Opal, Ruby and Amber Court Residents' Meeting

26th February 2026

Welcome and housekeeping announcements

Andy Mackay, Director of Building Safety,
Notting Hill Genesis

Meeting agenda

- Andy Mackay, Director of Building Safety, Notting Hill Genesis
  - Timeline of structural investigations and discovery of issues
- Andy Murray, Divisional Director, Pell Frischmann (Technical Advisors)
  - Building design
  - Explanation of the structural issues identified
  - Remediation considerations
- Andy Mackay, Director of Building Safety, Notting Hill Genesis
  - What are the remediation timeline and next steps?
- Q&A
- Contact details

Block references

Block C	Opal Court
Block D	Ruby Court
Block E	Amber Court
Block F & G	Sapphire Court/Lapis Mews

Timeline of structural investigations and the discovery of issues

Andy Mackay, Director of Building Safety,
Notting Hill Genesis

Our approach to building safety

Throughout this situation our guiding principles have been to:

- Put your safety first at all times
- Follow the advice of our Technical Advisors (Pell Frischmann) based on the evidence presented by the Original Structural Design Engineers
- Act immediately upon new information received
- Do all we can to support affected residents and keep you all informed
- Work closely with relevant partners, authorities and government bodies

Timeline of building safety investigations

Initial building review

January 2025

- The original Structural Design Engineers notified Notting Hill Genesis of their review of buildings at Stratford Halo
- NHG started working closely with the Original Structural Design Engineers to understand the review process and outputs

Response to emerging information

February 2025 - July 2025

- Upon the receipt of new information from the Original Structural Design Engineers, and at NHG's request, areas of concern were opened up exposing the concrete structure. This enabled the structure to be examined for signs of distress
- Other as built conditions of the building were investigated and it was identified screed was not in place – this information was considered in the wider modelling of the building performance
- The building risk assessment was updated to reflect the impact of this new information emerging from the original Structural Design Engineers
- In parallel, and at NHG's request, active monitoring measures (strain gauges) and twice weekly visual inspections were put in place. **The monitoring remains ongoing.**
- A trigger plan outlining the point at which any adverse changes in the behaviour of the building might constitute grounds for tenant decant, was developed.
- All actions and decisions that arise from emerging information are taken with resident health and safety in mind

Initial remediation solution development

February 2025 - November 2025

- An interim steel propping solution, in areas of concern, was proposed by the original Structural Design Engineers
- NHG's technical advisors confirmed that, for the purposes of implementing a rapid interim repair solution, the steel propping proposal was an appropriate response
- The design of the interim propping solution was initiated by the Original Structural Design Engineers
- Onsite surveys, to assess the practical implications of the works on the building structure and building services took place
- Over this period, the areas which the Original Structural Design Engineers had intended to prop were descoped in parts
- Contract negotiations, in respect of undertaking work to the building, were simultaneously undertaken between NHG and the Original Structural Design Engineers

Relocation- December 2025- present

- Although the Original Structural Design Engineer had begun designing the interim propping solution and mobilising contractors for its installation, a mutually agreed site start date had still not been agreed by December 2025
- NHG were advised by our Technical Advisors, that given the performance concerns of the structure, the lack of clarity as to when the interim propping scheme would be in place and lack of a longer-term remediation solution, the ongoing risk management approach was no longer fit for purpose
- Whilst there was no observed changes to the building's behaviour, NHG were advised by our Technical Advisors that statements, made by the Original Structural Design Engineers about the safety of the buildings in relation to ongoing occupation, could no longer be supported
- This led to the Board decision to ask residents to relocate

Explanation of building design

Andy Murray (Divisional Director) Pell Frischmann

Structural Form

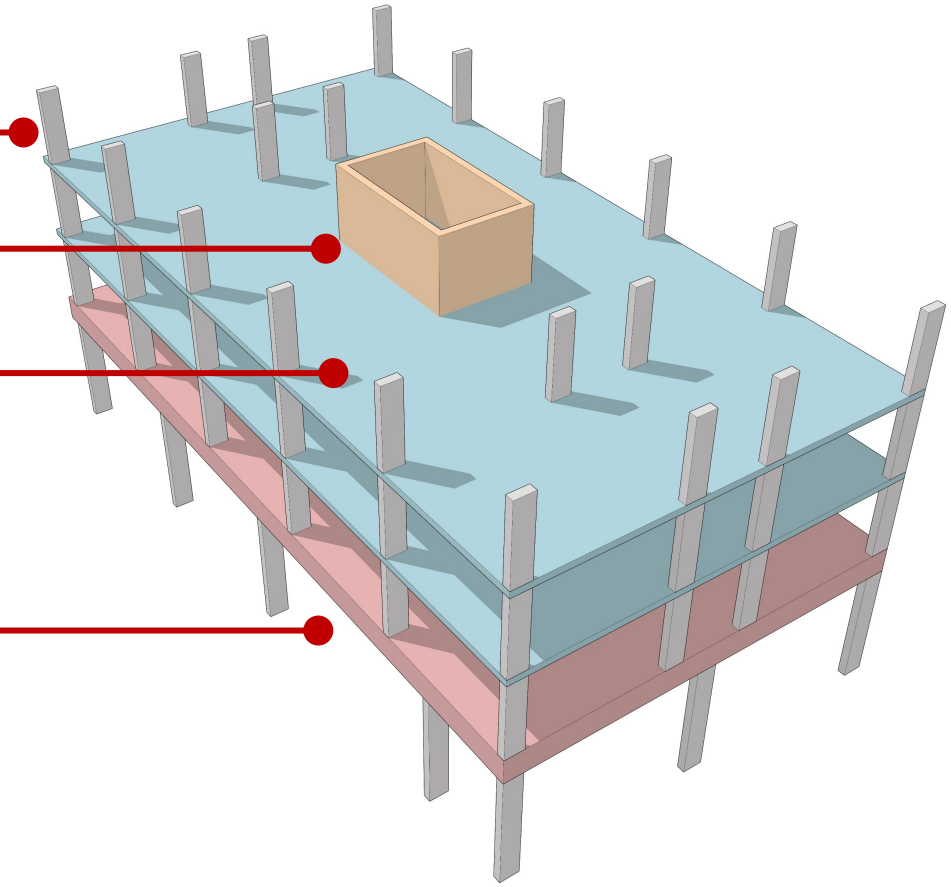
All Blocks are reinforced concrete frames.

