

PART E

TECHNICAL REQUIREMENTS

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E1 GENERAL

E1.1 GENERAL

The Works to be carried out by the Contractor shall comprise of the design, procurement, supply and installation of 67 controlled emission toilet systems to 21 heritage rail carriages.

The rail carriages are located at two separate locations; Nine (9) at the Large Erecting Shop at Eveleigh, operated by 3801 Ltd, the remaining twelve (12) are located at Thirlmere and are operated by the NSW Rail Transport Museum (RTM).

E1.1.1 Project Background

The Purchaser has an obligation to ensure its heritage rolling stock complies with legislative requirements as well as the obligations of its licensing agreements with the Rail Infrastructure Corporation.

The heritage carriages have toilet systems that discharge effluent directly to the rail track. Current legislation prohibits this practice and has led to an investigation by The Purchaser into alternatives available for retention toilet systems.

The Purchaser engaged a specialist consultant, Interfleet Technology, to provide a detailed report of options for converting the heritage fleet toilets to controlled emission systems. The report categorises the heritage carriages under consideration and provided detailed information on the different options for retention toilet systems and possible methods for decanting.

Interfleet's detailed report has been modified to form a Scope of Works document for the Contractor and is attached in Appendix E1. Note that where there are any inconsistencies between these tender documents and Appendix E1, this document shall supersede any information contained in the Interfleet Scope of Works (Appendix E1).

E1.1.2 Heritage Background

All of the rolling stock to be dealt with have some level of heritage significance, and in accordance with obligations placed on StateRail (the Purchaser) under the NSW Heritage Act 1977, amended in 1998, the removal and replacement of any panels or components necessary to install the retention toilet systems, must be undertaken in a manner that does not damage the carriage or any components.

E1.2 DESCRIPTION, LOCATION AND WORKING HOURS OF SITE

E1.2.1 Eveleigh

The nine heritage carriages, operated by 3801 Ltd are located at Eveleigh Railway yard in the Large Erecting Shop. The site is a fully operational interchange and train stabling yard. The site is run by StateRail and has no public access other than to Redfern Station, which is adjacent to the site.

The Large Erecting Shop on Locomotive Street is encompassed by several occupied buildings; The Australian Technology Park is located to the south-east (owned by Sydney Harbour Foreshore Authority). To the north-east is the Exhibition Centre. StateRail Xplorer (Tangara) occupies the buildings to the north. The Elephant House is located directly to the west and further west is the ACDEP buildings accommodating up to five different StateRail tenants (EDI, Millennium Train and others). See following area map showing Redfern Train Station in the top right-hand corner.



The installation works will occur within the Large Erecting Shop or on the adjacent siding located on the South side of the Large Erecting Shop.

Works can be undertaken at Eveleigh from 7.30am to 4pm Monday to Friday excluding public holidays and subject to shunting of trains.

Further information on the Eveleigh site is contained within Section E4 – Site and Works Management.

E1.2.2 Thirlmere

The twelve heritage carriages, operated by the NSW Rail Transport Museum (RTM) are located at Thirlmere at the Railway Museum. The operational site is bounded by Barbour Road to the west and Station Street to the east. The Site is surrounded by residential properties and there is a primary school to the west of Barbour Road.

The installation works will occur where the carriages are stored, in general this will not be inside the workshop.

The overall Thirlmere site functions as a railway museum, storage and maintenance facility and is therefore, in part, open to the public. The Museum is open to the public at the following times; weekends and public holidays 9:00 to 17:00, weekdays 10:00 to 15:00, and NSW public school holidays weekdays 9:30 to 16:00.

Works can be undertaken at Thirlmere from 7:30am to 4pm Monday to Friday, works outside these hours must be agreed with the Engineer.

Further information on the Thirlmere site is contained within Section E4 – Site and Works Management.

