Safe System of Work Form SHE 4 – Safe Erection of Tower Crane			
To be completed when tasks involve multiple or complex activities that are not covered in their entirety by risk assessments and/or key procedures. Note: This form is only valid when sections K and L are completed and signed by the manager responsible, and all personnel involved.			
Site/project name:	**St Anns**	**Project no.:**	**2022-392-TC2**
Address:	**St** Anns Road, **London**, **N15** 3TD, **.**		
Client:	**Hill**		
SSOW No.	SSW-**2022-392-TC2**-E		
Name of Client Representative:	Damon Willicombe	**Contact Number:**	07734 848 900
Name of Responsible Manager/Supervisor: *(Sign and date Section K)*			

Original Prepared by:	J Robson	**Signed:**		**Date:**	
Reviewed by:		**Signed:**		**Date:**	

	No.	**Revised by**	**Signed**	**Date**
Revision:	01			
Changes				
Revision:	02			
Changes				

A: Brief description of work to be undertaken			
Summary of Work:	Safe System of Work for the erection of a **SAEZ TLS 65-10T SR** tower crane.		
Start date:	TBC	Duration:	2 Days

B: Work Equipment, Procedures and Competences required for Health and Safety					
Note: Include all equipment needed for a safe work environment. Do not include PPE – see section H.					
Job Details:					
Tower Crane Detail:	**SAEZ TLS 65-10T SR**	**TC Jib Length:**	**40.0** m	**Tower Height:**	**47.20** m
Mobile Crane Details:	Liebherr LTM 1200-5.1				
Main Boom:	62.755m	**Ballast:**	26.0t		
Outrigger Span:	8.89m x 8.30m	**Outrigger Mat Size:**	2.5m x 2.0m		
Maximum Anticipated Point Load:	53.0t	**Distributed Load:**	10.60t/m^2		
SWL:	**12.2t @ 16.0m Radius**				

B: Work equipment/Documentation required for a safe working environment

Note: Include all equipment/documentation needed for a safe work environment. Do not include PPE – see section H.

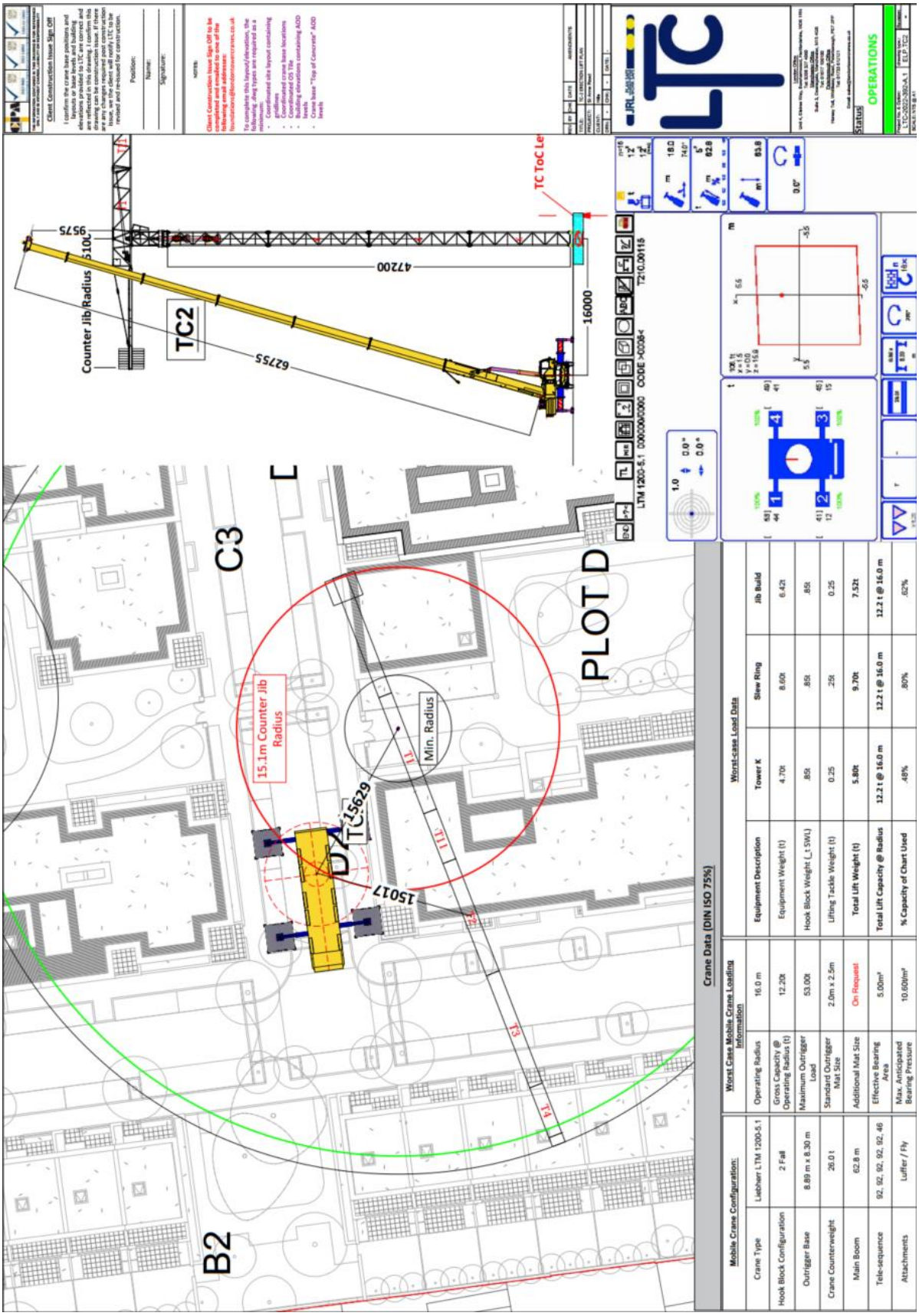
- Tower Crane Erection Drawing
- Tower Crane Configuration Drawing
- Tower Crane Foundation Design Information and Permit to Erect – Pre-Erection Report (Form LTC1 / Annex 1).
- Mobile Crane Ground Bearing Capacity Form (Form LTC2 – Annex 2)
- Loading Schedule (Form LTC3 – Annex 3)
- Risk Assessment and Briefing for Safe Erection of Tower Crane (Annex 4)
- Thorough Examination Report of mobile crane by independent inspection company (Report to be obtained from Mobile Crane Hire Company before work commences).
- Tower Crane floodlight power supply detail attached.
- Approved and inspected safety harnesses for erection crew.
- LTC Insurance Document
- Section (M) must be signed by client representative on first day of erection

Sign off Requirements:

- London Tower Crane **Erection Supervisor** to ensure **Pages 14, 15 &** Error! Bookmark not defined. are completed prior to any works commencing.
- London Tower Crane **Erectors** to sign off **Page 15** prior to any on-site works commencing.
- **The Client** must sign off **Page 16** prior to any on-site works commencing.