Column

Core

Slab

Transfer slab



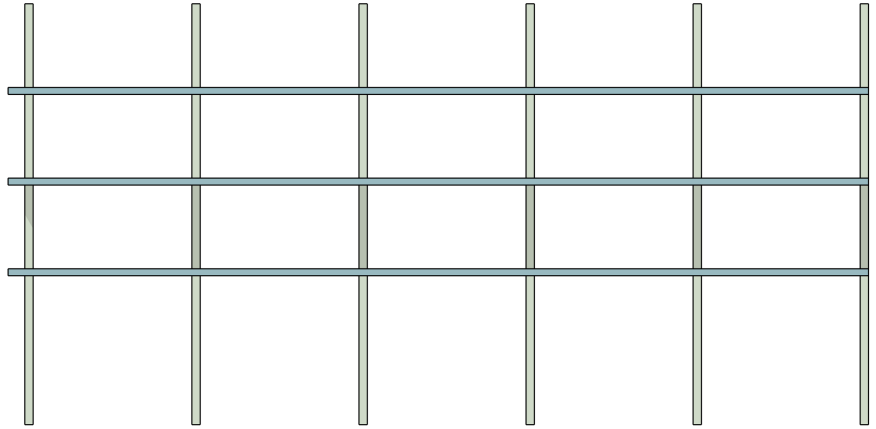
Illustrative purposes only

Technical terms

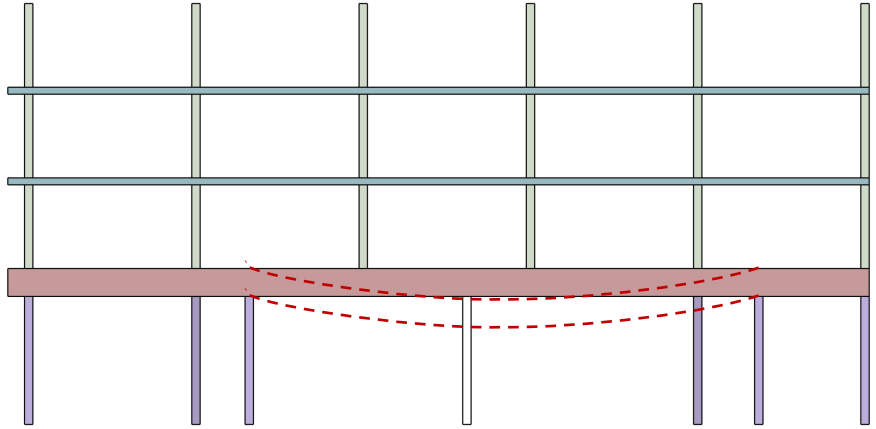
Structural anatomy

- Opal, Ruby and Amber Court are reliant on transfer slabs; the primary transfer slab is located at ground level.
- This is not an unusual form of structure for this type of building.
- It is often used to accommodate different floor layout requirements between basement/ground areas to those above such as residential layouts

Vertically aligned



Transfer structure



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What we know about the structural issues identified

Issues identified and contributing factors

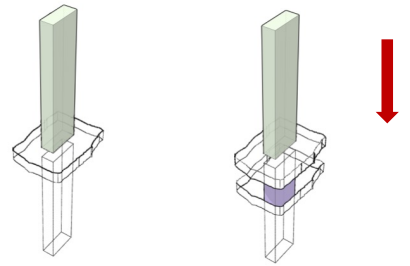
- There are a considerable number of locations within the existing concrete structure where the constructed structure does not meet recognised minimum accepted performance requirements
- The advised performance issues with the structure are due to decisions made by the Original Structural Design Engineers, around geometry and materiality
- It is highly unlikely that they result from external influences such as works adjacent to the site
- Any cracking observed to finishes, whilst unsightly, is highly unlikely to compromise the ongoing performance of the primary concrete structure

Advised Performance Concerns

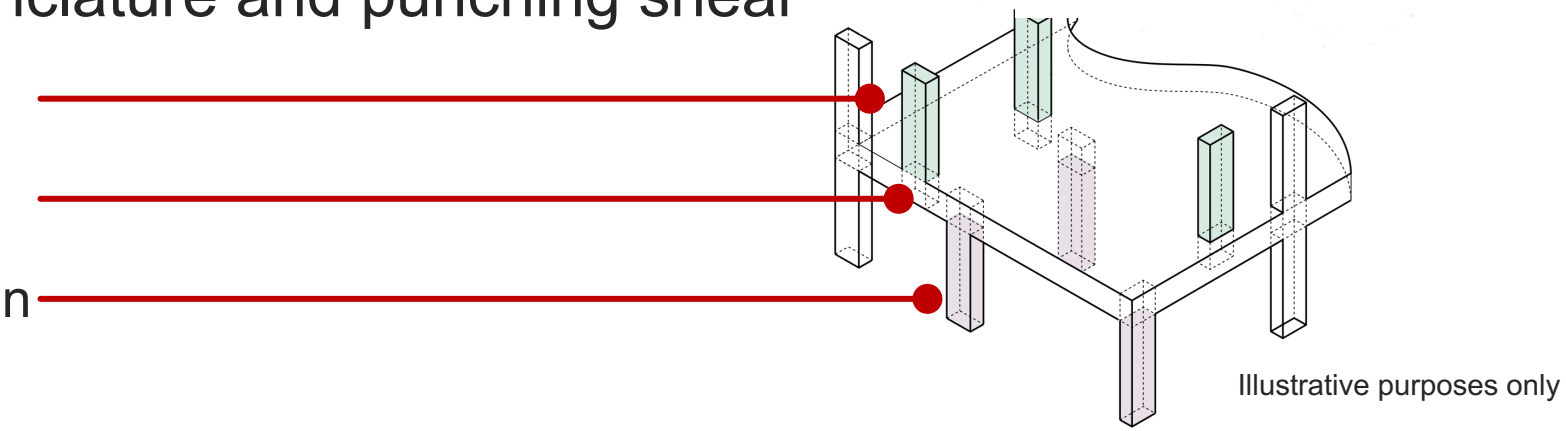
Opal, Ruby and Amber Court

- Column to slab punching shear concerns
- Slab combined punching shear and bending concerns

Punching shear – vertically continuous columns



Transfer slab nomenclature and punching shear



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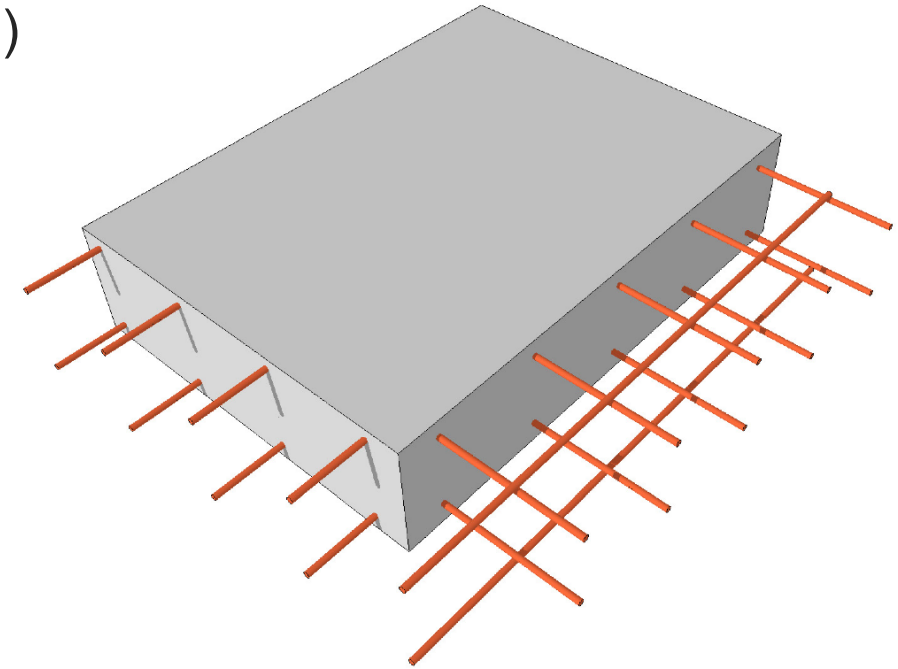
Advised Performance Concerns

