

## INQUIRY INTO CROSS CITY TUNNEL

Organisation: Thiess John Holland - Lane Cove Tunnel Project  
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Date Received: 25/05/2006

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Theme:

Summary



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**Lane Cove Tunnel Project**

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The Director  
Joint Select Committee  
On the Cross City Tunnel  
Parliament House  
Macquarie Street  
Sydney 2000  
25 May 2006

**INQUIRY INTO THE CROSS CITY TUNNEL – LANE COVE TUNNEL**

Dear Sir,

Please find attached a submission from Thiess John Holland. As the Project Director, I have been authorised by the Joint Venture Management Committee to make this submission and to appear before the Committee if required.

Please do not hesitate to contact me on 9034 8117 if you require any further information.

Yours sincerely

Brendan Donohue  
Project Director  
Thiess John Holland  
Lane Cove Tunnel Project



# **Joint Select Committee Inquiry into the Cross City Tunnel – Lane Cove Tunnel**

## **Submission**

**Thiess John Holland**

**25 May 2006**

## Executive Summary

Thiess John Holland (TJH) was contracted by Connector Motorways Pty Ltd (previously known as the Lane Cove Tunnel Company) to design and construct the Lane Cove Tunnel and Associated Roadworks. TJH welcomes the opportunity to make a submission to the Joint Select Committee. Although most of the matters in the Committee's terms of reference (g), (h) and (i) predate the commencement of TJH's contract, this submission provides information about the scope of TJH's work, its safety record, and the relationships with the community and government agencies in delivering the project.

The submission is organised as follows:

1. *Introduction*
2. *Contractual Relationships*– This section describes the joint venture and its key subcontractors.
3. *TJH's Scope of Works* – The key deliverables in the two stages of TJH's contract works are outlined. The scope is defined by the Design and Construction Deed, the Planning Minister's Conditions of Approval, and the Scope of Works and Technical Criteria.
4. *Relationships with Government Agencies* – In delivering the project, TJH is regulated by, and consults with, a range of government agencies in accordance with the Project approval conditions and contract requirements.
5. *Overview of the progress of the project*
6. *Safety* – With over 5 million manhours of work completed, the Project has an impressive Lost Time Injury Frequency Rate (LTIFR) of 0.82. This compares with the recorded average LTIFR for the NSW construction industry in 2004/05 of 21.3.
7. *Community Consultation* – The Project is being delivered in a highly urbanised setting across four local government areas while maintaining traffic flow on some of Sydney's busiest roads. A comprehensive, transparent and accountable consultation process has been implemented to inform and involve the community in the delivery of the project and to minimise the impacts of construction. This section includes consultation with the general community, residents and businesses, the Community Construction Liaison Groups, Air Quality Community Consultative Committee, Traffic Committees and consultation with Local Councils.
8. *Urban Design and Landscaping Plans* - A key area of consultation has been in the urban design and landscaping plans for the project, which detail the finished form of the project's structures, landscaping and other facilities.
9. *Community Consultation to develop the detailed design for stage two works on Epping Road.* – The Project Approval Conditions require TJH to deliver improved public transport, cycle and pedestrian facilities as well as restore right hand turns and other landscaping improvements to Epping Road once the tunnel opens. TJH undertook a very extensive consultation process which included a public exhibition of a draft plan which attracted 110 submissions which were each considered in the further development of the design.
10. *Tunnel subsidence incident and update on negotiations with owners and residents*
11. *Conclusion*

## **1. Introduction**

Thiess John Holland (TJH) welcomes the opportunity to make a submission to the Joint Select Committee. Thiess John Holland was contracted by Connector Motorways Pty Ltd (previously known as the Lane Cove Tunnel Company) on 9 December 2003 to design and construct the Lane Cove Tunnel and Associated Works in accordance with the Minister for Planning's Approval Conditions and the Scope of Works and Technical Criteria.

In relation to the Committee's Terms of Reference (g), (h) or (i), the parent companies of TJH formed part of the Lane Cove Tunnel Consortium that won the bid for the Lane Cove Tunnel project. Thiess and John Holland were responsible for construction planning and costing and undertook some consultation with key community stakeholders to better understand possible impacts of construction on the community as an input to draft construction plans. In developing the design and construction elements of the Consortium's tender, Thiess and John Holland had access to the tender documents, the EIS and RTA Preferred Activity Report, and the Minister's Conditions of Approval. In addition, some stakeholder EIS submissions that were publicly available or provided direct to the tender team were also considered in the development of the tender.

