STATIC Plant Hazard Assessment Form

Assessment Number: **TL2**	**Assessment Date:** **16/1/2024**
Plant Type: Traffic Lights (Solar) **Plant Make:** A1 Roadlines **Plant Model:** CS-400 **Asset/Fleet/Rego No**: **Plant Serial No.** VIN 6T9T20V86NA3VM0 (088/089, 066/067, 068/069)	**Assessment Facilitated by:** **Leigh Evans (Admin/Accounts Manager)** **Assessment Participants**: **Chris Feldbauer (Director)**
Plant Owner Name: **Northern Hire Group**	**Initial Assessment**

Site/Job Specific Assessment Required? YES

When completing the checklist, consider the hazards that may affect:
- plant operators
- anyone working, or in the vicinity of, the plant
- others who could be affected, such as visitors, pedestrians, contractors, etc.

Is the plant designed to perform the task?	Yes	~~No~~	
Has the plant been modified from the original condition?	~~Yes~~	No	
Is the plant in good working condition and free of weeds & mud?	Yes	~~No~~	
All identified action items closed out/addressed (plant checks)?	Yes	~~No~~	
Is the plant safe to operate? (On completion of PHA and action closure)	Yes	~~No~~	

Date: 16/1/24 **Signature:** 

STATIC Plant Hazard Assessment Form

This document has been developed as a guide to identify hazards on plant only.

This Risk Assessment has been conducted to the guidelines as detailed in the Worksafe booklet "Plant Hazard Checklist"

Workplace hazards <u>have not</u> been identified.

Job safety analysis (J.S.A) - Safe Work Method Statement (SWMS) is required to identify workplace hazards.

Operators must take into account Job Safety Analysis when operating mobile plant.

This assessment is conducted under a static condition as per Occupational Health & Safety Regulations Victoria 2017. A site specific assessment should be conducted at each change of location. Refer to Plant Regulations/National Standards for Plant (NOHSC).

Action and Approval Scheme

These suggested timings and tolerance levels in the Action Table will be overridden by specific policies of the company that either dictate shorter timeframes for corrective action or zero tolerance. For example, the company has a zero tolerance policy for Safety and Environmental risks.

The decision to tolerate a risk or capture a opportunity should be based on a consideration of:

Whether the risk / opportunity is being controlled to a level that is reasonably achievable;

Whether it would be cost-effective to further control risk or capture the opportunity;

Whether the user wishes to tolerate risks / opportunities of that type

	A	B	C	D	E
1	H	H	H	M	M
2	H	H	M	M	L
3	H	M	M	L	L
4	M	M	L	L	L
5	M	L	L	L	L

Hazard Risk Assessment

H	High Risk INTOLERABLE (Significant & Urgent Action(s) required - Immediate Action)
M	Medium Risk (Reduce risk to ALARP - As Low As Reasonably Practicable)
L	Low Risk -Tolerable (monitor and manage risk)

Likelihood of Occurrence
1. Expected to occur (once per week)
2. Common (once per month)
3. Rarely (once in < 20 years)
5. Highly unlikely (once in > 20 years)

Severity of Result
A. Fatality
B. Permanent Disability
C. Lost Time Injury (LTI)
D. Medical Treatment/Damage
E. First Aid Injury

Disclaimer:

This Plant Hazard & Risk Assessment does not eliminate the Owner/Operator responsibility to maintain the Mobile Plant as per OH & S Regulations Victoria 2017/National Standards for Plant (NOHSC).

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This assessment provides information that is based on an inspection that was made on the date noted on the assessment cover sheet. If any addition, alteration or modification has been made to this mobile item plant subsequent to that date, it may not confirm to a satisfactory level of acceptance.

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All hazards identified in this document must be rectified within 21 days of date listed on this form.

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If faults are not rectified in 21 days, this document becomes null and void.

I acknowledge receipt of the complete Assessment for the Plant item detailed on the cover sheet.

I acknowledge receipt of the complete Assessment for the Mobile Plant item detailed on the cover sheet.