E1.3 SCOPE OF WORKS

E1.3.1 General Scope of Works

The Contractor is required to carry out the necessary activities to deliver the technical, performance and project requirements for the **installation of 67 controlled emission toilet systems** specified in Interfleet Technology's Scope of Work document (Appendix E1). The following general scope of work for the Contractor is proposed:

- a) Design Specification
- b) Design Review
- c) Accreditation and Approval
- d) Procurement of Equipment and Materials
- e) Trial Installation
- f) Production Installation
- g) Testing and Commissioning
- h) Technical and Maintenance Documentation
- i) Spares arrangements

E1.3.2 Design Specification

The Contractor shall develop a detailed technical specification for each vehicle toilet system describing the system functional, maintenance and technical parameters. The Engineer and the Contractor shall review and agree the technical specifications before detailed design work commences.

E1.3.3 Design Review

The Engineer and the Contractor shall hold regular design reviews as the nature of the work will require customised and possibly unique designs for each vehicle. The aim of the design reviews will be to discuss the differences of each vehicle and develop a suitable design package within the overall toilet system design. The design review will also provide an opportunity to discuss the re-location of carriage fixings to accommodate the retention toilet design. The frequency of the design reviews will be negotiated between the Engineer and the Contractor, but will allow for flexibility should it be deemed necessary. Further information on meetings is specified in section E3.2 of this document.

The Contractor must provide the design documentation to be reviewed in advance of the meeting. Once the final design packages for the toilet system have been submitted they shall be reviewed by the Engineer prior to the commencement of installation work.

E1.3.3 Accreditation and Approvals

The Contractor is responsible for gaining accreditation from ITSRR for the toilet installations. The Contractor must obtain and maintain all certificates, licences, consents, permits and other approvals of any Authority required for the execution of the work and pay all fees relating to the same.

E1.3.4 Equipment and Materials Procurement

The Contractor is to obtain all toilet system equipment, components and materials necessary to complete the Contract.

E1.3.5 Trial Installations

The Contractor shall undertake trial installations on the first vehicle for Categories A, C & H to refine the design and installation arrangements. When installed, the trial shall demonstrate that the toilet system is fully functional and is free from any defects.

E1.3.6 Production Installation

The Contractor shall install 67 toilet systems as specified in Appendix B, page 31 of the Interfleet Scope of Works. Unless expressly stated otherwise in the Contract, the Contractor must:

- a) Provide all labour, subcontractors, inspections, co-ordination necessary to complete the Contract;
- b) Provide all temporary services to allow safe installation of the retention toilets;
- c) Provide all temporary site accommodation and storage in conformance with applicable, awards, codes and standards;
- d) Manage, control and co-ordinate the OH&S management for the installation works.

E1.3.7 Testing and Commissioning

The Contractor shall provide a suitable programme for testing and commissioning the toilet systems on each vehicle. Commissioning shall be undertaken by the Contractor and the installations shall be signed off by the Engineer and the Contractor as compliant with the specification.

E1.3.8 Final Inspection and Acceptance Regime

To validate the work undertaken a sample of the modified heritage fleet will be inspected, by the Engineer, to ensure that the toilet system fitted meets the design specification agreed.

E1.3.9 Standards and Specifications

The Contractor shall ensure that the toilet system and all associated vehicle equipment supplied under the Contract shall meet necessary legislative and industry standards and regulations as detailed in Interfleet Technology's Scope of Work document (Appendix E1).

E1.3.10 Technical and Maintenance Documentation

The Contractor shall ensure that all documentation requirements in Interfleet Technology's Scope of Work document are met, including but not limited to:

Design Information

- a) The provision of Design Packs containing toilet design information for review by the Engineer.
- b) A complete suite of drawings, of sufficient detail to allow the operators to adequately maintain, repair and replace equipment. These should include, where possible, assembly, installation and parts drawings.

Installation, Commissioning and Testing

- a) Provision of a test specification.
- b) A methodology and plan detailing how to install, test and commission each vehicle. Where possible, an estimate of hours should be given.
- c) Completed installations and associated commissioning and testing records for installed toilet systems.