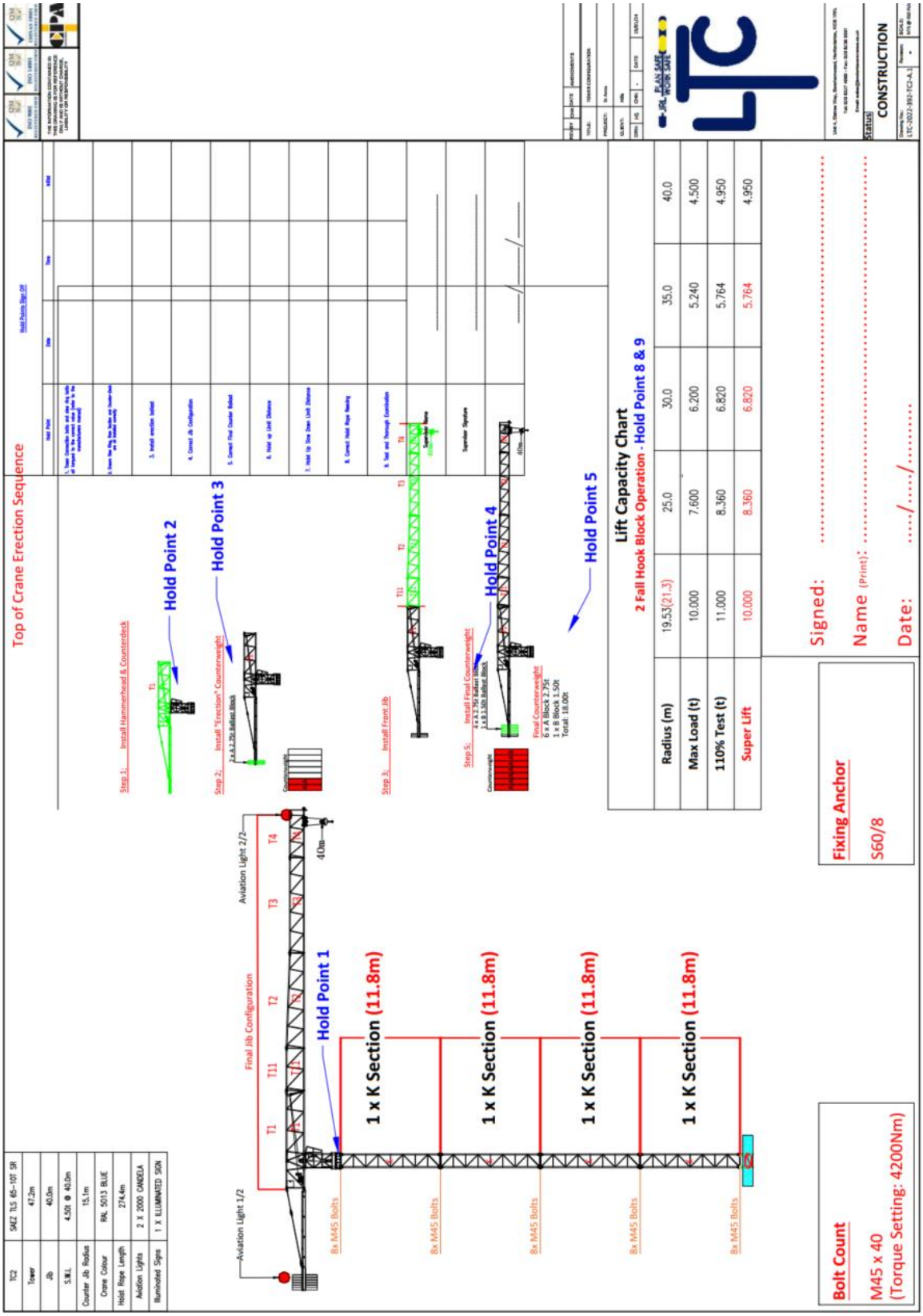
***Both sign off items MUST be completed prior to any tower crane being erected**.

LTC Tower Crane Erection Drawing attached as follows:



***Both sign off items MUST be completed prior to any tower crane being erected.**

LTC Tower Crane Configuration drawing attached as follows:



***Both sign off items MUST be completed prior to any tower crane being erected.**

LTC Lift Plan Chart attached as follows:

