Method Statement and Risk Assessment

Author: Mark Power	(Signature) *Mark Power*
Document reference number: MCFS/MC/WC/221-860	
Location: Westwood Cottages Raby Street Manchester	
Work scope: Electrical Works - To provide installation, supply & fit in accordance with Documents: 20_010-X-MEP-G530-PL-XX-001-PO1/ 20_010-X-MEP-G530-PL-XX-002-PO1/ 20_010-X-MEP-G530-PL-XX-003-PO1/ 20_010-X-MEP-G530-PL-XX-004-PO1/ 20_010-X-MEP-G530-PL-XX-005-PO1/ 20_010-X-MEP-G530-PL-XX-006-PO1	
Does the work scope include temporary works (if so refer to MCFS Temporary works procedure)?	Yes
Does the work scope require specialist technical knowledge	Yes

Document review and authorisation			
Document reviewed by:			
Technical Content	**Ian Lowe**	**Environmental** (as applicable)	**Ian Lowe**
Health and Safety	**Ian Lowe**	**Quality** (as applicable)	**Ian Lowe**
Document is authorised for use (Site Manager)**:**			
(Print)	(Sign)		**Date:**

Revision Record		
Revision	**Date**	**Comments / Changes**
Field Change Notices		

Method Statement and Risk Assessment

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Method Statement and Risk Assessment

1.0 Purpose and scope of works

Electrical Works - To provide installation, supply & fit in accordance with Documents: 20_010-X-MEP-G530-PL-XX-001-PO1/ 20_010-X-MEP-G530-PL-XX-002-PO1/ 20_010-X-MEP-G530-PL-XX-003-PO1/ 20_010-X-MEP-G530-PL-XX-004-PO1/ 20_010-X-MEP-G530-PL-XX-005-PO1/ 20_010-X-MEP-G530-PL-XX-006-PO1

1. Supply labour and materials as is necessary to carry out the electrical works under documents referred to above.

2. Prior to works commencing a site induction will be carried out by the MC Construction Site Manager, Luke McLoughlin

3. Overview – Westwood Cottages will undergo a full electrical refurbishment including sub main distribution, power, lighting and fire circuits. This includes a full install of new accessories.

4. Mains Distribution – Each Unit requires a new 100A non-combustible Wylex Consumer Unit, including 8Nr RCBO's. A new supply is to be brought to each unit (MCC to instruct DNO) for 100A supply protected by BS1361 IIB Fuse.

5. Containment – The routing of cabling is prescribed by the requirements contained in BS7671:2018 and these are strictly adhered to.

6. Fire Alarm – All Units are to be fitted with Smoke Alarms, Heat Detectors & CO Detectors. These will be mains operated, interlinked with battery back-up. A Fire Alarm Installation Certificate will be handed over with the O&M Manuals.

2.0 Programme and constraints

Duration of works		
Anticipated start date: 28th August 2020	**Anticipated finish date:** TBC	**Duration:TBC**

Working Hours		
Weekday	**Start time:** 7:30am	**Finish time:** 4:00pm
Weekend	**Saturday:** N/A	**Sunday:** N/A

Constraints
Noise: Yes
Dust / mud: Yes
Archaeology: N/A
High voltage overhead lines: N/A
Other (specify): N/A

3.0 Surveys and Engineering

Type of survey	Document Reference

4.0 Reference documents

Document Title	Document Reference

MCFS Isolation Procedures	MCFS/IP/2020
BS7671:2018	
One Manchester Electrical Specification	

5.0 Permits and Permissions

Work permits - MCC		
Hot work: yes	Permit to dig: no	Electrical work: yes
Confined Space: no	General work permit: no	Roof work: no
Working under/adjacent HV overhead lines: no		Working a height permit: yes
Temporary Works Permits		
Permit to load: no	Permit to strike: N/A	
Permissions required to carry out the works from the Client		
Client Contact: MCC Construction		
Hot work: yes	Permit to dig: N/A	Electrical work: yes
Confined Space: no	General work permit: no	Roof work: no
Working under/adjacent HV overhead lines: no		
Others: Access Permit to enter specific buildings (To be confirmed by site manager)		

6.0 Resources

Labour / Trades requirements
Time served/Qualified Electrical Engineer (s),
Plant and Equipment
Hand tools
Cordless power tools
Electrical testing equipment
Materials
Distribution Boards Electrical Cable Electrical Materials Light Fittings & Sockets Plus other sundries

