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RISK ASSESSMENT & METHOD STATEMENT

Document Register No: RaMs 5532/1 (First Issue)

Customer: Coniston

Site: British Museum

Drawing No: 1039-03-P2 and 1039-05-P2

Title: Scaffold Gantry, Lifting Structure and Temporary Roof

	Date	Author	Primary Review	Description of the revisions
1	16-Nov-07	Steve Kearney	Alan McShane	First Issue

Document received by Lead Scaffolder:

Note: you are responsible for ensuring that you, and all the operatives under your direction, work safely at all times. You must also ensure that you and all scaffolders wear appropriate PPE, including harnesses, at all times while at work, and that all scaffolders clip on to a suitable anchorage point prior to working near any unguarded leading edges.

VARIATIONS TO METHOD STATEMENT: If work cannot proceed according to this method statement, all work activities must cease and the client and your supervisor must be contacted

Name:.....

Signed:.....

Date:.....

Document received by Coniston

Name:.....

Signed:.....

Date:.....

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1. Scope of Works

1.1 General Notes

This Risk Assessment/Method Statement (RaMs) describes the Safe System of Work to be used for the erection of *The Gantry, Lifting Structure and Temporary Roof* to the British Museum, for refurbishment works. The work is programmed to start December 2007.

Note: all references to the "client" refer to Coniston.

Please refer to drawings, 1039-05-P2 & 1039-03-P2 when reading these RaMs.

1.2 Gantry Scaffold

Tube, beams and materials will be used to form a roof level loading gantry – please refer to drawing 1039-05-P2 – which will be erected in one continuous operation. The gantry will be double boarded with a polythene sandwich, with a double guardrail and toeboards fitted to the perimeter. The completed structure will allow a loading of 3.00KN per square metre. SWL signs will be fixed to the scaffold, with 2m high guardrails used to segregate areas for different materials.

1.3 HAKI Temporary Roof

Tube, beams, HAKI roof components and materials will be used to form a HAKI roof – please refer to drawing 1039-03-P2 – which will be erected in one continuous operation.

Note: The skylights will be protected prior to work starting with heavy-duty black rubber matting.

The roof will be supported off 2no scaffolds, which will be founded on one side off steelwork and on the other side with ladder beams resting on walls (protected by sand bags and scaffold boards). The scaffolds will be tied down with kentledge and bolted ties, as per the drawing, and the scaffold will be encased in monarflex sheeting.

1.4 Lifting Structure

Tube, RSJ lifting beam and materials will form a 1000kg lifting beam fixed to the underside of the HAKI roof – please refer to drawing 1039-03-P2 – which will be erected in one continuous operation. A temporary scaffold will be erected from the HAKI roof scaffold to erect the lifting rail, which will be dismantled after use. Please note that, for the dismantle of the lifting rail, the temporary scaffold will have to be re-erected.

2. Project Organisation for Health and Safety

2.1 Contact Numbers

- 1) Office Contact Number: 020 8980 1155
- 2) Emergency Contact Number: 07860 114 400
- 3) Neil Garner, Director: 07801 462 881
- 4) Alan McShane, Contracts Manager: 07801 462 870
- 5) Darren Clinton, Contracts Supervisor: 07801 462 858
- 6) Lead Scaffolder: TBA

2.2 Site Visits

- 1) Alan McShane the contracts manager, or Darren Clinton the Contracts Supervisor, will visit the site at least once a week.
- 2) They will also be in daily contact with the lead scaffolder and will be on call if the client has a problem or wishes to discuss any work items.
- 3) TRAD's safety team will regularly visit the site.
- 4) TRAD's management team and lead scaffolder will listen to any concerns that the client has and act on any reasonable request to improve safety and quality control.

3. Risks and Controls

3.1 There are 5 no key safety issues involved in the erection/dismantle of the Access Scaffolding:

- 1) There is a risk of scaffolders falling from height during the erect/dismantle of the scaffolds.
- 2) There is a risk of other operatives falling from height while working on the scaffold.
- 3) There is a risk of scaffolders dropping material in the erection/dismantle of the scaffolds.
- 4) There is a risk of other operatives dropping materials while working on the scaffold.
- 5) There is a risk of a scaffold collapse.

Note: For full details of the hazards and risk control measures please refer to the Erection Methodology (attachment A) and the Risk Assessment (attachment B).

3.2 Summary: The main safety control measures to be implemented are:

- 1) Although scaffolders will be trained in the use of SG4:00 (and briefed by their supervisor on SG: 05), the approved recommendations in the construction/dismantling of access scaffolds, TRAD's supervisor and lead scaffolder will brief them to wear, and ensure that they use, harnesses at all times while working on exposed edges. Scaffolders will check harnesses daily, with TRAD's supervisor inspecting each harness weekly.
- 2) Only trained, experienced and competent scaffolders will erect scaffolding. After the scaffold is completed, TRAD (with the invited client's scaffold inspector) will inspect the scaffold before use, and hand it over to the client.

