Construction Management Plan

Site Accommodation

Stamford/ and or it's builder currently proposes two accommodation set-up locations for each stage of the development.

1. Accommodation will be established on land adjacent to each stage whilst the site is excavated and the first levels of structure built. Accommodation will be provided in accordance with industry practice for amenities, change facilities and lunch rooms. In addition to this Stamford/ and or it's builder will establish a site office in a prominent location to ensure all visitors and workers new onto the site are able to locate the site office to attend the site induction prior to commencing on site.

2. When the structure of the basement levels are able to be stripped of formwork and cleared, the accommodation for the site will be transferred into the basement levels. The accommodation will remain in the basement levels until the completion of the project.

3. It is anticipated that site personnel will travel to the site by one of the following means:
    i. Public transport – Rail and bus network hubs sit in close proximity to the site (Macquarie Park station & Macquarie University / Macquarie Shopping centre bus exchanges).
    ii. Pedestrian access – for workers living in close proximity to the site.
    iii. Cycling – small numbers of workers may cycle to the site.
    iv. Personal vehicles – parking to be located off site on the surrounding council road network. This will be subject to parking restrictions around the area therefore may encourage contractors to use non-vehicle means of travelling to work.

Waste

Stamford/ and or it's builder's commitment to the environment extends to its treatment of waste materials on the site. Stamford/ and or it's builder will seek to reduce the volume of waste transferred to land-fill through the implementation of a management process on site. This process will be developed and monitored in accordance with the successful contractors site management policies.

Stamford/ and or it's builder will work in close conjunction with the architect to ensure products selected for the site are not only suitable for use, but also supplied with a view to reducing the volume and type of packaging the goods selected are supplied in. This process extends to ensuring quantities ordered do not generate excessive waste, nor have a negative impact through in-efficient multiple deliveries.

Stamford and/or its builder will engage a waste contractor that is capable of ensuring all waste removed from the site is sorted at the waste depot for recycling / re-use. Reports

will be requested on a monthly basis from the waste contractor to ensure the re-cycling and re-use targets are being achieved.

Waste materials on site will be restricted to the bins provided at all times. At no point on the project will stockpiles of waste materials be permitted. In general bins 9m3 – 15m3 will be used at the ground level to collect the waste. These larger bins will be fed by smaller bins lifted from the working floors and emptied by crane or forklift on a regular basis. Larger waste bins will be exchanged once full. Full bins are to be covered at all times when they are being transported on the public road network.

The Waste Management Plan for the operation of Stage 1 is provided under separate cover.

Materials Handling

Movement of materials around the site will be conducted utilising the following means: Cranes – mobile cranes will used in the initial stages of the construction of the structure where sufficient staging areas are available adjacent to the site. When practicable a tower crane will be erected to service the project.

The tower crane will be positioned on the project to ensure site coverage is maximized to reduce the need to establish secondary mobile cranes on the site. Retracting landing platforms will be installed to aid the movement of heavy materials on and off the leading levels of structure. Each building will also be serviced by a 'man and materials' or 'materials only' type hoist to transport workers vertically up the building. These hoists will also be used to transport smaller materials onto the working floors.

The location of the hoists will be so designed to travel the full height of the building and may have the ability to service the basement levels. Materials delivered to the site on pallets will be lifted onto the floors by either the crane or hoist.

They will be moved around each floor to the work face by either electric or manual pallet trolleys. The unloading of trucks will be carried out by forklift or 'Manitou' type all terrain forklifts. All unloading of materials will be done off the public road system (i.e. on site) to prevent congestion of the surrounding road network. Materials shall be stored in the areas nominated as materials handling zones and (once cleared of formwork) the basement levels. Any combustible liquids will be stored in the appropriate security cages with the appropriate safety measures in place.

Construction Management Plan

Noise Management

The management of noise on site must consider two different but equally important factors. These are the general public and the workers responsible for the construction on site. Stamford/ and or it's builder shall implement the monitoring and control procedures noted in the Acoustic Report for the site prepared by Acoustic Logic. In addition to this the approved hours of work will be adhered to at all times to reduce the impact of the construction process on the occupants of the surrounding properties. Construction Management System has an established noise management policy for each site under the control of the company. This system shall be implemented on the Herring Road development site for each stage to maintain high levels of safety for the workers on site at all times. The Noise Management policy is a vital element in the induction process of workers on the site to ensure individuals are aware of the dangers of long term exposure to excessive levels of noise.