Other Documentation

- a) Provision of technical and maintenance information for the toilet system in a format to be agreed with The Purchaser.
- b) Provision of technical documentation, test results, etc necessary to support accreditation and approval processes.
- c) Provision of a briefing session outlining the contents of the technical and maintenance information to relevant RTM and 3801 Ltd staff

E1.3.11 Spares

- a) Provision of warranty spares.
- b) Provision, at the Engineer request, of maintenance spares.
- c) Provision of a list of parts and suppliers for all manufactured items used in the fitment of the toilet system.

E1.3.12 Vehicle Sub – Category

The Vehicle sub – Categories are as given in the Table below:

Vehicle Sub - Category	Vehicle Type
A	Heritage Train
B	Guards Van
C	Power Van
D	Roomette Sleeper
E	Sleeping Car
F	MBE Sitting
G	FN Sitting
H	MFS Sitting

E2 DOCUMENTS

E2.1 CONTRACTORS SUBMISSIONS PRIOR TO COMMENCEMENT

The Contractor shall submit the following documents to the Engineer for review prior to commencement.

E2.1.1 Methodology

The Contractor shall prepare a detailed methodology, including details of all toilet systems, tanks, plant, machinery, tools and equipment proposed to be used, installation techniques, procedures for the delivery of materials to and from site, co-ordination procedures with RTM, 3801 Ltd and the Purchaser, storage areas, sequence of installation and overall Works program.

The Contractor's methodology shall take into account any restrictions or conditions detailed by RTM, 3801 Ltd or the Purchaser in these tender documents and at any time prior to completion of and agreement to the detailed methodology.

E2.1.2 Project Program

The Contractor shall provide a Project Schedule in Gantt chart format prior to commencement of the work detailing project activities, activity durations, start and finish dates and sequencing. The schedule should include design review milestones and training times of personnel to be employed on the project. The schedule should show key milestones including completion and handover dates in accordance with the Contract and shown below (tentative):

Appointment of Contractor	mid December 2006
Design, Specification & Review	end January 2007
Prototype Testing, Accreditation & Approvals	Feb 2007
Installation Commencement	April 2007
Project Completion	end June 2008

The Engineer will review the submitted Project Schedule and provide comments on the base line prior to commencement. The base line Project Schedule shall remain frozen for the duration for the project.

The Contractor shall update the Project Schedule at regular intervals and not less than once per month to show progress against the base line.

E2.1.3 Dilapidation Survey

The Contractor must, at the date of appointment provide a complete dilapidation survey of all 21 existing heritage carriages before commencing work on site. The survey must clearly identify and record in writing with accompanying photographs:

- a) the state of each toilet compartment
- b) the condition of the services in and around the toilet facilities
- c) the condition of the underside of the carriage, with particular attention given to carriages with timber floors
- d) any existing damage must be recorded

Two copies (one unbound) of each report shall be forwarded to the Engineer.

The Engineer will use the survey(s) and report(s), amongst other things, as a means of assessing the responsibility for damage and/or making good arising out of the performance of the work under the Contract during and at Completion of the Works.

E2.1.4 Site-Specific Safety Management Plan

The Contractor must prepare a detailed Site-specific Safety Management Plan (SSMP) for both the Eveleigh and Thirlmere sites, which identify hazards associated with the works at the site, refer to the HAZARD IDENTIFICATION & RISK CONTROL INFORMATION (Pre Tender) in Part B Schedules, along with the hazardous control measures that will be implemented to ensure that people are adequately protected from risk of injury or illness and as a minimum should include the following; Statement of Responsibilities, OH&S Training, Incident Management, Site Safety Rules and Safe Work Method Statements.

E2.2 TENDER INFORMATION SUPPLIED BY THE PURCHASER

E2.2.1 Detailed Scope of Works

A detailed Scope of Works document compiled by a specialist consultant, Interfleet Technology is provided in Appendix E1.

The Purchaser shall not be responsible for any interpretations, deductions or conclusions made by the Contractor from the information made available and the Contractor must accept full responsibility for any such interpretations, deductions or conclusions.