This submission primarily addresses item (j) of the terms of reference and aims to provide the Committee with a broad understanding of TJH's contractual relationships, its scope of work, progress in delivering the works, its safety record and community consultation carried out as part of the delivery of the project.

## **2. Contractual Relationships**

Thiess John Holland (TJH) is an unincorporated joint venture of Thiess Pty Ltd and John Holland Pty Ltd.

The lead design consultant for TJH is Parsons Brinckerhoff and United Group Infrastructure is contracted to TJH to design and supply the mechanical and electrical systems for the project. A wide range of other specialist consultants deliver environmental, traffic, geotechnical, survey and other services.

Over 7500 people (employees and subcontractors) have been inducted to work on the project.

## **3. Thiess John Holland's scope of works**

Stage One of the works includes:

- Design and construction of twin 3.6km tunnels linking the Gore Hill Freeway at Artarmon with the M2 at North Ryde
- Design and construction of the ventilation system including 2.3km of ventilation tunnels, two ventilation stacks and an air intake
- Mechanical and electrical fit out of the tunnels
- Widening of the Gore Hill Freeway to provide two new transit lanes including retaining walls, viaducts and bridge widening
- Widening the Lane Cove River Bridge, providing additional lanes on Epping Road to Wicks Road and for Delhi Road at the intersection with Epping Road

- Three new ramps connecting Falcon Street with the Warringah Freeway
- Construction of a shared use cycle and pedestrian path from North Ryde to Naremburn
- Development of traffic management plans and management of traffic incidents along the project corridor during construction
- Installation of a network of traffic management facilities including variable message signs and traffic cameras
- Construction of a Motorway Control Centre at Sirius Road, Lane Cove West, including communication cabling to manage new electronic traffic management facilities such as cameras, variable speed and message signs along the project corridor.

Once the tunnel is open, a second stage of associated works will provide new public transport, cycling and pedestrian facilities, and other changes required under the conditions of approval. The Stage Two works do not include the closure of any roads.

The Stage Two scope includes:

- A new bus interchange on the corner of Parklands Ave and Longueville Road
- Installation of 24 hour bus lanes along Epping Road between Mowbray Road and Pacific Highway
- Completion of the regional standard shared user cycle and pedestrian path between Mowbray Road and Pacific Highway
- New pedestrian overbridge with elevators to cross Longueville Road and demolition of the existing pedestrian bridge at Kimberley Ave
- The reinstatement of right hand turning lanes at Centennial and Parklands Avenue
- Creation of an urban design "Gateway" to Lane Cove
- Preservation and enhancement of the Epping Road Azalea beds
- Installation of a new pedestrian crossing at Cox's Road
- Landscaping and urban design enhancements on Epping Road to create an avenue

#### **4. Relationships with Government Agencies**

As the Proponent, the RTA remains the point of contact with the Department of Planning. TJH meets regularly with government agencies which license works or which are required to be consulted in the development of construction plans and designs. These agencies include the Department of Environment and Conservation, Police, Fire Brigade, State Transit Authority, RTA and various service utilities.

#### **5. Overview of the progress of the project**

As at the end of May 2006, Stage 1 works are 75% complete by cost.

Stage 2 is to commence once the tunnel is open and will be completed approximately six months later.

## 6. Safety

With over 5 million manhours of work completed, the project has an impressive Lost Time Injury Frequency Rate (LTIFR) of 0.82.

This compares with the recorded average LTIFR for the NSW construction industry in 2004/05 of 21.3. (Reference 2004/05 WorkCover Statistical Bulletin)

## 7. Community Consultation

The Project is being delivered in a highly urbanised setting across four local government areas while maintaining traffic flow on some of Sydney's busiest roads.

A comprehensive, highly transparent and accountable consultation process has been implemented to provide community members with the opportunity:

- To be informed and understand the project being delivered,
- To contribute suggestions on how that delivery can be improved especially in relation to the mitigation of construction impacts, and
- To be consulted on specific detailed design issues identified in the project approval conditions.