**Always refer to the tower crane manufacturer's manual for the erection sequence.*

Description			on transport				Erected		Jib	mobile crane - deductions : 1000 Kg				
Crane	Component	ID	Length	Width	Height	Weight	Height	Weight	40.0 m	Gross weight incl. chains (+250kg)	max radius to mobile crane	lifting capacity mobile crane	% of lifting capacity used	Boom length
TLS65-10SR	Slew ring	Slew Ring	4.40 m	2.00 m	2.00 m	6400 Kg	2.00 m	6400 Kg	1	7.7 te	16.0 m	12.2 te	63%	62.78 m
TLS65-10SR	Cab and platform	Cabin	3.00 m	1.15 m	2.35 m	1000 Kg	2.35 m	1000 Kg	1	2.3 te	16.0 m	12.2 te	19%	62.78 m
TLS65-10SR	Cabin + slew ring	Slew Ring + Cabin complete	4.40 m	2.00 m	2.35 m	6400 Kg	2.35 m	6400 Kg	1	7.7 te	16.0 m	12.2 te	63%	62.78 m
TLS65-10SR	Counterjib	Counterjib	11.94 m	1.80 m	0.60 m	2575 Kg	2.35 m	2575 Kg	1	3.9 te	16.0 m	12.2 te	32%	62.78 m
TLS65-10SR	Jib section 1	30-65m Jib (Heel)	11.80 m	1.25 m	2.30 m	6230 Kg	2.30 m	6230 Kg	1	7.5 te	16.0 m	12.2 te	61%	62.78 m
TLS65-10SR	Jib section 11	35-65m Jib	5.15 m	1.13 m	2.25 m	1330 Kg	1.65 m	1330 Kg	1	2.6 te	16.0 m	12.2 te	21%	62.78 m
TLS65-10SR	Jib section 2	30-65m Jib	11.60 m	1.13 m	2.25 m	2406 Kg	1.65 m	2406 Kg	1	3.7 te	16.0 m	12.2 te	30%	62.78 m
TLS65-10SR	Jib section 3	30-65m Jib	11.60 m	1.13 m	1.80 m	1935 Kg	1.65 m	1935 Kg	1	3.2 te	16.0 m	12.2 te	26%	62.78 m
TLS65-10SR	Trolley	Trolley	1.20 m	1.35 m	0.80 m	320 Kg	0.80 m	320 Kg	1	1.6 te	16.0 m	12.2 te	13%	62.78 m
TLS65-10SR	Hook Block	Hook Block	0.80 m	0.15 m	1.50 m	300 Kg	1.50 m	300 Kg	1	1.6 te	16.0 m	12.2 te	13%	62.78 m
TLS65-10SR	30.0m Complete Jib	Complete Front Jib + Hook	23.20 m	1.13 m	2.25 m	4961 Kg	2.25 m	4961 Kg		6.3 te	16.0 m	12.2 te	52%	62.78 m
TLS65-10SR	35.0m Complete Jib	Complete Front Jib + Hook	28.35 m	1.13 m	2.25 m	6291 Kg	2.25 m	6291 Kg		7.6 te	16.0 m	12.2 te	62%	62.78 m
TLS65-10SR	40.0m Complete Jib	Complete Front Jib + Hook	33.65 m	1.13 m	2.25 m	6934 Kg	2.25 m	6934 Kg	1	8.2 te	16.0 m	12.2 te	67%	62.78 m
TLS65-10SR	45.0m Complete Jib	Complete Front Jib + Hook	38.95 m	1.13 m	2.25 m	7464 Kg	2.25 m	7464 Kg		8.8 te	16.0 m	12.2 te	72%	62.78 m
TLS65-10SR	50.0m Complete Jib	Complete Front Jib + Hook	44.25 m	1.13 m	2.25 m	7934 Kg	2.25 m	7934 Kg		9.2 te	16.0 m	12.2 te	75%	62.78 m
TLS65-10SR	55.0m Complete Jib	Complete Front Jib + Hook	49.55 m	1.13 m	2.25 m	8310 Kg	2.25 m	8310 Kg		9.6 te	16.0 m	12.2 te	79%	62.78 m
TLS65-10SR	60.0m Complete Jib	Complete Front Jib + Hook	54.85 m	1.13 m	2.25 m	8636 Kg	2.25 m	8636 Kg		9.9 te	16.0 m	12.2 te	81%	62.78 m
TLS65-10SR	65.0m Complete Jib	Complete Front Jib + Hook	54.85 m	1.13 m	2.25 m	8884 Kg	2.25 m	8884 Kg		10.2 te	16.0 m	12.2 te	84%	62.78 m
TLS65-10SR	Ballast block A	Counterweight 2.75te	3.50 m	1.25 m	0.30 m	2750 Kg	3.20 m	2750 Kg	6	4.0 te	16.0 m	12.2 te	33%	62.78 m
TLS65-10SR	Ballast block B	Counterweight 1.5te	1.83 m	1.25 m	0.30 m	1500 Kg	1.83 m	1500 Kg	1	2.8 te	16.0 m	12.2 te	23%	62.78 m
Tower Build Components														
TLS65-10SR	Mast	K (11.8m)	11.80 m	1.64 m	1.64 m	5100 Kg	11.80 m	5100 Kg	4	6.4 te	16.0 m	12.2 te	52%	62.78 m

***Both sign off items MUST be completed prior to any tower crane being erected.**

LTC Sequence of Work:

Method of slinging must be detailed for each load – including weight of load and type of lifting equipment.

When tower crane sections are required to be stood vertically, they must be stood on bearers and suitably prepared/stable ground.

When tower crane sections require re-slinging, they MUST be laid horizontally on timber bearers to do this. They must NOT be allowed to be completely unhooked from the chains in a vertical position.

Day 1

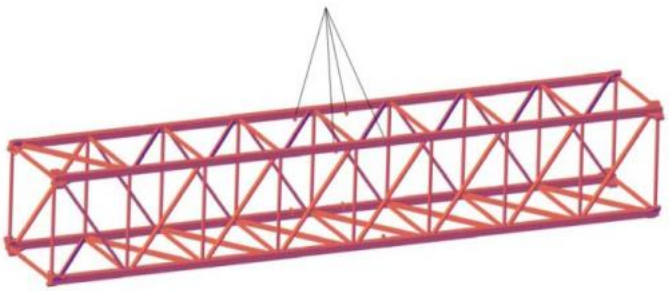
1. 07.00am Mobile Crane and associated transport to arrive on site and switch off engines for inductions and SSW Briefing

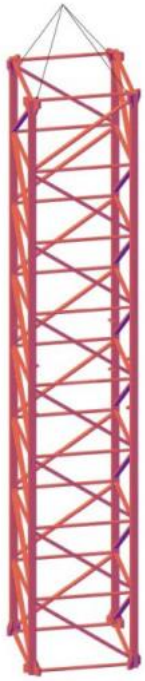
2. 08.00am after inductions and Briefing the Mobile Crane will rig as per Lift Pla LTC-2022-392-ELP-TC2, once rigged the operator will check wind speed and radius if all within tolerances proceed with Erection.

3. The slinger will sling the first 1 x 11.8m K Tower Section lower it to the ground and stand it vertical then lift it to the Base, the erectors will locate the Tower into position and secure.

	WEIGHT (KG)
K (S17 8/8)	4664
L (S17 8/16)	5648
M (S17 16/16)	5798

The tower mast sections **S17** type **K, S17** type **L** and **S17** type **M** have got sockets have sockets for hoisting, both horizontally **(see figure 3)** for its loading and unloading from trucks or in the warehouse, and vertically **(see figure 4)** for the erection and dismantling process of the machine.



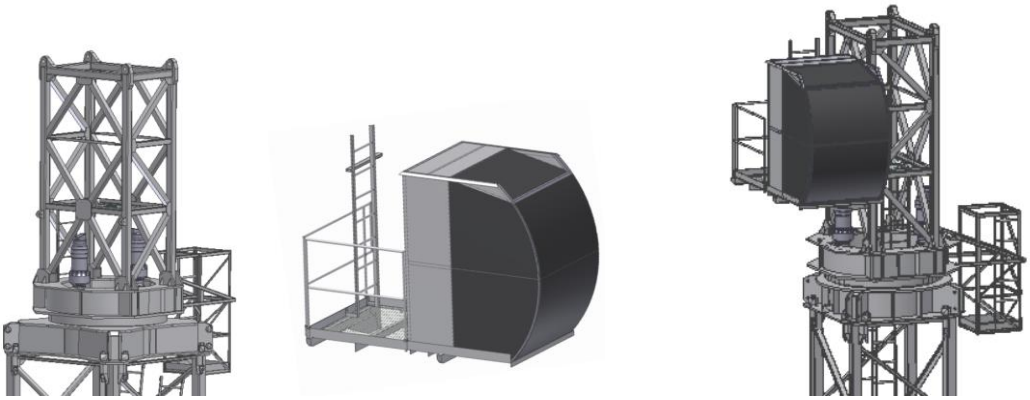


4. The slinger will sling the second 1 x 11.8m K Tower Section lower it to the ground and stand it vertical then lift it to the erected Tower, the erectors will locate the Tower into position and secure.
5. The slinger will sling the second 1 x 11.8m K Tower Section lower it to the ground and stand it vertical then lift it to the erected Tower, the erectors will locate the Tower into position and secure.