Supervisor/Operator Name: ……

Supervisor/Operator Name: ……
Supervisor/Operator Signature:……

Supervisor/Operator Signature:……
Date: / /

Date: / /

<u>Further information</u>

Contact the WorkSafe Victoria Advisory Service on 1800 136 089 or go to worksafe.vic.gov.au to download:

- Occupational Health and Safety Act 2004
- Occupational Health and Safety Regulations 2017
- Plant Compliance Code
- Hazardous Manual Handling Compliance Code
- Noise Compliance Code
- Hazardous Substances Compliance Code
- Code of Practice for Storage & Handling of Dangerous Goods

STATIC Plant Hazard Assessment Form

Potential Hazards	Hazard			Describe Hazard	Controls	Current Risk Level	New or Additional Controls Required on Plant	Final Risk Level	New or Additional Controls Action By: (Name and Date)	Action Verified as Complete: (Name and Date)
	Y	N	N/A							
1. Are there any specific warnings or conditions (manufacturers or other) relating to potential hazards from the operation of the item of plant? ▪ Refer to technical or operating manuals, SOPs, safe use instructions ▪ List any relevant safety warning hazards & controls	*Y*			Injury due to improper use	Please refer to Safety Precautions, Operator Manual & ensure safety decals are in a clean and readable state. A site specific Risk Assessment/ & SWMS may be required	L				
2. Are there any <u>COMMUNICATION</u> requirements in relation to the safe operation of the plant? ▪ Active signalling processes. ▪ Point to point communications. ▪ Whistle ▪ Spotter (with/without whistles) ▪ Flag signalling ▪ Labels and signage	Y			Potential hazard from incorrect set-up/configuration	Refer to field manual for set up procedure. Site specific risk assessment must be undertaken by client prior to operating plant	M				

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	Y	N	N/A							
3. Can anyone be <u>ENTANGLED</u> in the plant? ▪ Hair or other body parts caught in moving parts ▪ PPE caught in moving parts ▪ Isolation devices ▪ Warning decals ▪ Guarding ▪ Rotating parts ▪ Emergency stops	Y			Injury due to contact with moving parts	Ensure all guards are in place and have clear hazard warning labels Operators to use appropriate PPE. Ensure hair, jewellry, loose clothing, etc are kept away from moving parts. Do not climb onto or from moving plant Operators are to locate emergency stops and ensure they are in working order before operation.	M				

4. Can anyone be CRUSHED or TRAPPED? *(e.g. through unexpected movement, lack of capability for plant or equipment to be slowed, stopped or immobilised, plant tipping or rolling, being thrown from plant)* ▪ Emergency stop (E Stop) ▪ Service or parking brake ▪ Battery isolator ▪ ROPs/FOPs ▪ Being crushed between moving parts ▪ Unexpected movement ▪ Neutral Start ▪ Reversing/travel alarm ▪ Warning horn ▪ Amber flashing beacon ▪ Rear swing warning lights ▪ Pedals non slip surface ▪ Appropriate controls ▪ Rear view mirror ▪ Seat belt ▪ Door inter locks ▪ Crush zone decals ▪ Guarding devices ▪ Mandatory secondary protection device installed on all boomtype MEWP	Y			Falling, uncontrolled or unexpected movement of plant or load. Tipping or rolling over. Effects of wind and weather.	Vehicle is to be parked on solid, stable ground and handbrake or stabilisers engaged. Safety chains must be attached each time the trailer is attached to a vehicle. Do not exceed the maximum weight limit of the vehicle. Use part brake at all times while stopped. Wheel chocks must be used when on a slope of any grade. Amber flashing warning light fitted to vehicle. Hazards light must be functioning. No person is to ride on the trailer while vehicle is in motion. Handbrake must be applied Lower jockey wheel Disconnect breakaway brake cable Outriggers engaged Pre-operation check of vehicle and	M				

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	Y	N	N/A		trailer is recommended. Replace and repair any damaged items. Workers to keep clear of mast and light unit while raising and lowering Workers must not mount the unit for any reason. Client must risk assess workplace for the effects of weather and high winds.					
5. Can anyone be CUT, STABBED or PUNCTURED? ▪ Flying objects ▪ Moving parts ▪ Pinch points ▪ Sharp edges ▪ Isolation devices ▪ Warning decals ▪ Guarding	Y			Injury from contact with sharp or moving parts, or dislodged debris from work area/piece	Establish exclusion zone around work site. Operator to use correct PPE.	M				