E2.2.2 Hazardous Materials Assessment

StateRail (the Purchaser) has obligations under the Occupational Health and Safety Act 2000 to ensure the health and safety of employees, contractors and members of the public. As such, the Purchaser engaged a specialist consultant, GHD Pty Ltd. to conduct a hazardous materials survey to assess as far as possible the presence of any hazardous materials, including but not limited to, friable asbestos and lead paint. The results of the survey are provided in Appendix E3.

Note: *Note that as indicated in the report, hazardous materials may be present that have not been identified in the report (see Section E4.7)*

E2.3 INFORMATION SUPPLIED BY THE PURCHASER WHEN CONTRACTOR APPOINTED

E2.3.1 Updated Report for State Rail Heritage Fleet

The Scope of Works document created by Interfleet Technology was derived from an initial report titled 'Updated Report for State Rail Heritage Fleet'. The updated report provides further information on the background of the project. An abridged version of the report will be provided to the Contractor upon appointment of the Contract.

E2.3.2 StateRail FE specifications

StateRail's FE specifications are listed in Section 6.0 of Interfleet Technology's Scope of Work document (Appendix E1).

E3 ADMINISTRATION

E3.1 SUPERVISION - PRELIMINARIES

The Contractor is responsible for:

- (a) the continuous and detailed mandatory inspections and supervision of the work under the Contract on site whilst Works are being undertaken;
- (b) The Contractor or any sub-trades engaged on the work must be registered or licensed to carry out the work under the Contract. The Contractor may be required to produce evidence of registration or licence prior to any commencement of the work under the Contract.
- (c) the co-ordination and control of the work under the Contract. The Contractor must program and direct all sub-contractors, Consultants and suppliers and ensure that:
 - (i) all orders are placed;
 - (ii) materials are removed;
 - (iii) resources are on Site, at the time required to avoid delay;
- (d) the timely ordering of all materials or plant and equipment for the work under the Contract;
- (e) all necessary work under the Contract, being work not specifically mentioned in the Contract documents, but which is necessary and/or inferred for the work under the Contract to achieve the desired scope and quality;
- (f) physically co-ordinating the detailed set out of the work under the Contract.

E3.2 MEETINGS

The Contractor must attend all Meetings as required by the Engineer. It is anticipated that Site meetings will be held on a monthly basis when installation works commence or as deemed necessary. Project meetings will generally be held monthly at 55 Market Sydney, unless specifically nominated.

Minutes of both the Design and Site Meetings shall be kept by the Engineer and copies passed to attendees.

The Contractor and the Engineer shall hold regular Project Review meetings, and not less than once per month, to review project progress against the base-line Project Schedule.

E3.3 INSPECTIONS

The Engineer may make inspections on Site. These inspections may occur with short notice and the Contractor must provide a senior representative during such inspections. The Engineer may be accompanied on all inspections by an expert advisor or others, as maybe appropriate.

E4 SITE AND WORKS MANAGEMENT

E4.1 WORKING CLOSE TO OPERATIONAL TRACKS

- (a) The Contractor shall at all times during the period of the works take all necessary precautions to avoid any delay, obstruction or stoppage to railway traffic. Should any avoidable delay, obstruction or stoppage occur, the Contractor will be held responsible for any costs incurred as a consequence.
- (b) The Contractor shall comply with the minimum clearances from the track centreline to be maintained for plant, equipment and structures, which are specified in Part D (D1.2 Definitions) of the Contract. It should be noted that the specified horizontal clearance applies to 300mm below the rail level.

E4.2 OHS REQUIREMENTS

The Contractor's employees and subcontractors must be inducted onto both Sites by either RTM or 3801 Ltd before commencing Works. It will not be mandatory to hold a PO1 Track Safety Awareness Certificate for the Thirlmere site, however, all Contractor's employees and subcontractors must hold this Certificate for the Eveleigh site. RTM will cover basic track safety awareness in their site induction process.

The Contractor will be required to host Tool Box meetings each morning before Works commence, at which the relevant RTM or 3801 Ltd Representative, must be present. These Tool Box meetings will be used as a forum to discuss both the Operator's and the Contractor's proceedings for the day. The Contractor shall provide constant updates of site issues to the relevant RTM or 3801 Ltd nominated contact person, and shall maintain constant communication with this person regarding all project matters.