Note: TRAD will fix warning signage – such as, for instance: “incomplete scaffold” signs – together with barriers preventing unauthorised access to the area, while TRAD erects/dismantles scaffolding.

- 3) Scaffolders will erect the scaffold according to these RaMs and the drawings. All lifts will be progressively boarded and guardrailed, and all scaffold material will be stowed safely and neatly on the scaffold, with fittings in sacks. TRAD will segregate the area off in which the erection/dismantle will take place (with temporary barriers); and warning notices will be displayed so that the other trades and non-site staff are diverted away from the area while work is carried out.

- 4) All working lifts will be handrailed and boarded with toeboards, and the entire scaffold will be encased in monarflex sheeting.
- 5) Scaffolders will erect the scaffold to the drawing, paying special attention to the tie detail. TRAD's supervisor will also ensure that the scaffold has been erected according to the drawing and these RaMs. Although TRAD will regularly inspect the scaffold, the client will also conduct regular work place inspections to ensure that the gantry is not overloaded and to ensure that other trades do not alter or dismantle the ties, or remove the kentledge.

4. Access/Egress

4.1 Personnel:

- 1) All TRAD operatives will be inducted at the client's site offices.
- 2) TRAD will comply with the client's access/egress systems already in place on the site for both men and deliveries.
- 3) TRAD personnel will sign in and out each day at the client's site offices.
- 4) They will comply with all the client's security arrangements.
- 5) They will keep to all designated pathways.
- 6) TRAD's supervisor will brief all scaffolders on dealing with railway personnel. They will be briefed to be courteous to all railway staff/members of the general public on accessing and egressing the site, and to pass on any queries to the client's management team. Moreover, because of the possible interface with women in the area, TRAD will also brief scaffolders on the need to refrain from wolf whistling and behaving in any way that could be construed as sexual harassment.

Note: neither TRAD nor the client will tolerate such behaviour. Those caught doing so will be removed from site and face dismissal.

4.2 Deliveries:

- 1) The lead scaffolder will inspect and co-ordinate the delivery of materials.
- 2) Deliveries will be co-ordinated with the client's Logistics Co-ordinator and will be booked in advance.

Note: TRAD envisages that one lorry per day will be sufficient for the erection/dismantle.

- 3) For the erect/dismantle, lorries will arrive on site and, with the aid of the client's traffic marshals, park in the designated space for unloading.
- 4) TRAD drivers will obey all site signage and keep to designated routes.
- 5) TRAD drivers will follow the directions of the client's traffic marshals at all times.
- 6) TRAD drivers will wear appropriate PPE if they leave their lorry.
- 7) They will be briefed to be courteous to all members of the railway staff, general public, and other road users, on accessing and egressing the site, and to pass on any queries to the client's management team.
- 8) Materials will be offloaded by HLAB and craned onto the roof, making sure to only land material in designated areas and not to overload the roof.

Note: All materials delivered will be inspected for worthiness before use. Should any defective items be found, they will be segregated for removal.

5. Lighting

- 1) TRAD will not require any additional lighting beyond the general access lighting (and emergency lighting) that the client will supply for their own operatives' needs

6. Plant and Equipment

6.1 Plant

- 1) HIAB lorry
- 2) Drill and reciprocating saw

6.2 Equipment

- 1) LAYHER and HAKI components, beams, Excalibur tie bars and M12 bolts (and chemical ties), galvanised scaffold tube, steel ladders, boards and couplers.
- 2) RSJ running rail
- 3) Monarflex sheeting, netting when required
- 4) Sand bags
- 5) Red and white UPVC reflective barriers, and warning signage.

6.3 P.P.E

- 1) Safety Helmet EN 397
- 2) High Visibility Jacket/Waistcoat
- 3) Long sleeve/short sleeve shirt/T-shirt polo jersey
- 4) Long trousers/overalls and gloves
- 5) Full body harness EN 361:1992
- 6) Shock absorber lanyard EN 355: 1992
- 7) Inertia Reel EN 360: 2003
- 8) Foot protection (steel toe cap and mid sole) EN 345:1
- 9) Safety Glasses (when required)

6.4 Welfare

- 1) Agreed shared facilities with the client in their designated site facilities.