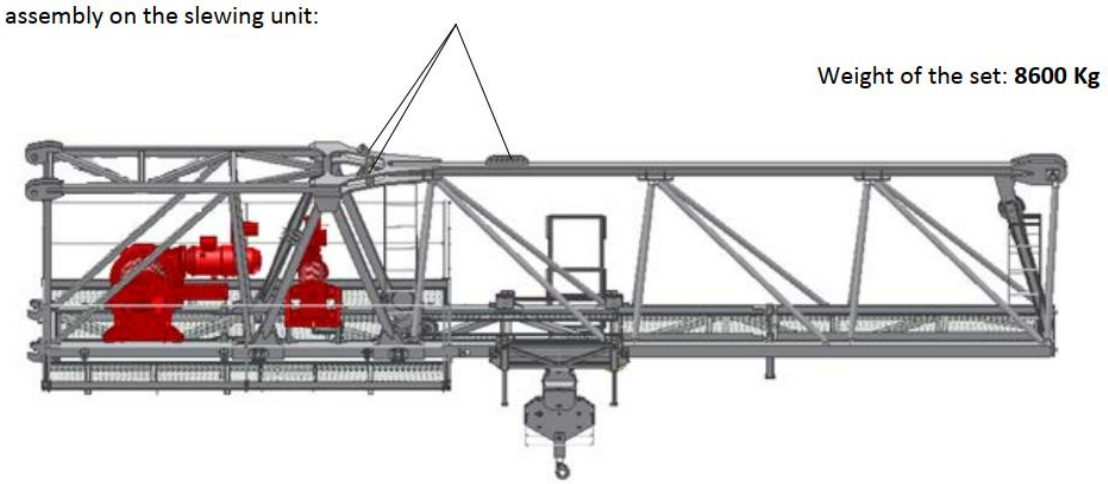
***Both sign off items MUST be completed prior to any tower crane being erected**.

6. The slinger will sling the last 1 x 11.8m K Tower Section lower it to the ground and stand it vertical then lift it to the top of the erected Tower, the erectors will locate the Tower into position and secure.

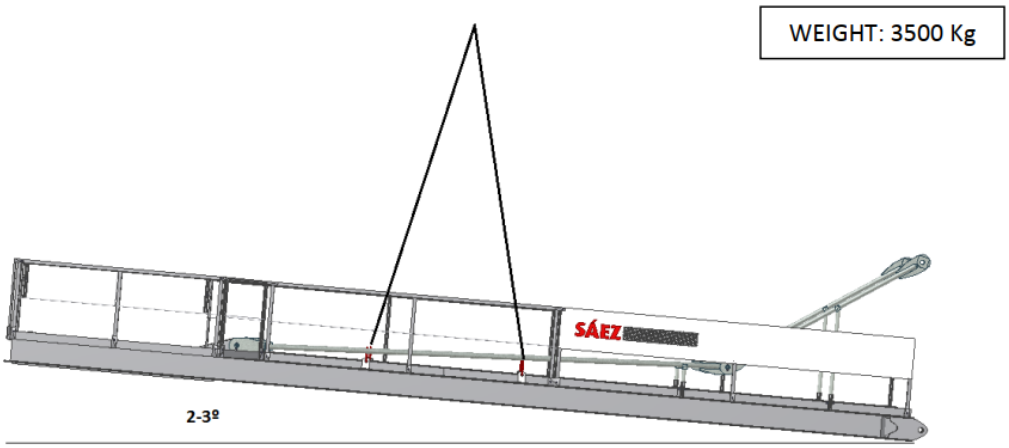
7. The slinger will unload the slew ring and prepare it on the ground with the mains cable and Cabin, then lift the complete unit to the top of the erected tower, the erectors will locate the slew ring into position and secure.



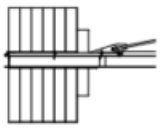
8. The slinger will unload the Hammer Head (jib1) and prepare it on the ground then using a tag line to guide it lift it to the slew mast, the erectors will locate the Jib into position and secure it.



9. The slinger will unload the counter deck prepare it on the ground the using a tag line to guide it lift it to the rear of the Hammer Head, the erectors will locate the deck into position and secure it.



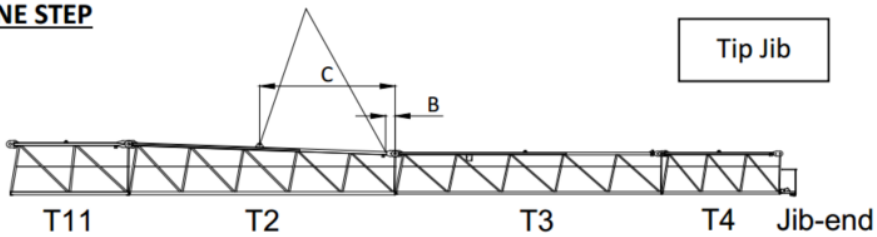
10. The slinger will unload the erection Counterweights, 2 x A (2.75t) Blocks and lift them individually to the counter deck, the erectors will locate the blocks into position starting at the rear most slot first

40 m	CONCRETE BLOCKS	2xA	CONCRETE BLOCK	4xA + 1xB	18000 Kg 
	JIB SECTIONS	T11,T2,T3,T4			

11. The slinger will unload jib sections 11, T2, T3, T4 & Jib end and join them in sequence on the ground then using a tag line to guide it lift the complete Jib to the front of the Hammer head, the erectors will locate the jib into position and secure.

1.4.5. 40 METERS JIB

ONE STEP



Tip Jib

Group weight: 6422 Kg

B (mm)	C (mm)
400	5710

12. The slinger will unload the remaining Counterweights 4 x A (2.75t), 1 x B (1.50t) blocks and lift them individually to the counter deck continuing from the rear and placing the A Block lastly at the front.

13. The Mobile Crane will new de-rig and leave site.

14. The Tower crane will now be visually inspected and tested by the Erection supervisor followed by an independent Inspection. Once all paperwork has been completed the Tower Crane can go into service

C: *Sequence of main job tasks*

(Identifying the work equipment required for health and safety, method and associated safety controls)