Opal, Ruby and Amber Court

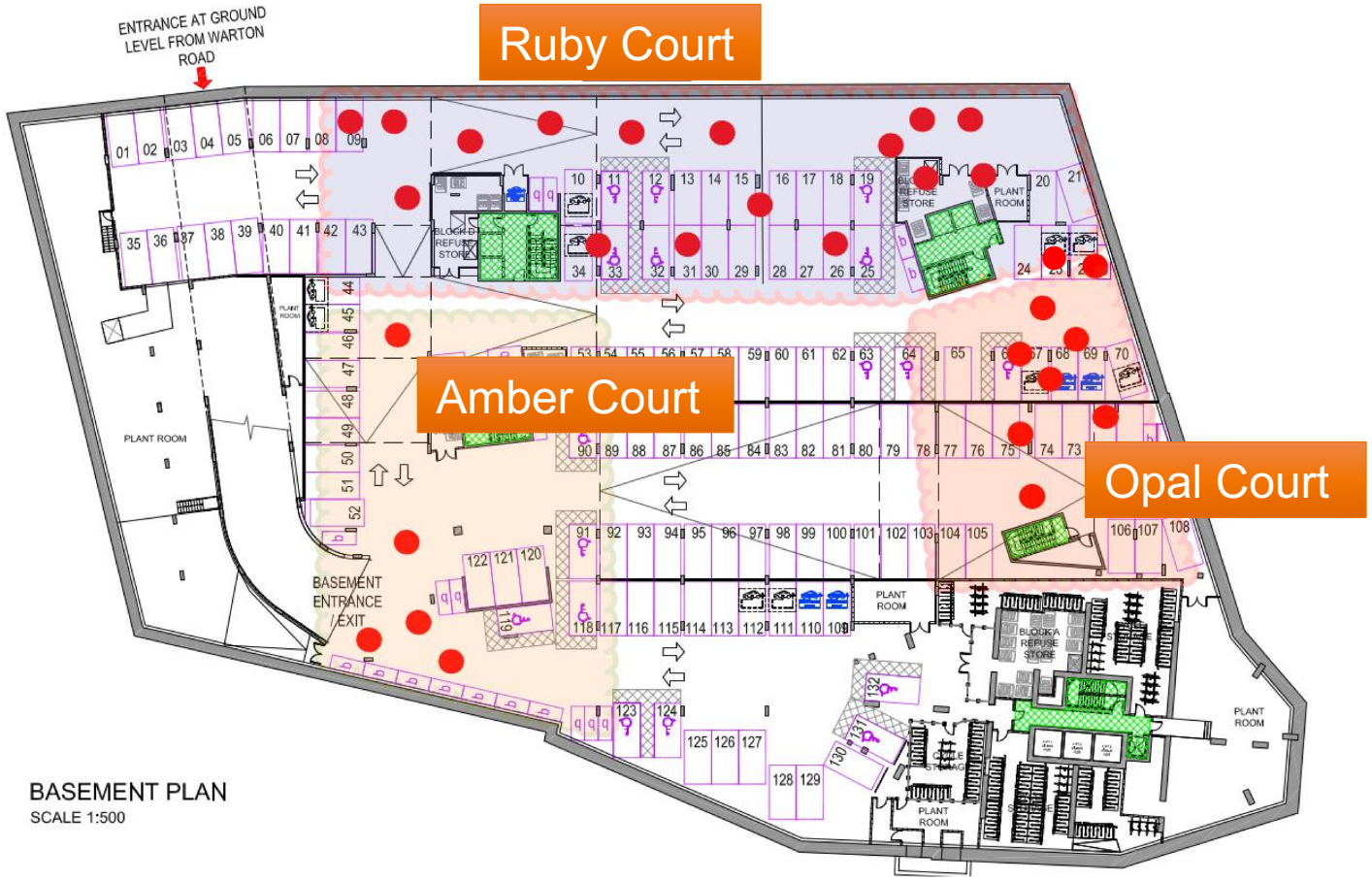
- Slab combined punching shear and bending concerns
  - Concrete is good in compression (being squeezed)
  - Concrete is poor in tension (being bent and stretched)
  - Steel is strong in tension



Advised Performance Concerns

Opal, Ruby and Amber Court

- Column to slab punching shear, slab combined punching shear and bending



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Opal, Ruby and Amber Court

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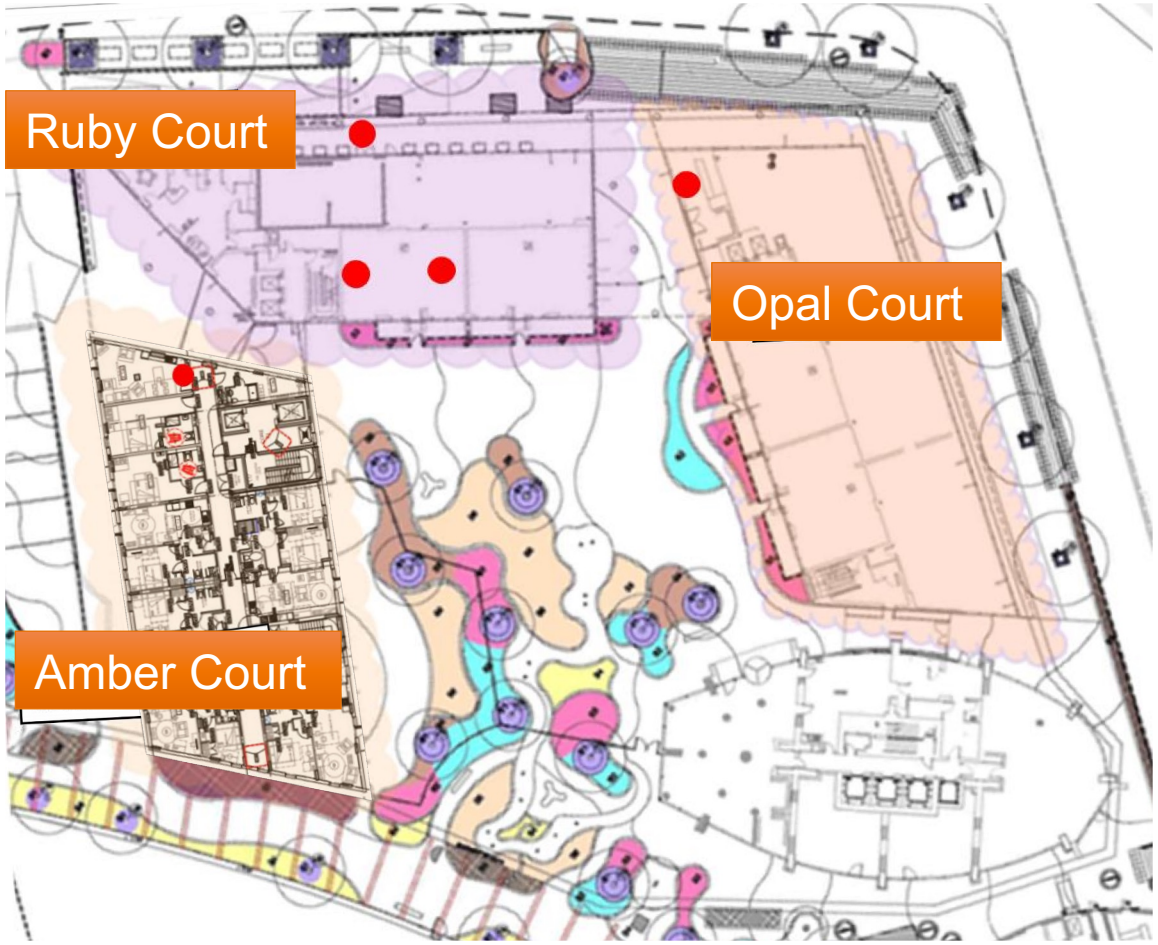