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	Y	N	N/A							
6. Can SHEARING occur? ▪ Between two moving and rotating parts ▪ Between fixed and moving parts ▪ Warning decals ▪ Guarding	Y			Injury from contact with moving parts	Enusre all guards are in place and hazards clearly labelled. Establish exclusion zone around work site.. Avoid contact with moving parts Operator to use correct PPE.	L				
7. Can ABRASION, TEARING or STRETCHING occur? ▪ Continuous contact with moving parts ▪ Warning decals ▪ Guarding ▪ Pulling/pushing		N								

8. Can anyone be STRUCK whilst operating the plant? ▪ Plant disintegrating ▪ Mobility of plant travelling ▪ Reversing/travel alarm ▪ Amber flashing beacon ▪ Work pieces thrown out ▪ Moving parts ▪ Warning decals ▪ Guarding	*Y*			Injury from contact with moving plant or passing vehicles Injury from dislodged debris from work area/piece. Effects of wind and weather	Installation and operation of unit may require a SWMS under state legislation – check local requirements Avoid installing unit near trenches, pits, cut-ins, ditches and other drop offs or areas where ground stability may be an issue. Daily pre-operational check of equipment and trailer is recommended. Replace and repair any damaged items. Trailer must not be placed on slopes greater than 20° Trailer must not be disconnected from tow vehicle on slopes. Wheel chokes are to be used when trailer is disconnected/parked. Handbrake must be applied Lower jockey wheel	M				

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	Y	N	N/A							
					Disconnect breakaway brake cable Outriggers engaged Client must assess site for the effects of weather and high winds.					
9. Can a hazardous PRESSURE be produced? ▪ Hydraulic hoses ▪ Radiator ▪ Come into contact with fluids under high pressure		N								

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	Y	N	N/A							
10. Can an ELECTRICAL hazard be created? ▪ Lack of insulation ▪ Contact with electrical conductors ▪ Poor earthing ▪ Water near equipment ▪ Lack of isolation ▪ Warning decals	Y			Installation and operation of unit may require a SWMS under state legislation – check local requirements Avoid installing unit near trenches, pits, cut-ins, ditches and other drop offs or areas where ground stability may be an issue. Daily pre-operational check of equipment and trailer is recommended. Replace and repair any damaged items. Trailer must not be placed on slopes greater than 20° Trailer must not be disconnected from tow vehicle on slopes. Wheel chokes are to be used when trailer is disconnected/parked. Handbrake must be applied Lower jockey wheel Disconnect breakaway brake cable Outriggers engaged Client must assess site for the effects of weather and high winds.	Site induction and planning is the responsibility of the principal contractor Ensure all site personnel receive appropriate instruction on all electrical service locations and associated control measures. Minimum approach distances must be adhered to at all times The plant must be isolated prior to maintenance. Safety labels must be maintained	L				

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	Y	N	N/A							
11. Can an EXPLOSION or LOSS OF CONTENTS occur? ▪ Gas emission, ▪ Dusts ▪ Vapours, lubricants ▪ Fuel tank ▪ Storage of haz chemicals/ DG's near plant ▪ Warning decals ▪ Ejection of workpiece ▪ Collapse or fragmentation		N								
12. Can anyone using or near the plant SLIP, TRIP or FALL? ▪ Uneven surface ▪ Fall from a height ▪ Weather conditions ▪ Slippery surfaces	Y			Potential Hazard – site specific	Site specific risk assessment must be undertaken by client to determine controls prior to operating plant.	L				
13. Are there ERGONOMIC - MANUAL HANDLING hazards associated with the plant? ▪ Poor posture ▪ Repetitive or sustained movements ▪ Awkward positions ▪ Strained movements ▪ Poorly designed seating ▪ Access and egress ▪ Access for maintenance ▪ Routine inspections and adjustments		N								

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	Y	N	N/A							
14. Are there ERGONOMIC - OPERATING CONTROL hazards associated with the plant? ▪ Difficult to understand ▪ Inappropriate colouring ▪ Function not identified ▪ Inappropriate controls & switches ▪ Access and egress ▪ Labelling of controls and indicators ▪ Variation in operators ▪ Operation by two or more persons		N								
15. Are there specific requirements for ISOLATION of energy sources? ▪ Hydraulic pressure ▪ Compressed gases ▪ Electrical feeds/capacitors ▪ Motive power systems ▪ Suspended loads ▪ Operation by two or more persons		N								

