

# ADA Ramp Design

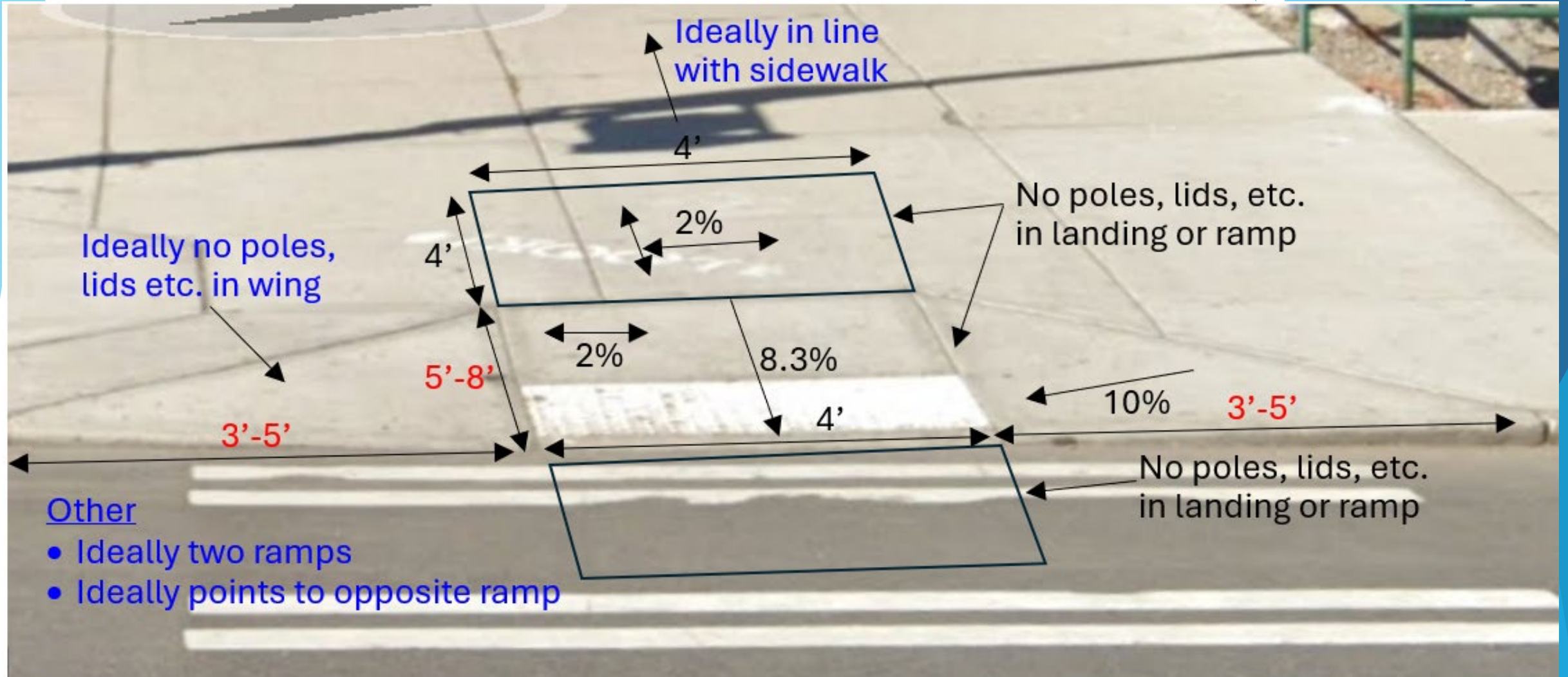


# Design Standards (Ch. 3)

- “In all new construction and reconstruction projects placement of two ADA compliant curb ramps per corner is required.”
- “For retrofit or preservation work the priority is to use two curb ramps per corner.
  - However, the use of single curb ramps per corner may be appropriate when relocation of utilities would be required to accommodate dual ramps, topographic constraints, right-of-way constraints or intersections with small curb radii.
  - When using a single curb ramp per corner, it is helpful to avoid deviating from the pedestrian line of travel.”
- An ideal layout is shown below.



