode share goal.

ISSUES	RESPONSE
Sydney Water	
▪ The development is located within the 400m Sewage Treatment Plant (STP) buffer zone which will result in people being exposed to odour, and therefore recommends that dining areas shall be fully enclosed with appropriate ventilation systems incorporated and consideration given to any other outdoor staff amenity areas.	It should be clarified that any reference to a 'Café' on the plans refers to an 'outdoor eating area' where no food is produced or sold. While the proposed outdoor eating area is approximately 320m from the STP boundary the recommendation to enclose the area is not considered appropriate for the following reasons: ▪ The proposed staff outdoor eating area will not function as a commercial café or staff canteen. No food will be produced or sold from the café and it will only be used intermittently by staff during breaks. ▪ It is located on the northern side of building which is orientated away from the STP and buffered by the significant building mass of the IPMG facility. ▪ It achieves the Liverpool Development Control Plan 2008 Section 7.7(b) objective to provide outdoor amenity areas for staff on industrial sites. ▪ It provides a desirable recreation area for the staff of the printing facility.
RailCorp	
RailCorp recommended the following conditions of consent: ▪ A Risk Assessment/Management Plan and detailed Safe Work Method Statements (SWMS) for the proposed works are to be submitted to RailCorp for review and comment prior to any road works (sic) commencing.	Noted. No road works were proposed as part of the Project Application.
▪ No metal ladders, tapes, scaffolding and plant/machinery, or conductive material are to be used within 6 horizontal metres of any live electrical equipment. This applies to the train pantographs and 1500V catenary, contract and pull-off wires of the adjacent tracks, and to any high voltage aerial supplies within or adjacent to the rail corridor. Not metal ladders are to be used within the rail corridor.	Noted. The western wall of the development is approximately 10 metres from the site boundary and considerably further to the train line (see Figure 7 of the EAR). Therefore there is no risk of any metal ladders, tapes, scaffolding and plant/machinery, or conductive material being used within 6 metres of any live electrical equipment.

ISSUES	RESPONSE
▪ The Applicant is to procure a report on the Electrolysis Risk to the development from stray currents, and the measures that will be taken to control that risk. The Applicant is advised to consult an Electrolysis expert. The expert's report must be submitted to RailCorp for review by the Senior Electrolysis Engineer or nominated Electrolysis Section personnel.	As detailed in Section 6.1 of the EAR, electrolysis was not considered an issue as the building closest to the railway is an existing structure and the new development is sufficiently distant from the corridor to not be affected by electrolysis. Despite this the proponent will consider the potential effects of stray electrical currents and electrolysis in the design of the development and will provide an Electrolysis Risk Report, prepared by a specialist consultant, to RailCorp prior to commencement of construction.
▪ No crane or other aerial equipment is to be operated with the potential to reach over the rail corridor. The applicant is required to submit to RailCorp a plan showing all craneage and other aerial operations for the development.	Noted. As detailed in Section 4.2 and Figure 15 of the EAR, no crane or other aerial equipment with the potential to reach over the corridor is proposed.
▪ Prior to the commencement of any works along Bellevue Street (sic) the Applicant is required to obtain Rail Corp's requirements in relation to fencing along the common boundary with the Rail Corridor.	Not applicable. The proposal retains the existing fencing along the corridor. Bellevue Street does not apply to this site.
▪ The proponent must submit any proposals to RailCorp for the use of lights, signs and reflective materials.	Noted. No lights, signs or reflective materials are proposed near the rail corridor or along the western facade of the building facing the railway line.
Sydney Regional Development Advisory Committee (SRDAC)	
▪ The proposed initiatives to encourage employee use of public transport are commended.	Noted.
▪ The plans submitted with the application do not provide details of the car parking and loading areas and therefore a detailed assessment of the internal arrangements could not be undertaken.	Noted. Plans detailing the car parking and loading areas were submitted with the application and are appended to Appendix M of the EAR.