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16. Can unplanned LOSS of POWER create a hazard? ▪ Engine shutdown ▪ Loss of electrical supply ▪ Loss of steering systems ▪ Ability to apply brakes and stop ▪ Ability to lower suspended loads	Y			Potential for injury/damage due to traffic confusion, in the event of power loss	Daily pre-operational inspection required to determine wear and/or damage. Ensure solar panels are positioned with access to direct sunlight (away from trees and/or shade creating objects).	**L**				
17. Can anyone be SUFFOCATED? ▪ Lack of oxygen ▪ Contaminated atmosphere ▪ Confined spaces ▪ Spaces where air flow is inadequate		N								
18. Does operation of the plant cause extreme TEMPERATURE changes? ▪ Fire ▪ Burns through conduction ▪ Convection ▪ Cryogenic burns ▪ Operation in extreme heat or cold		N								
19. Can a FIRE occur? ▪ Friction ▪ Ingress of materials/fluids ▪ Build-up of materials/lubricants ▪ Fuels ▪ Fire extinguisher		N				L				

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	Y	N	N/A							
20. Can certain WEATHER conditions create a hazard? ▪ Hypothermia / extreme cold ▪ Heat stroke / extreme hot ▪ Wet conditions ▪ Electrical storms ▪ Dirt & mud on roads at egress points	Y			Effects of wind & weather	Client must assess workplace for the effects of weather and high winds. Solar powered devices may require power backup in extended periods without direct sunlight.Observe local weather warnings.	L				
21. Does VIBRATION of the plant create a hazard? ▪ Plant becomes unstable ▪ Causes physical problems for the operator whilst operating ▪ Vibration of equipment ▪ Operation could cause unacceptable vibration levels in nearby structures		N								
22. Can the plant emit toxic FUMES or VAPOURS? ▪ Exhaust fumes ▪ Chemicals ▪ Haz chemicals/DG's		**N**				L				

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23. Carry out NOISE survey on page 14. Is the plant noisy? ▪ Emit >85 dBA at the operator ▪ Effects operator communication ▪ Noise impacts on community during out-of-hours work (including reversing beepers)		N								
24. Carry out the LIGHT survey on page 14. Is there poor visibility ▪ At the controls ▪ At the task ▪ Darkens surrounding areas ▪ Light impacts on community or sensitive natural environment during out-of-hours work				Site Specific						
25. Does the plant emit RADIATION? ▪ Eg X-rays ▪ EMR ▪ Laser		N								
26. Can operation of the plant create DUST? ▪ Explosive atmosphere ▪ Breathing hazard ▪ Reduced visibility ▪ Nuisance dust at nearby community ▪ Impact on local flora and fauna ▪ Loss of topsoil and spread of weeds and pathogens		N				L				

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	Y	N	N/A							
27. Can the plant become UNSTABLE during operation? ▪ Working on uneven / unstable ground ▪ Shifting load ▪ Lack of plant support ▪ Outriggers	Y			Injury from overturning plant and/or shifting load Effects of wind and weather	Ensure plant is operating within the manufacturers specifications Avoid use near steep slopes, trenches & pits. Reinforce grounds and edges where required. Site specific risk assessment must be undertaken by client onsite to determine PPE and controls	L				
28. Could LOSS of LOAD occur? ▪ Failure of ropes/slings ▪ Overloading ▪ Entanglement in surrounding structures ▪ Maintenance requirements		N								

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	Y	N	N/A							
29. Is there anything in the SURROUNDING ENVIRONMENT that may produce a hazard? ▪ Power lines ▪ Low ceiling ▪ Other plant ▪ Storage areas ▪ Co-located equipment ▪ Isolation requirements ▪ Potential for flash flooding if operating adjacent to waterways ▪ Operating in known areas of weeds, pathogens or contamination ▪ Operating in sensitive environments requiring protection from offsite weeds/pathogens or spills	Y			Potential Hazard – site specific hazards	Site specific risk assessment must be undertaken by client to detemine controls, PPE & exclusion zones.					
30. Can CHEMICALS create a hazard? ▪ Leaking from plant ▪ Splashing ▪ Explosion ▪ PPE considerations ▪ Spill kit considerations		N								

