

CONSTRUCTION HAZARD ASSESSMENT STRUCTURAL DESIGN for

**Festival Hall, Heath Road, Petersfield GU31
4EA**

Stage Works

It is assumed that the project is to be undertaken by experienced and competent designers and contractors who are aware of the common risks associated with construction processes.

The summary below is intended to help all parties recognise the less common hazards which may be encountered in this particular project through an understanding of the structural principles involved and

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Date: 31 Jan 2024

Status: Information (Tender)

Version: 1



Project Title: Festival Hall, Heath Road, Petersfield GU31 4EA		Project No: 180327
Consideration	Yes/No	Comment
1.0 NEW SUBSTRUCTURE AND FOUNDATIONS		
1.1 Utilities		
1.1.1 Has a public utilities search been implemented?	No	Excavation areas to be locally scanned for services prior to undertaking the works.
1.1.2 If not why not?		
1.1.3 Which utilities may affect the project?		None anticipated but to be confirmed.
1.2 Site Investigations		
1.2.1 Has a desk study been undertaken?		Yes. Please refer to GEA report J21169
1.2.2 Has a soil investigation been undertaken?		Yes. Please refer to GEA report J21169. No internal trial pits feasible at the time of undertaking the site work due to the building being in use.
1.2.3 If not why not?		
1.2.4 Does the investigation highlight any:		
o Exceptional strata	No	
o Water problems	No	
o Contamination	No	
o Obstructions	No	
o Other issues?		
1.3 Site Strip		No significant strip required. Only locally to expose existing foundations and possible cast new extensions to them, subject to size.

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1.3.1 What is the anticipated depth of site strip?		N/A
1.3.2 Are any special precautions needed when excavating and removing material?		Excavation areas to be locally scanned for services prior to undertaking the works.
1.4 Foundations		
1.4.1 Describe the proposed foundations in outline.		Existing foundations are traditional concrete trench fill. Proposal is to re-use the foundations if found to be large enough, if not the works will involve extending them.
1.4.2 Do any excavations that require hand finishing exceed 1.2 m depth?		To be confirmed on site. Existing foundations may be deeper than 1.2m.
1.4.3 Are any excavations envisaged close to adjoining structures?	Yes	
1.4.4 If yes, have their foundations been examined and recorded?	No	Not in this area – external foundations recorded only. These foundations are to be investigated at the start of the works.
1.4.5 Are any special shoring procedures needed?		To be confirmed. Possible trench sheeting to maintain stability of made ground.
1.4.6 Have any existing underground services or obstructions been identified?		To be confirmed.
1.4.7 Are any excavations close to existing services?		To be confirmed.
2.0 SUPERSTRUCTURE – NEW BUILD AND EXTENSIONS		NOT APPLICABLE
2.1 General		

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2.1.1	What structural system is proposed?	
2.1.2	How is stability to be achieved?	
2.1.3	If a frame is being used will any special sequence of craneage be needed?	
2.1.4	Will any temporary works be necessary to ensure stability during erection?	
2.2	Walling and Cladding	
2.2.1	What construction is envisaged for the external envelope of the building?	
2.2.2	What construction is envisaged for internal partitions?	
2.2.3	Does walling or cladding provide either temporary or long-term stability to the building?	
2.2.4	Can all units be safely lifted and placed in position by one person?	
2.2.5	Are walls stable in the temporary condition before floors/roofs applied?	
2.3	Beams and Lintels	
2.3.1	What beams and lintels are envisaged in the works?	
2.3.2	Are special (in terms of size, weight, awkward shape or requiring assembly work on site) beams and lintels necessary?	
2.3.3	Are there any special handling and erection sequences which need to be followed?	
	Are beam weights, moments and reactions indicated on the drawing?	
2.4	Floors and Stairs	

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2.4.1 Outline the proposed construction of floors and stairs.		
2.4.2 Define the imposed load capacity required		
2.4.3 Has any special allowance for construction loads been allowed?		
2.4.4 Is the design by others?		
2.4.5 Is craneage necessary?		
2.5 Roof		
2.5.1 Describe the proposed roof construction.		
2.5.2 Define the imposed load capacity required.		
2.5.3 Is design by others?		
2.5.4 Is craneage necessary?		
2.5.5 Is the erection sequence important for stability during construction?		
3.0 INFRASTRUCTURE AND EXTERNAL WORKS		NOT APPLICABLE
3.1 Describe the Highway works and any issues related to their construction that are unusual or represent significant hazards.		
3.2 Describe the drainage works and any issues related to their construction that are unusual or represent significant hazards		
3.3 Are any excavations close to existing services, or sensitive uses?		
3.4 Describe any external works, retaining walls, earthworks etc.		
3.5 Is design by others?		

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3.6 Any special sequence of work or limitation on loading, including temporary loads from construction?		
4.0 SUPERSTRUCTURE REFURBISHMENT, REPAIRS AND STRUCTURAL ALTERATIONS		
4.1 Is there an asbestos register for the building? If yes, are areas to be investigated affected and are precautions required or clearance necessary ahead of any investigations or construction works? If no, lead consultant to organise asbestos survey ahead of any investigations		To be provided by the client.
4.2 What is the construction and load bearing elements of the existing building?		Locally around the stage, the building comprises concrete roof slab panning between steel beams that are encased in concrete. The steel beams span approx. 13m between perimeter columns, which are encased in the external brickwork wall.
4.3 What provides stability at present?		Likely to be racking resistance from the brickwork walls.

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4.4	What is the nature of the proposed works?	Increase the ceiling rigging capacity of the stage which requires additional steelwork beams to support the rigging equipment. The existing structure has insufficient capacity for the proposed loads therefore the proposal is to essentially install a new steel frame with the stage area to support the new equipment. This includes new beams spanning the width of the auditorium and new columns adjacent to the existing.
4.5	What will provide stability in future?	As existing.
4.6	Have any major structural defects been discovered?	No.
4.7	Are any special precautions or procedures necessary before the works begin in earnest?	Confirm foundation size beneath the existing columns – trial pit at each location required.
4.8	Are any unusual risks anticipated in the execution of the works?	No
4.9	Are there any special sequences of alteration, repair or erection which need to be followed?	Beam restraints to be installed after installation of the rigging support beams.
4.10	Define imposed load capacities to be achieved.	Refer to Theatre Plan's loading diagram for rigging loads. Existing stage / floor loads remain.
4.11	Are any walls, floors or their coverings being removed in the works which might lead to temporary loss of stability in the building?	No

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5.0 BUILDING IN USE		
5.1 Are any elements of the structure expected to fatigue or wear or require ongoing maintenance and repair work during the design life of the building?	No	
5.2 Are there any elements in the civil engineering works (e.g., pumps, catch pits, silt traps, permeable paving) that require maintenance during the design life of the building?		N/A
5.3 Are regular ongoing inspections required – define frequency.	No	
6.0 DEMOLITION AT THE END OF DESIGN LIFE		
6.1 Are any special procedures needed due to method of construction or erection?		To be demolished in opposite sequence from erection.

Signature of Project Engineer:



Date: 31.01.24

Signature of
Director/checker

Duis Beady

Date: 31/01/2024