Sequencing / Programming the Project

The table below summarises the stages of the proposed development. Each stage will be subject to planning approval by the relevant authority. Commencement of each stage will also be subject to market demand for the proposed residential product. In each case the construction management principles outlined above will be implemented across each of the stages. Stamford prides itself on its strong safety record and positive reputation in both the construction sector and the general public. It is the intent of Stamford/ and or it's builder to undertake the proposed works to the highest standards possible.

Stage		Stage Summary	Stage Details
Stage 1		**Demolish Existing Hotel and Complete Basement Works.**	• Create construction access and fence the site making it safe • Utilize existing sewer, water and power of current facilities on site • Demolish existing hotel and facilities • Excavate and complete basement works
		Construction of Stage 1 Buildings and Courtyard	• New sewer extension to rear main sewer - inclusive easements (as required). • Utilise existing water and power of current facilities on site. • Construction of buildings H,W,C,Y and completion of through site links from Epping Rd.

Construction Management Plan

Stage 2		**Completion of the remaining buildings, landscape area and public domain/ through site links.**	• Completion of the remaining buildings. • Complete remaining landscape areas including the gym facilities. • Completion of the through site links for public access and removal of all construction fencing

Project Completion

Stamford will ensure that each of the stages is developed in accordance with all approvals. Stamford is proud to be associated with the staged development on Herring Road and will seek to ensure the construction process has no impact on the adjoining properties and the surrounding environment.

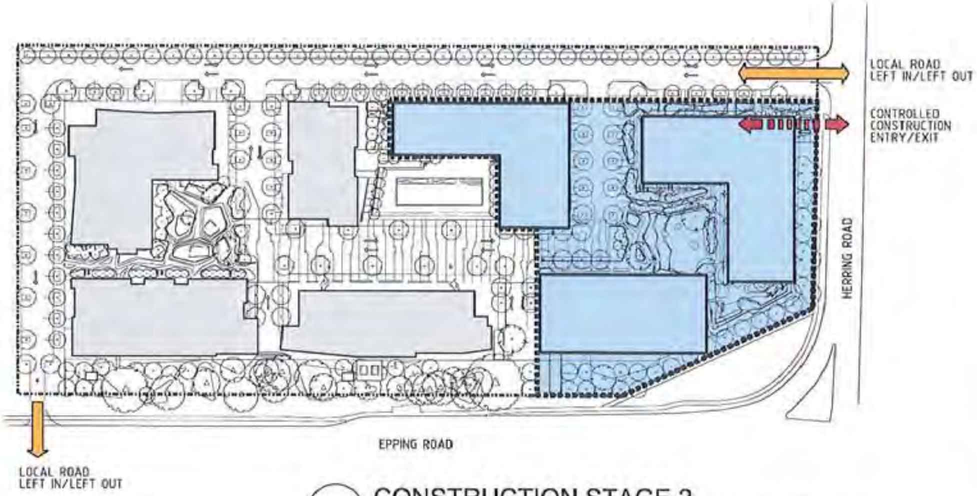
Critical project issues such as tree protection, environmental and noise control requirements are to be identified prior to commencement and highlighted with all sub-contractors throughout the construction period taking into account the recommendations and procedures in this report. Stamford will ensure that the management of the construction process on site is managed in accordance with all approvals right through to the point of occupation of each of the buildings.
The successful contractor will compile a detailed Construction Management Plan for each separate stage to deal with site specific issues prior to the commencement of work on those stages. Stamford fully acknowledges that the long term success of the development is very much reliant upon creating a completed built environment that is attractive to future residents and sympathetic to the surrounding natural environment. It must also be sympathetic to the site surrounds throughout the development process.

As there will be a dedicated construction entrance to the development once stage 1 is complete owners will use the dedicated stage 2 road for entry and exit, there will also be a construction fence separating stage 1 and stage 2 with fabric installed on it to minimise dust and other impacts. As the car park will be built in its entirety during stage 1 works there will also be fencing installed so as to limit the use of the area.