Job task	**Safety control (Reference sections B, D-J below)**
• Supervisors to ensure that the mobile crane to assist in the erection of the tower crane meets specifications in part A and is sited as in Form LTC2. • Supervisor to review where best to position rescue kit during the erection of the tower crane in the event of an emergency. Consideration must also be given to the height of the crane.	Part A – Mobile Crane Specification Form LTC2 – Mobile Crane Ground Bearing Capacity Form
• Supervisor to ensure that tower crane is erected to the Tower Crane Configuration Drawing. Hold Point • When tower crane sections are required to be stood vertically, they must be stood on bearers and suitably prepared/stable ground. • When tower crane sections require re-slinging, they MUST be laid horizontally on timber bearers to do this. They must NOT be allowed to be completely unhooked from the chains in a vertical position	Refer to Tower Crane Configuration Drawing attached.
• Supervisors to ensure that tower crane components are unloaded in accordance with LTC procedures.	Refer to HSP 24, Annex 1.
• Supervisors to ensure that contractors and LTC erection team are competent in their roles.	Refer to HSP 24, Annex 2.
• Supervisor to ensure that an exclusion zone as agreed with the client is maintained below and around all tower crane erection areas. • Supervisor and Crew to ensure no unauthorised personnel are working beneath suspended loads. • Before conducting erection or dismantle of the tower crane, the LTC Erector must make his presence known at the client's premises and if necessary, sign the visitor's books and attend any site induction. They must then report to the responsible person designated, before carrying out any works. • All access/egress to the base of the tower crane is via the site designated walkways. • First Aid is to be supplied by the Site and all Responsible Persons and details should be notified to LTC's at the site induction. • Exclusions Zone will be maintained by site team along with LTC erection team during any erection or dismantle operations. • This must be discussed with site management prior to any work commencing. • A minimum of 10m around any lifting area must be maintained throughout the operation.	Refer to HSP 24, Annex 2.
• Crane erection crew to begin erection in sequence as per crew general training and site-specific sequence and Tower Crane Configuration Drawing.	Refer to Tower Crane Configuration Drawing attached.
• Crane erection crew to ensure tool tethering is carried out.	
• Supervisor to ensure all operatives had a site safety induction.	
• Supervisor and crew to ensure all involved in erection of tower crane have radio communication / radio contact and or hand signals.	
• Supervisors need to ensure that all slinging of loads is carried out by trained	

***Both sign off items MUST be completed prior to any tower crane being erected.**

slinger/signallers (CPCS qualified).	
• Supervisor and crew to ensure that tower fixings are correctly fitted and secured.	
• Supervisor and crew to ensure that a jib is built in accordance with the Tower Crane Configuration Drawing.	Refer to Tower Crane Configuration Drawing attached.
• Supervisor and crew to ensure correct slinging points are used for lifting jib.	
• Supervisor and Crew to ensure no unauthorised personnel are working beneath suspended loads and that the exclusion zones are maintained.	
• Supervisor and crew to ensure correct ballast configuration as in Tower Crane Configuration Drawing.	Refer to Tower Crane Configuration Drawing attached.
• Supervisor and crew to ensure no loose items are left in an unsafe position	Refer to HSP 23, Annex 4.
• Supervisor to do a post-erection inspection of the tower crane and inform client's representative of completed works, leaving a copy of the LTC post-erection test certificate.	
• Supervisor to ensure that arrangements are made for a thorough examination of the tower crane by an independent inspection company.	Refer to HSP 23, Annex 3.

Safe system of work form SHE 4 (cont'd)

D: ***Key health and safety procedures (HSP) required*** *(see SHE2 for guidance) and associated documentation*

Note: Each relevant HSP to be briefed to site team.

- HSP 03 – Working at Height Procedure
- HSP 12 – Use of Harnesses and Inertia Reels
- HSP 23 – Safe Lifting Using Tower Cranes & Mobile Cranes
- HSP 24 – Tower Crane Erection Procedure
- HSP 25 – Tower Crane Rescue Procedure

E: ***Health & Safety Guidance & Briefing (HSG)*** *(see section 3 of the manual and JRL HSE Website for list of risk assessment guidelines)*

Note: Each relevant HSG to be in place, associated toolbox talk completed, and section L of this form completed.

- HSG047 – Safe Erection of Tower Cranes
- HSG047 – Safe Dismantle of Tower Cranes
- HSG042 – Working in Adverse Weather Conditions
- HSG065 – Tower Crane Rescue Procedure for Erecting & Dismantling Tower Cranes
- HSG067 – Erecting and Dismantling mobile Cranes & Tower Cranes Near Railway Lines

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F: Additional *resources, specialised skills & competencies*

Note: This may include other specialist trades/skills, in-house or external

Role	Name	CPCS No.	Accreditations
Managing Director	Martin Harvey	00308612	A/P - Slinger Signaller, Crane Operator, Tele Handler Operator NVQ Level 3 Erector
Senior Operations Manager	John Robson	01149101	AP – Slinger Signaller - NVQ Level 3 Erector SMSTS - NEBOSH
Office Manager	Lee Done	06127262	Appointed Person
Sales Division	Henry Shearer	06343821	Appointed Person
Health & Safety	Gary Leader	40623539	AP - Slinger Signaller – Crane Operator / NVQ Level 2 Plant Installations
Inspection & Test Manager	Martin Gibson	00287682	AP- Slinger Signaller / NVQ Level 3 Erector - SMSTS
Sales / Operations Manager	Robert Mahoney	01371231	AP- Slinger Signaller / NVQ Level 3 Erector - SMSTS
Operations Manager	Mark Cobourne	40538739	AP-Slinger Signaller- Crane Supervisor
Sales / Operations Manager	Mark Champion	40430753	Appointed Person
E&D Manager	Ross Webb	00064898	AP- Slinger Signaller / NVQ Level 3 Erector
Service Manager	Ian Cooper	01374547	AP – NVQ Level 3 Erector
Supervisor	Michael Foster	02084683	AP- Slinger Signaller / NVQ Level 3 Erector
Supervisor	Robert Living	01306363	AP- Slinger Signaller / NVQ Level 3 Erector
Supervisor	Peter Cunnington	1013035	AP- Slinger Signaller / NVQ Level 3 Erector
Supervisor	Assane Fall Fall	04810179	Slinger Signaller / NVQ Level 2 Plant Installations
Erector	Jimmy Robins	40542620	Slinger/ Signaller - Crane Supervisor
Erector	Craig Robins	00991367	Slinger/ Signaller - Crane Supervisor
Erector	Antanas Mitev	02623941	Tower crane op/ Slinger Signaller
Erector	Callum Scott	06374191	Slinger Signaller
Erector	Ben Foulkes	13479332	NVQ Level 2 Erector
Erector	Mark Winstanley	40351338	Slinger/ Signaller
Technician	James Bailey	C1019116	NVQ Level 3 - Electrotechnical Services
Technician	Scott Holloway	C1112067	Technician - Slinger/ Signaller
Technician	Craig Ford	06342415	Slinger Signaller – Level 2 Electrotechnical Services
Technician	Doug Ward	03657711	Skilled Worker / Slinger Signaller
Technician	Jason Parrott	01194742	NVQ Level 2 Erector
Service Engineer	Lionel Marklew	02403334	Slinger Signaller – Crane Operator / NVQ Level 2 Plant Installations

***Both sign off items MUST be completed prior to any tower crane being erected**.

Technical Accessories Manager	Sean Fucile	40630831	AP – Slinger Signaller – NVQ Level 3 Erector
Accessories Technician	Ashley Green	40856833	Slinger Signaller / Trainee Erector
Accessories Technician	James Carr	40888629	Slinger Signaller / Trainee Erector
Operator Manager	Paul Patterson	02232211	Slinger/ Signaller - Crane Operator

