

# **Bringing engineering to conservation**



Bill Jordan & Associates has developed the expertise to give clients the best advice for conservation of a wide range of buildings and engineered structures. Services include general advice for heritage-related projects and the production of Conservation Management Plans and Statements of Heritage Impact, both with the extra dimension resulting from a structural understanding. Specific advice on materials conservation and structural behaviour under earthquake and blast vibrations are required for many historical and modern structures.

#### CMPs and SoHIs

Conservation Management Plans (CMP) are the instruments required to manage a place or work of heritage significance. Statements of Heritage Impact (SoHI) are the documents prepared to manage change in a structure, often required to enable its continuing service or provide for safety to users.

Both documents start with a heritage significance analysis, based on historical research; the important elements are readily identified and the conservation strategies can then be formulated in the most effective manner.

Buildings, bridges, wharves, tunnels and many other types of historical infrastructure can benefit from an engineering approach to their conservation.













#### Masonry and mortars

Leading expertise has been developed in the assessment and strengthening of historical masonry (brick and stone) and the mortars needed to repair and conserve them. The key to the long life of most historical masonry has been the use of hydraulic lime mortars. These are no longer manufactured in Australia, but great success has been achieved with a synthetic formulation now being used by many clients.





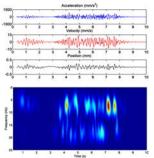




## Structural vibration

The effects of structural vibration on buildings are little understood, often resulting in costly and conservative measures, which may not be justified, being undertaken in an effort to mitigate potential problems. Bill Jordan & Associates has developed a high level of capability in the evaluation of the vibration vulnerability and behaviour of a large range of building and structure types which are subject to vibrations from blasting, construction works and earthquakes.

Projects start with the simple evaluation of likely vulnerability by consideration of the structural form and materials. Detailed monitoring of the structure using sensitive equipment, and the subsequent analysis of the recorded behaviour using specialised software, yields further information, sufficient to satisfy any requirement.













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