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Warwick District Council
Town Hall, Parade,
Royal Leamington Spa,
CV32 4AT

For the attention of Darren Knight

8th May 2026

Darren

Re: Linen Street Carpark – Initial Structural Condition Appraisal - P02 Issue

Background

- Linen Street Carpark is currently providing residential carparking at levels 1 and 2, with the remaining public carpark levels being left redundant.
- It is Warwick District Councils' intention to dismantle the upper carpark area sometime in the near future and retain the lower levels as serviceable carparks. The upper levels are therefore excluded from this structural appraisal.
- More recently Warwick District Council (WDC) have carried out a general building survey via Pegasus Group. This has raised concerns with the safety and structural integrity of the carpark areas being used.
- Pegasus Group recommended that the resident parking should cease until the concerns have been further investigated and the structure considered safe.
- JNP Group have been asked to review the structural condition of the carpark as a whole and advise on the ability to safely reopen the residential parking at lower levels.
- This report is an initial assessment of the building structure. Further intrusive testing is to be carried out to help inform the work required to extend the lifespan of the structure. This will result in a more detailed report which will assist WDC with their development strategy.
- The carpark was constructed circa 1970's. It comprises a reinforced concrete frame with cast in situ waffle decks. The frame is clad with masonry infill walls. The floor slabs on level 1 and 2 along with the access stair area are traditional reinforced concrete.

Previous Structural Surveys

- JNP Group carried out structural inspections of Linen Street Carpark for many years on behalf of WDC. The last report was in 2014 and this will be the basis for comparison of the carpark condition.
- The 2014 report identifies previous repairs which were carried out prior to the survey. Hence, any concrete repairs to the structure are in excess of 12 years old.
- This report led to concrete chemical testing and hammer testing of the structure along with recommendations for remediation. The upper levels were subsequently closed, indicating remediation was considered uneconomical at the time.

2026 Observations

- At levels 1 and 2 the floor slab and walls have no signs of significant deterioration.
- All of the upper levels of floor comprising cast in situ reinforced waffle slabs are exhibiting similar defects throughout. This also extends to some of the ramp sections and the walls.
- Concrete repairs have previously been carried out (before 2014). We understand that these repairs were carried out by a professional repair company using specialist repair materials.
- The typical defects in floors at levels 3 and 4 observed during our recent visits are:
    1. Deterioration and spalling to the top and soffit of the floor slabs.
    2. Deterioration and spalling *of repairs* to the top and soffit of the floor slabs.
    3. Localised corrosion of reinforcement resulting in staining and expansion of surface finishes.
    4. Localised spalling of reinforced concrete walls.

Discussion

- Comparison of the previous 2014 report by JNP Group against the current condition of the carpark structure indicates that the structure, as a whole has not significantly deteriorated further.
- There are isolated issues relating to corrosion throughout the floors. These appear to reflect water ingress through joints and leaks from the slab above.
- Previous repairs have been carried out but have subsequently failed in some areas.
- Some new areas of deterioration have been identified.
- The extent of all deterioration and defects is isolated and not deemed a structural risk to the overall stability of the building.

Conclusion

- The building as a whole is not at risk of imminent collapse.
- There are numerous local defects which need to be remediated to levels 3 and 4 to make good the concrete structure for continued safe use of levels 1 and 2.
- There is a risk of concrete spalling from the soffit of the slabs locally. This risk is greater where defects are identified.
- Testing of the concrete will advise on the long term strategy for increasing the lifespan of the structure.

Recommendations – Short Term

- Restrict the areas of parking to where there are no evident defects present. This includes all previously repaired areas, and areas where there is increased risk of local concrete failure due to staining, deformation or other visual indicators.
- Defects exist in the trafficked areas, between the car parking spaces. These areas will remain a higher risk, however, the likelihood of a pedestrian or vehicle being present should concrete fall from the soffit of the slab is considered low.
- It may be possible to reduce the risk of debris further by creating physical method of catching/controlling any falling debris. This would be considered a short term fix, and will need to be developed by WDC alongside JNP Group before consideration.

- Carry out frequent visual inspections to identify new areas of slab which may deteriorate further.

Recommendations – Long Term

- Carry out concrete testing to inform the extent of remediation required to prolong the lifespan of the building.

Moving Forward - Short/Medium term solutions

- A visit was carried out by WDC with JNP Group on Wednesday 6th May. The risk of debris falling and the extent of the defects in the slab was reviewed and discussed.
- Initial options were presented by JNP for providing a safe area for residents to use.
- The option to fence off and restrict access to the areas where known defects are present was not considered a desirable solution at this stage.
- An alternative option was suggested, which would provide a protective barrier beneath the slab to prevent any future debris from falling into the occupied space below. The initial concepts are based on providing a membrane or fine mesh netting system fixed to the soffit of levels 3 and 4.
- This would significantly reduce the risk of debris falling from the underside of the slab into the space below.
- Additional remedial work to known defects will also be considered. This will focus on exposed reinforcement and compromised repairs.
- Further design work is required to develop the soffit barrier option, since there is restricted headroom which limits the zone that works can take place without compromising the use of the car park. It is likely that any developed solution will require load testing on site to confirm the design.
- Regular inspections and load/material testing may also be required when any developed solution has been installed and residents are using the carpark areas.

Yours sincerely

Gareth Stephenson
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Associate

Photograph 1 – Previous repairs

Photograph 2 – local staining from corroding reinforcement