Advised Performance Concerns

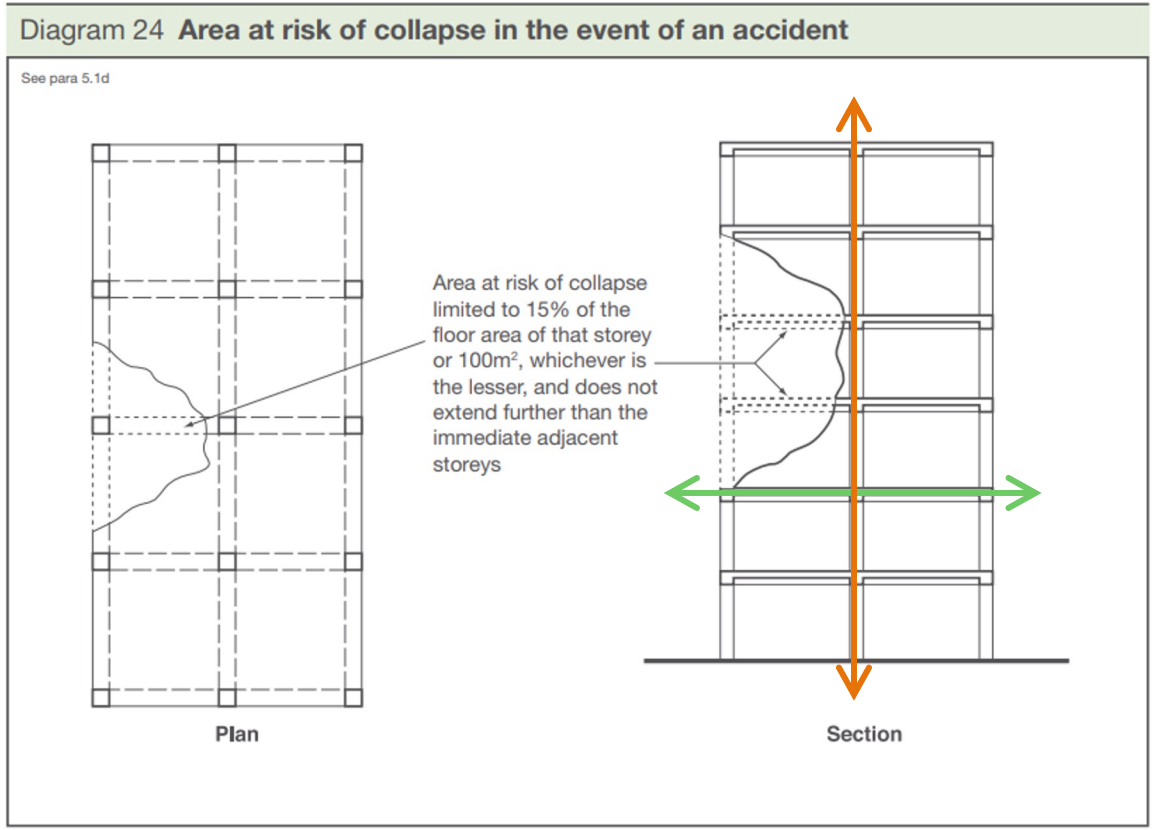
Opal, Ruby and Amber Court

- Structural robustness concerns

In the event of accident/structural failure the global collapse of structures is limited by designing the structure against what is termed as disproportionate collapse.

This involves ensuring that the building structure is both vertically and horizontally tied together adequately.

Alternatively critical structural components, known as ‘Key elements’, are designed for accidental loading resulting from gas blasts, vehicle impact etc.



Remediation considerations

What works are being undertaken?

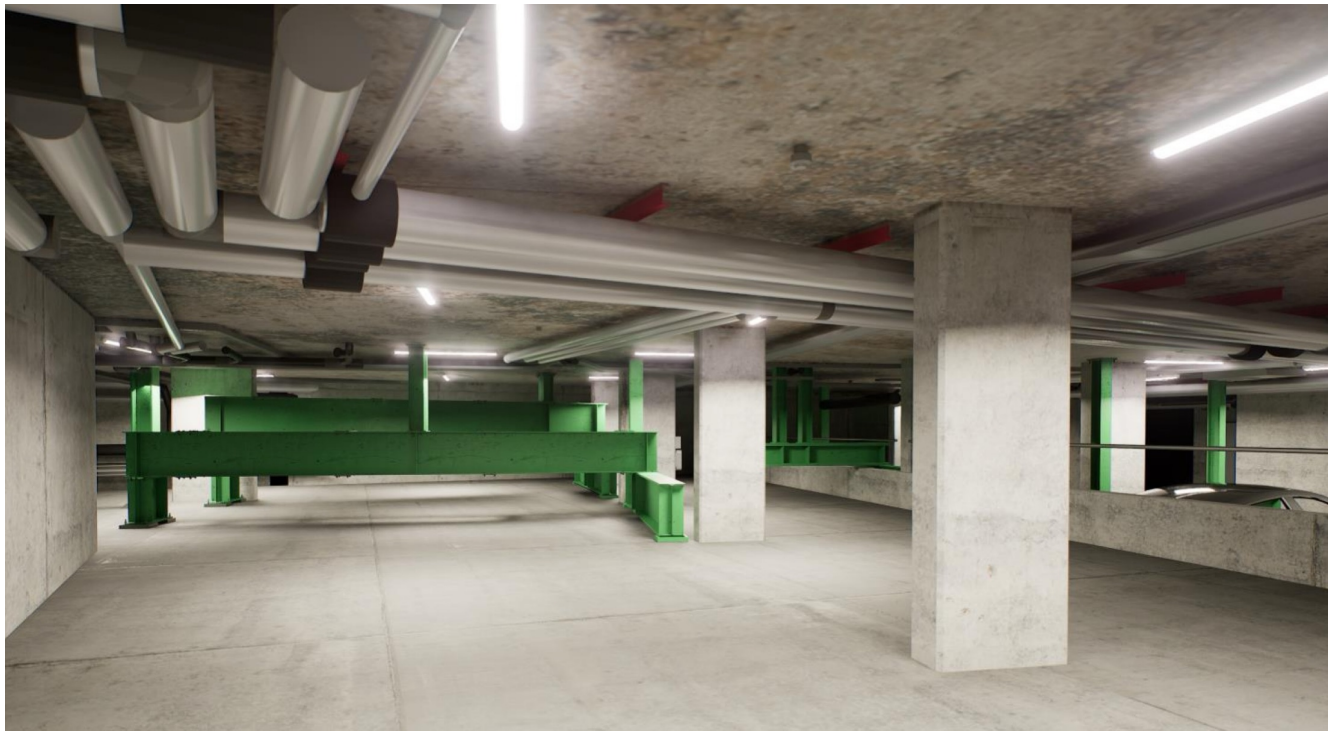
- A temporary propping solution has been developed by the Original Structural Design Engineers. This consists of bespoke fabricated deep steel beams propping the underside of the ground (basement ceiling) slab
- The steel beams will be installed tight to the underside of the ground floor slab. They are designed, in a failure situation, to support column loads from above and distribute them to the existing foundations
- The Original Structural Design Engineers have proposed a design they consider will mitigate the current risks on a temporary basis, there are some areas that we are seeking further clarity on due to high utilisation
- Whilst considered to be a temporary/interim proposal the propping solution should be designed with the structural capability to support column loads permanently