ISSUES	RESPONSE
▪ Car parking provision should be to Council's satisfaction.	Noted.
▪ Off-street parking associated with the development should be designed in accordance with AS2890.1 – 2004 and AS 2890.2 – 2002.	Noted.
▪ The swept path of the longest vehicle entering and existing the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS.	Noted. A swept path analysis demonstrating the proposals compliance with AUSTROADS was undertaken by Transport and Traffic Planning Associates and was appended to the Traffic Report (see Appendix M of the EAR)
▪ A Demolition Construction Traffic Management Plan should be submitted to Council prior to issue of construction certificate.	Noted. The proponent has committed to preparing a Demolition Construction Management Plan as detailed in Section 8.5 of the EAR.
NSW Health	
▪ It is advisable to do a risk assessment of the catchment and likely quality of rainwater to ascertain what further treatment is required.	Noted. The proponent will seek specialist advice to ensure that harvested rainwater meets required standards.
▪ The future redevelopment of Liverpool Hospital Campus will result in increased traffic flows on Scrivener Street.	Noted. The proposal will result in an overall reduction in the amount of traffic compared to the existing operations.
▪ The early detection/warning systems and evacuation procedures should be fully assessed as part of the hazardous risk assessment and that sensitive receptors are fully considered as part of the assessment.	Early leak detection, fire detection and fire suppression systems will be incorporated into the design of the facility. An emergency plan is to be developed, that will account for 'notification of authorities and adjacent companies' (in accordance with section 2.10.2 of HIPAP 1 (DoP, 1993)). This will include mutually agreed contact arrangements. Sensitive receptors have been fully considered in the risk assessment and it was found that 'there were no events with the potential to affect… sensitive land uses', see Page 9 of the Preliminary Hazard Assessment report (Appendix Q).
▪ Noise levels need to be within acceptable limits to sensitive receptor sites.	Section 7.7 of the EAR assessed the impact of noise on sensitive noise receptors in the locality and found that the development will be within acceptable limits.

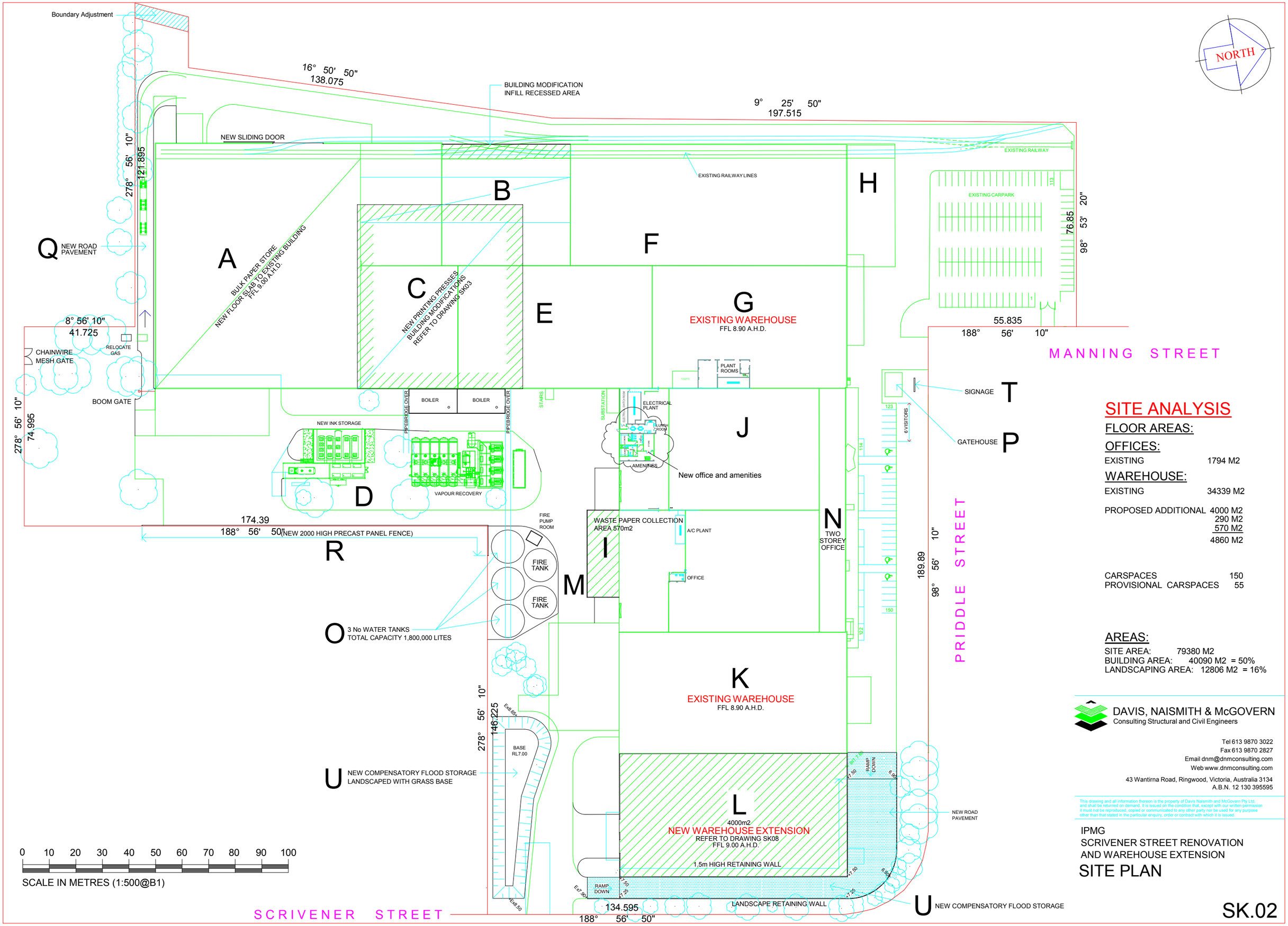
ISSUES	RESPONSE
Resident 1	
R1 was concerned about the potential for increased noise levels in particular on their horses, as a result of the movement of heavy vehicles and the proposed 24 hour operation of the facility. R1 suggested a range of measures to minimise noise levels on residents. R1 was also concerned by dangerous chemical emissions.	R1's concerns regarding truck noise are addressed in Section 2.3 of the Response to Submissions. The chemical emissions produced by the facility are well under the EPA regulatory limits as detailed in Air Quality Assessment prepared by Stephenson Environmental Management Australia (see Appendix N and Section 7.10 of the EAR).
Resident 2	
R2 was concerned about the potential for increased noise levels in particular on their horses, as a result of the movement of heavy vehicles and the proposed 24 hour operation of the facility. R2 requested that a curfew be adopted to restrict any loud activity after hours and that truck drivers be made aware of the impact that noise has on the surrounding residents.	R2's concerns regarding truck noise and suggested curfew are addressed in Section 2.3 of the Response to Submissions.
Resident 3	
R3 was concerned about the potential for increased noise levels and traffic, as a result of the movement of heavy vehicles and requested clear statements regarding: ▪ truck movements ▪ testing of emergency systems ▪ forklift operations at night ▪ gate repairs and maintenance ▪ staff change over's at night R3 also requested that the car park and Manning Street gates should not operate between 9pm and 6am and the 11pm traffic shift change should be via the Scrivener Street entrance.	R3's concerns regarding truck noise, traffic and suggested curfew are addressed in Section 2.3 and 2.4 of the Response to Submissions.