G: *Details of work permits or authorisations required*
(Tick ✓ and attach permits or other forms are required for the work activity)

Permit to work *(electrical)*		Permit to work. *(Working platform certificate)*		Permit to work. *(Mobile crane authorisation)*		Permit to work. *(other)*	
Permit to work. *(general)*		Permit to work. *(Work at Height)*		Permit to work. *(Hot work)*		Permit to work. *(Confined spaces)*	

***Both sign off items MUST be completed prior to any tower crane being erected**.

H: ***Personal protective equipment required***

Description of PPE	**Required Yes/No?** (*Tick ✓*)	**Type of PPE** *(In accordance with PPE regulation or international standards)*
Head protection • Safety Helmet	Yes/No **Yes**	EN 397:2012+A1:2012
Foot protection • Boots	Yes/No **Yes**	BS EN ISO 20345:2011
High visibility clothing (Orange) • Vest, • Jackets • Coveralls	Yes/No **Yes** **Yes** **Yes**	EN 471
Hand protection • General • Mechanical	Yes/No **Yes** **Yes**	EN 420 EN 388
Eye protection • Glasses	Yes/No **Yes**	EN 166
Clothing • Waterproof/foul weather	Yes/No **Yes**	EN 343
Fall arrest protection. • Full body harness • Fall arrest system. • Fall restraint system	Yes/No **Yes** **Yes** **Yes**	EN361 EN362 EN353
Other PPE required. *(Add when required)*		

***Both sign off items MUST be completed prior to any tower crane being erected**.

I: Are other *contractors involved in the activity?* *(If so state name, address and key contact details).* ***Other site health and safety information.***

- Mobile Crane Company – To be allocated.
- Haulage Company – To be allocated

J: ***Details of contacts, site management etc., or special emergency arrangements*** ***(Site Specific)***

Name	Contact	Role
Head Office	020 8327 4060	
Martin Harvey	020 8327 4060	Managing Director
John Robson	07766 318 261	Senior Operations Manager
Robert Mahoney	07717 793 881	Operations Manager
Mark Cobourne	07778 391 549	Operations Manager
Ross Webb	07774 573 433	E&D Labor Manager
Ian Cooper	07920 290 927	Breakdown & Service Manager
Paddy Donaghy	07765 492 603	Sales Director
Mark Champion	07513 134483	Sales & Operations Manager
Breakdown & Service Line	**020 8327 4060**	**All Breakdowns & Service Bookings**

K: ***Name of LTC Supervisor responsible for implementation of safe system of work***
(Communications and monitoring compliance)

Name *(please print)***:**			
Position:		**Contact no:**	
1. Check all sections and confirm correct.			
Signature:	-	**Date:**	-
2. Issue document to site team and ensure briefing.			
Signature:	-	**Date:**	-

***Both sign off items MUST be completed prior to any tower crane being erected.**

L: ***Details of personnel involved and confirmation that information and instructions in this document have been satisfactorily communicated.***

I/We the undersigned have been instructed and made aware of the contents of this 'Safe System of Work and Risk Assessment/s' and agree to comply with its requirements. If we are unable to carry out the work safely, we agree that we must immediately stop work and inform our manager/supervisor.

Date	Name	Position/Role	Signature	Briefing given by

M: ***Client Approval***

Name (printed):		**Signed:**	
Position:		**Date:**	

***Both sign off items MUST be completed prior to any tower crane being erected**.

Mobile Crane Ground Bearing Capacity Form

Mobile Crane Ground Bearing Capacity Form requires a signed declaration by the site engineer, that the ground required for the mobile crane has been prepared and is of adequate strength to support the shown imposed loads. These loads are detailed on the lift plan which must be referenced along with the position of the mobile crane.

Method Statement Ref:	**2022-392-TC2**
Client	Hill
Site Name	St Anns
Address	St Anns Road, London, N15 3TD .
Tower Crane Details:	**SAEZ TLS 65-10T SR**
Tower Height:	**47.20**m
Jib Length:	**40.0**m
LTC Lift Plan Drawing Reference:	LTC-2022-392-A.1-ELP.TC2
Mobile Crane Details:	Liebherr LTM 1200-5.1
Rigger Configuration:	8.89m x 8.30m
Rigger Mat Size:	2.50 m x 2.0m
Maximum Anticipated Point Load:	53.00t
Distributed Load:	10.60t/m^2
I hereby confirm that;	i. The area determined for the mobile crane on the specific lift plan has a ground bearing capacity in excess of the specified outrigger loads. ii. The route to that position can withstand an axle load of 16Te

Name (printed):	**Signed:**
Position:	**Date:**

***Both sign off items MUST be completed prior to any tower crane being erected**.

Loading Schedule

Project Reference:	**2022-392-TC2**
Client:	**Hill**
Site Name:	**St Anns**
Site Address:	**St** Anns Road, **London**, **N15** 3TD, **.**
Crane Specification:	**SAEZ TLS 65-10T SR**
Jib Length	40.0 **m**
Tower Height	47.20 **m**
Counter Ballast Total:	18.00**t**
Counter Ballast Configuration	6 x At Block (2.75t), 1 x B Block (1.50t)
Date of Operation:	-

Load No	Time	Description
Day 1:		
1.	0900hrs.	1 x 11.8m K Tower Section
2.	1000hrs.	1 x 11.8m K Tower Section, Counter deck on top
3.	1100hrs.	1 x 11.8m K Tower Section, Jib 11
4.	1130hrs.	1 x 11.8m K Tower Section,
5.	1200hrs.	Slew ring – Mains Cable , Cabin
6.	1300hrs.	4 x A Blocks, Hammer head with Trolley & Hook Block
7.	1400hrs.	Jibs 2, 3, 4-nose, 11t Test weights
Equipment Ordered	**Required (Y/N)**	Load Detail (LTC Yard Use Only)

			Loaded?
Floodlights:	YES		
Signs:		YES	
Chain Pack (Sale Item):	Error! Reference source not found.		
New Hoist Rope:	NO		
Anti-climb:	YES		
Aircraft Warning Lamp:	YES		