The following sections provide a brief overview of the consultation and communication activities undertaken by Thiess John Holland. Table 1 contains a summary of the extent of these activities

*Table 1- Summary of TJH community consultation*

Target group	Consultation/ communication	Number
General public	24 hour contact line	Over 3000 public contacts
General public	Website <a href="http://www.lanecovetunnelproject.com.au">www.lanecovetunnelproject.com.au</a>	Over 100,000 visitors and over 3 million hits
General public	Quarterly construction update and regular traffic and other advertisements in SMH, Daily Telegraph and 5 suburban papers	114 advertisements
General public	Display centre operates 6 days a week	1850 visitors since opening
General public	Mobile displays	Displays in Lane Cove Plaza, Artarmon Fair, Naremburn shops, Macquarie centre, Big Bear shopping centre Neutral Bay, Greenwood Plaza North Sydney
General public	Public Libraries	Project information in Libraries in 4 local government areas

Target group	Consultation/ communication	Number
All residents and businesses in the project corridor	Bi Monthly, 4 page colour Project Newsletter <i>Lane Cove Tunnel News</i>	Over a million newsletters distributed to up to 95,000 households and businesses from North Sydney to North Ryde
Local residents and businesses	Letterbox notifications and local updates	Over 800 separate notices delivered to relevant areas
Travelling public, bus and taxi operators, emergency services	Weekly traffic updates	78 issued to all member organisations.
Local residents, community groups and business	Information sessions, presentations, on site street meetings and inspections	Over 250 individual sessions
Local Councils	Regular and special issue meetings with council officers and presentations to Council committees, site inspections	Over 100 meetings
Residents and businesses within 50 metres of tunnel alignment	Tunnelling notification letters, updates and doorknocks	3200 individual letters and doorknocks.
Property owners	Property pre-construction condition surveys with information about damage complaint and resolution process	2241 surveys undertaken
Local resident, business and Council representatives	Construction Community Liaison groups (CCLGs)	4 CCLGs Over 100 meetings, site inspections and workshops
Local resident, business and local council representatives	Air Quality Community Consultation Committee (AQCCC)	21 meetings
Local Council traffic managers, representatives of bus, taxi operators, Bicycle NSW, NRMA, RTA	Traffic and Transport Liaison Group	37 meetings 32 Traffic Management Plans considered.
Residents, Lane Cove Council and bushland conservation groups	Mid tunnel rehabilitation and revegetation working group	8 meetings including on site inspections

## **7.1 Construction Community Liaison Groups (CCLGs)**

Four CCLG groups were established prior to the commencement of substantial construction and meet at least monthly. Their scope is defined in a charter primarily focussed on construction issues.

- Community liaison group members were invited by advertisement and by widespread letterbox notices. The St James Ethics Centre assisted in the selection process to ensure members were representative of a broad range of community interests, particularly in terms of potential construction impacts. The CCLGs represent residents, community groups, business and special interest groups.
- Meetings are independently chaired. Minutes are reviewed and agreed during the meeting by all members and are posted on the project website. Members are provided with written responses to all actions from the meetings. Actions from previous meetings remain open until the group agrees they are closed.
- At each meeting, the CCLG members are updated on communication activities, construction progress and planned construction activities, including out of hours work.
- The CCLG meetings are attended by senior construction, design, environmental, and community relations staff. In addition, a range of specialist consultants have attended to present on Urban Design, Architecture, Landscaping, Noise and Vibration and Flora and Fauna. TJH has also invited representatives of other authorities to attend meetings to receive community input on activities under their control. These include Energy Australia, AGL and the State Transit Authority.
- Key plans and documents on which the CCLGs have been consulted include Construction Method Statements, Noise Impact Statements, Noise and Vibration Management Sub plans, Urban Design and Landscaping plans, Cycleway and Pedestrian Plan.
- The CCLG charter defines a formal consultation period, generally at least ten working days, in which the CCLG members can provide comment on environmental plans and other documents. Written responses are provided for all comments received.
- Where plans are submitted for external approval, all CCLG comments and the written responses provided to them are submitted with the plan.

## **7.2 Air Quality Community Consultative Committee (AQCCC)**

- Members of the AQCCC represent Councils, residents and business from the Ryde, Lane Cove and Willoughby local government areas. Community members were selected following advertisements seeking nominations.
- The AQCCC is independently chaired, and minutes are recorded, reviewed and agreed during the meeting. Minutes are posted on the project website.
- The charter of the AQCCC is focussed on air quality monitoring including the establishment of community based monitoring stations, and consultation on the independent operation and auditing of the air quality monitoring network.
- Representatives of the RTA, TJH, Transfield Services and Connector Motorways attend meetings.
- Specialist consultants in the areas of ventilation design, air quality modelling, traffic volume projections and air quality monitoring provide specialist advice.