ISSUES	RESPONSE
Resident 4	
R4 was concerned that the facility will increase traffic flows which will make it harder for horses and staff to cross Manning Street safely. R4 requested that flashing lights or a designated horse crossing be installed.	As detailed in Section 7.8 of the EAR and 2.4 of the Response to Submission, the proposed development will result in a reduction in the amount of traffic when compared to the previous facility and therefore reduce the potential for a horse related incident. IPMG will incorporate a set of protocols into site induction, contractor (including driver) induction and the construction tender to deal with potential noise, speeding, and potential 'hoon-like' behaviour on the roads surrounding the site. IPMG would support safety measures implemented by Liverpool Council in the area.

Revised Drawing (SK.02)

Davis Naismith & McGovern

Attachment B



SITE ANALYSIS

FLOOR AREAS:

OFFICES:

EXISTING	1794 M2

WAREHOUSE:

EXISTING	34339 M2
PROPOSED ADDITIONAL	4000 M2
	290 M2
	570 M2
	4860 M2

CARSPACES	150
PROVISIONAL CARSPACES	55

AREAS:

SITE AREA:	79380 M2
BUILDING AREA:	40090 M2 = 50%
LANDSCAPING AREA:	12806 M2 = 16%

DAVIS, NAISMITH & McGOVERN
Consulting Structural and Civil Engineers

Tel 613 9870 3022
Fax 613 9870 2827
Email dnm@dnmconsulting.com
Web www.dnmconsulting.com

43 Wantirna Road, Ringwood, Victoria, Australia 3134
A.B.N. 12 130 395595

IPMG
SCRIVENER STREET RENOVATION
AND WAREHOUSE EXTENSION

SITE PLAN

SK.02

Information on Potential Hazard Impacts

Sherpa Consulting

Attachment C

Sherpa Consulting Pty Ltd (ABN 40 110 961 898)
PO Box 1830
Chatswood NSW 2057
AUSTRALIA
Phone: 61 2 9412 4555
Fax: 61 2 9412 4556
Web: www.sherpaconsulting.com

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9 January 2009

Attention: Chris Ritchie
Manager – Manufacturing and Rural Industries
Major Development Assessment
NSW Department of Planning
23-33 Bridge Street
Sydney

Dear Mr Ritchie

RE: Warwick Farm Printing Project, Application Number 08_0088

Further to your request for information in Attachment A of your letter Ref S07/01943, I give the following responses.

Item 1 – In case of a fire involving inks, the fire fighting water will be contaminated. Brief information on the arrangements for containing contaminated fire fighting water should be provided.

The Fire Safety Study, following the requirements of HIPAP 2 (DoP, 1993), and undertaken prior to construction, would normally be used to describe the arrangements for contaminated firewater containment. The design of any firewater retention system required would follow the requirements of 'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems',(McCracken, 1994).