E4.3 SITE SECURITY

E4.3.1 Security Requirements

The Contractor is responsible for the security of the installation, site accommodation and storage areas, from the date of the commencement on site to the date of Practical Completion.

The Engineer may direct the upgrading of security to the Site, if the measures put in place by the Contractor are not in its view, sufficient. This upgrading will be at the Contractor's cost.

The Engineer may, at its discretion, direct that fencing and hoardings remain in place to secure areas of the site until Practical Completion of the Works.

E4.4 PROTECTION OF EXISTING INFRASTRUCTURE AND STRUCTURE

Works under this Contract shall proceed in a manner that will not damage or disturb the existing infrastructure or railway tracks. Infrastructure includes all track, stanchions, ballast, track drainage, signalling equipment and overhead wiring.

The Contractor must utilise installation techniques that avoid debris falling onto track and ballast. Any fouling of the ballast shall be rectified immediately by the Contractor.

Appropriate protection is to be installed by the Contractor where necessary to safeguard the existing infrastructure and tracks.

E4.5 SERVICES DURING WORKS

The Contractor must make their own arrangements for temporary services connections. These may include telephones, power requirements and water connections. The Contractor must make all payments for fees and charges for connection, use of facilities and any alterations and subsequent disconnection.

E4.5.1 Eveleigh

During the installation works the Contractor may utilise the existing workshop electrical and hydraulic services provided from inside the Large Erecting Shed. The Contractor is responsible for arranging temporary services connections for the site shed and storage and the Contractor's cost. The Contractor must make all payments for fees and charges associated with any alterations and subsequent disconnections.

E4.5.2 Thirlmere

During the installation works the Contractor may utilise the basic electrical services that are situated around the site. Use of three-phase power is limited around the site. The limited reticulated hydraulic services around the site may also be utilised by the Contractor. The Contractor is responsible for arranging temporary services connections for the site shed. The Contractor must make all payments for fees and charges associated with the use of facilities and any alterations and subsequent disconnections.

E4.5.3 Power leads

The Contractor is responsible for its own electrical safety and must ensure that all leads, sockets, plugs and equipment are in good and safe working condition. The Contractor must:

- (a) test all electrical leads; and
- (b) tag all leads.
- (c) show relevant safety tags

E4.6 ADJOINING PROPERTIES

E4.6.1 Delay Due to Dispute with Tenants

The Contractor shall not be entitled to any extension of time due to any dispute, delay or proceedings with existing occupants of the site or adjacent neighbours, owners or occupiers. The Contractor shall be responsible for notifying the tenants of installation works on a regular basis.

E4.7 CONTAMINATION

Refer to GHD Hazardous Materials Assessment (**Appendix E3**) for information on hazardous materials in the nominated carriages. All recommendations contained in the report must be implemented as detailed in the report.

Given the age of the carriages, it is possible that the carriages may contain additional hazardous materials not identified in the report. Accordingly, the Purchaser has advised that the following requirements should be implemented by the Contractor during any works:

- Appropriate environmental and Occupational Health and Safety controls should be implemented in accordance with legislative requirements.

- If during the works, the Contractor identifies any material which may be hazardous, and has not been identified in the report, the Contractor shall immediately stop work, secure the work area and arrange an Environmental Consultant to undertake sampling and classification. The results of the sampling and classification shall be used to develop appropriate management controls, prior to continuing the works.

E4.7.2 Disposal of Contaminants

The Contractor must properly dispose of solid, liquid and gaseous contaminants in accordance with all statutory and contractual requirements.

Protection of the Environment Operations Act 1997

The Contractor is responsible for all dust control and runoff from the installation area to maintain compliance with all EPA guidelines and Protection of the Environment Act and in accordance with all the relevant authority's requirements.

E4.8 SITE CLEANLINESS

The Contractor must ensure the clean and orderly performance of the work under the Contract, including the regular removal of all rubbish, debris, surplus materials etc from the Site and the working areas.