Training / Competency	
Position	**Requirements**
Electrical Engineers	18th Edition/ NICEIC Accredited/ CSCS

7.0 Communication

Prior to commencing of works	
Company and Sub Contract pre-start safety meeting	Yes
On site - site specific H&SE induction	Yes
On site - competency checks prior to commencing work	Available for inspection
Routine communication processes	
Staff briefed on RAMS documentation	Sign off required
Daily pre-start briefing & SSOW assessment	As Required
Applicable Toolbox talks (Safety / Environmental / Quality)	Weekly
Contractor safety / progress meetings including H&S	As Required
Emergencies	
Emergency response actions identified and communicated	Verbally by Client or in advance of works
Accident and incident/ Near Miss procedures explained	Verbally by Client or in advance of works
Task specific communication processes	

8.0 Supervision and Responsibilities

Supervisory Role	Position	Contact No:	
Ian Lowe	Director	07957 891851	Overall Responsibility of the works
Mark Power	Electrical Manager	07703 390041	Overall Supervision of the works

9.0 Health Impacts

Identified Impact	Applicable (✓)	Identified Impact	Applicable (✓)
Silica (Silicosis)	✓	Hand arm vibration (HAVS)	✓
Asbestos (Asbestosis)	×	Dust / Vapours / Fumes	✓
Noise (Deafness) -	✓	Chemicals	×
Weils disease (Leptospirosis)	✓	Dermatitis	×

COSHH Impacts		
Substances or materials	**SDS required**	**COSHH assessment required**
N/A	N/A	N/A

HAVS and Noise Impacts					
Equipment or Tool	**dB(A)**	**SNR Rating required**	**M/S^2**	**Exposure Action Value (EAV)**	**Exposure Limit Value (ELV)**

Cordless combi drill	95	16	13	18 min	1 hr 11 min
Medium duty Hammer drill	99	21	12.2	20 min	1 hr 21 min
Jigsaw	99	21	6.5	1 hr 11 min	1 hr 30 min
Chop saw	108	29	<2.5	8 hours	24 hours
Circular Saw	106	27	3	5 hr 33 min	22 hr 13 min
Sander Palm	93	14	3	5 hr 33 min	22 hr 13 min
Sander Orbital	71	N/a	4.5	2 hr 28 min	9 hr 53 min
Reciprocating Saw	102	23	19	8 min	33 min

The above are typical examples – Obtain the correct readings for the tools that you are using.

10.0 Quality Control

Aspect of works
As determined by Client scope – all works signed off at completion.

11.0 Environmental Impacts

The following potential environmental impacts have been identified for this scope of works:

- Waste and disposal thereof
- Vehicle usage

12.0 Methodology and sequence of works

Always wear the correct PPE for the task in hand!!

- On arrival all employees are to report to MC Construction Ltd for H&S Induction training.
- Engineers are required to familiarise themselves with specific risk assessments for electrical installations.
- Engineers will initially install temporary supplies, 3Nr to connect the 10Kva transformers, and in accordance with the Site Manager.
- Engineers will then confirm the Unit in which they are to commence works
- Engineers will also mark out the chasing to be completed by MC Construction.
- Materials required for the installation of the cables/ first fix will be brought onto site and taken to the first unit. Confirmation of site storage locations can be enquired to the site manager.
- It will be established the order in which the circuits are to be installed and the first fix will commence.
- Any conflicts with design specifications will be brought to the attention of the site manager/ contracts manager/ project manager and shall be made in writing as soon as is possible.
- As the cables are being installed, plastic PVC capping to be placed over all switch/ socket drops.
- All back boxes are to be installed at the specified heights of 450mm – 1200mm depending on type.
- On completion of fist fix works, MCC will be notified and a final check of installed cables will be made and an initial handover carried out.
- On notification that second fix is ready for completing, all materials will be brought onto site and completed. Final connections will be made.