7. Training Certification

- 1) All TRAD scaffolders will be certificated:
 - a) Lead Scaffolders to hold CISRS Advanced Scaffolders Record Card
 - b) Basic Scaffolders to hold CISRS Basic Scaffolders Record Card
 - c) Trainee Scaffolders to hold CISRS Trainee Record Card
- 2) All operatives are trained in the use of Fall Arrest Equipment to comply with recommendations of the *National Access and Scaffolding Confederation Safety Guidance Note for the use of Fall Arrest Equipment during scaffolding operations, SG4:00*
- 3) All scaffolders are trained in the use of the *National Access & Scaffolding Confederation SG4:00 approved recommendations in the construction/dismantling of access scaffolds*. TRAD's supervisor will also brief scaffolders on SG4:05
- 4) Competent HIAB operator to be provided by TRAD (Loading/unloading TRAD vehicles)
- 5) Competent CTA slinger/signaller to be provided by TRAD (Loading/unloading TRAD vehicles)

Note: Copies of all relevant certification are kept in TRAD's head office and are available on request.

8. Hazardous Materials and Substances

- 1) Scaffolders will adhere to the manufacturer's guidelines on the chemical tie packets.
- 2) All waste material will be disposed in appropriate COSHH waste bins.

9. Waste Management

- 1) TRAD scaffolding will create the minimum of waste on the site. Any off cuts of tubes or boards, from tubes or boards that have to be cut to size, will be sent back to the yard to be reused on other sites.
- 2) In the event scaffolders do create waste, however, TRAD's supervisor will brief all operatives to place rubbish in the appropriate bin or skip.

10. Special Control Measures (and references)

10.1 Control Methods to Protect the Public, Non-Site Staff, and Other Operatives

TRAD is well aware that there is an inherent danger in the erection/dismantling of scaffolding near the general public, other site operatives and/or non-site staff and these dangers are reflected in both the Erection Methodology (Appendix A) and in the Risk Assessment (Appendix B).

- 1) TRAD's contracts supervisor will brief all operatives to work to these RaMs and to the drawings. He will also brief them that if work cannot proceed according to these RaMs all work activities must cease and the client and the supervisor must be contacted

10.2 Security Control

- 1) All operatives will follow any security system, which the client puts in place.
- 2) TRAD will brief all scaffolders to report unauthorised visitors to the site agent immediately.

Note: scaffolders must not physically challenge any unauthorised person who steps into the cordoned off area; instead, they are to halt work and contact the client's shift manager who will deal with the intruder.

- 3) Although the client will be ultimately responsible for installing protection systems to prevent unauthorised access to TRAD scaffolds, TRAD's lead scaffolder will ensure that all loose ladders are secured during the erection/dismantle.

10.3 Rescue Plan

- 1) TRAD's supervisor will brief scaffolders about emergency procedures.
- 2) In the event of a scaffolder falling in a harness, scaffolders should immediately ring the emergency services and then contact the client.

Note: TRAD's supervisor will also brief the men to wear inertia reels when working over voids to minimise the risk of a scaffolder remaining in a harness too long.

- 3) At no time should other scaffolders endanger themselves in order to try to affect a rescue. Scaffolders will be briefed that they may affect a rescue only if the fallen scaffolder can be safely be lifted onto the boards by other scaffolders situated behind a handrail, clipped on, and working on a fully boarded lift.
- 4) If the victim is conscious rescue may be affected by the following: 2no scaffolders must clip their lanyard to a suitable point above their heads. They must then grasp the victim and drag him onto the boarded platform. He must be told to rest and to have his situation medically checked. He may not return to work until the supervisor

and site manager are convinced he is well enough to work. In the event that the victim is rendered unconscious in the fall, scaffolders must ring the emergency services and follow their advice.

10.4 First Aid

- 1) First Aid facilities are to be located at the main site offices.
- 2) The client will have a First Aid representative on site.

10.5 Pollution Control Arrangements

- 1) TRAD will use the minimum of well-serviced plant; TRAD's supervisor will brief scaffolders to report any incidents to the site agent immediately.
- 2) TRAD's supervisor will brief scaffolders to keep all noise to a minimum at all times.
- 3) TRAD will make the minimum of dust.
- 4) TRAD's supervisor will brief scaffolders to ensure that all chemical tie containers are disposed of in appropriate waste bins.

10.6 Fire Procedure

- 1) TRAD's supervisor will brief operatives to use the client's fire extinguishers in the event that they notice a small fire
- 2) If the fire appears too large to safely handle they will be briefed to raise the alarm and to call for assistance – they are not to put themselves in any danger.
- 3) After raising the alarm, they will then go to the nearest muster point.

