

Time to take the long view

Life Care Plans make sound structural and business sense, says Makers' **Simon Lamb**

Whilst cars have grown in height, capacity and weight, the fundamental dimensions for both new build and refurbished car parks remain largely unchanged. What may have been an easy car park to access and egress in the Sixties may now be considered as a tight and awkward place to park. The changing shape of cars is just one of many factors that affect the operation and performance of parking structures over time. These include changes in standards for lighting, security and the design and robustness of perimeter safety barriers. In parallel, there have been improvements in the accuracy of structural investigation techniques and the quality of repair materials.

The ability to extend a car park beyond its original design life requires a combination of factors:

1. Is the car park structurally sound?
2. Does the structure lend itself to modern vehicles and technology?
3. Is there a business case for its continued use?
4. Do the refurbishment costs make the scheme viable?
5. Do the asset value and returns increase with alternative use?
6. Does the car park meet the client's expectations? (Always bear in mind the adage of the silk purse!)

Running through a check list like this means taking a long view, which means using regular inspections to organise on-going maintenance, to identify problems early and implement repairs as soon as possible. This approach is described as life care planning. Once we place the concept of life care planning at the heart of design, then the principles of longevity and first-time maintenance take centre stage.

Designing either a new structure or devising a refurbishment from the perspective of whole life costing will affect cost bases, product choices and require a proper look at budget streams. The Life Care Plan process takes on the concept of whole life costing and is more aligned to the perspective of accountants, finance directors and investors, who are looking for returns on capital.

Car park owners and operators all have differing needs and criteria depending on their scale and commercial objectives. For established car park providers the key factors may be maintaining their status and reputation, while new entrants to the market may be keen to establish a differentiated business offering. The key driver may be improving public perception of a facility or simply enhancing income streams. Any one, or combination, of these approaches will have an effect on design and consequently on the life care plan that is devised for their car park.

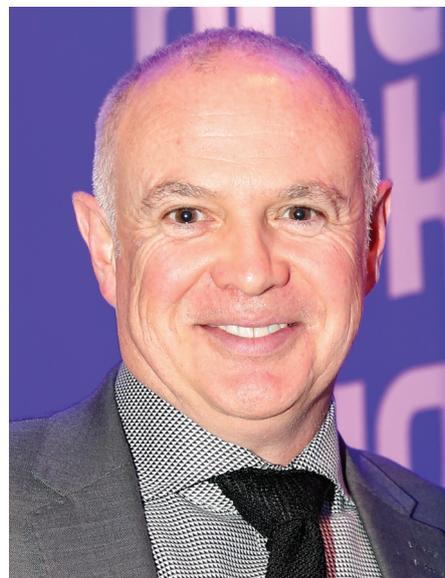
For major parking operators projecting an



image, developing branding and building a portfolio is the focal point. But many organisations have more restricted resources and will be limited to adopting a value engineering approach, which is one that requires balance and compromise. However, a value engineered project is one that actually benefits from having a good Life Care Plan in place at the outset. Thinking about a Life Care Plan will ensure a framework that provides planned preventative maintenance in a cost-effective manner. Again, the key consideration is the car park owner or operator being willing to take a long view.

Common sense suggests well-planned maintenance removes the shock of unforeseen bills in response to issues and, if used correctly, a regular inspection and repair regime provides added value and good asset management. Car park owners have a legal duty to provide safe structures especially when inviting members of the public to use their facility. However, a major problem with life care planning is that it tends to be overlooked and only comes to the fore when issues occur.

So, how far can the take-up of Life Care Plans be achieved? An experienced refurbishment contractor with knowledge of how parking structures are set out together,



such as Makers Construction, will seek to understand the client and their needs, and then to transfer those desires into the structure in question.

The key components of an effective life care plan are:

1. Gathering as much information about the car park as possible
2. Keeping a file with records of inspections or any work that is carried out
3. Undertaking a series of visual inspections on a regular interval basis
4. Recording any findings
5. Periodically testing for chemical attack on the structure
6. Having a suitable, qualified structural engineer carry out a full appraisal.

The appraisal will enable the client to obtain budgets and costings, then devise a refurbishment and maintenance programme to manage risk. Operators and owners can contribute a lot to this budgeting process. Makers offers an assessment service (which is free, inclusive of selective testing), which our engineering partners can then use to deliver cost-effective structural appraisals and compliant life care planning.

Good design comes from having a complete knowledge of the structure and developing targeted solutions to tackle properly understood problems. Contractors with track records and proven performance in the parking sector have experience that can be adapted and applied in the future. Makers' free testing scheme includes budgetary planning, which enables clients to understand what is available and achievable. The adoption of a lifetime design approach was the key element to securing the contract to undertake the £3m refurbishment of the Preston Bus Station, a Grade II listed 1960s structure (see page 42). The tender process wasn't about what we can do now, but how we could maintain the structure and provide quality and service in 20 years' time with a fully designed Life Care Plan.

Simon Lamb is managing director of Makers Construction