



Lee Center Intersection Road Safety Audit

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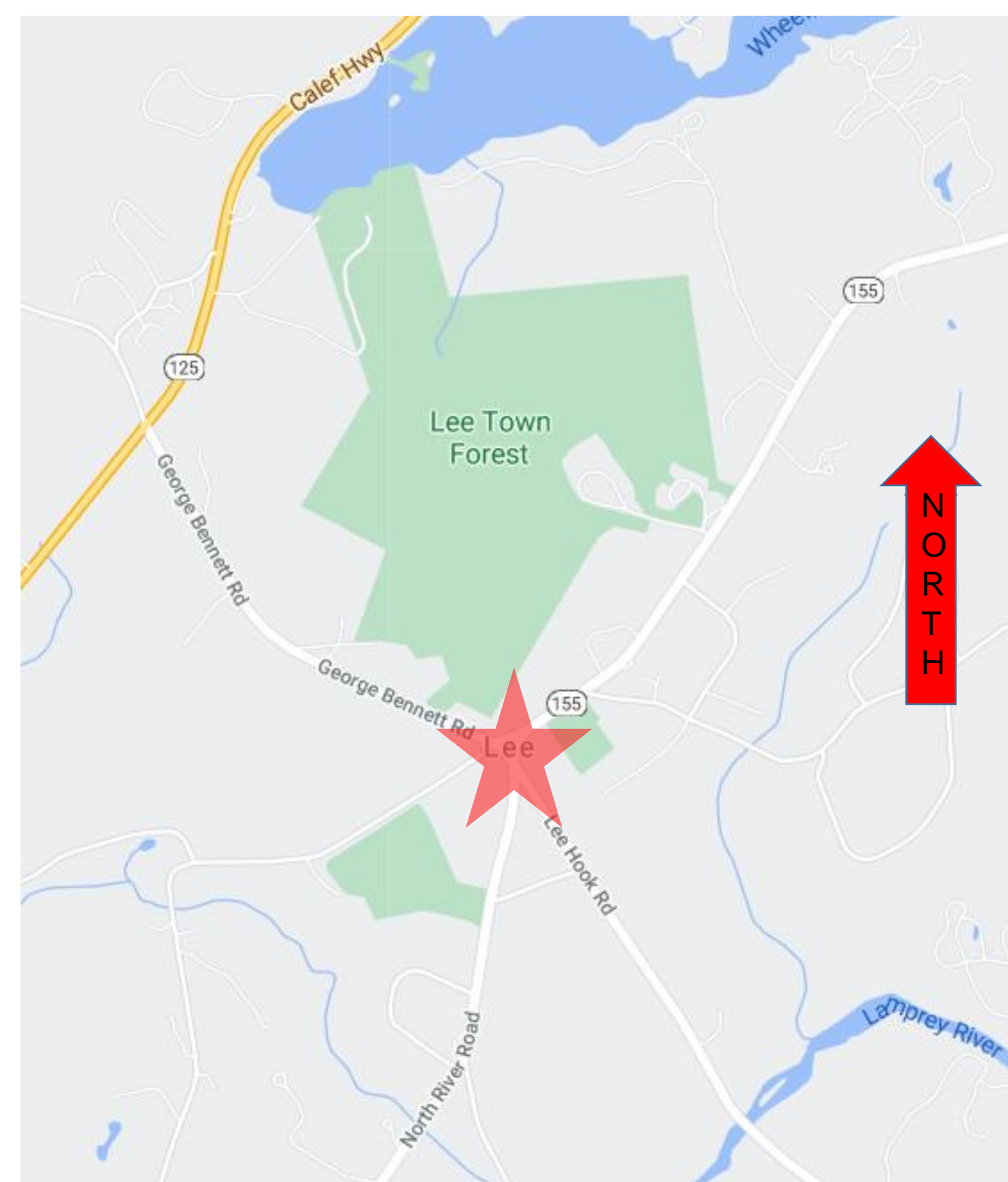
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Introduction

The intersection in the town center of Lee, NH features unique triangular geometry that has raised concerns among stakeholders. The project team was tasked with performing a Road Safety Audit (RSA) on the intersection. The team dedicated the Fall semester to identifying main safety concerns with the intersection and dedicated the Spring semester to designing alternatives.

Location



Locus map of intersection.

