

Risk Assessment and Safe System of Work																																																														
Project ID:		Site Name:																																																												
Work Start Date:		Site Address:																																																												
Work Completion Date:																																																														
Nature of Works:	Installation of EV Charge points																																																													
<p>This document identifies the potential risks and safe system of work associated with the works to be undertaken at the site detailed above.</p> <p>All work will be undertaken by qualified competent persons with experience of the type of work and in all cases in full accordance with safety procedures specified in eFaraday Health and Safety Manual.</p> <p>All operatives are to have read and fully understood the contents of this document prior to commencing work.</p> <p>All substances used during the course of the installation which may represent or be considered hazardous to health will have the appropriate datasheets available. The datasheets will be stored for reference in the van pack or be available electronically.</p>		<h3>Risk Evaluation</h3> <p>Likelihood: How likely is it that the hazard may result in harm? Severity: If the hazard does result in harm, how severe would the injury be?</p> <table border="1"> <thead> <tr> <th colspan="2"></th> <th colspan="5">Likelihood (L)</th> <th colspan="2"></th> </tr> <tr> <th colspan="2"></th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>Likelihood (L)</th> <th>Severity (S)</th> </tr> </thead> <tbody> <tr> <td rowspan="5">Severity (S)</td> <th>1</th> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> <td>1 Highly unlikely</td> <td>1 Trivial</td> </tr> <tr> <th>2</th> <td>4</td> <td>8</td> <td>12</td> <td>16</td> <td>20</td> <td>2 Unlikely</td> <td>2 Minor injury</td> </tr> <tr> <th>3</th> <td>6</td> <td>12</td> <td>18</td> <td>24</td> <td>30</td> <td>3 Possible</td> <td>3 Over 3-day injury</td> </tr> <tr> <th>4</th> <td>8</td> <td>16</td> <td>24</td> <td>32</td> <td>40</td> <td>4 Probable</td> <td>4 Major injury</td> </tr> <tr> <th>5</th> <td>10</td> <td>20</td> <td>30</td> <td>40</td> <td>50</td> <td>5 Certain</td> <td>5 Incapacity/death</td> </tr> </tbody> </table>				Likelihood (L)									1	2	3	4	5	Likelihood (L)	Severity (S)	Severity (S)	1	2	4	6	8	10	1 Highly unlikely	1 Trivial	2	4	8	12	16	20	2 Unlikely	2 Minor injury	3	6	12	18	24	30	3 Possible	3 Over 3-day injury	4	8	16	24	32	40	4 Probable	4 Major injury	5	10	20	30	40	50	5 Certain	5 Incapacity/death
		Likelihood (L)																																																												
		1	2	3	4	5	Likelihood (L)	Severity (S)																																																						
Severity (S)	1	2	4	6	8	10	1 Highly unlikely	1 Trivial																																																						
	2	4	8	12	16	20	2 Unlikely	2 Minor injury																																																						
	3	6	12	18	24	30	3 Possible	3 Over 3-day injury																																																						
	4	8	16	24	32	40	4 Probable	4 Major injury																																																						
	5	10	20	30	40	50	5 Certain	5 Incapacity/death																																																						

Hazard	Risk	Persons at Risk	L	S	Pre-Evaluation	Controls & Safe System of Work	L	S	Post-Evaluation
Vehicle Movement	Injury / Fatality	Operatives Public Site employees	3	5	15	Regular monitoring by site supervision High Visibility PPE to be worn at all times whilst on site Engineer to be made aware of site rules relating to vehicle traffic expectancy, in particular to areas of regular traffic Engineer to wear safety hat when working in the vicinity of fork trucks or any other mechanical or vehicular activity where goods are moved above the engineer. The site shall provide detailed information on traffic flow and warning signs in operation All engineers to receive induction prior to working on site. This induction shall cover all traffic rules for the site and all other risks our engineers shall be exposed to.	1	5	5
	Restricted movements in working area	Operatives	3	4	12	Assistance to be used to manoeuvre vehicles where location and visibility an issue On site meetings to inform of vehicle usage and locations	1	4	4
	Working in close proximity to other trades	Public	3	4	12	Barriers/fencing to be installed where possible to cordon off working areas PPE to be worn at all times On site meetings and communication for all site personnel.	1	4	4
Night Works/Low light levels	Injury	Operatives	3	4	12	All work areas to be appropriately illuminated to ensure work can be carried out in a safe and visible manner. High visibility clothing shall be worn at all times whilst work is being carried out in low-light conditions. Operatives to log working location with HQ before commencement.	1	3	3