***Both sign off items MUST be completed prior to any tower crane being erected**.

Load List Sign Off

Written By: _____ Checked By: _____

Date: _____ Date: _____

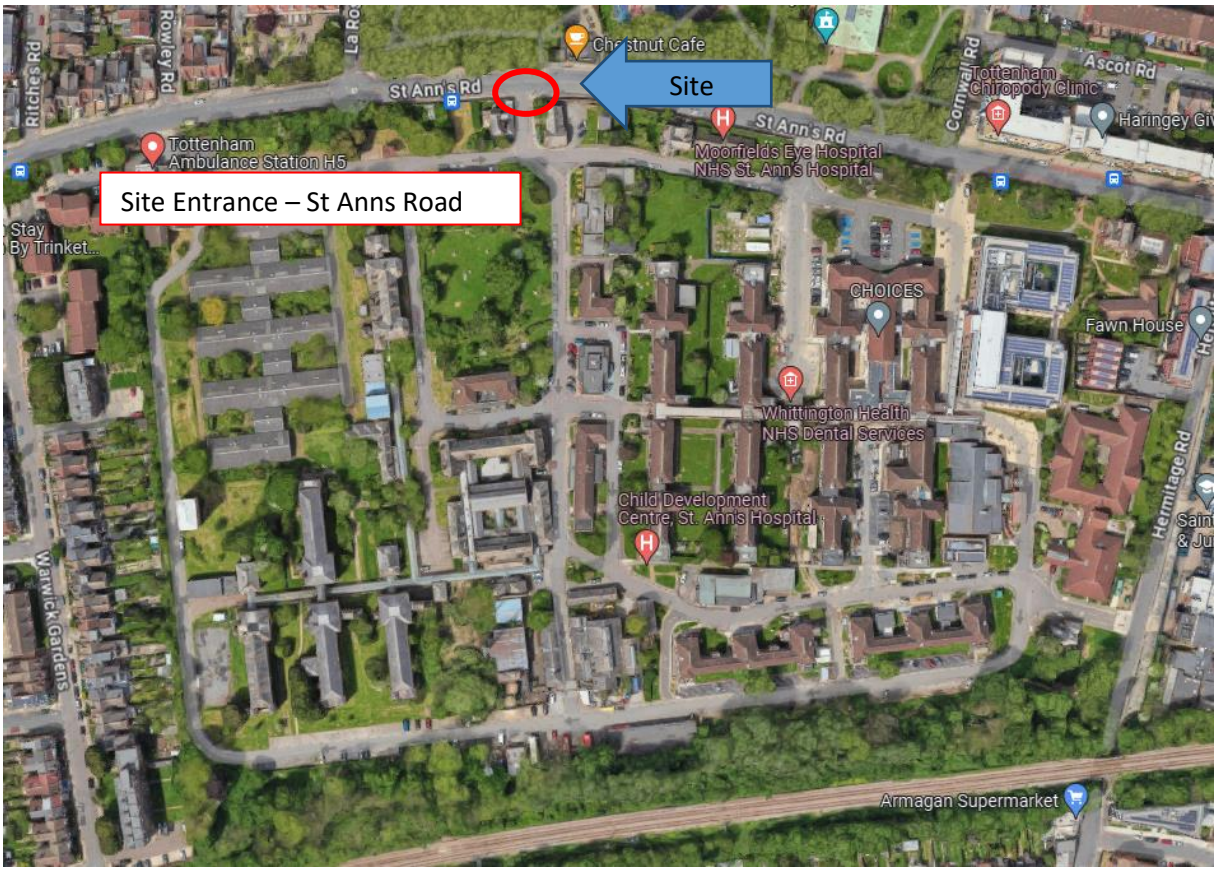
***Both sign off items MUST be completed prior to any tower crane being erected**.

Transport Arrangements

Tower crane parts are loaded to achieve the most cost-effective operation. This means that some parts are delivered out of sequence and may need to be stored on site temporarily during the erection process.

(1) Haulage contractors are instructed to deliver or collect loads at a specified time when we estimate they will be required. All drivers can be contacted by mobile phone and if necessary, the erection supervisor will adjust the times to avoid congestion on or near the site. Most equipment is delivered on articulated vehicles with flat 45ft trailers. Transport may need to be directed on site, especially when reversing. In the immediate area of the erection operation this can be done by the erection team. At the gate and on large sites away from the erection area the site banksman is expected to be available as part of the site's safe system of work.

Site Location Map



Site Specific Transport Arrangements:

*Both sign off items MUST be completed prior to any tower crane being erected.

Annex 4 Safe Erection of Tower Cranes
B: Employees Actions (record below main topics to be covered) - Briefing must be given before work starts. All crane erection team must have signed associated Safe System of Work (SHE4) at section L.
Site Arrival and Set up
• Only competent HGV drivers are allowed to drive LTC HGVs and trailers.
• HGV drivers must adhere to all requirements for recording journeys and break times and advise the LTC supervisor if there is a risk of overrunning permitted driving times.
• Drivers must ensure that the reversing alarm on the vehicle and trailer is working at all times.
• Drivers must ensure that a traffic marshal or banksman is available before any reversing manoeuvre.
• LTC site erection team must use full PPE at all times.
• LTC site erection team must only reverse HGVs if they have received banksman training.
• LTC site erection team must ensure that the loads on the vehicles are well strapped and remove these in the sequence set out in the LTC loads list.
Unloading and setting up of crane sections on site
• HGV drivers must continue to check reversing alarm on vehicle and never reverse without a traffic marshal or banksman. • HGV Drivers must use safe access ladder provided when accessing HGV trailer. • In the unlikely event there is no ladder access to the trailer, LTC Supervisor & HGV Driver to assess the safest access, this may include the use of a harness to safely climb the trailer. • Trailers must be fitted with edge protection by the HGV driver
• LTC crane erection team must ensure that they work within the exclusion zone and keep other personnel out of their work area.
• LTC erection team must follow the erection sequence.
• LTC erection team must ensure that the hand tools and tool tethering equipment are used and are in good condition at all times and must report problems to their site supervisor immediately.
Erecting the tower crane and working at height
• All LTC erection team must be instructed in the correct use of safety harnesses/lanyards including carrying out daily inspection of their harness. • PPE listed within SSW must be worn at all times during erection. • Trainee erectors within the team must be under the supervision and guidance of the lead erector at all times
• LTC erection team must check all lifting accessories, slings, chains etc., to ensure that they are in date and can be safely used to lift tower crane sections and accessories. • Where there is no agreed specified lifting method provided within the SSW or the method is no longer the safest method, work must not proceed, and the Erector Supervisor informed. • If the method has changed, it must be noted on the supervisor's erection report and agreed with site before proceeding. • Chain lengths are only to be reduced by the use of properly constructed shorteners or clutches.
• LTC supervisor and erection team must be in radio or visual contact with mobile crane operator at all times.
• LTC lifting team must wear provided gloves when handling equipment and ensure that they keep their hands clear when lifts are about to begin.
• LTC lifting team must ensure that every load is stable before lifting and must never attempt to lift an unstable or off-balance load. • Attaching & detaching of all loads and controlling of all crane movements, can only be carried out by authorised slinger/signallers

***Both sign off items MUST be completed prior to any tower crane being erected**.

- Ensure that sledgehammers are in good condition and use remote drift and tethered.

- At all times when working at height, you must be properly attached with your harness when you are outside of a protected area.
- Site First Aid and fire Procedures to be in place by client, this is to be discussed during induction stage with all personnel involved in the operation.
- Suitable rest area and welfare area is to be provided by client/site for the LTC erection team.

Tag lines – use must be planned and used with caution.

