STRUCTURAL DESIGN SOLUTIONS
CONSULTING ENGINEERS

Suite 11
50 Great North Rd, Five Dock NSW 2046 Australia
PO Box 245 Five Dock NSW 2046 Australia
Ph: +61 (0) 2 9712 4700 Fax: +61 (0) 2 9712 4733
Email: engineers@structuraldesignsolutions.com.au
ABN 98 111 292 169 – ACN 111 292 169

STRUCTURAL ADEQUACY STATEMENT

22nd September 2015

Caliph
Co Tonkin Zulaikha Greer Architects
117 Reservoir Rd
Surry Hills
NSW
2010

Attention: Grant Sandler

RE: PRECINCT 75 – Structural Adequacy Statement for Proposed Reuse

We, Structural Design Solutions Pty Ltd, the practicing Structural Engineers hereby advise that we are responsible for the design of structural elements of the proposed mixed use reuse development "**PRECINCT 75**" at **75 Mary St, ST PETERS, NSW**.

Precinct 75 is the redevelopment of a former paint factory into creative production space with associated retail as well as residential apartments. It will also include basement car parking. The master planning involves the selective removal of intrusive industrial elements, in order to stitch the reinvigorated precinct into the existing street pattern as well as creating a neighbourhood centre.

In the proposed development:-

- Three new building will be constructed
- Seven existing buildings will be demolished
- Five existing buildings will be reused

New Building Construction

The following will newly constructed as part of the redevelopment:

- The new construction will involve a 2 level basement car park extending to the edge of existing buildings.
- Building A will be a newly constructed building with six levels of residential.
- Building B will be a newly constructed building with four levels of residential.
- Building C will be a newly constructed building with a ground floor retail and seven levels of residential. 8 Storeys in total.
- There will be podium landscaping with large central park and paving.

Structural Design Solutions be designing all structural elements including permanent footings, columns, reinforced suspended slabs, beams, structural steel, stairs and walls. All these items will be designed in accordance with the Building Code of Australia and other relevant Australian Standards namely:

- AS2870 Residential Slab and footing
- AS1170.1 Dead and Live Loads
- AS1170.2 Wind Loads
- AS1170.4 Earthquake Loads
- AS3600 Concrete Structures Code
- AS4100 Steel Structures Code

We confirm the structural integrity of the existing buildings will not be compromised or undermined by the construction of the new buildings and basement car park. Excavation and shoring will incorporate appropriately selected construction equipment and shoring systems to limit movements and vibrations. Furthermore, construction of new buildings will incorporate appropriately selected construction equipment and building systems to limit movements and vibrations

We can confirm the structural integrity of the existing buildings for the improvements and modifications documented on the architectural drawings by Tonkin Zulaikha Greer Architects. We also confirm the existing buildings are structurally suitable for the incorporation of the proposed works and additions documented on the architectural drawings by Tonkin Zulaikha Greer Architects.

Buildings to be Demolished

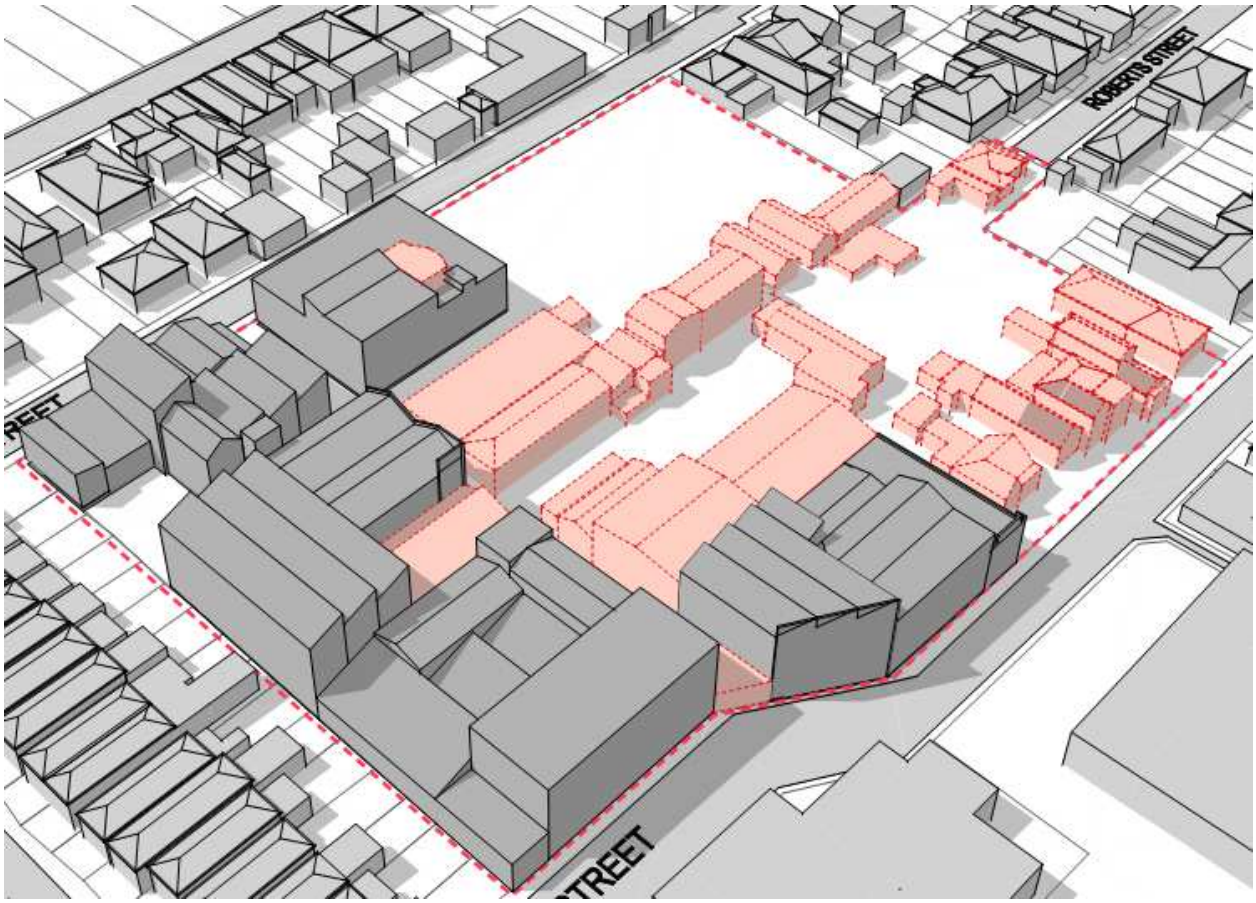
The following building will be demolished:

- Building 3 – is not suitable for reuse and will be demolished.
  This is a single storey masonry walled structure with concrete flooring and metal roof. It is and old building and not in good condition with signs of deterioration. Its form does not suit the new development.
- Building 4 – is not suitable for reuse and will be demolished.
  This is a single storey steel framed metal clad structure. It is not in good condition with signs of corrosion and deterioration. Its form does not suit the new development.
- Building 5 – is not suitable for reuse and will be demolished.
  This is a one and two storey masonry walled structure with concrete flooring and metal roof. It is and old building which has undergone several alterations over time. It is not in good condition with signs of deterioration in several locations. The South façade appears to have been repaired and held back with tension ties. Its form does not suit the new development.
- Building 9 – is not suitable for reuse and will be demolished.
  This is a single storey steel framed metal clad structure. It is not in good condition with signs of corrosion and deterioration. Its form does not suit the new development.
- Building 10 – is not suitable for reuse and will be demolished.
  This is a single storey steel framed metal clad structure. It is not in good condition with signs of corrosion and deterioration. Its form does not suit the new development.
- Building 11 – is not suitable for reuse and will be demolished.
  This is a single storey steel framed metal clad structure. It is not in good condition with signs of corrosion and deterioration. Its form does not suit the new development.
- The Cottage – is not suitable for reuse and will be demolished.
  This is a single storey masonry walled structure with timber flooring and rood. Its form does not suit the new development.

We confirm the structural integrity of the existing surrounding buildings will not be compromised or undermined by the demolition of these above mentioned buildings. Demolition will incorporate appropriately selected construction equipment and systems to limit movements and vibrations.

Buildings to be Re-used

The figure below indicates the buildings to be re-used in the development. The buildings shown in "Grey" are to be re-used in the development.



The following building will be reused:

- Building 1 – will essentially be retained in its current form with the addition of 4 levels of commercial. This building is constructed with solid masonry walls and a concrete frame. The structure is in good condition and suitable for re-use.
- Building 2 – will essentially be retained in its current form.
  This building is constructed with solid masonry walls and a concrete frame. The structure is in good condition and suitable for re-use.
- Building 6 – will essentially be retained in its current form with a new lift access
  This building is constructed with solid masonry walls and a concrete frame. The structure is in good condition and suitable for re-use.
- Building 7 – the west half will essentially be retained in its current form. The west half of this building is constructed with solid masonry walls and a concrete frame. The structure is in good condition and suitable for re-use.
  The east half is masonry clad structure. The façade is in good condition and will be reused in the new building.

- Building 8 – Lower levels will essentially be retained in their current form. Level 2 will have a new slab constructed for residential use. Level 3 and 4 will be newly constructed slabs with residential use. There will be a new roof over.
  This building is constructed with solid masonry walls and a concrete frame. The structure is in good condition and suitable for re-use. There will be need for underpinning and new internal framing to accommodate the proposal.

Structural Design Solutions be designing all structural elements including permanent footings, columns, reinforced suspended slabs, beams, structural steel, stairs and walls. All these items will be designed in accordance with the Building Code of Australia and other relevant Australian Standards namely:

- AS2870 Residential Slab and footing
- AS1170.1 Dead and Live Loads
- AS1170.2 Wind Loads
- AS1170.4 Earthquake Loads
- AS3600 Concrete Structures Code
- AS4100 Steel Structures Code

We confirm the structural integrity of the existing buildings will not be compromised or undermined by the construction of the new elements of these buildings. Demolition of internal walls and construction of new elements will incorporate appropriately selected construction equipment and building systems to limit movements and vibrations.

We can confirm the structural integrity of the existing buildings for the improvements and modifications documented on the architectural drawings by Tonkin Zulaikha Greer Architects. We also confirm the existing buildings are structurally suitable for the incorporation of the proposed works and additions documented on the architectural drawings by Tonkin Zulaikha Greer Architects.

Yours faithfully
STRUCTURAL DESIGN SOLUTIONS PTY LTD

Robert Facioni
BE, PhD, MIEAust