TRANSPORT AND URBAN DEVELOPMENT COMMITTEE

26 JUNE 2014

REPORT 1

BRIEF ON EXOSKELETAL STRUCTURES ON LEGAL ROAD

1. Purpose of report

There is an expectation that an increased number of earthquake prone building owners will seek consent to employ exosceletal reinforcing structures, in order to meet earthquake code objectives. Such structures do have an impact on public space. This report is to inform the Committee on the broad principles officers intend to deploy to evaluate such consent applications.

2. Executive summary

While low in numbers currently, officers anticipate an increase in requests to Council from building owners to allow exoskeletal structures in public space (mainly road corridors). This is to strengthen their earthquake prone buildings.

This brief outlines the range of considerations that will inform Council's response to such requests.

Because such structures can potentially have an adverse impact on limited public, road corridor space, onto aspects of city planning as well as the local economy it is important that each application is carefully considered under a set of criteria that would assure comprehensive risk management.

Further the Council will need to be able to demonstrate that its decision, to grant or not to grant such consents, is defendable and consistent.

3. Recommendations

Officers recommend that the Transport and Urban Development Committee:

1. *Receive the information.*

2. *Raise any questions or suggest additional criteria parameters to be included in the adopted process to consider applications for exoskeletal structures on legal road.*

4. Background

Following recent earthquake prone buildings code enforcement action by the Council and increased public awareness/expectations, many building owners are faced with the expensive prospect of either: strengthening, or demolishing, their earthquake prone building/s.

Some building owners suggest that the most economical way to strengthen their building is to construct an earthquake resistant frame around the outside of the building. These are commonly known as exoskeletal structures.

A number of identified earthquake prone buildings are built hard up against the street boundary. Therefore such proposals, to encroach on the pavement areas, could potentially have an adverse impact on the pedestrian and/or traffic use of the legal road. The Wellington Consolidated Bylaw 2008, Part 5 – Public Places, Section 17 "Encroachments" clause 17.2 requires Council to consider whether the encroachments will compromise the primary use of the legal road corridor.

To date only a few exoskeletal structures have been approved. One request has been turned down in Featherston Street due to the high pedestrian volumes on this corridor and relative to available footpath widths.

As there is potential for Council to be seen inconsistent by allowing exoskeletal structures in some situations and not in others, a set of guidelines has been produced to assist Council officers on taking an open and evidenced based approach to these requests.

5. Discussion

Some property owners suggest that they are under pressure from tenants to ensure earthquake safe premises. It has been stated by some that they have suffered financial loss when their buildings are listed as Earthquake Prone. Some see the exoskeletal structures as an economical way for them to strengthen their buildings.

In broad terms there are apparent advantages and disadvantages in this approach.

Advantages:

- Economy for property owners in some cases
- Reduced impact on available building internal space
- Reduced disruption to occupants during construction/strengthening

Disadvantages and effects on public space:

- Reduced footpath space
- Reduced lifeline and utility space
- Potential reduction of on-street short term parking space
- Potential negative CPTED effects (1)
- Potential pavement cleaning difficulties because of the creation of irregular façade
- Adverse visible effect on any heritage building façade and streetscapes
- Relatively permanent nature of the encroachment.

(1) Crime Prevention Through Environmental Design – Straight lines of visibility along the street, e.g. to avoid lurking behind objects, make the streets safer.

We are not certain at this stage on the potential numbers for such requests over the next five to ten years. A too liberal response by Council could potentially have a serious impact on limited road corridor space which would have a flow-on effect on footpath amenity, erosion on kerbside car parks if space is taken to widen the footpath around the exoskeletal structures and on lifeline utility space (horizontal infrastructure).

In Wellington we have a very high pedestrian mode share and limited road corridor space. Footpath widths are critical for the city to achieve the objectives of the WCC Walking Policy November 2008, and for the objectives of the Accessible Wellington Action Plan 2012-2015.

Existing footpaths struggle to safely facilitate everyday activities such as: sandwich boards, street-front vending machines/shops, pavement use licences, increased street seating, increased size of litter bins, beggars, buskers, pedestrian volumes etc.

Where such structures are agreed, the Council encroachment licence annual fees would apply. These are calculated on a basis of the annual commercial rental value of an equivalent piece of land in the same locality. However any income generated by exoskeltal structures through the encroachment licence fees is likely to be miniscule compared to the true value of any lost footpath and or parking space to the City.

It is proposed that Council adopts, as a first hurdle, and in considering such applications evidence that the owner has explored other options on their own land and within the structure. The owner will need to demonstrate that no other option considered has been found viable and the reasons for that conclusion.