Temporary/Interim propping solution

‘Proposed precautionary temporary measures’

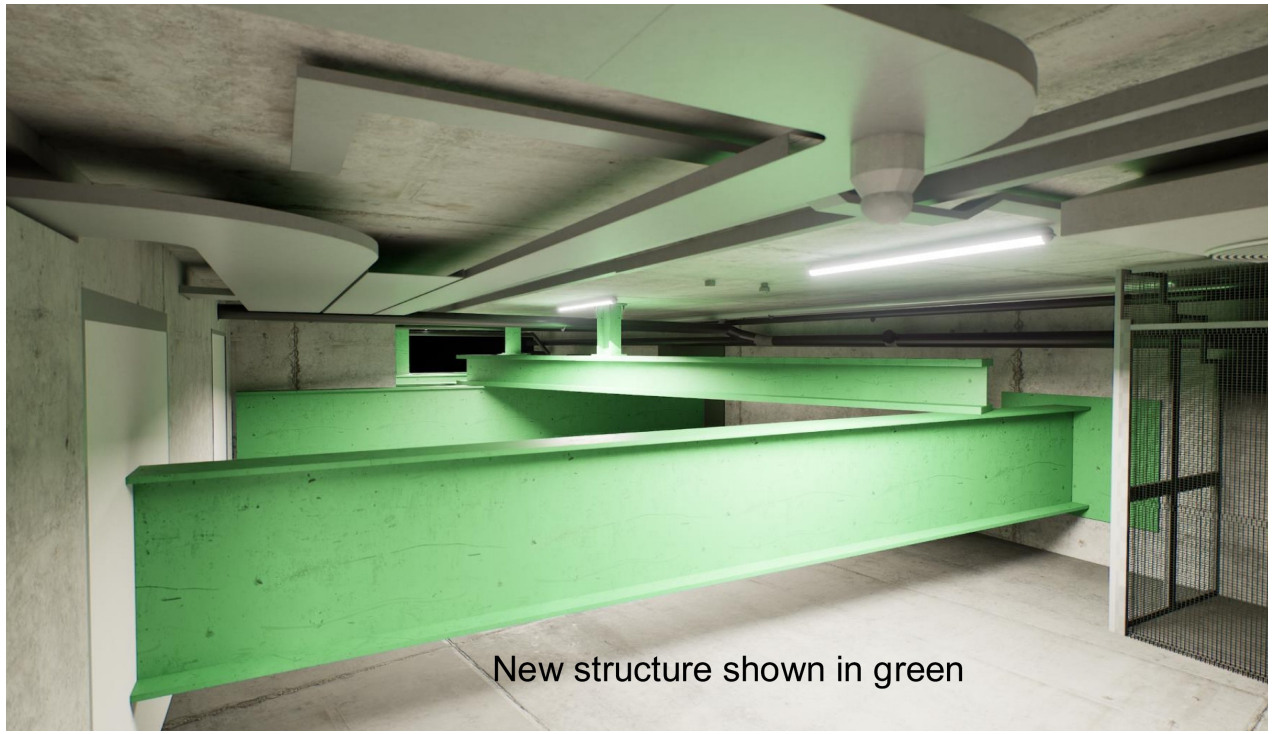
Not a series of ‘acro’ props

New transfer beam structure shown in green



Temporary/Interim propping solution

‘Proposed precautionary temporary measures’