10.7 Legislation:

- 1) The Health & Safety At Work Act 1974
- 2) The Construction (Health, Safety & Welfare) Regulations 1996
- 3) The Construction (Design & Management) Regulations 1994
- 4) The Management of Health & Safety at Work Regulations 1999
- 5) The Provision & Use of Work Equipment Regulations 1998
- 6) The Lifting Operations & Lifting Equipment Regulations 1998
- 7) The Personal Protective Equipment at Work Regulations 1992

10.8 References:

- 1) Designer's Hazard Identification – PART 1 & PART 2
- 2) National Access & Scaffolding Confederation SG4:00 (and SG4:05) approved recommendations in the construction/dismantling of access scaffolds
- 3) CITB Construction Site Safety Tool Box Talks (GT 700)
- 4) The Code of Practice for Access Scaffolds B.S.5973 and EN12811 Code of Practice for Access & working scaffolds & special scaffold structures in steel

Appendix A – Scaffold Erection/Dismantle Methodology

11. Pre Commencement of Works

- 1) TRAD Manager to communicate the contents of this method statement to all operatives carrying out the works and sign the method statement sign off sheet prior to starting works. A copy of the sign off sheet to be issued to the client before work commences (Appendix C).
- 2) All scaffolders to be given relevant Construction scaffolders Site Safety Toolbox talks prior to the erection or dismantle of the scaffold.
- 3) The area in which the erection/dismantle will take place will be segregated off by TRAD, with hazard tape or temporary barriers, and warning notices will be displayed so that other operatives are segregated from the area while erecting/dismantling works are being carried out.
- 4) All scaffolding erected will comply with The Code of Practice for Access Scaffolds B.S.5973 and the EN12811 Code of Practice for Access & working scaffolds & special scaffold structures in steel
- 5) All scaffolds will be erected according to the National Access & Scaffolding Confederation SG4:00 (and SG4:05) approved recommendations in the construction/dismantling of access scaffolds.
- 6) All working platforms will comply with the Statutory Legislation contained in Regulation 6 (Schedules 1&2) of The Construction (Health, Safety and Welfare) Regulations 1996, and ladders will comply with Regulation 6 (6) Schedule 5.

12. Commencement of The Works

12.1 Gantry Scaffold

Scaffolders will use tube, beams and materials to form a roof level loading gantry – please refer to drawing 1039-05-P2 – which will be erected in one continuous operation. Scaffolders will double board the gantry, with a polythene sandwich, and double guardrail and toeboard the perimeter. The completed structure will allow a loading of 3.00KN per square metre. Scaffolders will erect SWL signs to the scaffold, and also erect 2m high guardrails to segregate areas for different materials.

12.2 Erection Sequence (Gantry Scaffold)

The erection methodology sequence for the first lift and all subsequent lifts are as described in SG4:00 (and SG4:05) approved recommendations for the erection/dismantling of access scaffolds, including the following:

Note: scaffolders must be clipped onto a suitable point when working near unguarded leading edges.

12.3 Inspection Procedure for this Scaffold (and for all scaffolds detailed in these RaMs)

- 1) When the scaffolding is completed TRAD will conduct a Statutory Inspection as required by Regulation 29 (and schedule 7) of The Construction (Health, Safety and Welfare) Regulations 1996, and if satisfied that the scaffold is fit for use, and complies with design drawing, will complete a report to comply with Regulation 30 of those regulations (Scaffold Register)
- 2) TRAD will remove the “Scaffold Incomplete” signs and then the scaffold will be tagged and opened for access only.
- 3) The Scaffold tag will state “Access for Authorised Persons Only” and the client will be invited to inspect the scaffold.
- 4) TRAD’s designated Scaffold Inspector (and the invited client’s scaffold inspector) will inspect the scaffold to ensure that it complies with the sketch and the Method Statement and is fit for its intended use.
- 5) Once satisfied, the “Access for Authorised Persons Only” scaffold tag will be replaced and will define the permissible use (e.g. Heavy Duty) the number of working platforms and the S.W.L. per square metre.

This "Scafftag" (attached to the scaffold at the lowest access point) will be signed by TRAD inspecting the scaffold and will show the date of the inspection.

- 6) TRAD Handover Certificate will be issued to the client
- 7) All subsequent inspections will be carried out according to Statutory Legislation, which will be once a week or after inclement weather.
- 8) Should the scaffold be found to be unfit for use on a subsequent inspection. The "Scafftag" will be removed to display the red 'DO NOT USE SCAFFOLD' sign on the holder, the access ladder will be removed and "Scaffold Incomplete signs will be displayed. A Safety Inspection Report/Handing Over Certificate will be completed and issued to the client.
- 9) TRAD will report to the client (for information and review) and will instigate remedial works, and when they are complete, will undertake another (recorded) Statutory Inspection. When he is satisfied the scaffolding is fit for use, ladder access will be restored, warning signs removed and the advisory "Scafftag" reinserted.

12.4 Dismantle Sequence (and for all scaffolds detailed in these RaMs)

The dismantle methodology sequence for these lifts, and for all subsequent lifts, is the reverse of the erection procedure (and as described in SG4:00, and SG5:05, approved recommendations for the erection/dismantling of access scaffolds).

Note: no material is to be "bombed". All material must be safely lowered to ground. Neither TRAD nor the client will tolerate scaffolders working in an unsafe manner. Those caught doing so will be removed from site and will face dismissal.

