Required criteria:

* Wifi or ethernet access
* Power availability to wherever the camera will be mounted
* Unobstructed view of the sky
* Mount point that is off of the ground

Preferred criteria:

* Mount point on the roof
* Minimal levels of light pollution
* Designated computer for interacting with the camera module
* Small amounts of cloud cover (this is obviously outside the school’s control, but cloud cover plays a major role in deciding if the camera can take pictures or not).
* STEM program or other group of students interested in the project to monitor and maintain the on-site camera

| Pros and Cons of Potential Camera Sites  Required Criteria denoted by asterisk (\*) | |
| --- | --- |
| Pros | Cons |
| Existing power supply on the roof  Roof access  Wifi Access\*  Mount point off of the ground\*  Unobstructed view of the sky\*  Low levels of light pollution\*  Ability to run power to mount site\*  Workstation or computer for interfacing and interacting with the camera  STEM program or group of students interested in interacting with and maintaining the camera system  Roof heating or some other form of roof snow removal  Designated staff person to supervise and upkeep the camera  Geographically close to Sault Ste Marie  Geographic area with little cloud coverage | Light pollution  No roof access  Geographical area with consistent cloud coverage  No designated computer for interacting with the camera  No student groups to interact with/maintain camera  No designated staff person to supervise/upkeep the camera |

Case Manufacturing scope:

The scope for the case would be that it is weatherproof and can withstand snow, rain, ice, and the sun beams during the summer. The case must be big enough to hold a Raspberry Pi 5 with a Pi camera, and a small heating element. This case should be able to remove snow or prevent snow from piling up on it. This case needs to be clear so that the Pi camera can take images without disturbance, we suggest an acrylic casing. We would like 2-5 of these cases. We plan on using this case to protect our raspberry pi and camera which will be placed outside all year round to take images of the night sky. If you need any clarification or have any questions please let us know.