- Intersection is located just a few minutes away from the Lee traffic circle and the University of New Hampshire's main campus.
- NH 155 is the primary road through the intersection, running North to South from Durham to Lee.

Safety Improvements

There are some proposed improvements that are consistent with each design including:

- Streetlights
- Directional signs



On Site Observations

Main concerns observed on site:

- Junctions with acute geometry
- Insufficient signage
- High speeds on NH 155
- Poor sight lines
- Lack of pedestrian accommodations
- Evening sun glare



Junction of NH 155 and George Bennett Rd. shows poor sight lines.

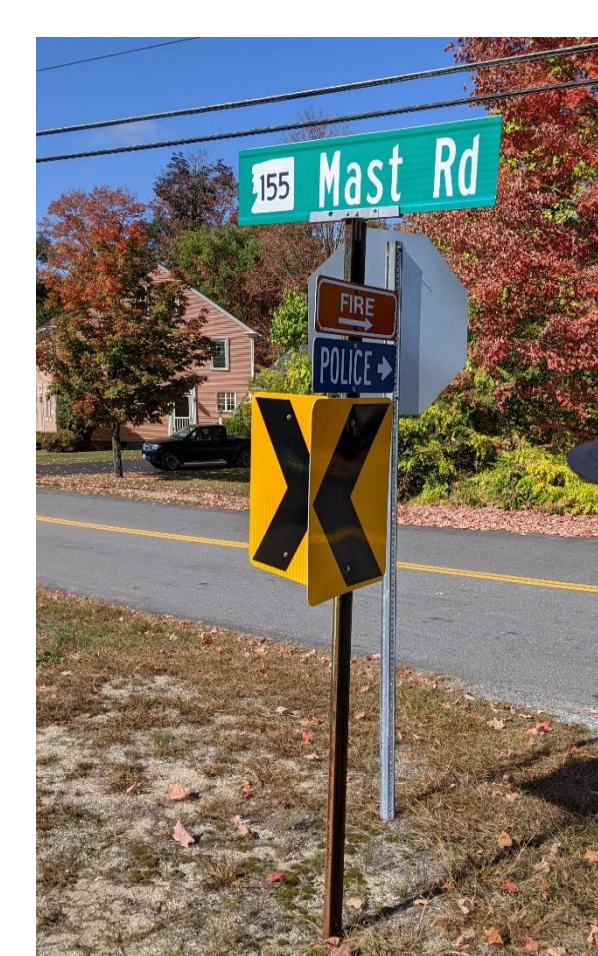


Photo shows poor signage.

