Designer's Risk Assessment

General Note
During the design stages of a project, designers are required to maintain a "Hazard Elimination and Management Schedule". The 'schedule' records the various significant (high risk) hazards identified by the designer(s) below and were they have been able, details of how they have been eliminated.
It is recognised that not every hazard can be 'designed out' and therefore the schedule will also be used to record the residual risks of which the designer(s) are aware.
The Schedule provides an audit trail of the design process and may also be used as evidence in the event that a designer is required to defend his or her actions in any HSE investigation.
Copies of both documents should be passed to all members of the project team.

If in any doubt over your requirements or duties under CDM, please contact a senior manager.

Project Title	Midsomer Norton Town Hall - Alterations and Refurbishment
Design Displine	Architect
Prepared by	PH3 design
Date Prepared	10.02.2022
Job Number	ph3_014_001

Notes
1. This section of the procedure includes a list of potential hazards pertaining to a wide range of situations which may occur across an architectural project. Where particular categories do not ordinarily affect an individual business unit, this document may be edited to more accurately reflect the work carried out.
2. An individual item or a whole section (by ticking the heading) can be noted as not applicable showing you have considered the hazard area and judged it to be not applicable.
3. The list of potential hazards is not exhaustive, and all sections can be added to, or additional sections added, as required. Reference to the RIBA Plan of Work may be helpful.
4. All items considered by the designer as having a potential high risk must be addressed on the seperate 'Hazard Elimination Management Schedule'. Low risk activities can also be included if considered appropriate.

Potential Hazards Arising From:		Risk (without designer's elimination / management measures)			Comments
Ref:		**Not Applicable**	**Low- NO Action Required**	**High – Action NEEDED**	
1	**Existing Environment**				
1.1	Existing buildings		√		Boundaries and access adjacent to pavement and Market Square.
1.2	Previous/existing land/ structures	√			
1.3	Roadways	√			
1.4	Railways	√			
1.5	Water course	√			
1.6	Ground conditions:	√			
	• Contamination		√		Presence of Radon accounted for in new ground floor design.
	• Ground water	√			
	• Instability	√			
	• Mineral / mine workings	√			
1.7	Access restrictions			√	Ensure site compound is secure, and access into building separates Contractors from Public. Consider forming new openings at rear of the building early on in programme.
1.8	Adjacent properties		√		Minimise dust and noise to surrounding properties.

1.9	Concurrent site activities			√	Second Floor of building to be occupied during part of the works.
1.10	Interface with the public			√	Removal of windows on Market Square and High Street elevartions especially, to be carefully managed to protect the public. Management of occupation of Second floor to be considered.
1.11	Occupied premises			√	The premises will be partially occupied during the construction phase.
1.12	Structural instability		√		Condition of existing structure has been reviewed by Structural Engineer.
1.13	Fragile materials		√		Existing internal linings to be removed so as not to damage existing stone / masonry walls behind. Condition of stonework. Brickwork to be inspected and reported to architect.
1.14	Hazardous materials			√	Asbestos survey has identified 3 area where asbestos is present.
I	Land use	√			
1.16	Traffic	√			
1.17	Others (insert as necessary)	√			
2	**Existing Services**				
2.1	Underground				
	• Electrical		√		New incoming supply and electrical services to M&E design / Specification.
	• Gas		√		Existing gas services to M&E design / Specification and to be checked for compliance with relevant regulations.
	• Water		√		New water connection provided to M&E design / Specification.
	• Telecommunications		√		New telecommunications provided to M&E design / Specification.
	• Others (insert as necessary)	√			
2.2	Overhead Services				
	• Electrical	√			
	• Telecommunications		√		High level cable to side elevation from Barclays Bank Building next door.
	• Others (insert as necessary)	√			
3	**Earthworks**				
3.1	Deep excavations			√	Excavations for foundations to new columns and Ground Floor Slab to be 1.7m deep.
3.2	Slope / ground stability	√			
3.3	Ground water / water courses		√		Culverted water course below Market Square. Check excavations for evidence of unexpected ground water.
3.4	Plant movements		√		
3.5	Interface with services (refer to 2.1)		√		New water main to be co-ordinated with groundworks for new ramp access. Impact on Phase 2 works, incuding underground drainage to be considered.
3.6	Contamination (ground / water) (refer to 1.6)	√			
3.7	Adjacent structures (refer to 1.8)	√			
3.8	Others (insert as necessary)	√			
4	**Foundations**				
4.1	Adjacent buildings/structures			√	Excavations for foundations to new columns and Ground Floor Slab to be 1.7m deep.
4.2	Deep excavations			√	Excavations for foundations to new columns and Ground Floor Slab to be 1.7m deep.
4.3	Plant movements		√		
4.4	Interface with services	√			
4.5	Contamination (ground / water)	√			
4.6	Ground water		√		Occasional flooding to basement.