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	Y	N	N/A							
31. Operator TRAINING / QUALIFICATIONS? ▪ Training requirements ▪ Qualification requirements ▪ Competency assessments ▪ Documentation ▪ Operator's manual ▪ Equipment experience ▪ Product knowledge	Y			Operation by persons who are not suitably qualified or experienced may result in injury to person, damage to property, and may also void insurance cover.	Operation by persons who are not suitably qualified or experienced may result in injury to person, damage to property, and may also void insurance cover. All operators must completely read and understand the Operator Manual prior to operating plant. Undertake a Job Safety and Environmental Analysis before use of plant, and use to determine that the relevant safety procedures are in place before commencing work.	L				
32. Are there <u>ANY OTHER</u> potential hazards generated by or during the use of this item of plant and/or any attachments?		N			*Pre – Operational Inspection*		**DAILY** - Operators must complete Start-up checklist Operation checklist Parking Checklist			

ALL OPERATORS OF THE PLANT OR EQUIPMENT MUST BE BRIEFED ON THE PLANT HAZARD ASSESSMENT (PHA) PRIOR TO FIRST TIME USE.

ANY RELEVANT CONDITIONS WHICH MAY IMPACT ON THE OPERATION OF THIS ITEM OF PLANT OR EQUIPMENT MUST BE TRANSFERRED TO THE AMS/TRA.

STATIC Plant Hazard Assessment Form

NOISE REPORT			
Equipment Type:	**Traffic Lights (Solar)**	**Serial/Asset No.**	
Make:	**A1 Roadlines**	**Model:**	**CS-400**
Test by (print):		**Date:**	**16/1/24**
Signature:			
Sound Level Meter Unit Used:			
Manufactures specified noise level:			**>80 dBA**
Background level:			**dBA**
Results – Operator's Station (Equipment Operating)		**>90 dBA**	**High Idle**
		>80 dBA	**Low Idle**
Comments:			
Results – Bystander Position: **At 7 metres from side of equipment – Equipment Operating (High Idle)**			
Front			**dBA**
Rear			**dBA**
Left			**dBA**
Right			**dBA**
Comments:			

LIGHTING REPORT			
Test by (print):		**Date:**	
Signature:			
Lux Meter used:			
Results – Operator's station			
At controls			**Lux**
At emergency control			**Lux**
In front/over task			**Lux**
Left side task			**Lux**
Right side task			**Lux**
Comments:			
Results – Surroundings:			
Clearly seen by others?		**☐ Yes**	**☐ No**
Decrease lighting in walkways?		**☐ Yes**	**☐ No**
Decrease lighting to other workstations?		**☐ Yes**	**☐ No**
Comments:			

COMMENTS:
This Hazard Identification and Risk Assessment has been prepared based on several key assumptions: 1. *That all examples of the plant currently in service are as per their original specification.* 2. *That all examples of the plant have not been modified in any way without the prior written consent of the manufacturer or owner.* 3. *That all examples of the plant are operated and maintained in accordance with the Manufacturer's Instructions and with all applicable statutory requirements.* *Northern Hire Group have made every attempt to identify all reasonable foreseeable operating circumstances in preparing this assessment, however no guarantee as to the completeness of this Assessment is provided or implied.* You should always check any applicable legislation and make your own judgement about what action you may need to take to ensure you have complied with the law. *It is the responsibility of the Employer, Contractor, Operator(s) to assess and identify any site or operation specific hazard associated with the use of this equipment specifically applicable to the task to be carried out and to where the equipment is to be used or located. They must assess the risk potential for each of the identified hazards and ensure that all reasonably practicable steps are undertaken to ensure those risks are effectively controlled.* *All operators must be trained and competent in the use of this plant and hold appropriate qualifications as required by applicable regulatory requirements.* *Operators of the plant to which this Risk Assessment refers must read and understand the instructions for Use and Warnings contained in the Operator Manual, or supplied with this Assessment, prior to use.* *All daily Pre-Start checks, Routine and Periodic Inspections, Maintenance and Repairs to this plant must be carried out in accordance with the requirements of applicable Australian Standards.*
NOTES: