

**AGENDA FOR A MEETING OF THE PROJECTS SPECIAL COMMITTEE TO BE HELD IN
THE CIVIC CENTRE, 6 WAIPAREIRA AVENUE, LINCOLN, WAITAKERE CITY,
ON WEDNESDAY, 2 MARCH 2005, COMMENCING AT 9.30 AM.**

TABLE OF CONTENTS

<u>ITEM</u>		<u>PAGE NO.</u>
1	APOLOGIES	1
2	URGENT BUSINESS	1
3	CONFIRMATION OF MINUTES	1
4	WAITAKERE CENTRAL CIVIC CENTRE - CONSTRUCTION STATUS REPORT	2
	<u>CONFIDENTIAL ITEM</u>	7
5	WAITAKERE CENTRAL LIBRARY/UNITEC - CONSTRUCTION STATUS	7
	PROCEDURAL MOTION TO EXCLUDE THE PUBLIC	7

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1 APOLOGIES



2 URGENT BUSINESS

Section 46A(7) of the Local Government Official Information and Meetings Act 1987 provides that where an item of business is not on the agenda, it may only be dealt with at the meeting if:

- (i) the Committee by resolution so decides; and
- (ii) the Chairperson has explained at the beginning of the meeting (when open to the public) that the item will be raised for discussion and decision, why the item is not on the agenda, and why it cannot be delayed until a subsequent meeting.

The Committee may make a decision on a matter determined to be urgent.

NOTE: Urgent Business need not be dealt with now and may be delayed until later in the meeting.



3 CONFIRMATION OF MINUTES

Meeting Minutes - Wednesday, 2 February 2005

RECOMMENDATION

That the minutes of the Meeting of the Projects Special Committee held on Wednesday, 2 February 2005, as circulated, be taken as read and now be confirmed.



4 WAITAKERE CENTRAL CIVIC CENTRE - CONSTRUCTION STATUS REPORT

PURPOSE OF THE REPORT

The purpose of this report is to provide a monthly construction status update to Projects Special Committee on the Waitakere Central Civic Centre construction project.

BACKGROUND

The Waitakere Central Civic Centre construction project was last reported to Projects Special Committee on 1 December 2004 in a report entitled "Combined Significant Projects Update" it was resolved:

"That with regard to the Waitakere Central: Civic Centre project, due to time pressures on the construction contract and in line with the secondary vibration isolation measures reported to Council on 6 October 2004, the Projects Special Committee confirms that the following secondary vibration isolation measures be implemented from funding earmarked for this purpose by Council at their meetings on 6 October 2004:

- that polystyrene lining to the piles nearest the rail track as specified in the contract documents be replaced with Bentonite to increase the vibration isolation qualities, as recommended by the structural engineer;*
- that portions of the on-grade ground-level floor slab be structurally suspended from the piled structure as recommended by the structural engineer."*

2181/2004

"That the individual projects in progress be reported back to the Projects Special Committee whenever there are any significant contract variations, alterations for buildings under construction, and any issues arising which require Council inputs."

2182/2004

Due to the significance of this project to Council, the project status during the construction phase will generally be reported to Projects Special Committee on a monthly basis. Particular emphasis will be placed on reporting the financial status of the construction stage of the project in regard to variations on the contract and the expenditure of contingency sums.

FREIGHT TRAIN VIBRATION DESIGN PARAMETERS

During the course of this project, advice received from New Zealand Railways Corporation on future scheduling and travel speeds of freight trains through Henderson has been subject to change as the double tracking project was initially confirmed and later developed.

Freight train activities prior to double tracking were indicated such that freight trains operate only at night and at speeds up to 50 Km/hour due to incomplete fencing of the rail corridor. With confirmation and the subsequent development of the double tracking project, advice received from New Zealand Railways Corporation more recently has indicated a possibility that freight trains may in future operate during the day and with plans to fully fence the rail corridor, the speeds of these trains may in future be increased to the 'line speed' of 80 Km/hour.

As a result of possible increased speed and frequency of freight trains, the designers of the Waitakere Central Civic Centre have had to accommodate for the likely increased speeds of future freight trains and have amended their designs accordingly, as information has become available. The current designs provide for fully loaded freight trains travelling at speeds up to 80 Km/hour on the proposed double tracked line.