- TJH also funded an independent air quality scientist to review, on behalf of the community, results of modelling of stack emissions and their predicted impacts on ambient air quality.
- TJH used locations identified as community priorities by the AQCCC for both the community based air quality monitoring stations and TJH's own ground based stations.

### **7.3 General Community Access and Information**

- A free call, 1800 number, promoted in all advertisements, publications and the Project's website, provides easy access for the community to make enquiries, suggestions or complaints. To date, TJH has received over 3,000 contacts via the hotline, email or fax.
- TJH maintains a permanent display centre open 6 days a week where members of the public have access to a range of plans, meeting documents and access to the internet. On request, members of the public can meet with the Independent Community Liaison Representative.
- Mobile displays are held in shopping centres, community fairs and areas likely to be affected by construction activities.
- The project website provides ready access to all CCLG and AQCCC meeting minutes, construction notifications, advertisements, newsletters, traffic and construction updates, as well as general information about the project.

### **7.4 Construction and traffic updates**

- Quarterly advertisements are placed in the metropolitan and local newspapers detailing all construction activities and traffic changes expected in the next three months. The bi-monthly newsletter also provides construction updates.
- Traffic changes are advertised through weekly traffic updates on the Project and RTA websites and forwarded to bus and taxi operators, emergency services, NRMA, and traffic reporters. Major changes are also advertised in conjunction with variable message and other signs in the area of the change.
- All out of hours works are notified to nearby residents and businesses at least five days in advance by means of letterbox notices.
- Doorknocks, street meetings and special information sessions are scheduled in the lead up to major new activities.

### **7.5 Liaison and consultation with Local Councils**

- TJH has consulted extensively with the four local councils Willoughby City Council, Ryde City Council, North Sydney Council and Lane Cove Council. All have representatives on the CCLGs, the Traffic and Transport Liaison Group and three are involved in the AQCCC.
- TJH also meets with key council officers, on a fortnightly or monthly basis. TJH also gives updates or special issue presentations to Council committees or full Council meetings on request.
- TJH has supported council led steering committees on key issues such as the Willoughby Road cycleway and Epping Road changes through providing senior design managers and consultants to provide technical advice.

- Numerous meetings have been held on site with Council heritage, bushland, drainage, community facilities and environment officers. Site inspections have been held for Councillors and staff.
- Special briefings have been provided to Councillors and senior council staff on the tunnel ventilation design, cycle and pedestrian path, landscaping plans, community feedback, major traffic changes, operational noise and site establishment.

## **8. Urban Design and Landscaping Plans**

A key area of consultation has been in the development of urban design and landscaping plans for the project which detail the finished form of the project's structures, landscaping and other facilities.

TJH has developed Draft Urban Design and Landscaping sub plans for all seven sections of the project, and for the ventilation and air intake structures. All plans are based on the concept design approved for the project and in accordance with the Minister's Conditions and the Scope of Works and Technical Criteria. Within these constraints, TJH has consulted widely to receive and consider public input into the detailed design of the project. All formal comments received are provided with a written response.

Relevant CCLGs, Councils, government authorities, residents and businesses, and other stakeholders were consulted on each plan. Comments and any consequent amendments were documented prior to submission via the RTA as the Proponent, for approval by the Department of Planning.

## **9. Community consultation to develop the detailed design for Stage Two works (Sub Plan C Epping Road)**

The following consultation process was undertaken for the Urban Design and Landscaping plan (known as Sub plan C) for the Stage Two works on Epping Road.

- From the starting point of the approved concept, the TJH design team workshopped key design issues with a steering committee established by Lane Cove Council over eight sessions, and also two special meetings with the CCLG for Stage Two (CCLG2).
- The draft plan was presented to Council and CCLG2 and placed on public exhibition for 21 days.
- Public presentation sessions were held for local community (residents, community organisations, and businesses), including presentations by urban and landscape designers
- The draft plan was made available through the Lane Cove Tunnel Project Display Centre, the local library, LCTAG (Lane Cove Tunnel Action Group) and Project web site
- Written and verbal invitations were given to business operators and local residents and newspaper advertisements inviting comment.
- *Lane Cove Tunnel News* advising the availability of sub plans including Sub Plan C was distributed to approximately 85,000 households and businesses along the project corridor. Local newspaper editors were briefed on the plan.