- Following from the above our engineers will carry out the inspecting, testing and commissioning of the installation and certification completed.
- Engineers will at all times keep the site/ area of work tidy and free from objects which may cause a trip hazard. All waste material will be disposed of in the correct manner.
- Engineers will at all times follow the Risk Assessment in respect of COVID-19

13.0 Appendices

13.1 Risk Assessment
13.2 COSHH Assessments – Detailed in the COSHH File / attached

Method Statement and Risk Assessment Hazard Check Sheet

Site:	**Westwood Cottages Raby Street Manchester**	**Activity, Process, Equipment being assessed:** **Electrical Works - To provide installation, supply & fit in accordance with Document: 20_010-X-MEP-G530-PL-XX-001-PO1/ 20_010-X-MEP-G530-PL-XX-002-PO1/ 20_010-X-MEP-G530-PL-XX-003-PO1/ 20_010-X-MEP-G530-PL-XX-004-PO1/ 20_010-X-MEP-G530-PL-XX-005-PO1/ 20_010-X-MEP-G530-PL-XX-006-PO1**	**RAMS Reference No:** **MCFS/MC/WC/221-860**
Location:	**Units 1-6**	**Electrical Works**	**Date:** **20/08/2020**

Persons at risk:	Client	✓	MCFS Personnel	✓	Subcontractors	✓	public	x	visitors	✓

Hazard	Tick	Hazard	Tick	Other Hazards	Tick
Adverse Weather	x	Lifting Operations / Equipment failure	x	if you identify a hazard not on this list	
Abuse / Violence	x	Lone Working	✓	please make sure you include it in the RA	
Asbestos	x	Manual Handling	✓	**DO NOT IGNORE IT!**	
Collapse of excavation / structure *	x	Mobile Plant / Traffic (Driving / Hit by)	✓		
Confined Spaces	✓	Moving parts	x		
COSHH / Hazardous Materials	x	Noise	✓		
Difficult Access / Egress	✓	Overhead working	x		
Dust / fumes / vapours	✓	Poor Lighting	✓		
Existing Services / Overhead Cables *	✓	Pressurised systems	x		
Electrical Equipment (Fix / Portable)	✓	Slips, Trips & Falls	✓		
Exposure to Sun/UV light	x	Tools & Equipment	✓		
Fall from Height / Falling objects *	✓	Ventilation	✓		
Flying particles	x	Vibration	✓		
Health Hazards (needles / rats / Disease etc.)	✓	Water (risk of drowning)	x		
Hot Work / Fire / Explosion / Temp extremes *	✓	Wet/Slippy surfaces	x		
Injury to hands / feet / head / body / eye *	✓	Working outside	x		
Ionising radiation	x	Working at Height	✓		

Method Statement and Risk Assessment Hazard Check Sheet

Use the above list when identifying hazards during the Risk Assessment Process. Remember to consider all aspects of the task and the surrounding environment. Also, remember to consider that conditions may change between the initial RA and the actual time the task is undertaken. Therefore, remember to address what happens. Use pre-commencement tool box talks daily as a means of re-evaluating the hazards and act manage these appropriately. If possible, AVOID the risk altogether. Where possible COMBAT the risk at source. Give priority to measures that PROTECT the whole workplace. Take advantage of technological & technical progress.

Method Statement and Risk Assessment
Risk Matrix

Risk Rating Likelihood (L) X Severity (S)			Severity should an accident occur *(S)*				
			1 **Negligible** Impact or personal injury	2 **Slight** Minor injury, damage or business impact	3 **Moderate** Lost time injury Moderate damage or business impact	4 **High** Fatality, serious injury, damage or business impact	5 **Very high** Multiple fatalities, serious injuries, damage or business impact
Likelihood of hazard occurring (L)	1	**Very unlikely** A n unusual combination of factors would be required for an accident or incident to occur	Low	Low	Low	Low	Low
	2	**Unlikely** A rare combination of factors would be required for an accident or incident to occur	Low	Low	Low	**Medium**	**Medium**
	3	**Possible** Could happen if a combination of accidental factors are present	Low	Low	**Medium**	**High**	**High**
	4	**Likely** Not certain to happen but additional factors may result in an accident or incident	Low	**Medium**	**High**	**High**	**High**
	5	**Very likely** Almost inevitable that an accident or incident would result	Low	**Medium**	**High**	**High**	**High**

Risk Level = Severity x Likelihood

Low Risk (Score 1-6)	Work may proceed providing specified controls are carried out to ensure principle of “As Low As Reasonably Practicable” (ALARP) is followed
Medium Risk (Score 8-10)	Consider revisiting the methodology to reduce risks, task may only proceed after consultation with specialist personnel and or HSE team
High Risk (Score12-25)	Task may not proceed, revisit methodology to reduce risks to acceptable levels