CONSTRUCTION COMMENCEMENT

The construction contract awarded to Canam Construction in October 2004 included primary vibration isolation measures to insulate the building from ground vibrations caused by passing freight trains. These measures included piles founded on bedrock approximately 12-14 metres below the ground surface and separation of the structure from the natural ground with polystyrene lining to piles, ground beams and floor slabs.

At the time of contract award, the design team advised Council that further vibration testing would be required on actual piles in order to determine the level of secondary vibration isolation measures that may be required. An estimated provisional sum of \$200,000 was earmarked at that time for the envisaged secondary vibration isolation measures.

In order to 'benchmark' vibration design criteria used in the analysis of vibration test results taken at Henderson, with criteria that are familiar to Council members, similar tests were undertaken at the New Lynn Community Centre on vibrations caused by passing freight trains. These test results from the New Lynn Community Centre were benchmarked against the results obtained at Henderson, with adjustments to allow for the speed differential of freight trains at the two locations. Freight trains at New Lynn comply with a temporary speed restriction that will be lifted in due course at which time final tests will be carried out to verify these results.

Through the building consent process, recommendations from EcoWater that the drainage for the site should be upgraded to public drainage standard, have been accommodated. The rationale for this is that while the property is privately owned by Council and therefore would be designed to private drainage standard, the property is in practice a public environment and will be maintained by Council at Council's expense. Therefore during the lifecycle of the system, public drainage standards reportedly provide an installation that is more cost effective to Council in the long term.

SECONDARY VIBRATION ISOLATION

Pile Isolation

Following the installation of a number of test piles, vibration tests were carried out by Marshall Day Acoustics simultaneously on piles and the adjacent ground. The structural engineer's assessment was that the primary isolation measures implemented would suffice for piles further than 13 metres from the track but that enhanced isolation from vertical vibration waves was required for piles less than 13 metres from the track.

The structural engineer's recommendation to use Bentonite slurry to isolate the piles closest to the track was adopted.

In addition, the structural engineer's recommendation to install structural rubber bearings on the caps of piles immediately adjacent to the tracks to isolate against horizontal vibration waves was adopted.

Ground Slab Isolation

Tests carried out simultaneously on piles and the adjacent ground, resulted in the structural engineer's recommendation that portions of the ground floor slab be suspended from the superstructure within 37 metres of the track. This recommendation was adopted and the design provides for a partially suspended ground floor slab.

CONSTRUCTION STATUS AS AT FEBRUARY 2005

Following the contract award, the following activities have taken place:

- Site establishment with Canam's site office located in the old Carter Holt office building.
- Piling approximately 85% completed.
- Principal site drainage completed.
- Precasting facilities established and precast panel production under way.
- Secondary vibration testing completed and structural engineer's redesign completed to include the following secondary vibration isolation measures:
 - Bentonite slurry isolation installed on piles nearest to the track.
 - Partially suspended ground floor slab.
 - Structural rubber bearings on top of piles adjacent to the track.
 - Structural separation of precast under floor ducting from natural ground.

A1-A4

Status of construction is further reported in the following reports attached at pages A1 to A4:

- Architect's Report No. 2, dated 8 February 2005.
- Canam Construction's report for the period to 3 February 2005.

QUALITY OF CONSTRUCTION

Ongoing quality audits are being conducted by the architect, consulting engineers, Council's independent quality assurance consultant and Council's project manager. Quality of construction audited to date has been of a high standard and no significant quality issues have been reported.

Quality audits undertaken to date confirm that the Contractor's general attitude to maintenance of quality construction practice on site is good.

HEALTH AND SAFETY

Canam Construction's site specific health and safety plan has been approved by the Engineer and is maintained on site for all site personnel. This plan requires that all site personnel undergo site specific health and safety induction prior to working on site.

To date only one minor incident was reported (a cut on a finger reported in November 2004), which was dealt with appropriately. No further incidents have been reported.

Quality audits to date confirm that the Contractor's general attitude to maintenance of health and safety on site is good.

TIMELINE STATUS

In response to resolution 2181/2004 from Projects Special Committee, considerable work has been undertaken following the installation of foundation piles in order to test, analyse and redesign elements of the structure to provide adequate secondary vibration isolation. The difficulty of arranging for heavily loaded freight trains to travel at sufficient speed to make the tests meaningful has taken some time to resolve in a satisfactory manner. This process has necessitated a revision of the works programme with an impact on the overall timeframe for construction. The resulting time extension is currently under review and will be finalised during the next month. In the interim, a provisional time cost allowance has been estimated in the reported costs based on a provisional extension of time of 20 working days.