Based on preliminary design information, the following details can be given which will be expanded upon in the Fire Safety Study to include design details for firewater containment:

- bunding for the toluene storage tanks, will be in accordance with the requirements of AS1940 (ME-017, 2004) including an allowance in the bund capacity for firewater application over 20 minutes.
- The printing machines will be fitted with a sophisticated fire detection and extinguishing system using carbon dioxide. This will limit the requirements for water to be used in this area.
- The paper storage area will incorporate a sprinkler system, but is segregated from plant items containing toluene to mitigate fire escalation and contaminated firewater generation.

In general, the design strategies against firewater contamination will consist of:

- Minimising available contaminants and remedial measures to minimize the likelihood of release
- Reducing the likelihood of fire
- Minimising the fire-fighting water requirements
- Containment of spillages and run-off

A detailed assessment of contaminated firewater containment will be undertaken in the Fire Safety Study when the detailed design is available.

Item 2 – The base leak frequency for a valve provided in Table 6.1 - Base Leak Frequencies used should be updated with information on the size of the valves to which the information applies. Furthermore it should be clarified if the frequency used is total frequency (i.e. accommodates all leak sizes and guillotine rupture) or is specific for a certain leak size.

The base valve leak frequency was extracted from HID data (HSE, 2002) for block valves sized <=3" and 3" to 11".

The leak sizes considered were for an equivalent hole diameter of <10mm and 10mm to 25mm, accounting for over 80% of the total leak frequency for each block valve size.

Item 3 – The event 1.01 PF: Bulk Storage - Fire in the Toluene Storage Bund is included in the frequency analysis because it has off-site impact. However, the frequency of a leak or rupture of a storage tank is not taken into account in the risk analysis. Although these type of failures are less likely to occur, an assessment should be performed and added to the overall frequency of 1.01 PF event.

The leak, or rupture of the storage tank may be added to the calculation in Table 6.2 of the PHA report (Johnson, 2008), and Table 1, in this letter, shows two larger leak sizes associated with the vessel in addition to the <=25mm leak size given in Table 6.2 of the PHA Report. An explanation of the parameters that were changed for the two new hole sizes in Table 1, in this letter, are given below:

- *Leak frequency* is taken from a study by the UK HSE (Nussey, 2006)
- *Operator Fails to Stop Leak* is assumed to have a probability of 1, ie he cannot stop a large leak
- *Ignition Probability* is related to the leak size, in this case the maximum probability is used for a 'mixed' material (Cox, et al., 1990) for the catastrophic leak; for the 50mm leak the release rate would be approximately 35kg/s which would relate to an ignition probability of 0.07.

Other probabilities are the same as those used in the initial assessment.

Table 1: Fire Frequency for Event 1.01 PF

Description	Frequency/Probability for each event		
	<=25mm	50mm	Catastrophic
Leak Frequency	7.30×10^{-3}	5.00×10^{-6}	2.00×10^{-6}
Operator Fails to Stop Leak	0.1	1	1
Ignition probability	0.01	0.07	0.3
Leak Fills Bund	1	1	1
Fire Detection and Protection ineffective	0.1	0.1	0.1
Wind in correct direction	0.4	0.4	0.4
Thermal Radiation Barrier Ineffective	1	1	1
Frequency	**2.92×10^{-7}**	**1.40×10^{-8}**	**2.40×10^{-8}**
Total Frequency	**3.06×10^{-7}**		

As seen in Table 1, above, the fire frequency for the revised calculation is 3.06×10^{-7}/year, increased from 2.92×10^{-7}/year. When added to the frequency of the other fire scenarios considered in the PHA Report, the overall risk does not significantly change, ie the overall risk reported in Table 6.7 of the PHA report and in the relevant sections of the EA remains 16×10^{-6} per year.

Yours sincerely

Phil Johnson
Principal Engineer
Sherpa Consulting Pty Ltd

References

Cox, A. W., Lees, F. P. and L., Ang M. 1990. *Classification of Hazardous Locations.* s.l. : Institution of Chemical Engineers, 1990.

DoP. 1993. *Hazardous Industry Planning Advisory Paper No. 2 -- Fire Safety Guidelines.* 1993.

HSE. 2002. *Offshore Hydrocarbon Releases Statistics: 2001 HID Statistics Report.* 6th Edition. s.l. : HSE HID, 2002.

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McCracken, John. 1994. *Best Practice for Contaminated Water Retention and Treatment Systems.* NSW Govt. Hazardous Materials Policy Co-ordinating Committee. 1994.

ME-017. 2004. *AS 1940 The storage and handling of flammable and combustible liquids.* s.l. : Standards Australia, 2004.

Nussey, Clive. 2006. Failure frequencies for major failures of high pressure storage vessels at COMAH sites: A comparison of data used by HSE and the Netherlands. 2006.