12.5 HAKI Temporary Roof

Scaffolders will use tube, beams, HAKI roof components and materials to form a HAKI roof – please refer to drawing 1039-03-P2 – which will be erected in one continuous operation. Scaffolders will initially erect 2no scaffolds, which will be founded on one side off steelwork and on the other side with ladder beams resting on walls (protected by sand bags and scaffold boards). Scaffolders will tie the scaffold with a combination of bolted ties and kentledge as per the drawing, and encase the scaffold in monarflex sheeting.

12.6 Erection Sequence (HAKI Temporary Roof)

Note: Scaffolders, with light lines, will pull and secure heavy-duty black rubber matting over the skylights as protection prior to work starting.

Erection Sequence: Independents

The erection methodology sequence for the first lift and all subsequent lifts are as described in SG4:00 (and SG4:05) approved recommendations for the erection/dismantling of access scaffolds, including the following: all the independents will be erected according to the drawing, with all scaffolders wearing full PPE and clipping on to a suitable anchorage point prior to working near any unguarded leading edges.

Erection Sequence: HAKI roof

- 1) Material will be craned onto the roof, with scaffolders taking care not to overload roof and to stack material neatly.

Note: only advanced scaffolders will erect the HAKI roof. All scaffolders working on top of the roof will be harnessed onto a suitable point at all times and use crawling boards where necessary.

- 2) HAKI beams will then be passed up from the roof and fixed into the required position by every line of standards.
- 3) Once all the beams are fixed into position, they will be laced together.

Note: this also includes the erection of "fixing beams" to the HAKI beams, and to which the plastic sheeting is later nailed and fixed to, and which is described in the following:

- 4) Each scaffolder working on top of the roof will erect a Jordan clamp to the scaffold. The scaffolder will then fit the inertia reel to the Jordan clamp and to the Dorsal ring on their harness, which will give them approximately 6m of safe working area.
- 5) A roll of proprietary plastic sheeting will be rolled up the roof and tacked into position on the western elevation, and scaffolders will work progressively eastwards.
- 6) Metal plates will then be fixed to the edge of the first sheet and screwed into position holding down the left edge of the first roll of plastic sheeting (tacks will hold down the other right hand edge until the second roll is tacked into position).
- 7) The next roll will be tacked into position. Metal plates will then be screwed into place over the overlapping edges of the two rolls.

Note: if scaffolders do not finish the roof in one shift then the leading edge of the last roll of plastic sheeting at the end of each shift will be temporarily fixed into position by screwed metal plates for safety.

- 8) The plastic sheeting overhanging the roof will be tied to the independent overlapping the existing monarflex sheeting to create a water resistant seal.

Erection Sequence: Monarflex sheeting

Note: TRAD's supervisor must ensure that designated ties (as the agreed drawing) are installed prior to commencement of monarflex sheeting. Scaffolding may only be sheeted when the top lift is complete.

- 1) Scaffolders, working safely behind a handrail on fully boarded lifts, will fix monarflex sheeting.

Note: The erection of netting/monarflex will not be started if TRAD's supervisor/lead scaffolder considers the weather to be too windy.

- 2) Scaffolders will partially monarflex within the confines of the independent and cut the roll into manageable sections.

Note: the whole roll will not be passed and rolled out on the outside of the lift in case the roll is dropped.

- 3) Instead, one end of a strip will be fed outside the outside line of standards and temporarily fixed to the outside ledger with proprietary ties.
- 4) The remainder of the strip will be fed outside the independent progressively and fixed temporarily to a 4m length of the outside ledger in a concertina fashion (in the same manner that a curtain is bunched) with proprietary ties.
- 5) Scaffolders will then, working within the confines of the boarded lift, stretch the monarflex strip out and fix it permanently in its required position.
- 6) The monarflex will then be fixed with proprietary ties in the middle, top and the bottom of the roll in accordance with the manufacturer's recommendations.
- 7) This procedure will be carried out for the erection of all subsequent monarflex rolls.

Note: the erection of monarflex will be halted if TRAD's supervisor considers the weather is, or is liable to become, too windy.

12.7 Lifting Structure

Tube, RSJ lifting beam and materials will form a 1000kg lifting beam fixed to the underside of the HAKI roof – please refer to drawing 1039-03-P2 – which will be erected in one continuous operation. A temporary scaffold will be erected from the HAKI roof scaffold to erect the lifting rail, which will be dismantled after use. Please note that for the dismantle of the lifting rail, the temporary scaffold will have to be re-erected.

Note: the client's scaffold inspector must be invited to inspect the lifting rail, prior to handing over the lifting rail to the client.