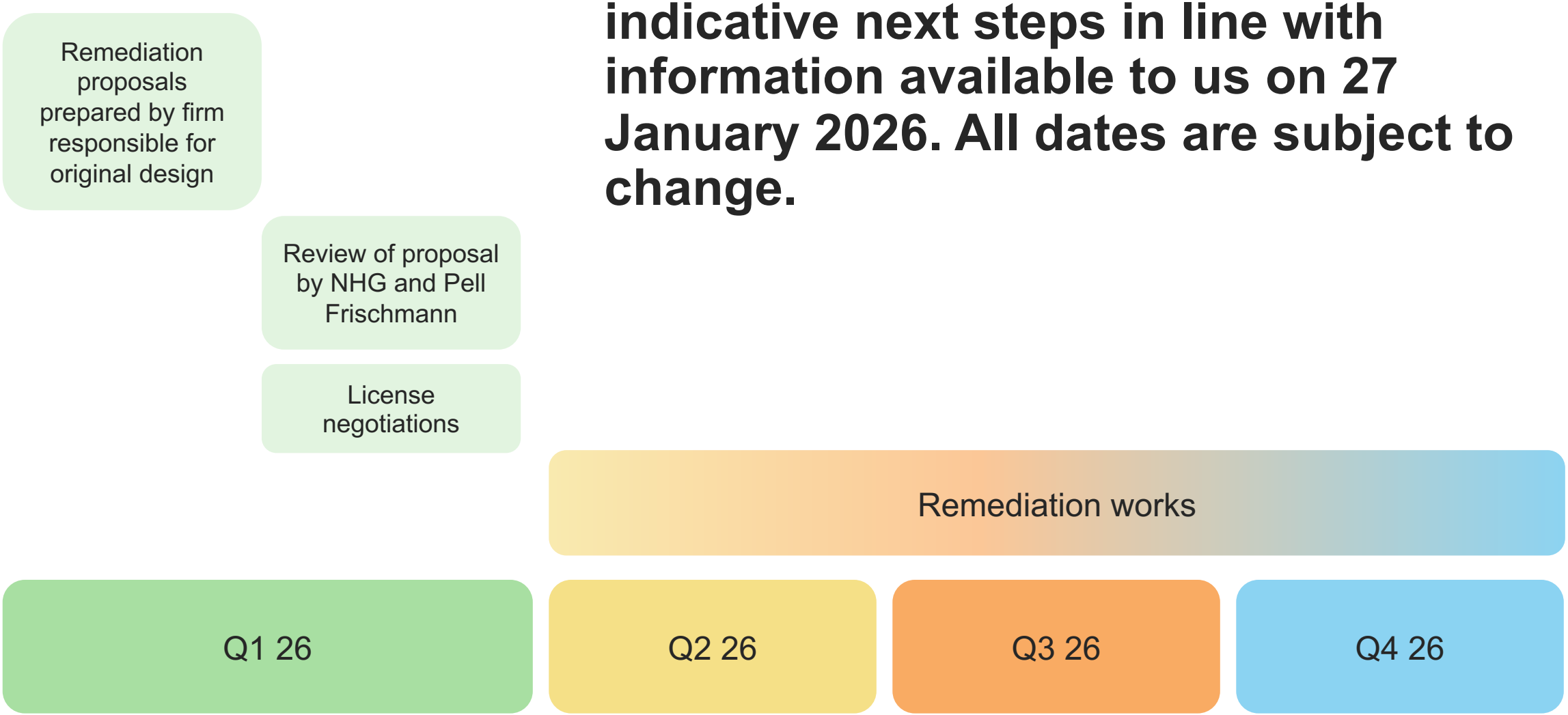
Remediation solution assurance

- As remediation works are completed to Opal, Ruby and Amber Court, NHG will seek independent certification and assurances to ensure the adequacy of the works:
  - That the remediation works will be designed to meet the requirements of building control
  - The building is a ‘Higher Risk Building’ as defined under the Building Safey Act 2022. Any remediation proposals will therefore require approval from the Building Safety Regulator
  - Approvals to the interim propping proposal solution have ben developed on the basis that Building Safety Regulator Gateway 2 approval can be dealt with under the emergency protocols
  - The Original Structural Design Engineer and NHG will be discussing this with the Building Safety Regulator in the immediate future
  - Notting Hill Genesis will be seeking independent warranties for the design and installation of the remediation works. We will also seek assurances regarding the performance of building structural components that have not been altered as a consequence of the remediation works

Remediation timeline and next steps

Andy Mackay, Director of Building Safety,
Notting Hill Genesis

Amber, Opal and Ruby Court – indicative next steps in line with information available to us on 27 January 2026. All dates are subject to change.



Remediation next steps

- Contract and licence negotiations were ongoing during 2025. It is NHG's aspiration that these are resumed with the Original Structural Design Engineers and concluded at pace
- Work is ongoing to coordinate works with services to the building alongside some further intrusive surveys to confirm the design is implementable
- Based on current progress, a start on site is likely to be later within Q2 however we have allowed time within the works programme and are still looking to target a 2026 completion

Investigations w/c 16th March

- W/C 16th March the Original Structural Designers are undertaking surveys in the basement area to confirm the as built conditions for the implementation phases
- This means the chaperone service in Ruby Court will be suspended during working hours and we ask residents to plan for this now
- There will be limited evening slots on Tuesdays and Thursday from 5pm-7pm and access on the weekends will be available during 10am-6pm
- If there are any changes to this we will update residents
- This does not affect Opal and Amber Court

Long Term Remediation

- The temporary/interim propping solution has the structural capability to support column loads permanently. This is not however, a permanent remedial solution
- This is to allow residents to move safely back home with certainty about the longer term
- It is NHG's requirement that any long-term permanent remediation solution must have the capability to be installed without the need for further future mass relocation of residents
- A long-term remediation solution to the areas of concern has been requested by NHG and their Technical Advisors from the Original Structural Design Engineer
- To date this has not been provided by the Original Structural Design Engineer

Q&A and how to contact us

Q&A

How to contact us

Speak to your dedicated NHG staff member

Stratford Halo 24-hour hotline
0203 815 0333

Email

- Opal, Ruby and Amber Court residents: hotline@nhg.org.uk

Stratford Halo Residents Hub
located in the reception of Halo Tower

Website including regularly updated FAQs section
www.nhg.org.uk/stratford-halo-updates