# ADA Ramp Requirements



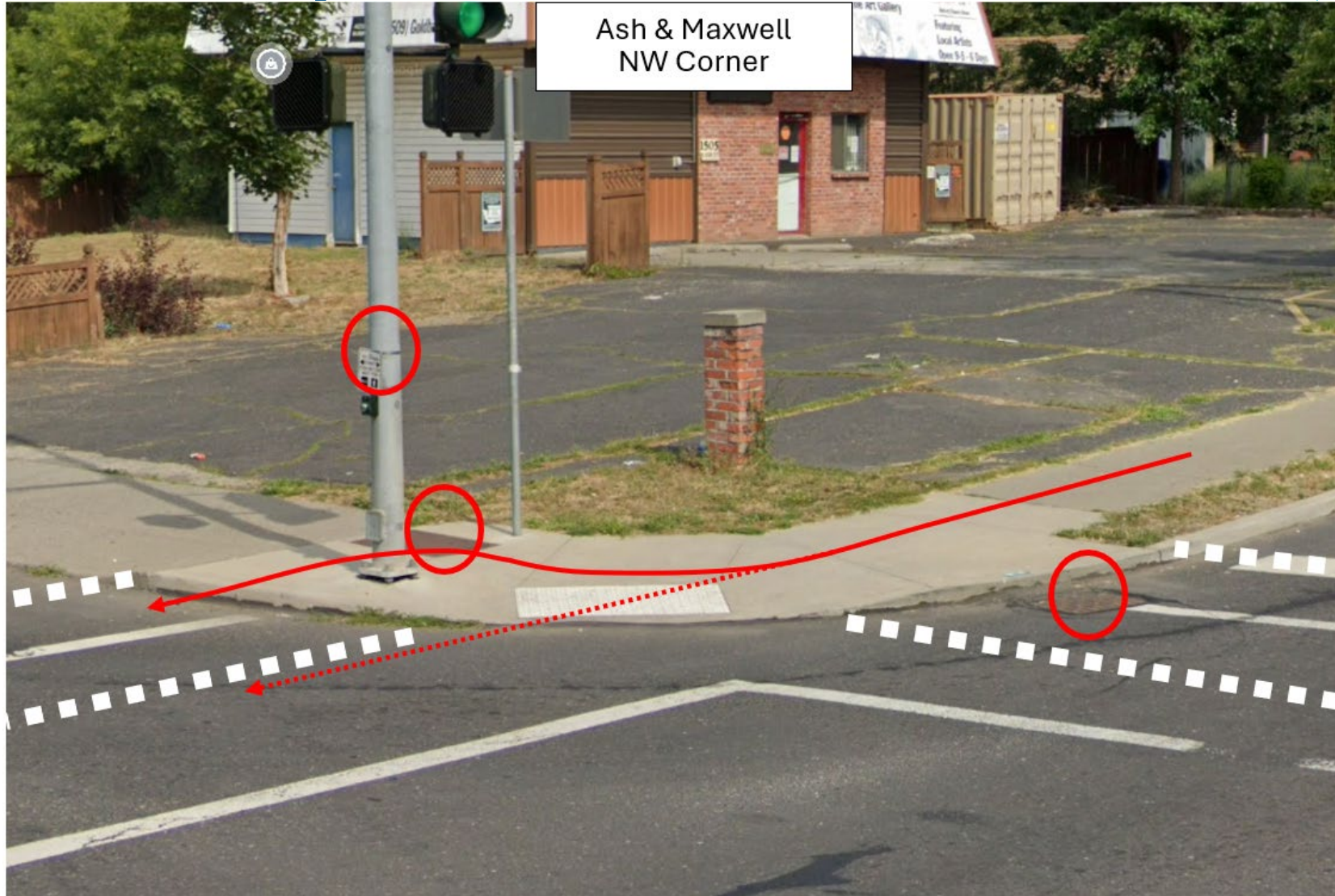
# Limitations

- Most of our projects are retrofit/preservation where two ramps is the goal (but is not required).
- On such projects, two ramps is not possible or desirable in many cases if we are to meet ADA. Why?
  - Catch basin is in the way - each catch basin move is at least \$10,000 (must move connecting pipes to the middle of the street)
  - Traffic signal J-box is in the way - each J-box move is at least \$20,000 - \$30,000, (have to replace connecting conduit to opposite side of street)
  - Traffic signal is in the way - about \$200k to move
  - Receiving ramps are outside the project, already ADA compliant or single ramps so dual ramps don't match.
  - Proximity to crossing push button
  - Large radius pushes crosswalk around the corner too far
  - Topography
  - Small radius, adjacent sidewalk
  - Available ROW
    - Tree removal (2 ramps requires more area)
- A typical ramp costs \$10k-\$12k.