12.8 Erection Sequence (Lifting Structure)

Erection Sequence: temporary scaffold

The erection methodology sequence for the first lift and all subsequent lifts are as described in SG4:00 (and SG4:05) approved recommendations for the erection/dismantling of access scaffolds, including the following: all the independents will be erected according to the drawing, with all scaffolders wearing full PPE and clipping on to a suitable anchorage point prior to working near any unguarded leading edges.

Erection Sequence: RSJ running rail

- 1) After the temporary scaffold has been erected, scaffolders will commence to erect the lifting rail.
- 2) This lift will be constructed with load bearing couplers, with supplementary couplers where indicated, to form lifting rail with S.W.L. 1000kg, as per the scaffold drawing.
- 3) Holding up either end of the lifting rail, two scaffolders will present the lifting rail up to the supported transoms.
- 4) A third scaffolder will fix the lifting rail to the transom with steel couplers.
- 5) This sequence will continue until the entire lifting rail required is fixed, together with all necessary tubes and bracing as required by drawing.
- 6) If the lifting rail is too heavy for two scaffolders then additional labour will be used to supplement them.
- 7) Scaffolders will then fix a lifting rail stopend to one end of the lifting rail. Two scaffolders will then place jockey onto lifting rail and fix the last stopend.
- 8) The client's scaffold inspector will then be invited to inspect the lifting rail, prior to handing over the lifting rail to the client.

Appendix B – Risk Assessment

SECTION OF WORK: **British Museum**

OPERATIONS: **Erection of Gantry, HAKI roof and Lifting Rail**

HAZARD	HAZARDOUS EVENT	INITIAL RISK			RISK CONTROL MEASURES	RESIDUAL RISK		
		L	S	DR		L	S	DR
Delivery of Scaffold Materials	Persons being struck by moving vehicles.(TRAD operatives & public) Damage to other vehicles/plant/materials	3	3	9	1) All deliveries will be co-ordinated with the client 2) Driver to comply with Site Traffic Rules and follow the directions of traffic marshals at all times 3) TRAD will install barriers and display warning signs as required 4) TRAD lorries will park in designated parking area for unloading 5) Site specific induction, safety Induction, CITB GT 700 Tool box talk No.22.2 6) All operatives to wear High Visibility Jackets/waistcoats and PPE as required 7) Lorry drivers will be courteous to all road users when accessing/egressing the site	1	3	3
Unloading of scaffold material	Operatives being struck by materials, crushing injuries, cuts & abrasions, back strain.	3	3	9	1) Competent TRAD Slinger/signaller and trained HIAB operator for mechanical lifting. 2) All personnel, including drivers outside their lorry, to wear appropriate P.P.E. 3) Tool box talks 4) All material will be unloaded where practical by mechanical means. 5) Trolleys or wheelbarrows will be used where necessary	1	3	3
Manual Handling	Slips trips, strains, pulled muscles, abrasions, cuts, foot injuries, back strain	4	2	8	1) TRAD will use designated walk ways 2) All personnel to wear appropriate P.P.E. (including gloves) 3) Access routes and walk ways to be kept unobstructed 4) Materials to be stacked/stored neatly 5) Materials to be handled mechanically whenever possible to minimise manual handling 6) CITB GT 700 toolbox talk No.9.1. 7) All operatives will fill in a TRAD health questionnaire upon induction. 8) TRAD supervisor will give specific training on manual handling	2	2	4

Defective scaffold materials	Injury to persons by failure of components, scaffold rendered unfit for use by defective components	2	4	8	1) Materials are inspected before leaving yard by the Yard Manager 2) Materials will be inspected before use by the lead scaffolder, & quarantined if found to be defective 3) Tool Box Talks 4) All items that require certification (e.g. ginny wheels) will be distributed with a copy of the relevant certificate available for inspection	1	4	4
Damage to Building	Damage to building delivering scaffold materials	3	3	9	1) If work cannot proceed according to the Method Statement, work must cease, and the client will be informed 2) The TRAD supervisor/lead scaffolder will inspect, supervise and coordinate all deliveries with the client. 3) Lorries/trolleys ferrying materials will use designated routes. 4) All operatives will be briefed by TRAD on preventing damage to the building fabric (for instance, breaking windows).	1	3	3