- Check the load path for potential snag points.
- Keep line length long enough to allow control.
- Inspect for damage & to remove knots or loops etc.
- Never attach anything to the end of a tag line
- Ensure line does not become entangled and never 'tie off' tag lines to any body part, equipment, or structures.
- Never induce swing or pull the load out of balance.

Weather Conditions

Observe the current weather conditions if the current (or imminent) weather pattern falls outside of the guidance parameters below, then the lifting operation must be re-assessed or if in progress operation is to stop until safe to continue:

- There is the threat of lightning/thunderstorm.
- The wind pressure is greater than indicated below.

OPERATION	MPH	KPH
Offload, erection, climb, test or maintenance	26	41.8
Out of Service	38	61.5

***Both sign off items MUST be completed prior to any tower crane being erected**.

Gallagher SPECIALTY

The Walbrook Building
25 Walbrook
London
EC4N 8AW

TO WHOM IT MAY CONCERN

Email melanie_freeman@ajg.com
www.ajg.com/uk/

Dear Sirs,

22nd September 2023

RE: London Tower Crane Hire and Sale Limited
Certificate of Construction All Risks, Employers and Public Liability and Professional Indemnity Insurance

We act as Insurance Brokers for the above mentioned Insured and can confirm that we have incepted the below insurances on their behalf for the period commencing 23rd September 2023 and expiring on 22nd September 2024. Brief details of the insurances are as follows:

Construction All Risks Insurance

Interest:	All Risks of loss or damage to permanent works and/or temporary works executed, or in the course of execution, and materials (including free issue materials) and all other property intended for incorporation therein in connection with the Insureds business anywhere within Territorial Limits. Cover includes owned or hired in constructional plant tools and equipment for which the Insured is responsible up to the Sum Insured.
Sum Insured:	GBP 40,000,000 any one occurrence / maximum contract value GBP 7,000,000 any one occurrence in respect of owned and hired-in Plant
Conditions:	Cover provided by this insurance is subject to the terms, conditions and exclusions of the Policy.
Territorial Limits:	The United Kingdom, Channel Islands and the Isle of Man
Insurer(s):	Allianz Insurance plc
Policy Reference(s):	CJ0072623
Additional Notes:	We can confirm that we have arranged Terrorism Insurance with this Policy and that the Insurer is a member of Pool Re. This Policy contains a multiple insured clause which automatically notes any employer, and/or sub-contractor and/or financial institution with an interest in the works where required by contract.

Arthur J. Gallagher (UK) Limited is authorised and regulated by the Financial Conduct Authority. Registered Office: The Walbrook Building, 25 Walbrook, London EC4N 8AW. Registered in England and Wales. Company Number: 1193013. www.ajginternational.com

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Employers Liability Insurance

Interest:	To indemnify the Insured in respect of their, legal liability for death of or injury to employees arising out of and in connection with their employment in connection with the Insured's business within Territorial Limits.
Limit of Liability:	GBP 25,000,000 any one occurrence but GBP 5,000,000 any one occurrence in respect of terrorism
Conditions:	Cover provided by this insurance is subject to the terms, conditions and exclusions of the Policy.
Territorial Limits:	Worldwide
Insurer(s):	Chubb European Group SE, QBE European Operations, Berkshire Hathaway International Insurance Limited, Liberty Mutual Insurance Europe SE and AIG Europe Limited
Policy Reference(s):	CJ0523323 and CJ0072923

Public & Products & Pollution Liability Insurance

Interest:	To indemnify the Insured against all sums which the Insured becomes legally liable to pay as damages in respect of death of or bodily injury to third parties and/or loss of or damage to third party property and/or trespass, nuisance or any interference with any right of way, light, air or water happening during the Period and arising out of or in connection with the Insured's business including liability arising from goods sold or supplied within Territorial Limits.
Limit of Liability:	GBP 20,000,000 any one occurrence but GBP 20,000,000 any one occurrence and in the aggregate for the period in respect of products liability and pollution or contamination liability.
Conditions:	Cover provided by this insurance is subject to the terms, conditions and exclusions of the Policy.
Territorial Limits:	Worldwide
Insurer(s):	Chubb European Group SE, QBE European Operations, Berkshire Hathaway International Insurance Limited, Liberty Mutual Insurance Europe SE, AIG Europe, Lloyds underwriter syndicate no. 2987 Brit Limited
Policy Reference(s):	CJ0523323, CJ0072823, and CJ0072923

The policies noted above contains an Indemnity to Principals clause which automatically indemnifies any Principal (including any Employer, local authority or funder), where required by any contract or agreement. Cover provided by this insurance is subject to the terms, conditions and exclusions of the Policy.

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TOWER CRANE BOOKING FORM

LONDON TOWER CRANE HIRE & SALES LTD

LTC Contract Number: 2022-392-TC2 Client Order No.

Date: 18/12/2023 Revision: - By: Henry Shearer

Project Details			
Client:	Hill		
Site Name:	St Anns		
Site Address:	St Anns Road, London, N15 3TD, .		
Erection Date	Jan 24	**Minimum Hire Period**	42 Wks

Tower Crane Detail				
Tower Crane Make/Model			SAEZ TLS 65-10T SR	
Jib Length			40.0	m
SWL @ Max Radius			4.50	t
SWL Maximum			10.00	t
Counter-Ballast:	18.00 t	**Configuration:**	6 x At Block (2.75t), 1 x B Block (1.50t)	
Tower Height	47.20 m	**Configuration:**	4 No. K-Section (11.8m),	
Base Type:	Fixing Anchor	S60/8	**Delivery Date**	April 24

E&D Arrangements				
	Radius / Over	Additional Mats	Midweek / Weekend	Road Closure Requirements
Erection	15m / 0m	Included up to 5m²	Midweek	No – On Site
Dismantle	15m / 0m	Included up to 5m²	Midweek	Road Closure (client to arrange)

Items to be supplied:						
Fixing Anchors	YES					**Installed?** (to be filled in post erection)
Crane Operator	YES	Crane Familiarisation:	NO			
Tower Crane Inspection(s)	3 Monthly					
Floodlights	YES					
Illuminated sign boxes + Fascia	YES	Artwork:	TBC	No.: 1		
Wind Repeater System	YES	Type	Wind Crane			
Chain Pack Sale item	NO	Types:	Drop Chain:	t		
			4-Leg:	t		
New Hoist Ropes	NO					
Anti-Collision	YES	DCS61	**Install Date:**	On Initial Erection		
Zoning	YES			~~On Second Crane Install~~		
Anti-Climb system	YES					
Aviation light	YES	Type:	200 Candela	No.: 1		
Painting	NO	Colour:	LTC BLUE			
BlokCam	NO					
Base Hoarding Surround	NO	Install by:	By Client			
Tower Crane Rescue Kit	NO	Training:	N/A			

Other Requirements:	Fascia Artwork (If Required):
Notes:	

MANAGER SIGN OFF:

Date:

DIRECTOR SIGN OFF:

Date:

***Both sign off items MUST be completed prior to any tower crane being erected.**