# Examples of Limitations

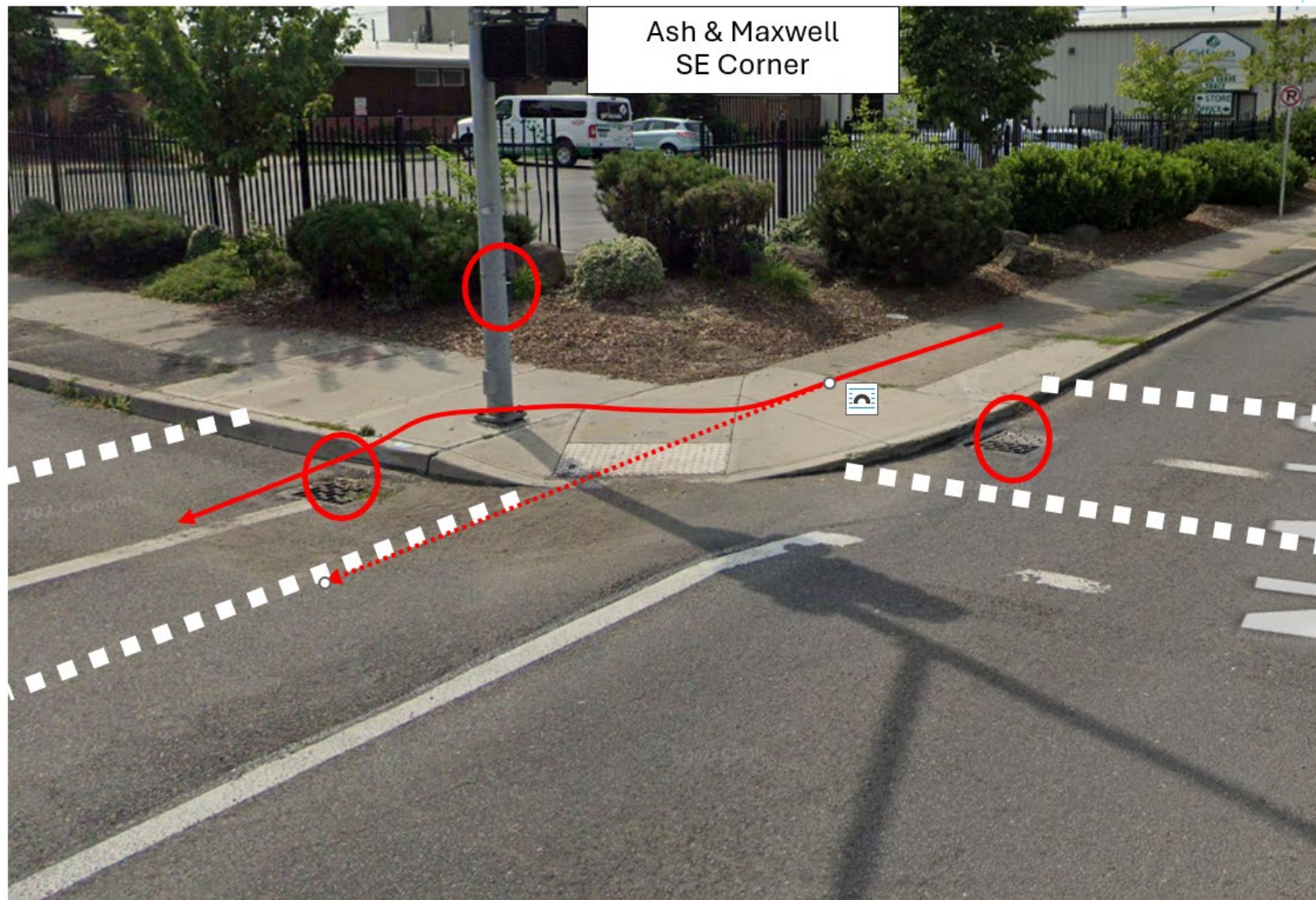


# Examples of Limitations