Diseases	Psittacosis & Weil's Disease (note: Weil's disease can be potentially fatal if not treated)	3	5	15	<p>1) Site specific Health, Safety, and Welfare Induction, defining hazards that may be encountered on this project</p> <p>2) Tool box talks from CITB GT 700 on First Aid (No.26), COSHH (No.33), Health on Site No. 41.1), Weil's Disease (No.41.2), and Hygiene (41.3).</p> <p>Note: TRAD's supervisor will brief scaffolders to be aware of the danger of diseases picked up from handling tube contaminated by, for instance, pigeon droppings and rat's urine, and will explain how wearing gloves and good hygiene will reduce the risks.</p> <p>3) Operatives to comply with all site hygiene rules</p> <p>Note: There will be no urinating on site. Any scaffolder caught doing so will be disciplined.</p> <p>4) Shared Welfare facilities, enabling hands to be washed prior to eating</p> <p>5) Seek immediate treatment for all cuts and abrasions at First Aid facilities</p> <p>6) Gloves to be worn at all times</p> <p>7) All waste to be disposed of in appropriate waste bins/skips</p> <p>8) TRAD supervisor /foreman will ensure that all waste is disposed of in appropriate bins/skips</p> <p>9) TRAD contracts manager/supervisor will advise operatives on skin disorders.</p>	1	5	5
C.O.S.H.H	Danger of contact and contamination.	3	3	9	<p>1) Scaffolders will follow the safe practices for the chemicals.</p> <p>2) TRAD will use the minimum of COSHH material when using chemical ties.</p> <p>3) Scaffolders will wear gloves and wash hands after the ties have been fixed.</p> <p>4) TRAD supervisor /foreman will ensure that all waste is disposed of in appropriate COSHH bins.</p> <p>5) Seek immediate treatment for all cuts and abrasions at First Aid facilities</p>	1	3	3

Falls from height (Scaffolders)	Death or serious Injury	3	5	15	<p>1) All scaffolders will be issued with Fall Arrest Equipment</p> <p>Note: scaffolders will wear harnesses at all times, and ensure that they clip onto a suitable anchor point prior to working near unguarded leading edges.</p> <p>2) All scaffolders will have Recorded training in the use of Fall Arrest Equipment</p> <p>3) Specific Method Statement will be provided to define Safe System of Work (the appointed lead scaffolder will have the responsibility of communicating the contents of the RaMs to all operatives. Signed copies will be kept for inspection).</p> <p>4) Toolbox talks on Work at Height (No.24. CITB GT 700)</p> <p>Note: TRAD supervisor will also brief scaffolders about the danger of horseplay, which can result in accidents.</p> <p>5) All scaffolders will be trained in the use of SG4:00 and briefed on SG4:05</p> <p>6) Harnesses will be checked daily (by user)</p> <p>7) The appointed lead scaffolder/supervisor will inspect all the scaffolders' harnesses and record his inspection weekly in a "Harness and Lanyard Inspection Register"</p> <p>8) TRAD Health and Safety representative to carry out a (recorded) three monthly visual inspection of all harnesses and maintain a log and remove and destroy all unsuitable harnesses.</p> <p>9) All lead scaffolders and contracts managers/supervisors will monitor PPE use and ensure that it is worn correctly.</p> <p>10) TRAD's supervisor will brief scaffolders to use inertia reels where appropriate</p>	1	5	5
Falls from working platforms (other trades)	Death or serious injury	2	5	10	<p>1) All working platforms to comply with Statutory Legislation</p> <p>2) Only competent persons to erect/alter/dismantle scaffolding.</p> <p>3) All Scaffolding to be inspected before use, and recorded in the scaffold register</p> <p>4) Client to conduct regular workplace inspections to check that the scaffold is not overloaded, no ties have been altered/removed, and that the scaffold has not been abused.</p>	1	5	5

Collapse of scaffolding & overloading	Injury to persons, damage to plant/materials	3	5	10	<ol style="list-style-type: none"> 1) Scaffolding to be inspected by TRAD weekly (or after inclement weather, or after it has been adapted). 2) All Scaffolding to comply with BS5973 and EN12811 3) Scaffold to comply with Statutory Legislation 4) Scaffold to be taken out of use if struck by moving plant /cranes/ vehicles, or undermined, until remedial works are effected 5) The client to control use, and conduct regular work place inspections 6) Loading on scaffolds not to exceed S.W.L. displayed 7) Weekly inspections to be recorded in Scaffold Register 8) Scaffolders will be briefed to report any possible abuses and report direct to TRAD supervisor. 9) Monarflex sheeting will be fixed to the scaffold with proprietary ties, but no tubes will be used to restrain sheeting (because the sheeting is designed to fail in high winds). 	1	5	5
Falling materials, including collision with scaffolding components, and tripping hazards (while scaffold is being erected/ dismantled)	Injury to persons, (scaffolders, public, other trades) damage to plant/materials	3	5	15	<ol style="list-style-type: none"> 1) Hazard tape (or barriers) to be installed to segregate all areas where scaffold operations will take place. 2) Warning signs to be displayed. 3) No materials to be left standing, unless tied 4) Scaffolders will adhere to Safe System of Work defined in Method Statement 5) All material will be stacked neatly with fittings in sacks 	1	5	5
Falling Materials (while scaffold is in use)	Injury to persons (scaffold users and public), damage to plant/materials	3	5	15	<ol style="list-style-type: none"> 1) All working platforms to comply with Statutory Legislation. 2) Scaffolders to erect all necessary measures 3) The client to conduct regular work place inspections 4) All materials to be stacked neatly 5) Monarflex sheeting will encase the scaffold, and it lapped in such a way to prevent material falling from scaffold. 	1	5	5
Partially erected scaffolds	Risk scaffolding operatives/ pedestrians by collapse or collision with scaffolding components.	3	5	15	<ol style="list-style-type: none"> 1) Scaffolders will erect all scaffolds by erecting a kicker lift first 2) Temporary braces will restrain scaffolds until ties can be installed. 	1	5	5