Hazard	Risk	Persons at Risk	L	S	Pre-Evaluation	Controls & Safe System of Work	L	S	Post-Evaluation
Manual handling	Sprains/strains	Operatives	4	4	16	<p>The Load: Ensure Manual Handling Assessment has been carried out taking into consideration weight and size of load and frequency of operation. Check the condition of the load for hazards such as loose parts, irregular objects, bulky or difficult to handle (sacks, non rigid, unpredictable loads) Where practicable use mechanical aids. Get assistance if required</p>	2	2	4
		Operatives	4	4	16	<p>The individual: All engineers trained on manual handling and toolbox talks issued Before using any mechanical aids check training has been conducted and is up to date. Ensure correct PPE is available and being worn Ensure correct posture throughout the task :- Keep back straight, Keep arms close to the body, Tuck the chin in, Stand facing the direction you intend to go with feet slightly apart one slightly in front of the other, Bend the knees and grip the load with the palm of your hand, not just your fingers Lift straightening the legs, keeping the load close to your body, Turn by moving your feet, not twisting your back</p>	1	2	2
		Operatives	4	4	16	<p>The Task: Check items for hazards such as sharp edges Check items are safe to move, containers are fit for purpose Rehearse the lift if necessary Risk assess loose parts, irregular objects, bulky or difficult to handle items</p>	1	2	2

Hazard	Risk	Persons at Risk	L	S	Pre-Evaluation	Controls & Safe System of Work	L	S	Post-Evaluation
		Operatives	4	4	16	<p>The environment: Ensure that adequate room is available to carry out and complete the task, Ensure destination route is unobstructed both width & height Check the floor surface is in good condition, Consider weather conditions for outdoor works, Ensure lighting is adequate</p>	1	2	2
Hand and power tools	Electrocution	Operatives	4	4	16	<p>Cordless power tools to be used where feasible. All 240V tools shall be RCD protected. All employees to be trained/instructed in basic system operation. Electricians to observe safe isolation procedures. All electrical works to be carried out in accordance with BS7671 and the Electricity at Work Act. All users of the power tools are to conduct a pre-use visual inspection to include condition of flex, plug head and condition of the tools casing for signs of damage or abrasion. Work to be restricted in wet conditions.</p>	1	3	3

Hazard	Risk	Persons at Risk	L	S	Pre-Evaluation	Controls & Safe System of Work	L	S	Post-Evaluation
	Injury	Operatives	4	4	16	<p>All tools to be used in accordance with manufacturer's instructions.</p> <p>Battery chargers to be PAT tested. Cordless power tools to be used where feasible. All 240V tools shall be RCD protected.</p> <p>Only Trained personnel to use power tools. Check tool is appropriate for the job and used in accordance with manufacturer's instructions.</p> <p>Power tools to be securely stored when not in use. Loose clothing, jewellery and long hair to be kept clear of moving parts.</p> <p>Use guards where appropriate, never remove guards on power tools. Secure all work pieces when cutting or drilling items that could move</p> <p>Only use approved accessories and attachment with power tools. Ensure that there is adequate room to do the task at hand.</p>	2	2	4
	Electrical fire	Operatives Public Site employees	3	3	9	<p>Equipment supplied to site will be fit for its purpose with regard to voltage, power and environmental conditions.</p>	1	3	3
	Hand/Arm Vibration	Operatives	3	3	9	<p>Choose tools and equipment that omit low vibration levels when available.</p> <p>Reduce exposure time (possible to job share or job rotation) and taking regular breaks.</p> <p>Use of SDS type drills to be used</p> <p>Follow manufacturer's guidance notes and HSE exposure limits. (Compliance Team can provide information on exposure limits)</p> <p>Use foam gloves to keep your hands warm.</p> <p>Engineers must report any signs of tingling and numbness in their hands to a supervisor/Manager immediately</p>	2	2	4