- 110 written submissions were received. Each was considered and received a written response to each issue raised.
- Feedback was given to the Council and CCLG2 on key issues raised during the public display.
- There was follow up consultation with Lane Cove Council on detailed planning for Stage Two as forecast in response to early consultation.
- There was follow up consultation with individual residents on specific issues such as choice of plant species and noise walls at the bus interchange.
- Additional detailed consultation was held by the Design Manager and council representatives concerning the design of the cycleway, drainage, and intersections with local roads.

## **10. Tunnel subsidence incident 2 November 2005**

On 2 November last year an incident occurred involving the partial collapse of the Pacific Highway exit ramp which was being constructed in the vicinity of Longueville Road. One apartment building was partly damaged and residents were evacuated from that building and the immediately adjacent building. In consultation with the police emergency operation commander, TJH immediately undertook emergency work to stabilise the area and the building structure. More recently, TJH fully isolated the area by constructing an underground reinforced concrete retaining wall.

TJH commissioned an independent rock mechanics expert, Emeritus Professor E.T. Brown to undertake an investigation and his report was publicly released on 19 January, 2006.

Professor Brown concluded that no single factor caused the collapse. It arose from a complex combination of geotechnical factors that were not present together at any other location in the underground works of the project.

TJH has also cooperated fully with an investigation being conducted by the WorkCover Authority of New South Wales. This investigation is ongoing. WorkCover released its interim report on 30 March 2006.

TJH relocated 47 residents to a hotel and serviced apartments until the area was made safe and buildings declared fit to be inhabited. During this time TJH identified all interested parties, being tenants, owners, investors, strata managers and bodies corporate. Regular meetings were convened to update the parties and their legal representatives. TJH committed to an early compensation process, including, if desired, assistance for tenants to relocate, or the purchase of units at a fair (pre incident) market price. This offer was based on the principle that residents and owners would be returned to the position they were in immediately before the incident.

To facilitate early compensation:

- The TJH Project Director personally met with each tenant and owner so they could indicate their intentions and needs.
- A team of TJH officers was available to provide assistance to daily needs and to locate alternative long term accommodation for tenants.
- Parties were encouraged to obtain legal advice, the reasonable cost of which was met by TJH.

- Parties electing to sell their units could obtain independent valuations, the cost of which was met by TJH.
- Parties were encouraged to put their claims in writing for consideration by TJH. These claims would typically include transaction costs on the sale and costs of relocation to a new lease or purchase of a new property and other costs such as rent maintenance for investors.
- An independent facilitator was appointed to assist in the resolution of claims.

As at 24 May 2006, of the fifty six parties affected (tenants, owners and investors), TJH has settled with forty nine. Negotiations continue with the remaining parties.

## 11. Conclusion

The Lane Cove Tunnel Project is a major piece of complex infrastructure being constructed in one of the most densely populated areas of Sydney. As well as building a tunnel, some of Sydney's busiest roads are being widened and new public transport, cycling and pedestrian facilities installed.

The project has an excellent safety record. Using the accepted measure of comparison, the recorded lost time injury rate is lower, by far, than the construction industry as a whole, and for that matter, most other industries.

Community consultation has been a key feature of the project, both in terms of construction and the detailed design of public facilities such as the shared cycle and pedestrian path, urban landscaping, public transport facilities and built structures. TJH has had ongoing communication with local residents, community groups, businesses, local councils and the general public.

For some issues with strong community interest, the consultation has been undertaken over almost two years, with intensive, workshop style interaction where community members have provided direct input into the development of the detailed design, construction plans and environmental controls. Even though the areas are often technical, TJH has taken considerable effort to provide specialists to educate and inform the community of the work being undertaken on the Project.

Although there has been some frustration when options outside TJH's scope have been suggested, TJH has always carefully considered community comments and either modified proposals or explained why this was not feasible or practical. All of TJH's formal consultation is widely available through many publicly accessible channels.

We look forward to completing this major addition to Sydney's road, public transport and cycling/ pedestrian infrastructure.



Brendan Donohue  
Project Director  
Thiess John Holland