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Fire, explosions	Injury or death	2	5	10	1) Site specific Safety Induction to include Fire/Emergency Procedure 2) Provision of Fire Extinguishers 3) CITB GT 700 tool box on Fire Prevention & Control (17) 4) Information & site maps 5) Fire Drill 6) Fire Egress Routes to be clearly defined by the client.	1	5	5
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HAZARDS: Fire/Explosion - Mechanical Shock - Lifting/Moving objects -
Working surface/platform - Electrical Shock, Inundation - Intoxication
Health Impact - Poisoning, Contamination, Pollution of land water and air

LIKELIHOOD (L) = Frequent (5) - Probable (4) - Occasional (3) - Improbable (2) - Remote (1)

SEVERITY (S) = Catastrophic (5) - Major (4) - Reportable (3) - Serious (2) - Minor (1)

DEGREE OF RISK (DR) = LIKELIHOOD x SEVERITY

Prepared By: Steve Kearney.....

Date:.....

Independently Reviewed / Authorised By.....Date:.....

(See table above)

APPENDIX C – Sign Off Sheet

RISK ASSESSMENT/METHOD STATEMENT SIGN OFF SHEET FOR TRAD SCAFFOLDING

I have read & understood the risk assessment/method statement referenced above and I will undertake scaffolding operations according to the sequence of work detailed in the method statement.

If work cannot be carried out according to the method statement I will cease work and notify the appropriate Person

NAME	SIGNATURE	DATE

Appendix D Safety Briefing (TO BE USED IN CONJUNCTION WITH RaMs)

RISK ASSESSMENT METHOD STATEMENT NUMBER (RaMs): 5532.1						
OPERATION:		Erection and dismantle of Gantry, HAKI roof and Lifting Rail				
	Site Risks	Potential for harm			Site Control Measures	Training/ Certification Required (list)
		L	M	H		
1	Falling from height			X	1) All scaffolders trained in the use of Fall Arrest Equipment. 2) Harnesses will be checked daily (by user) and weekly (by supervisor) with details logged in the Harness Register. 3) Specific Risk Assessment/Method Statement (RaMs) will be provided to define Safe System of Work. Scaffolders to be trained in Fall Retrieval Techniques. All scaffolders trained in the use of SG4:00 (and briefed on SG4:05). 4) Scaffolders will wear all appropriate PPE including harnesses at all times while at work, and must clip onto a suitable anchorage point prior to working near any unguarded leading edges.	All operatives will be CSCS certificated and harness trained.
2	Falling material			X	1) All work areas be cordoned off with warning signs displayed. 2) All materials must be stacked safely, with fittings in sacks. 3) Scaffold must be encased in monarflex. 4) Lifting rail must be inspected before use by the client.	
3	Personal injury		X		1) All operatives will wear appropriate PPE. 2) Materials to be stacked/stored neatly, and handled mechanically whenever possible. 3) Operatives to be trained in manual lifting techniques. 4) Suitable and sufficient task lighting provided where necessary. 5) Toolbox talks.	All will be CSCS certificated. Only trained operatives to use machinery.
4	Environmental disturbance/ Inappropriate waste disposal		X		1) All waste to be put in appropriate waste bins/skips. 2) Operatives to comply with site hygiene rules. 3) Masks to be worn when necessary (for example, when drilling). 4) No shouting	
5	Negative interface with non-site staff, the general public and other trades.			X	1) TRAD will segregate others from scaffolding works with barriers and warning signs. 2) TRAD to brief all operatives on dealing with members of the public/ non-site staff and other trades. 3) TRAD to brief all operatives to pass onto the client's shift manager any comments/complaints from the general public, non-site staff and other contractors.	
6	Fire, explosion & death		X		1) Site specific safety induction to include fire/emergency procedure. 2) Provision of fire extinguishers, information and site maps and Fire drill and fire egress routes to be defined.	
Permits required		Personal Protective Equipment (list)			Personnel	
Hot works permit		Hard hat, harness, inertia reel, safety boots, high visibility jacket, safety glasses as required, gloves.			Alan McShane, Contracts Manager: 07801 462 870 Darren Clinton, Contracts Supervisor: 07801 462 858	