4.7	Confined spaces		√		Low headroom in basement. Works to serivces to take this into account.
4.8	Piling:	√			
	• Noise	√			
	• Vibration	√			
	• Contamination	√			
	• Plant	√			
4.9	Grouting:	√			
	• Drilling work	√			
	• Dust	√			
	• Pollution	√			
4.1	Stability of structure		√		Existing structure to be monitored by Structural Engineer during excavation works.
4.11	Others (insert as necessary)	√			
5	**Services Installation**				
5.1	Excavations		√		Location of services trenches to be confirmed by M&E consultant.
5.2	Ground water	√			
5.3	Ground conditions		√		Presence of Radon know. Ground condition risks to be reported by Structural Engineer.
5.4	Existing services		√		Any Existing services to be retained, to be checked by M&E consultant.
5.5	Testing operations		√		Testing of all new electrical and plumbing installations to be carried out by suitably qualified professional. Certificates of testing provided to lead designer and circulated to client for file record.
5.6	Lifting operations			√	Large plant (Air Handling Unit) to be installed at high level.
5.7	Adjacent structures / activities	√			
5.8	Maintenance		√		Services installation to be assessed regularly by suitably qualified person.
5.9	Contamination	√			
5.1	Others (insert as necessary)	√			
6	**Drainage Works**				
6.1	Excavations		√		New drainage connections to rear of building for temporary drainage from escape door. Requirement for excavations, inlcuding invert levels and falls, to be confirmed by Structural Engineer.
6.2	Ground water	√			
6.3	Ground conditions	√			
6.4	Confined spaces	√			
6.5	Leptospirosis / Weils disease		√		Works not to be undertaken during times of flooding. Full PPE to be worn by persons on site at all times.
6.6	Existing services		√		Location of existing drainage services below ground indicative only. Services to be located on site. Contractor to scan ground before excavations…
6.7	Manual handling	√			
6.8	Lifting operations	√			
6.9	Maintenance	√			
6.1	Sewage	√			
6.11	Traffic	√			
6.12	Contamination (ground / water)		√		Works not to be undertaken during times of flooding. Full PPE to be worn by persons on site at all times.
6.13	Hepatitis B / Tetanus		√		Works not to be undertaken during times of flooding. Full PPE to be worn by persons on site at all times.
6.14	Others (insert as necessary)	√			
7	**Highways**				

7.1	Traffic management		√		Deliveries to be managed and co-ordinated with public access to and around the site.
7.2	Adjacent traffic		√		Market Square to be used as public parking area. Avoid dust and damage to adjacent vehicles.
7.3	Construction materials		√		Deliveries to be timed to avoid busy periods on High Street and Market Square. Storage of materials to be away from high traffic areas.
7.4	Structural works	√			
7.5	Adjacent structures	√			
7.6	Noise	√			
7.7	Vibration	√			
7.8	Others (insert as necessary)	√			Waste skips to be located away from public highway and building.
8	**Steelwork Construction**				**New steelwork generally.**
8.1	Working at height			√	Suitable access arrangements to be made for new steelwork at Assembly Floor Level.
8.2	Lifting operations			√	Large pieces of steel installed to Market Hall, and in Assembly Room Floor.
8.3	Temporary stability			√	Ensure support of existing central beam and existing floors during new structural works.
8.4	Connections			√	Consider access to form new steel connections within Assmebly Room floor zone.
8.5	Unusual sequence			√	Central wall supporting main beam to be used as support while new steelwork installed.
8.6	Materials, eg paints	√			
8.7	Consideration of future maintenance			√	Steel below damp proof membrane not accessible following completion of works.
8.8	Others (insert as necessary)	√			
9	**Concrete Construction**				**Proposed new beam & block floor ground floor.**
9.1	Working at height	√			
9.2	Plant restrictions		√		Access for lifiting equipment limited to exisitng opening widths.
9.3	Lifting operations		√		Method statement for safe lifting to be provided by contractor.
9.4	Noise	√			
9.5	Vibration	√			
9.6	Temporary instability			√	Excavations for foundations to new Ground Floor Slab to be 1.7m deep.
9.7	Pre/post tensioning	√			
9.8	Materials	√			
9.9	Maintenance	√			
9.1	Joints (scabbling should not be undertaken)	√			
9.11	Others (insert as necessary)	√			
10	**Masonry Construction**				**Infill of exisitng walls**
10.1	Manual handling			√	Large sections of stone potentially required for new infill works.
10.2	Lifting operations	√			
10.3	Materials	√			
10.4	Temporary stability				
10.5	Working at height			√	Window infill at High Level.
10.6	Dust	√			
10.7	Durability	√			
10.8	Catastrophic collapse	√			
10.9	Others (insert as necessary)	√			
11	**Timber Construction**				**Existing Structural Timber**
11.1	Materials	√			
11.2	Working at height	√			