Hazard	Risk	Persons at Risk	L	S	Pre-Evaluation	Controls & Safe System of Work	L	S	Post-Evaluation
	Noise/dust	Operatives	3	3	9	Hearing protection must be worn at all times during use of power tools. FFP 3 dust masks (if appropriate) and goggles to be used when using power tools. Engineers are to report any defective PPE being worn	1	2	2
Weather	Exposure Lightning Strikes Slips and trips Dehydration	Operatives	2	5	10	ARP to assess weather conditions before commencing works. Adequate PPE to be provided and utilised. No works outdoor works to be undertaken during thunderstorms. Provision of drinking water. During extreme heat conditions, regular breaks to be taken, plan work to eliminate exposure to sunlight at the hottest part of the day In extreme cold, avoid touching cold metal surfaces with bare skin - use of gloves in cold environments at all times	1	2	2
Dust	Inhalation and irritation	Operatives Public Site employees	4	4	16	Working areas to be clearly demarcated. Barrier systems and signage to be put in to place. Temporary dust screens / partitions to be installed. Air cubes to be used in sensitive areas to ensure any dust is contained. Vacuum cleaners fitted with heap filters to be used as opposed to brushing / sweeping up. Wear suitable PPE / RPE issued to all engineers. All equipment to be fitted with suitable dust suppressant measures. Areas to be 'damped down' where required to minimize dust release. Manufacturers guidance notes to be followed for use of all equipment that may create dust / release fumes	1	3	3
Chemicals	Irritation or poisoning	Operatives	4	5	20	Implementation of COSHH procedures. Documents to be available for reference in an emergency situation.	1	2	2

Hazard	Risk	Persons at Risk	L	S	Pre-Evaluation	Controls & Safe System of Work	L	S	Post-Evaluation
Fire	Injury/fatality	Operatives Public Site employees	3	5	15	Operatives to familiarise themselves with escape routes as part of Dynamic Risk Assessment Only use fire fighting equipment where the fire is small enough to tackle (eg. waste paper bin). Follow emergency protocol on site at all times	1	5	5
Working at height	Falling from height	Operatives	5	4	20	Ladders / Stepladders are to be used for short duration periods only Area surrounding work to be carried out to be checked to ensure it is safe to use equipment. Before any attempt to use ladders checks must be made to the condition of: - • Treads. • Stiles. • Hinge arrangements. • Restraining rope. Damaged ladders must be taken out of use immediately. All works to be planned and organised All personnel working at height will have received training and instruction. All operatives and those working below overhead operations will wear appropriate P.P.E. Regular refresher training courses TBTs	1	4	4
	Fall of materials	Operatives Public Site employees	5	4	20	If the workplace contains an area in which there is a risk of someone being struck by a falling object or person this area must be clearly indicated and that (as far as reasonably practicable) unauthorized people are unable to reach it – establish and police any exclusion zones. All operatives and those working below overhead operations will wear appropriate P.P.E. Barriers and signage to block off work areas	1	4	4

Hazard	Risk	Persons at Risk	L	S	Pre-Evaluation	Controls & Safe System of Work	L	S	Post-Evaluation
	Weather	Operatives	4	4	16	Weather conditions to be assessed prior to any work commencing. Suspend any works during strong winds, poor visibility or icy conditions Assess the area surrounding the works	1	4	4
	Incorrect assembly/use of ladders	Operatives	5	4	20	<p>All personnel working at height will have received training and instruction. Before use the following instructions and checks are to be carried out:-</p> <ul style="list-style-type: none"> • ensure ladders cannot slip • ensure ladders are tied near to the top • ensure the rungs are clean • Ensure that footwear is clean • use both hands when climbing or descending and maintain 3 points of contact at all times • If ladders cannot be tied at the top then secure ladder by extension feet, otherwise the ladder must be footed by a second person to prevent it slipping outwards or sideways. • Never use a makeshift or homemade ladder • Never overreach • Never stand on a drum or other unsteady base to obtain additional height. • Set ladder at correct angle – One measure out to every four measures up. • Never overload a ladder or support it on its bottom rung on a plank. • Ensure ladder is correct height for task; ladder must reach 1.07m above a platform or step off point 	1	3	3

Hazard	Risk	Persons at Risk	L	S	Pre-Evaluation	Controls & Safe System of Work	L	S	Post-Evaluation
	Incorrect assembly / use of Step Ladders	Operatives	4	4	16	<p>Stepladders are only to be used for light duty work</p> <p>Ensure set on firm level base</p> <p>Work no further than two thirds up the stepladder – maintain 3 points of contact at all times.</p> <p>Boards are not to be hung between treads to provide working platform.</p> <p>Treads of stepladders not to be used as work benches.</p> <p>Stepladders are not to be used to access another level</p>	1	4	4
Buried Utilities	Electrocution Explosion Fire Environmental incident	Operatives	4	5	20	<p>Any areas which are to be excavated shall be appropriately surveyed and marked out before any works commence. A Cable Avoidance Tool (CAT) will be used to identify existing utilities.</p> <p>Excavations shall be carried out by hand where feasible. Safe dig plans will be sought from utility providers if appropriate</p>	1	5	5
Asbestos	Exposure to asbestos fibres	Operatives	4	5	20	<p>Potential presences of asbestos to be noted on inspection and surveyed. All staff trained for asbestos awareness.</p> <p>Where any asbestos is identified work is to stop immediately and this is to be reported</p>	1	4	4
Mechanical Excavator	Injury	Operatives Public Site employees	4	5	20	<p>Operatives to hold appropriate qualification.</p> <p>Barriers to be installed around excavator at a distance not less than: excavator arm length + 1.5m = safe zone. No operatives to work in safe zone whilst excavator is in use.</p>	1	5	5
Excavated hole	Slips, trips, falls	Operatives Public Site employees	4	5	20	<p>Appropriate pedestrian/traffic barriers to protect all excavations. All excavations to be covered if left unattended for long periods of time e.g. overnight.</p>	1	4	4