Thank you

Appendix
Building structure supporting technical information by Pell Frischmann

Nomenclature

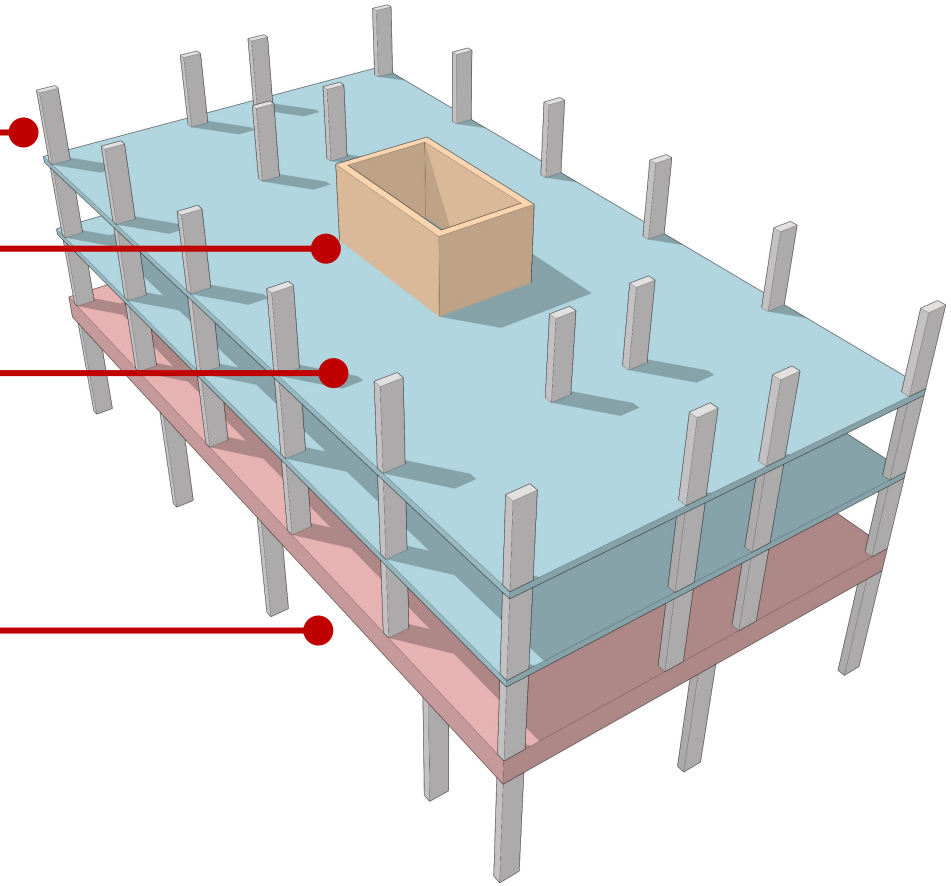
Structural anatomy

Column

Core

Slab

Transfer slab

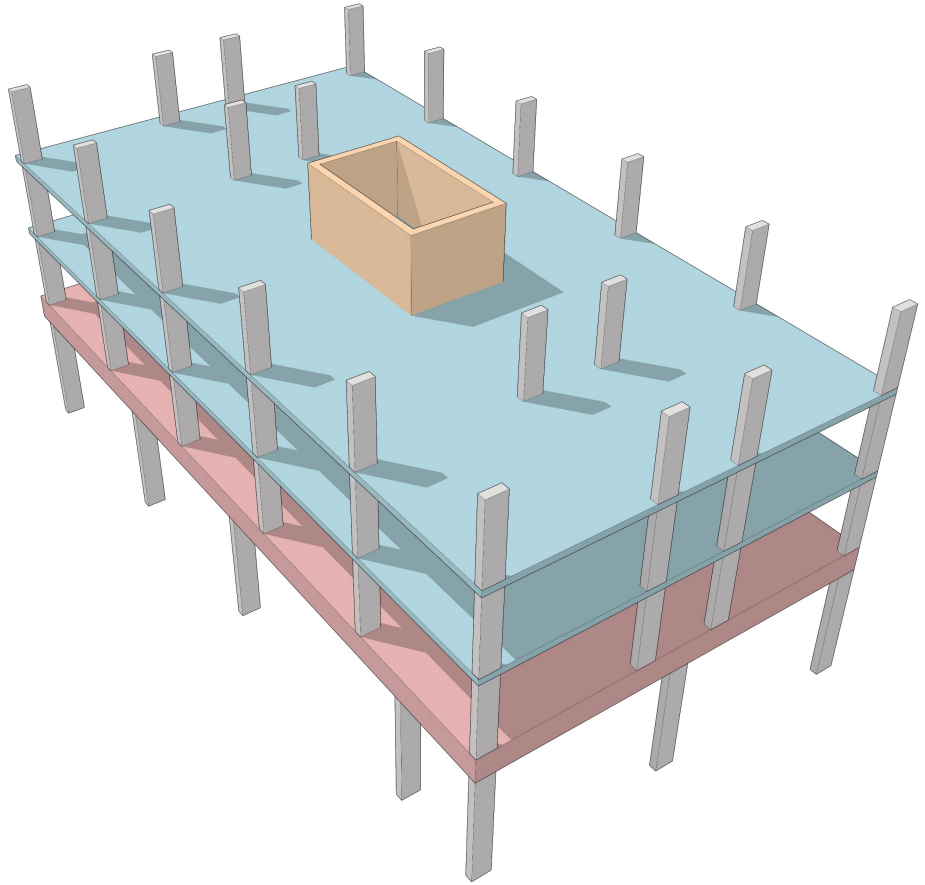


Illustrative purposes only

Opal, Ruby and Amber Court – Lapis Mews

Structural anatomy

- All Blocks are reinforced concrete (RC) frames.
- They rely on vertical columns supporting horizontal concrete slabs.
- The slabs are typically what is termed as ‘flat slabs’ meaning they are self supporting and not reliant on beams providing vertical support.
- The buildings are stabilised against wind using concrete walls, clustered around vertical circulation locations such as staircases and lifts.



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Nomenclature

Structural anatomy

- Opal, Ruby and Amber Court is reliant on transfer slabs.
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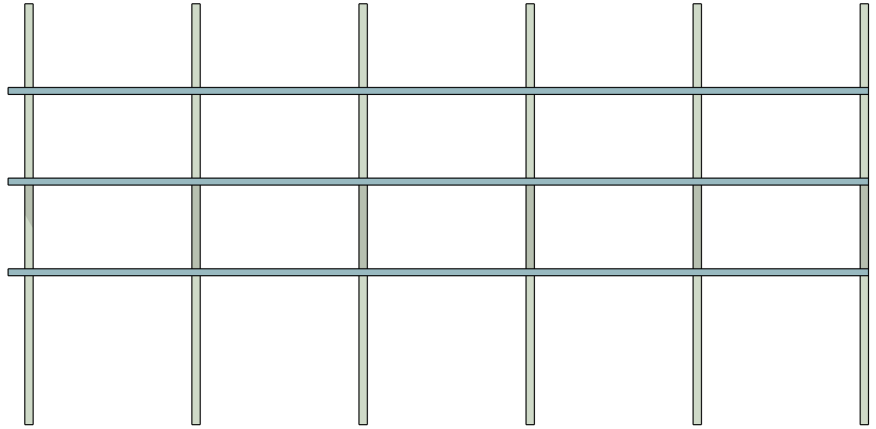
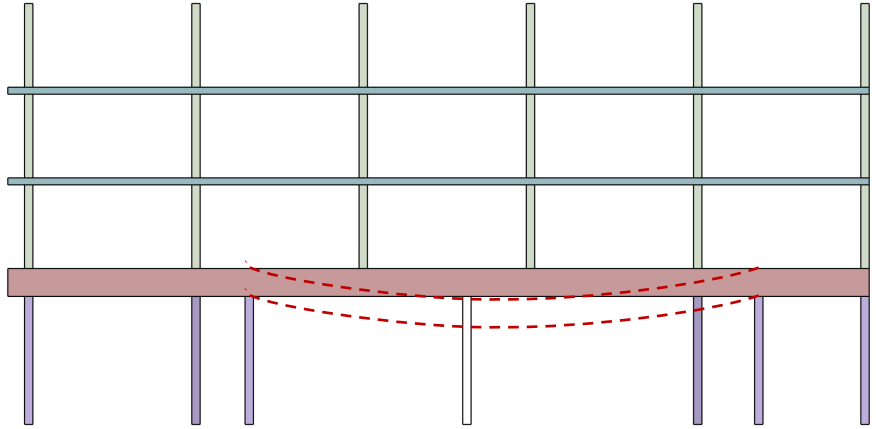
- It is often used to accommodate different floor layout requirements between basement/ground areas to those above such as residential layouts