TIMELINE STATUS		
Key contract dates / times	As at contract award October 2004	As at February 2005
Acceptance of Tender	7 October 2004	7 October 2004
Contract Commencement	3 November 2004	3 November 2004
Contract Period	350 working days	350 working days
Extensions of Time (provisional estimate)	-	20 w.d. (prov.)
Due Date for Completion (Practical Completion)	12 April 2006	15 May 2006
Fit Out and Commissioning (10 working days)	1 May 2006	29 May 2006
Contingency Time	33 working days	13 working days
"The Move" (To be conducted on a week-end)	17/18 June 2006	17/18 June 2006

Table 1: Timeline Status

FINANCIAL STATUS

A5-A10

A summarised financial status for the construction project is provided in Table 2 below. The quantity surveyor's (Rawlinsons) report is attached at pages A5 to A10.

FINANCIAL STATUS			
Project Costs	As at contract award 10/04	Change	As at February 2005
Net Tender Sum	\$36,042,399	-	\$36,042,399
Primary Vibration Isolation Measures	\$243,800	-	\$243,800
Tender Award Value (excl. contingency)	\$36,286,199		\$36,286,199
Secondary Vibration Isolation Measures	\$200,000	\$142,857	\$342,857
Contract Variations	-	\$79,090	\$79,090
Value Engineered Savings	-	(\$195,024)	(\$195,024)
Provisional Extension of Time Cost: Under review - (estimated allowance based on provisional 20 days)	-	\$177,800	\$177,800
Contingency Sum	\$2,000,000	(\$204,723)	\$1,795,277
Total Construction Cost (incl. contingency)	\$38,486,199		\$38,486,199

Table 2: Financial Status

CONCLUSION

As with general construction projects, the period during which underground works are taking place provides the highest risk and potential for unforeseeable costs and delays as the works reach the "out of the ground" stage of construction. The Waitakere Central Civic Centre construction team has had to deal with a number of issues, not least of which were the effects of ground vibration from passing freight trains. However, in comparison with conventional building construction projects, this project is emerging from this high-risk stage relatively unscathed in spite of the extra measures that were determined necessary for secondary vibration isolation.

Considerable cost savings have been achieved through the ongoing value engineering programme and further savings can be expected. These savings will partially offset the additional costs incurred for vibration isolation measures and revised drainage standards.

The current status of the project as the building reaches the "above ground" stage is that only 10% of the cost contingency has been expended, while it is common on construction projects that up to 30% of contingency may be required to offset unforeseen issues underground. The time taken in resolving the vibration isolation and drainage issues can be accommodated within the allowed time contingency with no impact on the projected date for Council's move to the new facility. The remaining time contingency of 13 working days is considered adequate for the balance of the project.

The combined results of the value engineering programme together with the positive and co-operative relations between the contractor, architect, quantity surveyor and Council's officers means that the project budget is in a relatively strong position for the current stage of the project.

RECOMMENDATION

That the Waitakere Central Civic Centre - Construction Status Report be received.

Report prepared by: John Schermbrucker, Special Projects Manager.



CONFIDENTIAL ITEM

5 WAITAKERE CENTRAL LIBRARY/UNITEC - CONSTRUCTION STATUS

This item will be considered in the Confidential Supplement of the agenda, and has been circulated to members separately with this agenda.

PROCEDURAL MOTION TO EXCLUDE THE PUBLIC

That the public be excluded from the following part of the proceedings of this meeting, namely, Waitakere Central Library/Unitec – Construction Status.

The general subject of the matter to be considered while the public is excluded, the reason for passing this resolution in relation of the matter, and the specific grounds under Section 48(1) of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of the matter to be considered.	Reason for passing this resolution in relation to the matter.	Ground(s) under Section 48(1)(a) for the passing of this resolution.
<ul style="list-style-type: none"> Waitakere Central Library/Unitec – Construction Status 	<p>The withholding of information is necessary in order to:</p> <ul style="list-style-type: none"> protect information where the making available of the information - would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information; enable any local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations). 	<p>That the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist.</p>

This resolution is made in reliance on Section 48(1)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by Section 7(2)(b)(ii) and 7(2)(i) of that Act which would be prejudiced by the holding of the relevant part of the proceedings of the meeting in public as follows:

- The report contains information which if released could affect the Council's negotiations and Council's future access to commercial information from parties concerned.*