Once this first hurdle has been passed, the aspects to be considered and relevant guidelines are listed as follows:

Aspect	Consideration	Guidelines
Effect on pedestrians (Footpath)	Is the current footpath width adequate for pedestrian needs ? Can the situation be mitigated, such as a pedestrian Right Of Way colonnade within the front of the property ? Is the safety of pedestrians having to walk on the carriageway an issue ? The WCC Code of Practice for Land	Use the WCC Code of Practice for Land Development as a guide for the required footpath widths. Make allowance for local variations that may cause intense pedestrian use. If footpath widths are adequate, then any reasonable encroachment may be allowed If footpath widths are not adequate but suitable

	Development suggests minimum footpath widths: 5.0m Golden Mile 4.0m Central City Shopping 3.0m Central Business district 4.0m Suburban Shopping etc Are there any local variations that may cause intense pedestrian use?	mitigation measures are provided, then any reasonable encroachment may be allowed If footpath widths are not adequate but close to being adequate, then a maximum encroachment of 200mm may be allowed, If footpath widths are significantly inadequate, then the maximum encroachment shall be 100mm
Effect on kerbside parking(Carriageway) e.g. if footpath needs to be widened	Council is under pressure to maintain existing kerbside parking capacity for the wider commercial interests of the city	Any proposed loss of roadside parking will require Council decision.
Effect on cycles and vehicles(Carriageway) e.g. if footpath needs to be widened	Vehicular traffic needs, including cyclists, needs to be met as set out in respective plans	Proposals where there are likely to cause adverse effects on future traffic needs, for all modes, will require Council decision.
Effect on streetscape, street furniture and planting needs	Appearance and conflict with street furniture	Any street furniture and planting is to be relocated as necessary to reasonably maintain the facility/streetscape without adverse affect on pedestrians and traffic
Effect on present and future utility service needs	Current Encroachment licence process requires liaison with the Utility Companies to address immediate utility needs	Limit the maximum extent of any encroachment to 0.5m from the boundary to a depth of 3.0m. This is in order to provide some protection for longer term utility needs. At a depth greater than 3.0m foundations may encroach further.
Building heritage needs	Consider impact and options to accommodate any building heritage needs	Internal strengthening is a preferred method and it is a permitted activity in terms of the District Plan.

		External strengthening should only be considered once internal options have been exhausted.
CPTED(1)	Avoid excessive recesses where people could hide	Require applicant to have considered and provide evidence that CPTED issues have been considered and a mitigation plan.
Compliance when approval given	Encroachment process allows for a bond or deposit	Appropriate bond/deposit to assure compliance during construction

(1) Crime Prevention Through Environmental Design – Straight lines of visibility along the street, e.g. to avoid lurking behind objects, make the streets safer.

The above considerations and guidelines will be used by staff when considering applications to permit exoskeletal structures on legal road. Applications are received through the Encroachment Licence process and will also be reflected in the Resource Consent process. Both of which are necessary for an exoskeletal structure.

Overall monitoring of such applications will be assigned to the Manager, Building Resilience with and integrated response coordination task.

5.1 Consultation and Engagement

Council teams consulted on this report are:

- Encroachments (Raeywn Picken)
- Urban Design and Heritage (Trevor Keppel, Vanessa Tanner)
- Resource Consents (Karen Williams)
- Building Resilience (Neville Brown)
- Transport Planning, City Networks (Steve Spence)
- Roading Operations, City Networks (Neil Johnstone)

5.2 Financial considerations

This is a regulator function so the only long term financial impact will be a small increase in Encroachment Licence revenue.

Approval of exoskeletal structures will lessen the financial cost to property owners to strengthen their buildings.

5.3 Climate change impacts and considerations

There are not expected to be any climate change impacts.

5.4 Long-term plan considerations

There are not expected to be any Long-term plan considerations.

6. Conclusion

Council staff will consider such applications for exoskeletal structures on legal road upon receiving evidence that the owner has explored other options on their own land and within the structure.

Staff will only approve exoskeletal structures on legal road where these do not have a significantly adverse impact. i.e. on: Building Heritage, Pedestrian and Traffic needs, Lifelines and Utilities and kerbside car parks as well as CPTED issues.

Contact Officer: *Stavros Michael, Manager City Networks*

SUPPORTING INFORMATION

1) Strategic fit / Strategic outcome

Helping Wellington City to be affordable, people centred and dynamic.

2) LTP/Annual Plan reference and long term financial impact

This is a regulator function so the only long term financial impact will be a small increase in Encroachment Licence revenue

3) Treaty of Waitangi considerations

There are not expected to be any Treaty of Waitangi issues since Council is to remain as owner of the road land

4) Decision-making

This is not a significant decision. The report sets out a number of options and reflects the views and preferences of those with an interest in this matter who have been consulted with.

5) Consultation
a) General consultation

All affected Council Sections have been consulted The effects of this work are confined to the street. Neighbours will be consulted and their interests considered through the normal Encroachment Licence process. Council is not required under legislation to consult on this matter.

b) Consultation with Maori

6) Legal implications

Legal implications will be considered on a case by case basis in line the with normal Encroachment licence process.

7) Consistency with existing policy

This report recognises the Council Encroachment licence policy along with other policies that will be used when assessing exoskeletal structure applications, such as the Walking Policy.