Method Statement and Risk Assessment

Risk Assessment Worksheet											
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Persons Affected	Site personnel, client's employees.										
Activity	**Hazard**	**Risk Rating Without controls**			**Existing Controls Measures** *(List the control measures required to eliminate or reduce risks to an acceptable level)*	**Existing Controls Adequate**	**Recommended Action**	**Residual**		**COSHH Required**
		L	**S**	**R**				**L**	**R**	
Pre-Start Activities										
Pre-Start Activities	Inadequate training or competence	4	3	12	Electrical operatives to hold valid ECS skill card Maintenance operatives to be time served with relevant experience Personnel to be familiar with equipment and tasks or receive suitable training	Yes		1	3	N/a
Pre-Start Activities	Inadequate knowledge of task and impacts	4	4	16	Review RAMS document and obtain sign off from team members Carry out daily task briefing before work commences (review performance) – complete SSOW assessment Ensure all work permits and permissions are in place before work commences Supervisor to explain tasks required at the work location before work commences New team members to be briefed before commencing work for first time	Yes		1	4	N/a
Pre-Start Activities	Inadequate supervision / communications	4	3	12	Operatives & engineers to have regular contact with supervision and MCFS Helpdesk Supervisor to visit work site if works are complex in nature or this is determined necessary Ops to be briefed on emergency response procedures Ops to have agreed method of communication for problems / emergencies (Crystal Ball lone worker system)	Yes		1	3	N/a
General site operations										
General site operations	Slips, trips and falls	4	4	16	Use designated site walkways to gain access to work location. Correct footwear to be worn for floor conditions. Walkways to be kept free of trip hazards, plant and materials Supervisors and operatives to monitor housekeeping standards daily and throughout works	Yes		1	4	N/a

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Persons Affected	Site personnel, client's employees.									
Activity	**Hazard**	**Risk Rating Without controls**			**Existing Controls Measures** *(List the control measures required to eliminate or reduce risks to an acceptable level)*	**Existing Controls Adequate**	**Recommended Action**	**Residual**		**COSHH Required**
		L	**S**	**R**				**L**	**R**	
General site operations	Protection of the public	4	5	20	Maintenance activities to be isolated from the public with barriers and clear signage. Ensure authorised entry only to work site locations	Yes		1	5	N/a
General Works										
Working at Height	Fall from Height	5	5	25	Use correct access ways and do NOT take shortcuts. Scaffolding can be provided when required Do not tamper with or modify any scaffold. Any work requiring the use of a Harnesses will require further and more detailed assessment Supervisors will give advice and instructions as required.	No	Any working at height with steps, podiums or mobile towers requires a permit to work or inclusion within SSOW assessment	1	5	N/a
General work upon electrical systems.	Electrocution, electric shock, burns, personal injury, death.	5	5	25	This work activity upon an electrical system is being carried out by trained and competent person with appropriate knowledge of the equipment, of the local points of isolation and any local protocols relating to the equipment or isolation thereof.	Yes		1	4	N/A
General Works	Slipping and Tripping	4	4	16	Keep all work areas & access ways clear of materials. Skips will be provided as required Remove all waste materials, including all nails from timber and the discarded nails and screws on the ground.	No		1	4	N/a
General Works	Foot, hand, eye & ear injury	5	4	20	Use the appropriate protective equipment. Follow instructions given with COSHH information when handling any substance. Follow the instructions given by Supervisors and risk assessments USE the correct tool for the job Safety boots must be worn.	No	Goggles, gloves, and earplugs must be worn as required. CHECK the tooling you are about to use for any damage and report it to MCFS HQ	1	4	N/a
Manual Handling	Lifting loads- Back injury	3	4	12	Where reasonably practicable all suppliers will be asked to supply materials that can be broken down into loads less than 20kg. All loads will be moved by mechanical means where possible.	No	All personnel to assess/ check loads for their own ability.	1	4	N/a

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Persons Affected	Site personnel, client's employees.									
Activity	**Hazard**	**Risk Rating Without controls**			**Existing Controls Measures** *(List the control measures required to eliminate or reduce risks to an acceptable level)*	**Existing Controls Adequate**	**Recommended Action**	**Residual**		**COSHH Required**
		L	**S**	**R**				**L**	**R**	
							All personnel to be instructed to seek help if they feel a load is too heavy to lift.			
Manual Handling	Repetitive work - Fatigue	3	4	12	All operatives to assess the task in hand and to take suitable short rests at that work face as and when necessary.	No	Repetitive tasks must have a Specific Manual Handling assessment performed by MCFS supervision	1	4	N/a
Handling	Cuts and tripping / slipping whilst Handling Materials	3	4	12	Operatives to wear appropriate gloves for the task. All cuts to be reported into the accident book. Operatives not to carry loads if they obstruct their path of sight. If this cannot be avoided, then route to be checked for hazards and help to be sought. Personnel to be trained in manual handling techniques. Repetitive tasks are to be separately assessed	Yes		1	4	N/a
General Electrical Works	Plant & Machinery	3	5	15	You are authorised to operate any mobile plant that you have been trained to use. Small plant, saws, drills, planes etc, may be used, if you are competent. Pre Use check must be carried out and any defects identified escalated to line management. Appropriate signs and information will be displayed.	No	Be aware of the risk from plant operating around you and take appropriate precautions. Any issues seek advice from the site manager.	1	5	
General Electrical Works	Contact with live electrical parts.	5	5	25	The system is being (will be) isolated and tested for dead before any intrusive work is carried out. "Lock Off Tag Off" (LOTO) or similar isolation system is in use. Appropriate signs and/or barriers are in place. A Permit to Work (PTW) may be issued by a suitably Authorised Person in respect to work activities where such is deemed necessary.	Yes		1	5	Yes
Use of electric tooling	Vibration	5	3	15	Consider other methods before the use of vibrating tools	Yes		1	3	N/a

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Persons Affected	Site personnel, client's employees.									
Activity	**Hazard**	**Risk Rating Without controls**			**Existing Controls Measures** *(List the control measures required to eliminate or reduce risks to an acceptable level)*	**Existing Controls Adequate**	**Recommended Action**	**Residual**		**COSHH Required**
		L	**S**	**R**				**L**	**R**	
					Vibration outputs are to be obtained for all vibrating equipment and stated in section 9 of the method statement. Obtain equipment with the lowest possible m/s2. All identified equipment resulting in a point score over 100 is to be managed in terms of job rotation. Each operative is to be monitored for vibration exposure.					
Use of electric tooling	Noise	5	3	15	Noise dB(A) readings are to be obtained for all vibrating equipment and stated in section 9 of the method statement. Obtain equipment with the lowest possible dB(A). 80 dB(A) – Suitable hearing protection is to be made available 85 dB(A)+ Suitable hearing protection is to be used Considerations for hearing protection zones C/w correct signage.	Yes		1	3	N/a
General Electrical, use of glues & painting galvanised cable management systems i.e. Conduit.	Handling substances and chemicals	4	4	16	COSHH regulations will apply therefore you MUST Follow all instructions given by your supervisor and in COSHH Assessments which will include the requirements to wear the appropriate protective clothing and equipment If in doubt consult the site manager.	Yes		1	4	Yes
Potential Environmental Impact(s)										
Disposal of Materials	Electrical Equipment	3	3	9	Ensure safe transfer & disposal of items falling under WEEE Regs to a registered disposal facility.	Yes		1	3	No

Method Statement Communication Record

Subject: Identify Activity Stage(s) briefed: *Electrical Works - To provide installation, supply & fit in accordance with Documents: 20_010-X-MEP-G530-PL-XX-001-PO1/ 20_010-X-MEP-G530-PL-XX-002-PO1/ 20_010-X-MEP-G530-PL-XX-003-PO1/ 20_010-X-MEP-G530-PL-XX-004-PO1/ 20_010-X-MEP-G530-PL-XX-005-PO1/ 20_010-X-MEP-G530-PL-XX-006-PO1*

All stages as above

This is to certify that the persons named below have been briefed in respect of the contents of the specified stages of this RAMS this Method Statement / Risk Assessment document that they agree to work safely in compliance with the identified controls.

Briefing By		***Attendees***			
Name	***Date***	***Name (Print)***	***Sign***	***Employer***	***Position / Role***
		Mark Power		MCFS	Electrician
		Stephen Dodd		MCFS	Electrician
		Chris Greener		MCFS	Electrician
		Mitchel Ferguson		MCFS	Electrician
		Andrew Cox		MCFS	Electrical Improver
		Aaron Halliday		MCFS	Apprentice

Notes: ECS/CSCS No.s Specified Above)

Method Statement Communication Record

Guidance for briefing – Brief relevant Stage(s) of MS/RA with the work crew before first commencement of the works or as individuals join an existing team, obtain signatures from team members to confirm that they have understood and agreed with the contents of the document. File original copy in the method statement file for audit purposes.