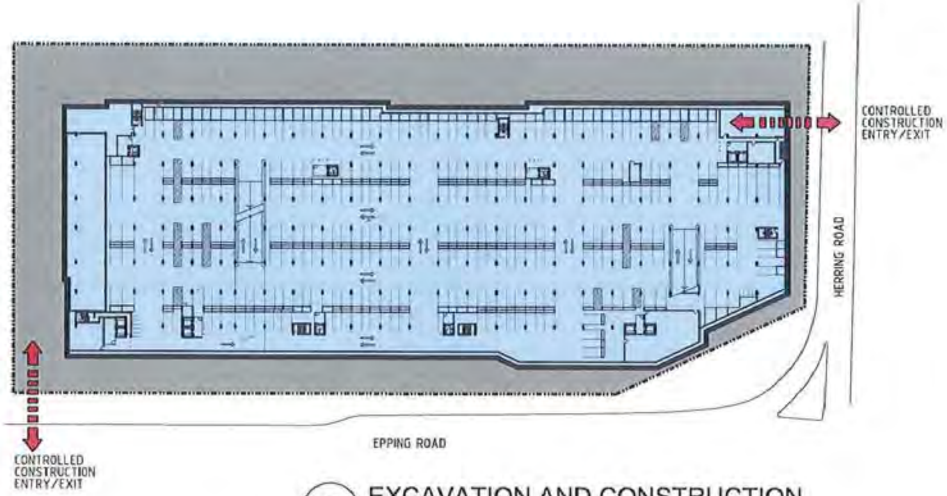
Construction Management Plan

Appendices

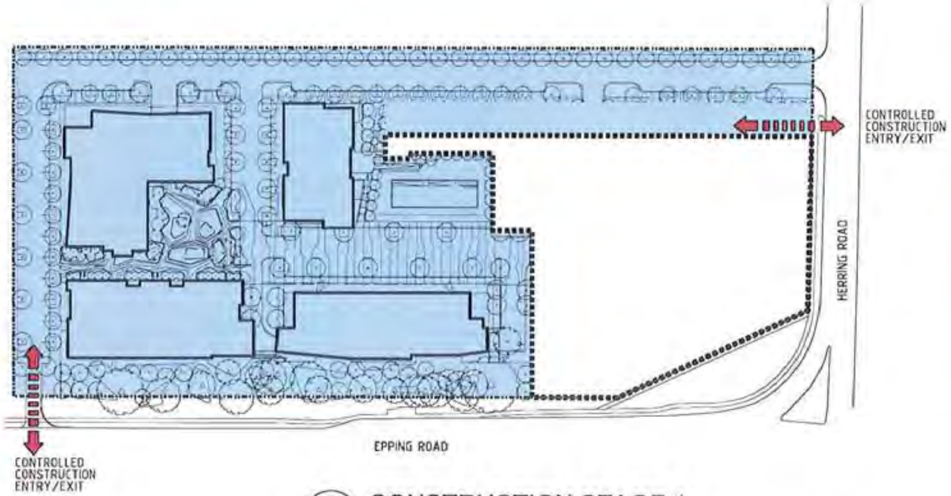
- **Construction Staging Plans prepared by Allen Jack + Cottier –**
Refer TO Architectural drawings DA0000- DA 4100 Issue A specifically DA0100 Issue A.



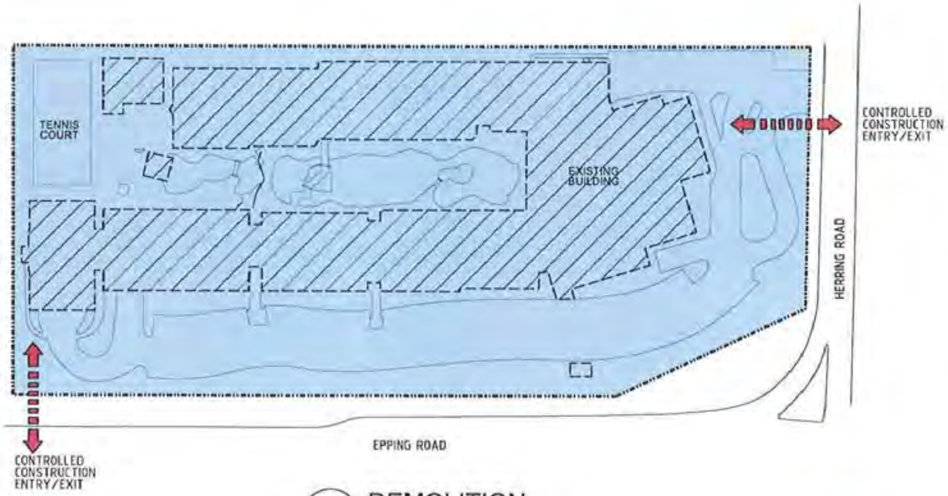
D CONSTRUCTION STAGE 2
APARTMENT BUILDINGS & LANDSCAPE



B EXCAVATION AND CONSTRUCTION
OF STAGE 1 BASEMENT LEVELS



C CONSTRUCTION STAGE 1
APARTMENT BUILDINGS & LANDSCAPE



A DEMOLITION

EXTENT OF WORK

Stamford Property Services is a Singapore based company. For cultural reasons there are no levels 4,14 and 24.