The Contractor is also responsible for the appropriate disposal of all rubbish and other material removed from the Site. The Contractor must enclose rubbish in appropriate containers such as plastic garbage bins or large mobile bins, before removal.

E5 ENVIRONMENTAL PROTECTION

The Contractor must comply with all Environmental Regulations, Codes and Standards. The Contractor must consider any project environmental aspects and impact for the works and implement strategies to mitigate or eliminate impact.

E5.1 STORAGE AND SITE ACCOMMODATION

The Contractor must store materials and equipment and locate site accommodation in the areas nominated by RTM and 3801 Ltd to minimise hazards to persons, materials and equipment. The Contractor must keep the storage areas and site accommodation neat and tidy. The Contractor must not use areas outside the designated area for storage. Storage of tools and equipment left within the carriages during the works will be at the Contractors risk.

E5.1.1 Eveleigh

The Contractor's site accommodation will be located directly adjacent to the Large Erecting Shop on the north west corner of the building, and will be limited to a size of approximately 4m x 5m. It is anticipated that the site shed will be used only intermittently during actual installation periods, and will be removed when works are not taking place. No equipment or materials are to be stored outside, and must be stored either in the heritage cars or off-site.

E5.1.2 Thirlmere

The Contractor must store materials and equipment and locate site accommodation on the Site in the areas nominated by RTM to minimise hazards to persons, materials and equipment. The Contractor must keep storage areas and site accommodation neat and tidy. The Contractor must not use areas inside the workshop or outside the Site for storage. It is anticipated that the Contractor will provide and install fencing, gates, etc to secure a nominated area within the Site.

It is anticipated that the Contractor's site accommodation and storage will be located in the area west of the turntable, which could be created by moving the fence and gates separating the western side of the Locomotive area from the north carpark.

E5.2 SITE AMENITIES

E5.2.1 Eveleigh

The Contractor will have access to the toilets and wash rooms in the Xplorer Centre located near the Large Erecting Shop. The Contractor will be responsible for provision of a meal area during the works.

E5.2.2 Thirlmere

The Contractor will have access to the amenities in the workshop including toilets, wash basins and showers. For more than four personnel on site, the Contractor has to provide its own temporary amenities.

E5.3 DISPOSAL OF REFUSE

The Contractor must entirely at its own cost, remove from the Site at regular intervals but not less than weekly, refuse (including food scraps) resulting from work under the Contract including any work performed during the Defects Liability Period.

The Contractor must handle refuse in a manner so as to confine the materials completely and prevent dust and odour emissions.

E5.4 DUST AND NOISE

The Contractor must:

- (a) ensure that EPA's requirements are met in relation to dust control.
- (b) take all necessary steps to minimise noise resulting from the work under the Contract;
- (c) report all noisy activities to the tenants and Engineer in advance.

E6 COMPLETION

E6.1 PRACTICAL COMPLETION

In addition to the requirements set out in the Contract, the Contractor must ensure that the following requirements have been satisfied before Practical Completion:

- (a) The Contractor must submit three (3) hard copies and one (1) CD disk of completed as built documentation, maintenance manuals and commissioning details to the Engineer prior to the requesting issue of the Certificate of Practical Completion.
- (b) The Contractor's machinery and site storage are removed from the site.
- (c) The Contractor must rectify or replace any damage to existing heritage carriages, existing buildings, roads and footpaths or items stored by RTM or 3801.
- (d) The Contractor must ensure the site area has been left clean.

E6.2 CLEANING UP**E6.2.1 Progressive Cleaning**

The Contractor must keep the Works clean and tidy including any work performed during the Defects Liability Period. Any damage to or marking of any parts of the Work under the Contract by the Contractor must be immediately rectified and left clean at the Contractor's expense.

E6.2.2 Failure to Comply

If the Contractor fails to comply with any obligation imposed on him by this clause the Purchaser may, after the Engineer provides the Contractor with a written notice, have the work of rectification, cleaning or tidying up carried out by other persons and the cost incurred may be deducted from the monies otherwise due to the Contractor. If those monies are insufficient, those costs may be recovered by the Purchaser as a debt due to the Purchaser by the Contractor.

