


| 15802 | RISK DESCRIPTION  |  | TREND   | INHERENT | CURRENT | RESIDUAL |
|-------|---|--|---|----------|---------|----------|
|       | IAP: s5138877, Barber Jessy - Investigating the Health of a Footbridge using LoRaWAN technology |  |  | Medium   | Low     | Very Low |

| RISK OWNER   | RISK IDENTIFIED ON | LAST REVIEWED ON | NEXT SCHEDULED REVIEW |
|--------------|--------------------|------------------|-----------------------|
| Jessy Barber | 14/03/2023         | 14/03/2023       | 14/03/2025            |

| RISK ACTIVITIES   | RISK FACTOR(S)   | INHERENT | EXISTING CONTROL(S)  | CURRENT  | PROPOSED CONTROL(S)   | TREATMENT OWNER              | DUE DATE                     | RESIDUAL |
|---|--|----------|--|----------|---|------------------------------|------------------------------|----------|
| <b>Electrical equipment</b><br>Will often handle sensitive electronics during the design and build process of the project. Will often use high voltage/current capable electrical equipment such as power supplies. | Risk of electrocution and short circuiting components. Risk of blowing a component and inhaling toxic fumes.   | Low      | Control: Ensure the workplace is clear and eye protection is worn.<br><br>Control: Ensure that adequate training for electrical equipment has been attained. | Very Low |   |                              |                              | Very Low |
| <b>Soldering electrical connections</b><br>Soldering electrical connections between electronics with a soldering iron in an electrical engineering lab.   | Soldering electronic connections. Risk of burns & inhalation of solder fumes.  | Low      | Control: Eye protection and gloves.<br><br>Control: Extractor fans / ventilation.  | Very Low |   |                              |                              | Very Low |
| <b>Working on the footbridge</b><br>Fastening three sensor nodes in their enclosures to the Griffith footbridge.  | Sensor nodes need to be fastened to the footbridge. The footbridge is situated over busy highway traffic. There is a risk of dropping equipment onto the road below and causing an accident. | Medium   | Control: The footbridge has protective railing.  | Low      | Design the module to be as small and lightweight as possible.<br>Design a secure fitting so that there is no chance of the sensor nodes falling.<br><br>Plan where the sensor nodes will sit along the bridge before implementation. Gain approval from supervisor for field implementation of equipment. Conduct implementation on | Jessy Barber<br><br>Yong Zhu | 15/04/2023<br><br>14/04/2023 | Very Low |
| <b>Vibrating beam experiment</b>  | Risk of crushing or physical injury if not   | Low      | Control: Cannot enter labs without enclosed  | Very Low | Ensure the space surrounding the experiment is clear. Ensure  | Jessy Barber                 | 31/03/2023                   | Very Low |