Hazard	Risk	Persons at Risk	L	S	Pre-Evaluation	Controls & Safe System of Work	L	S	Post-Evaluation
Overhead Cables	Electrocution	Operatives	3	5	15	No work to be carried out within a 3m perimeter of un-sheathed overhead cables. Any work which requires the movement of conductive materials with a length greater than 1.5m must not be carried out until overhead cables are shrouded. Overhead cables must be shrouded by the DNO before works can commence.	3	3	9
Access to live parts	Electric Shock	Operatives	4	5	20	Electrical work will be carried out by trained and qualified electricians. No work is to be carried out directly on live electrics. Authorisation to undertake any electrical testing and commissioning will be granted to competent employees who have received appropriate levels of information, instruction and training. Power supply to be isolated and locked off by each operative at main isolator, in order to prevent any accidental operation of functions with potential to cause harm. Test for dead on isolation All areas/components which could allow un-trained persons to touch live parts will be appropriately barriered, secured and signed at all times. No areas/components which could allow access to live parts, without the use of a key or tool, will be left unattended.	1	5	5
Earthing/Bonding	Electric Shock	Operatives Public Site employees	2	5	10	Before any electrical works are undertaken the adequacy of Earthing/Bonding will be assessed (usually on survey) and upgraded as required. Earth electrodes may be required on sites which have a TN-C-S earthing system, or, a TN-S Earthing system which cannot be guaranteed to be present in future.	1	2	2

Hazard	Risk	Persons at Risk	L	S	Pre-Evaluation	Controls & Safe System of Work	L	S	Post-Evaluation
General Housekeeping	Slips, trips, falls	Operatives Public Site employees	3	4	12	Battery tools to be used wherever feasible. At any time where the work area is to be left unoccupied the work area must be left in such a way to not pose a risk to anyone who may access it. Make client aware of any trailing leads. Use barriers or other suitable warning aids to increase visibility. Spillages must be cleaned up immediately and signage displayed. At the end of the working day the waste items must be removed and any dust or debris swept away. Management to ensure compliance with this assessment. Supervisors to check compliance during monitoring visits	2	2	4
	Blocking escape routes	Operatives Public Site employees	3	4	12	Bagged waste materials must be removed from the work areas and placed in the waste skips provided by the Principle Contractor / Customer. This must not be disposed of into the household waste bins of any residential premises being worked on.	1	2	2
Spills	Environmental incident	Operatives Public Site employees	3	3	9	Spill kit to be present on site at all times.	1	2	2
Sharps	Cuts and infection	Operatives			20	PPE (gloves and safety glasses as appropriate) and suitable tooling to be provided and utilised. Training given to all staff for dealing with sharps Ensure work area is clear at all times, offcuts from cutting cables which could pose a hazard have been cleared. Secure any loose materials	1	2	2

Hazard	Risk	Persons at Risk	L	S	Pre-Evaluation	Controls & Safe System of Work	L	S	Post-Evaluation
Lone Working	Increased vulnerability	Operatives	2	3	6	All site operatives provided with mobile phone for emergency calls. Installer to log/off site with Project Manager. Regular site audits. Operative provided with training on lone working procedures.	1	3	3
Vermin	Exposure to bites, scratches, infestation and excrement	Operatives	3	3	9	Personnel carry out a dynamic Risk Assessment of area prior to starting work. Personnel wash hands and arms thoroughly after finishing work and before eating, drinking or smoking. All scratches, cuts and abrasions are covered with waterproof dressings If contact is made personnel to seek medical advice immediately should they develop flu like symptoms – headache, fever and chill.	1	3	3



Dynamic Risk Assessment – to be completed when new, unidentified, hazards are present						
Hazard	Risk	Persons at Risk	Pre-Evaluation	Control	Safe System of Work	Post-Evaluation

RAMS Handover					
Risk Assessor:	James Hutchinson	Site Supervisor:		Client:	
Date:		Date:		Date:	
Signature:		Signature:		Signature:	