E7 MATERIALS AND WORKMANSHIP

E7.1 MATERIALS, LABOUR AND PLANT**E7.1.1 Manufacturers' Recommendations**

The Contractor must use manufactured items in the work under the Contract in accordance with current published recommendations of the manufacturer relevant to such use.

E7.1.2 Protection of Materials

The Contractor must provide at its own cost adequate storage and protection for materials so as to preserve their quality and fitness for the work under the Contract.

E7.1.3 Labour

Personnel must be skilled in their particular craft and workmen must do all work under the Contract in a thorough, faithful and workmanlike manner.

E7.2 STANDARDS**E7.2.1 Current Edition**

An Australian Standard or other standard applicable to the work under the Contract must be the edition last published not later than one month prior to the closing date for tenders.

E7.3 TESTING

Independent testing authority: Any testing required to be done by an independent authority must be carried out by an authority registered with the National Association of Testing Authorities Australia (NATA).

The Contractor must prepare a detailed testing scope and program and advise the Engineer's before proceeding with the tests.

E7.4 MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES**E7.4.1 Requirement**

Some sections of the Contract include specific means, methods, techniques, sequences and procedures to be employed during construction. If the Contractor does not wish to follow these means, methods, techniques, sequences or procedure, it must notify the Engineer and provide information on the alternative prior to carrying out the relevant work.

The Engineer may in its absolute discretion adopt or reject any alternative proposed by the Contractor.

E7.4.2 Claims

The Contractor must not make any claims arising from any rejection. The Contractor must not unless otherwise agreed, make any claim for variation of cost or time as a result of the Contractor adopting an alternative work method.

E7.4.3 Information

When offering an alternative for approval, the Contractor must provide all available technical information, and any other relevant information requested by the Engineer. If so requested, the Contractor must obtain and submit reports on relevant tests by an independent testing authority.

E7.4.4 Alterations

The Contractor must state whether the use of the alternative will require alteration to any other part of the Work under the Contract. If the alternative is adopted, the Contractor must carry out any such alteration without extra charge.

E7.5 JOINING UP

The Contractor must carry out the joining of new work, and any consequent cutting away, in a manner appropriate to the materials, and make good to match existing adjacent work in all respects.

E7.6 SAFETY OF PLANT AND EQUIPMENT INCORPORATED IN THE WORK

If required, the Contractor must supply a signed statement certifying that all plant and equipment designed by the Contractor for the work under the Contract, when used and maintained in accordance with the published instructions provided will comply with the requirements of the Occupational Health and Safety Act and all other applicable Law concerning health and safety. The Contractor must include with such statement a list of any special safety features provided in the plant and equipment as installed and operating.

STATE RAIL AUTHORITY OF NEW SOUTH WALES



**REQUEST FOR TENDER
DOCUMENT No. 2006/0108**

**DESIGN, SUPPLY & INSTALL
RETENTION TOILETS
IN
HERITAGE RAIL CARRIAGES**

Volume 2 OF 2

VOLUME 2

- APPENDIX E1** Staterail Heritage Fleet Toilet Conversion Scope Of Work
Prepared by Interfleet Technology (Information Document in
accordance with Part A)
- APPENDIX E2** Relevant Staterail FE Specifications
- APPENDIX E3** Hazardous Materials Survey Report Prepared By GHD
(Information Document in accordance with Part A)

APPENDIX E1

STATE RAIL HERITAGE FLEET TOILET CONVERSION SCOPE OF WORK

Prepared by INTERFLEET TECHNOLOGY

Issue: A - dated 21 MARCH 2006

(Note: This is a Separate pdf document)

APPENDIX E2

RELEVANT STATE RAIL FE SPECIFICATIONS

(Note: This is a Separate pdf document)

APPENDIX E3

HAZARDOUS MATERIALS SURVEY REPORT

Prepared by GHD

JUNE 2006

(Note: This is a Separate pdf document)