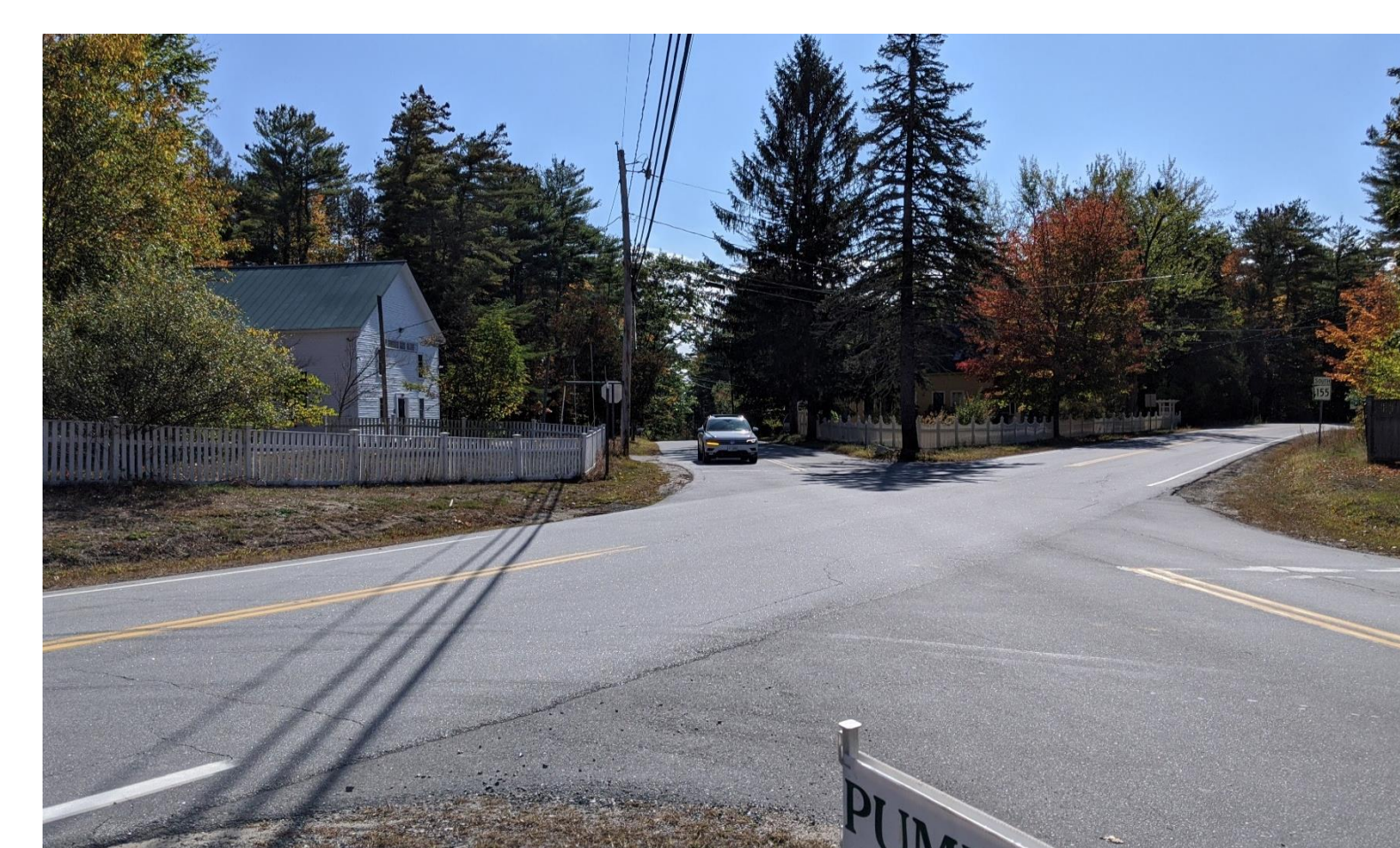
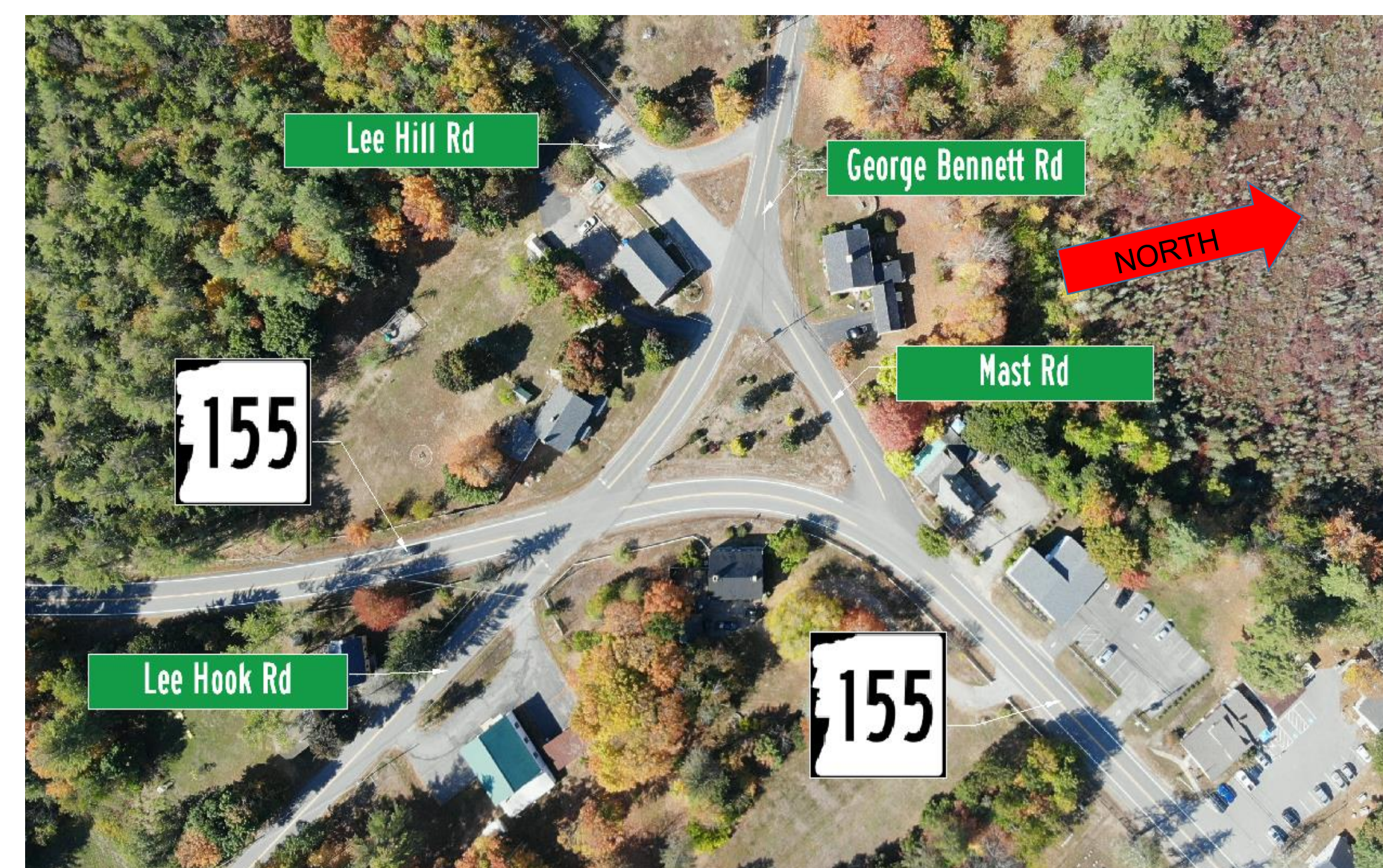


Photo highlights lack of pedestrian features at intersection.

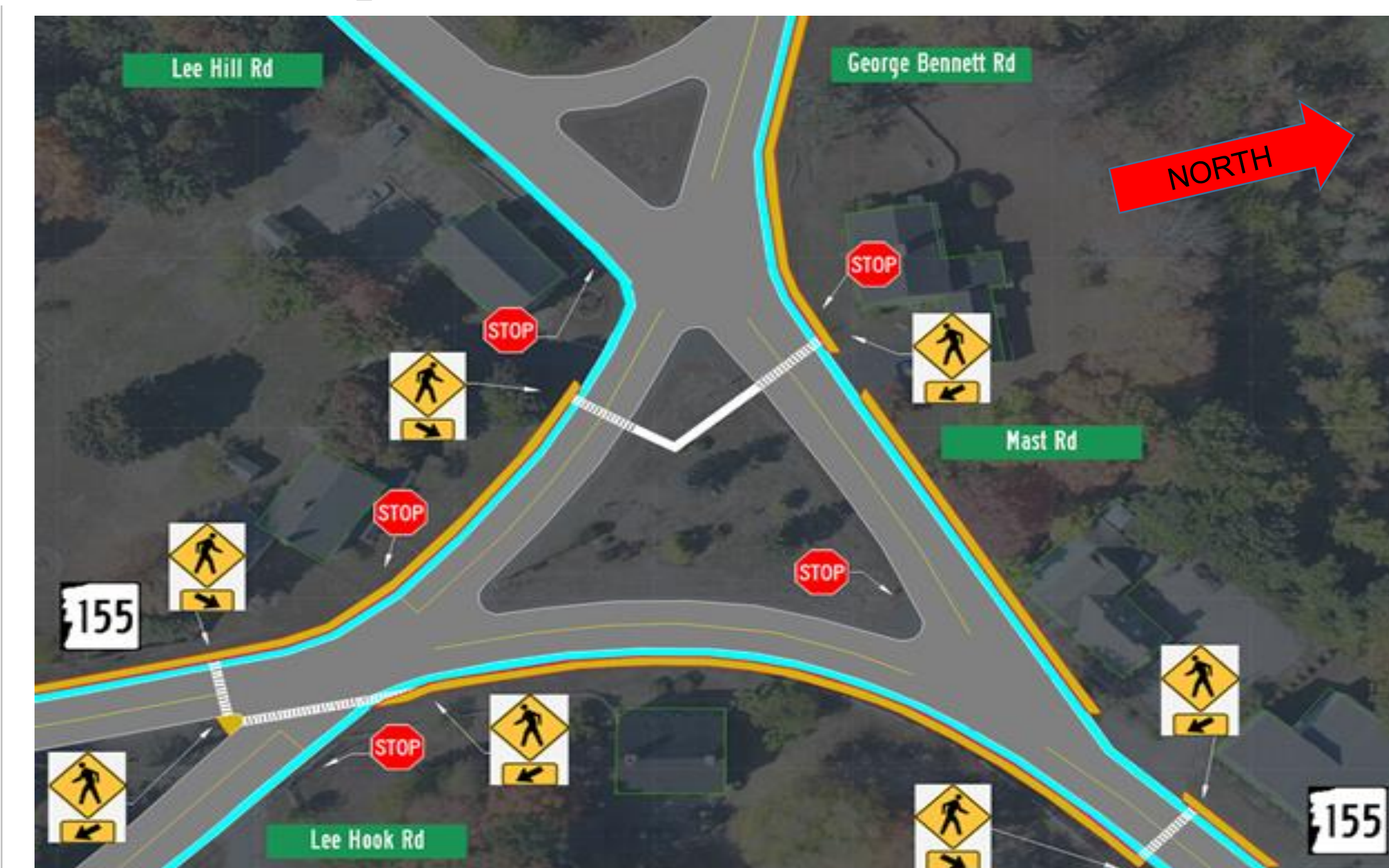
Proposed Alternatives

Existing Intersection



Existing intersection with no adjustments. Does not include any proposed alternatives or address any concerns.

Proposed Pedestrian Features



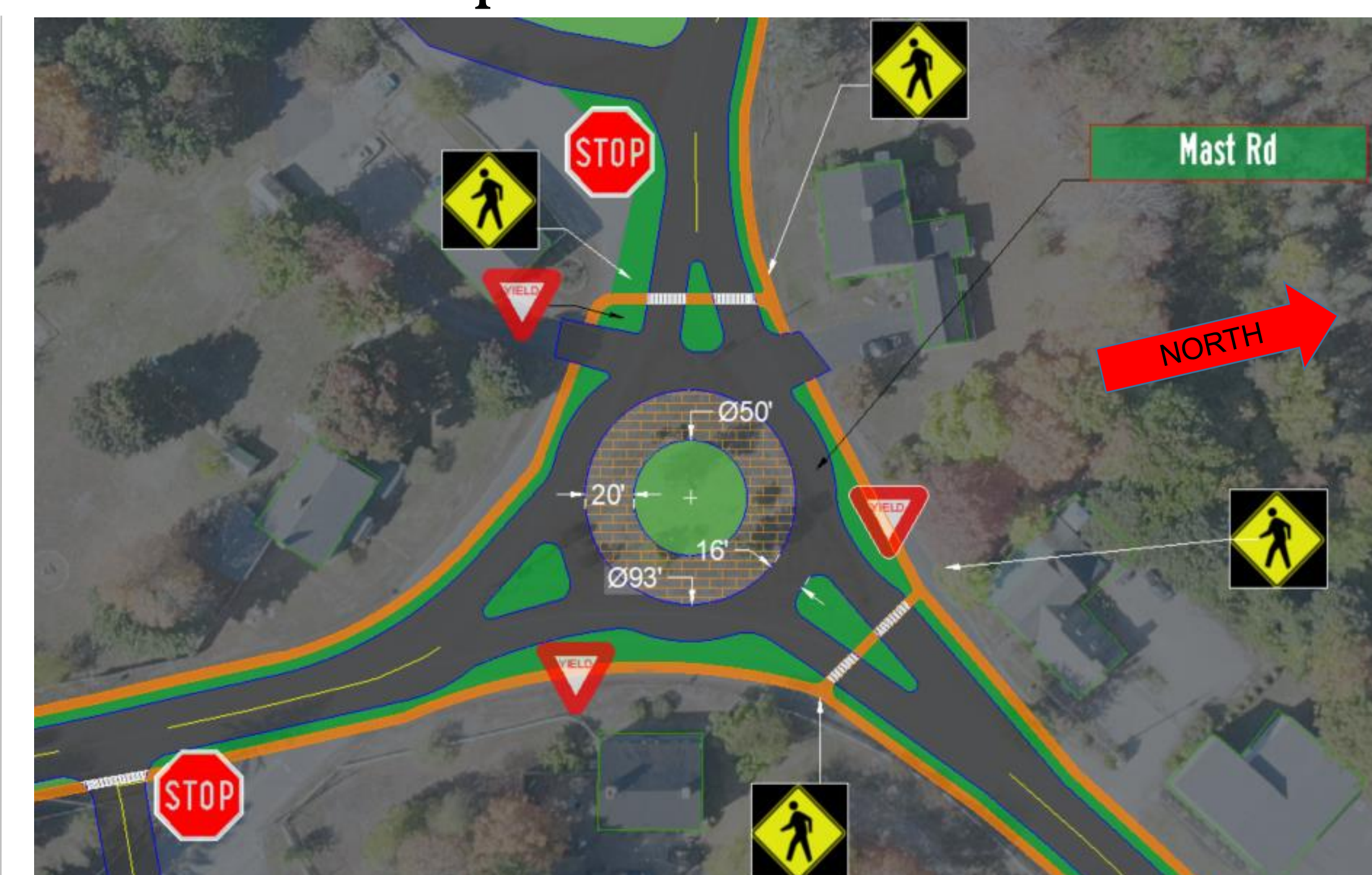
Existing intersection featuring sidewalks, crosswalks, and bike lanes. Design addresses pedestrian concerns, not geometry.

