Engineering Assessment Summary Report

1. Building Information	
Building Name/ Description	**First National building**
Street Address	20 Johnsonville Road, Johnsonville, Wellington 6037
Territorial Authority	Wellington City Council
No. of Storeys	2 + partial mezzanine
Area of Typical Floor (approx.)	250 m^2
Year of Design (approx.)	2003
NZ Standards designed to	NZS4203, NZS3101, NZS3603, NZS3404
Structural System including Foundations	Three-storey office building consisting of ground floor, first floor and mezzanine floor. Combined concrete and steel framing. First floor features a concrete slab, partial mezzanine above is a timber structure. Lightweight roof, one braced bay. Full-height concrete panels on the North, West and South sides. Foundation is slab-on-grade. Concrete walls and columns land on wider footings. Bracing in longitudinal direction - concrete panels. Bracing in transverse direction - concrete walls and concrete frames at the ground floor, steel framing above.
Does the building comprise a shared structural form or shares structural elements with any other adjacent titles?	n/a
Key features of ground profile and identified geohazards	Undifferentiated poorly sorted steep fan gravel deposits.
Previous strengthening and/ or significant alteration	No
Heritage Issues/ Status	No
Other Relevant Information	N/A

2. Assessment Information	
Consulting Practice	Silvester Clark
CPEng Responsible, including: • Name • CPEng number • A statement of suitable skills and experience in the seismic assessment of existing buildings[1]	Richard Parker CPEng 1008732 10 years of experience assessing timber, reinforced concrete, masonry and steel structures
Documentation reviewed, including: • date/ version of drawings/ calculations[2] • previous seismic assessments	Structural drawings for original build (2003).
Geotechnical Report(s)	Not available
Date(s) Building Inspected and extent of inspection	06-Mar-2018 Visual inspection of interior and exterior
Description of any structural testing undertaken and results summary	No
Previous Assessment Reports	No
Other Relevant Information	N/A

[1] This may include reference to the engineer's Practice Area being in seismic assessment, or commentary on experience in practice and recent relevant training, particularly if prior to re-assessment of practice area
[2] Or justification of assumptions if no drawings were able to be obtained

3. Summary of Engineering Assessment Methodology and Key Parameters Used	
Occupancy Type(s) and Importance Level	Office building, IL2
Site Subsoil Class	Assumed Cat. C Soil
For an ISA:	
Summary of how Part B was applied, including: • Key parameters such as μ, S_p and F factors • Any supplementary specific calculations	Concrete & steel framing. Assumed μ=2, S_p=0.7 Location: Wellington, Z=0.4
For a DSA:	
Summary of how Part C was applied, including: • the analysis methodology(s) used from C2 • other sections of Part C applied	
Other Relevant Information	N/A

4. Assessment Outcomes		
Assessment Status (Draft or Final)	Final	
Assessed *%NBS* Rating	70% NBS	
Seismic Grade and Relative Risk (from Table A3.1)	B – Not Earthquake Risk	
For an ISA:		
Describe the Potential Critical Structural Weaknesses	No potential CSWs identified.	
Does the result reflect the building's expected behaviour, or is more information/ analysis required?	Yes – the ISA is sufficient	
If the results of this ISA are being used for earthquake prone decision purposes, and elements rating <34*%NBS* have been identified:	N/A	
For a DSA:		
Comment on the nature of Secondary Structural and Non-structural elements/ parts identified and assessed		
Describe the Governing Critical Structural Weakness		
If the results of this DSA are being used for earthquake prone decision purposes, and elements rating <34*%NBS* have been identified (including Parts)[3]:		
Recommendations		

[3] If a building comprises a shared structural form or shares structural elements with other adjacent titles, information about the extent to which the low scoring elements affect, or do not affect the structure.