Vertically aligned



Transfer structure

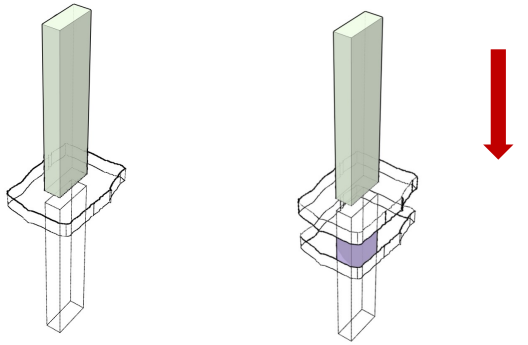


Illustrative purposes only

Nomenclature

Structural behaviour

Punching shear – vertically continuous columns

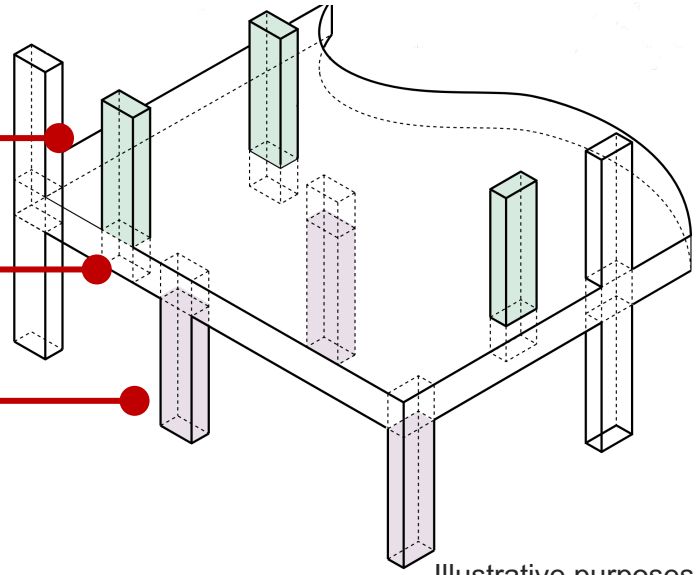


Transfer slab nomenclature and punching shear

Planted Column

Transfer slab

Supporting column



Illustrative purposes only

Nomenclature

Structural behaviour

When designing buildings structural engineers are generally concerned about the following structural behaviours.

- Bending – how much something bends
- Shear – shearing actions
- Deflection – how much something moves
- Robustness – limiting disproportionate collapse

Nomenclature

Structural behaviour

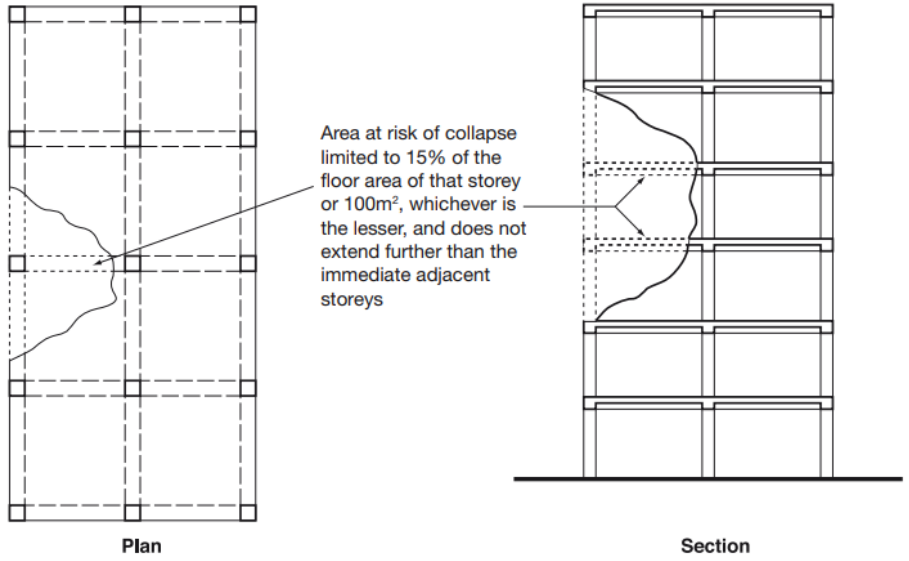
In the event of an accident/structural failure the global collapse of structures is limited by designing the structure against what is termed as disproportionate collapse.

This involves ensuring that the building structure is both vertically and horizontally tied together adequately.

Alternatively critical structural components, known as ‘Key elements’, are designed for accidental loading resulting from gas blasts, vehicle impact etc.

Diagram 24 **Area at risk of collapse in the event of an accident**

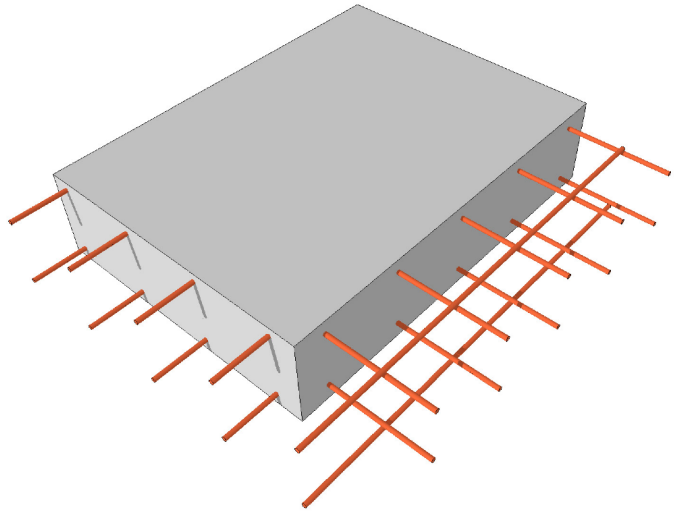
See para 5.1d



Materiality

Reinforced Concrete

- Concrete is good in compression (being squeezed)
- Concrete is poor in tension (being bent and stretched)
- Steel is strong in tension



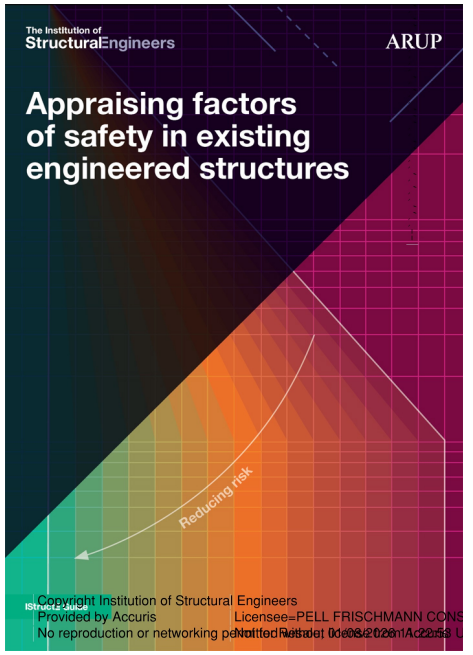
Combining the two materials creates a material which is strong under compression and tension

Advised Performance Concerns

Opal, Ruby and Amber Court

How did NHG's technical advisors determine that the building was no longer safe for occupation?

- This was based on the evidence provide by the original structural engineer.
- Additionally, structural performance concerns were assessed against a technical paper published by the Institution of Structural Engineers 'Appraising factors of safety in existing engineered structures. This demonstrated that continued occupation of the buildings represented a very high (unacceptable) risk.



Structural Performance

Design Approach and Utilisation

Structural Engineering is based on design codes which outline:-

- Recommended approaches to design (for that material)
- Typical load allowances
- Recognised material properties for each material
- Factors of safety to applied to the applied loads and material properties

A structure which meets its performance requirements is one where the applied design forces do not exceed 100% of its design resistance.

A structure which does not meet its performance requirements is one where the applied design forces exceed 100% of its design resistance.