Proposed "T" Junctions



Proposed intersection with re-worked junctions. Design addresses poor sight lines and high speeds on NH 155.

Proposed Roundabout

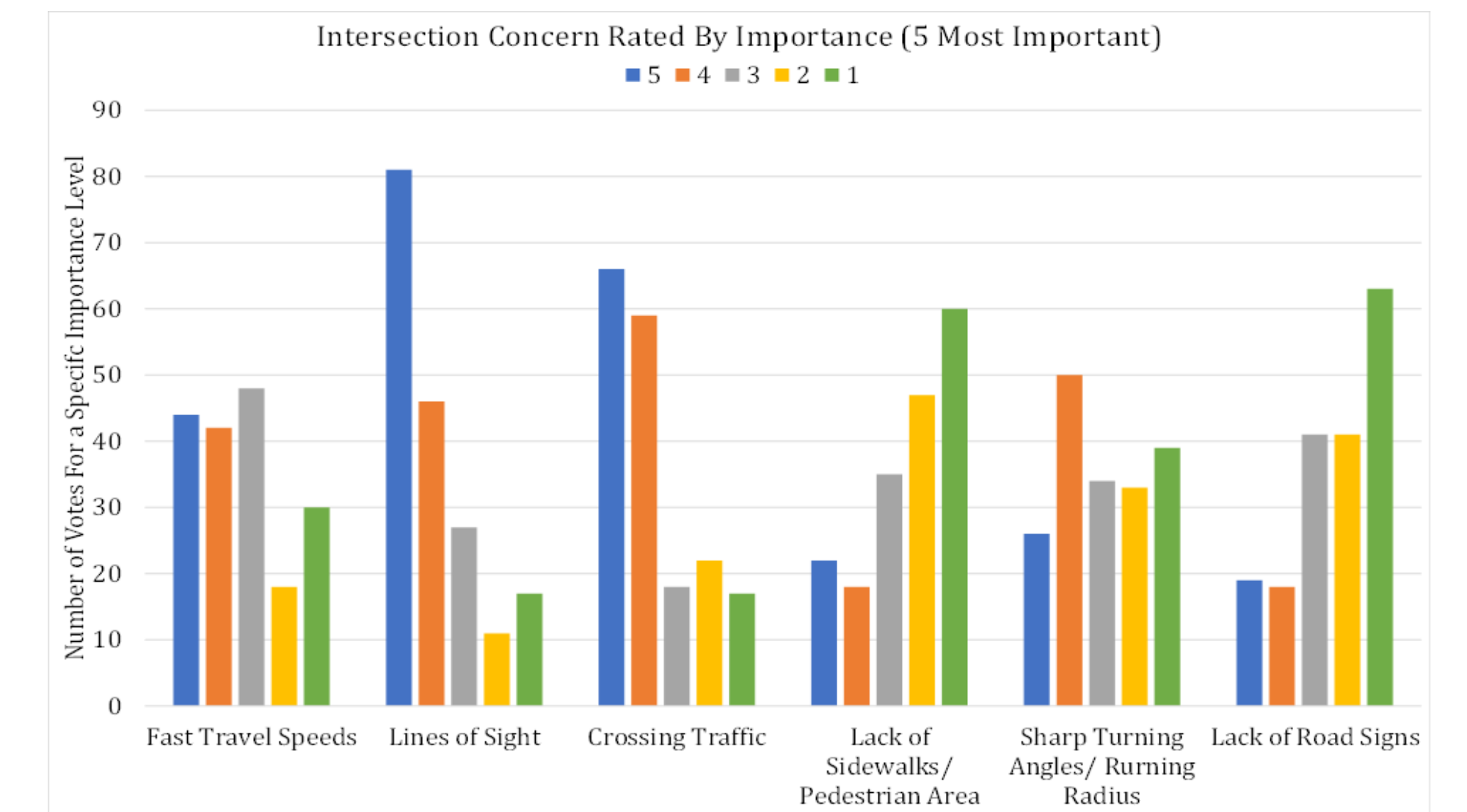


Proposed roundabout retrofit with pedestrian accommodations. Same roundabout design also created without pedestrian features. Design addresses most concerns.

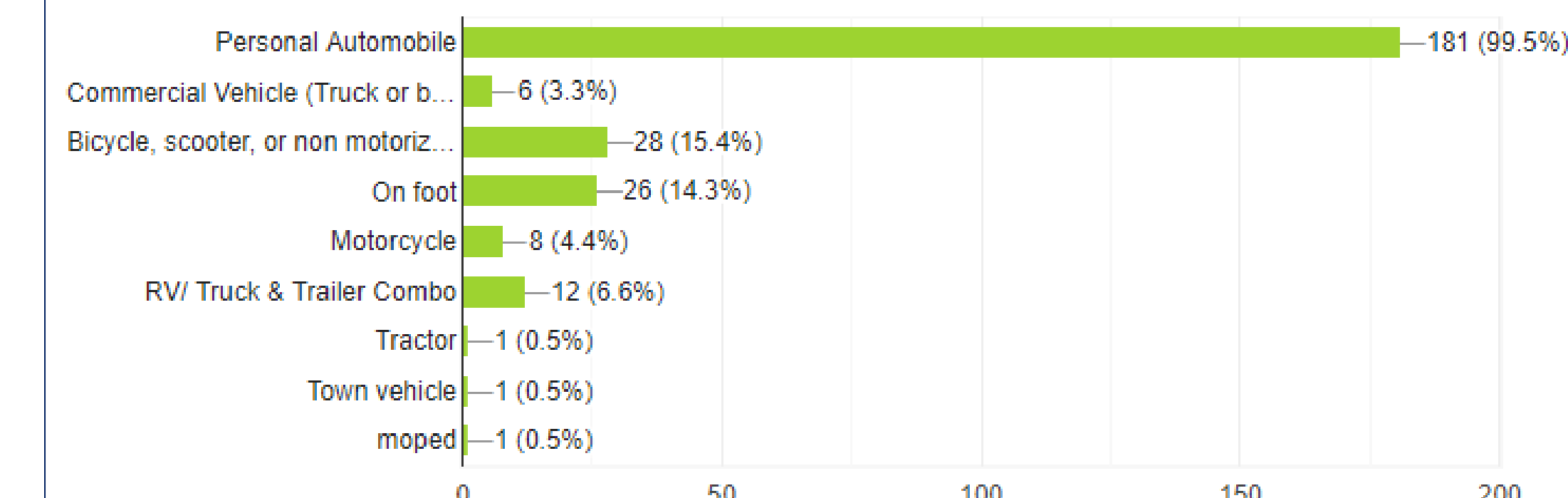
Public Input

Additional concerns noted by stakeholders:

- Dangerous crossing traffic
- Lack of streetlights
- Historic aesthetic of area



Survey results of stakeholder's concerns



Modes of transportation used by respondents

The survey results confirmed the thought that the intersection is unsafe and constitutes a Road Safety Audit.

Conclusions

- Develop a range of alternatives that address some or all safety concerns within the intersection
- Present findings in a design portfolio with cost estimates and benefits/challenges list
- Provide Lee with potential options to pursue in the future

Acknowledgements

- Dr. Kyle Kwiatkowski (Faculty Advisor)
- Bill Lambert (Project Sponsor)
- Michael Dugas (Project Sponsor)
- Michelle Marshall (Project Sponsor)
- Lee, NH Select Board

References

- FHWA Road Safety Audit Guidelines
- AASHTO (2011)
- Road Safety Audit Bow, NH
- Roundabouts: An Informational Guide