11.3	Temporary stability		√		Exisitng floors may require temporary support.
11.4	Lifting operations	√			
11.5	Manual handling	√			
11.6	Fire		√		Existing timbers may become exposed during the works. Contractor to ensure suitable mitigation / safety measures are in place.
11.7	Dust	√			
11.8	Others (insert as necessary)		√		Check all existing timbers for evidence of wet rot, dry rot, insect / fungal attack etc. and report to architect.
12	**Cladding**				
12.1	Lifting operations	√			
12.2	Manual handling	√			
12.3	Maintenance / cleaning	√			
12.4	Others (insert as necessary)	√			
13	**Glazing**				**Replacement glazing, Secondary glazing and frameless glazing.**
13.1	Lifting operations			√	Large sections of glazing to be installed/
13.2	Manual handling		√		Method statement for manual handling to be provided by contractor.
13.3	Cleaning / maintenance		√		Guidance for ongoing maintainance to be provided to the client.
13.4	Others (insert as necessary)			√	Damage to exsiting panes to be reported to architect. Suitable access provided to replace original panes in-situ, at height.
14	**Mechanical/Electrical Systems**				
14.1	Access		√		Access to existing drainage to be maintained.
14.2	Existing services	√			
14.3	Manual handling			√	Large air handling unit installed at second floor level weighs approx 750kg.
14.4	Materials / substances	√			
14.5	Confined spaces	√			
14.6	Pressure systems	√			
14.7	Testing operations	√			
14.8	Fixings	√			
14.9	Working at height	√			
14.1	Maintenance	√			
14.11	Others (insert as necessary)	√			
15	**Railway Activities**				**N/A**
15.1	Train movements	√			
15.2	Overhead lines	√			
15.3	Electrified track	√			
15.4	Underground services	√			
15.5	Adjacent structures	√			
15.6	Ground stability	√			
15.7	Contamination	√			
15.8	Others (insert as necessary)	√			
16	**Demolition of Existing Structures**				
16.1	Services		√		Services requiring temporary or permanent disconnection, to be confirmed by M&E consultant.
16.2	Adjacent / adjoining structures	√			
16.3	Materials:				
	• Hazardous ie asbestos		√		

	• fragile		√		Existing histroic features to be protected during demolition. E.g. existing main beam, cast-iron column, timber windows and masonry walls.
16.4	Working at height			√	Removal of existing windows at high level. Removal of central, 2 storey high, supporting wall.
16.5	Temporary stability			√	Ensure support of existing central beam and existing floors during new structural works. Central load bearing wall to be left in situ until new steelwork in place.
16.6	Pre/post tensioning	√			
16.7	Noise		√		Minimise impact to adjacent properties
16.8	Vibration		√		Minimise impact to adjacent properties
16.9	Dust		√		Minimise impact to adjacent properties
16.1	Effect on usage of demolition materials	√			
16.11	Others (insert as necessary)	√			
17	**Future Demolition / decommissioning of new structure/installation**				**Possible Phase 2 works.**
17.1	Unusual sequence	√			
17.2	Pre/post tensioned element	√			
17.3	Materials	√			
17.4	Adjacent/adjoining structure	√			
17.5	Temporary stability	√			
17.6	Contamination during usage of demolition material.	√			
17.7	Others (insert as necessary)		√		Access ramp to rear escape and existing window to rear elevation (W.gf.012) to be removed, as part of potential Phase 2 works.
18	**Operation and Maintenance of Facility / Structure etc**				
18.1	Access		√		Guidance for ongoing maintainance to be provided to the client.
18.2	Safety equipment		√		Guidance for ongoing maintainance to be provided to the client.
18.3	Testing / inspection		√		Guidance for ongoing maintainance to be provided to the client.
18.4	Procedure		√		Guidance for ongoing maintainance to be provided to the client.
18.5	Contamination during usage of demolition material.				Guidance for ongoing maintainance to be provided to the client.
18.6	Others (insert as necessary)	√			
			Yes	**No**	
19	**Use of the structure as a workplace**				
19.1	Does the proposed use of the structure / premises include the intention for it to be made available to any person as a place of work		√		
19.2	If yes; the design and materials used must take in to account the provisions of the Workplace (Health, Safety and Welfare) Regulations 1992		√		