STAGE 1 BUILDINGS SHADED

STAMFORD
LAND CORPORATION LTD

AJ+C
79 Myrtle Street Chippendale NSW 2008 AUSTRALIA

MACQUARIE VILLAGE
110-114 HERRING ROAD
MACQUARIE PARK

10_030

STAGING DIAGRAMS

NOT FOR CONSTRUCTION

DA0100

A

appendix e

construction traffic management plan

Preliminary Construction Traffic Management Plan

for a Concept Plan and Stage 1 Project Plan relating to the construction of a residential development on the corner of epping road and herring road, macquarie park

prepared on behalf of Stamford Land Corporation by
TRAFFIX traffic & transport planners
ref: 10 151 CTMP Draft Report v1 April 2011

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OPERATIONAL ASPECTS OF CONSTRUCTION TRAFFIC MANAGEMENT PLAN (CTMP)

The information below forms part of the Preliminary Construction Traffic Management Plan as required by the Department of Planning. The principles identified will be incorporated into a final CTMP once contractors have been appointed and the construction methodology and schedule are finalised. At such time a final CTMP will be developed in accordance with the relevant requirements of the Australian Standards and the RTA.

At this time, the following matters are considered relevant:

Hours of Construction

The hours of construction which are to be sought for the duration of the project (approximately 4.5 years) are:

- Mon-Friday: 7.30am to 5.30pm;
- Sat: 7.30am to 3.30pm;
- No work on Sundays or Public Holidays

Access

Access to the site is proposed via both Epping Road and Herring Road via a new staged road connection to Epping Road (in the location of the proposed new Type 3 Road) and via the existing driveway crossing within Herring Road.

At this stage it is expected that Epping Road will facilitate exit movements only with the Herring Road access to accommodate both entry and exit movements. It is however noted that on occasion access to the site may be required via Epping Road. Should this be required a suitable plan of management will be implemented to ensure that no conflicts occur at the site access.

Truck Movements

The truck movements associated with the construction activities of the site will vary depending on the stage of works being undertaken. However for planning purposes the truck movements per day for each stage of works has been estimated as:

- Stage 1: 30-50 truck movements per day;
- Stage 2: 30-50 Truck movements per day

These movements will be associated with the access locations identified above. At this time it is anticipated that all entry movements will occur via the existing Herring Road access, with all exit movements to occur via either the existing Herring Road access or the proposed access to Epping Road.

Truck Types

During the demolition and excavation stages, trucks will generally be ‘truck and dog’ combinations with occasional rigid vehicles. During the subsequent stages of the construction it is likely that

trucks will vary depending on deliveries. For planning purposes it is assumed that the largest vehicle accessing the site will be 19.0 metre articulated vehicles. The majority of deliveries however will occur using either 8.8m MRV's or 12.5m HRV.

The Epping Road and Herring Road accesses will be designed to ensure that all vehicles can exit the site in a safe and efficient manner and will not create any adverse impacts on users of the road network.

- Site Workers

It is anticipated that the number of workers associated with the site will vary from between 50 to 200 workers depending on the stage of works. Workers will be strongly encouraged to use public transport or car pool and due to the location of the site it is anticipated that up to 15% will utilise public transport with an additional 20% car pooling. Based on these assumptions the arrival and departure of workers will equate to approximately 150 entry movements and 150 exit movements per day. These trips will generally occur outside peak periods or on the peak 'shoulders' and as such will have a minimal impact on the operation of key intersections. However, should these trips coincide with the peak periods, the level of generation proposed will have a similar impact to that of the development when fully operational which has been shown to have no unacceptable impact on the existing road network.

Parking for workers will generally be provided on site. During the demolition and excavation stages, employee parking will be provided for up to 30 vehicles. During the subsequent stages of construction, most workers will be able to park within the basement car park that will have capacity for up to 700 vehicles which is more than required.

- Pedestrian Management

During the construction stages security fencing will be provided to protect pedestrians at all times. At this stage A Class Hoardings are proposed along both frontages with swing gates to be implemented at both site access locations to ensure pedestrian safety is not compromised during entry and exit movements of heavy vehicles.

Appropriate documentation of the above construction activities and required Traffic Control Plans (TCP) will be undertaken during Project Application and/or cc stages when the final construction program is known. All TCP's and documentation will be done in accordance with the requirements of the RTA and relevant Australian Standards and submitted to the RTA and Council for approval and will ensure that any disruptions to the local community is minimised.