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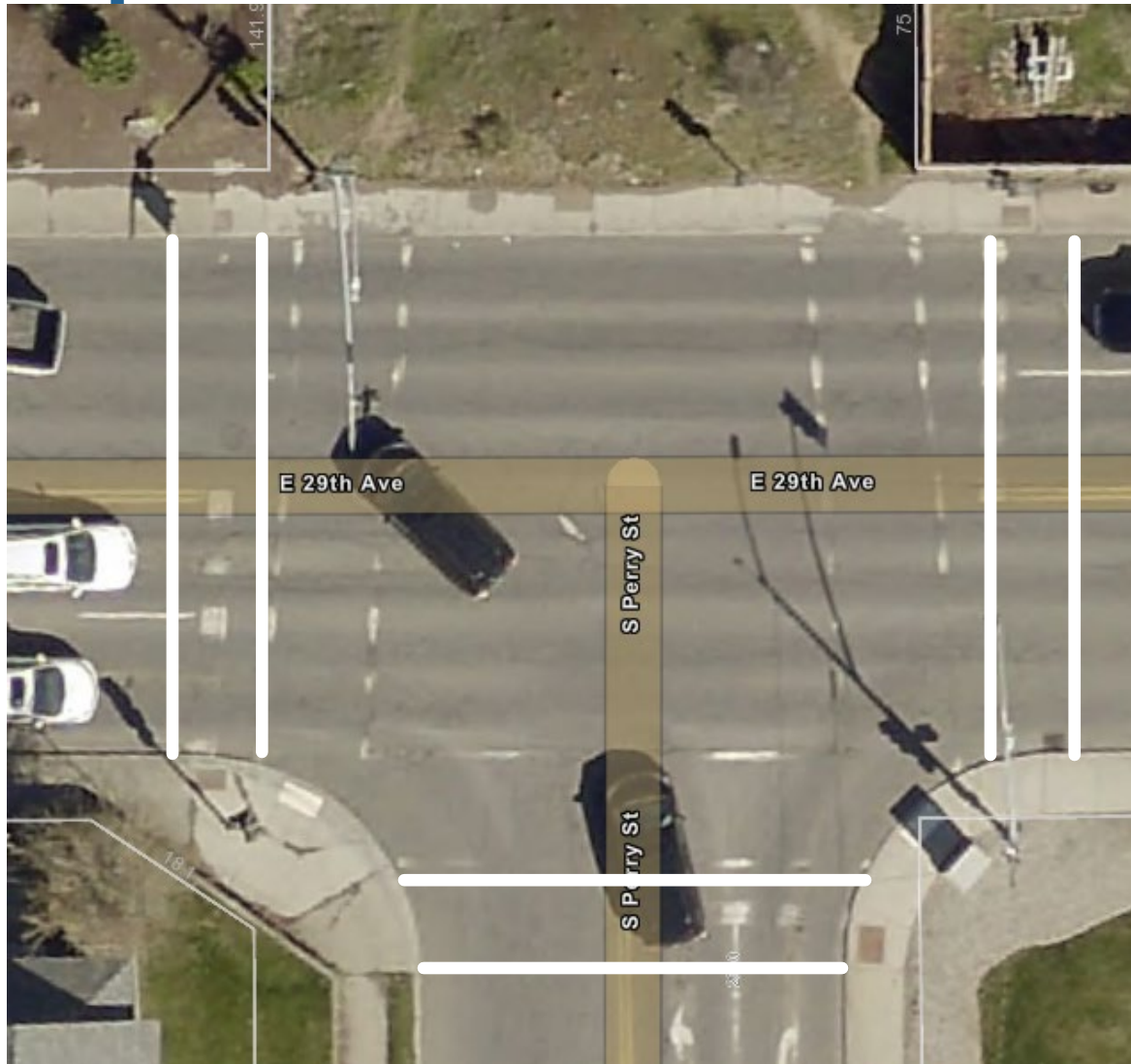




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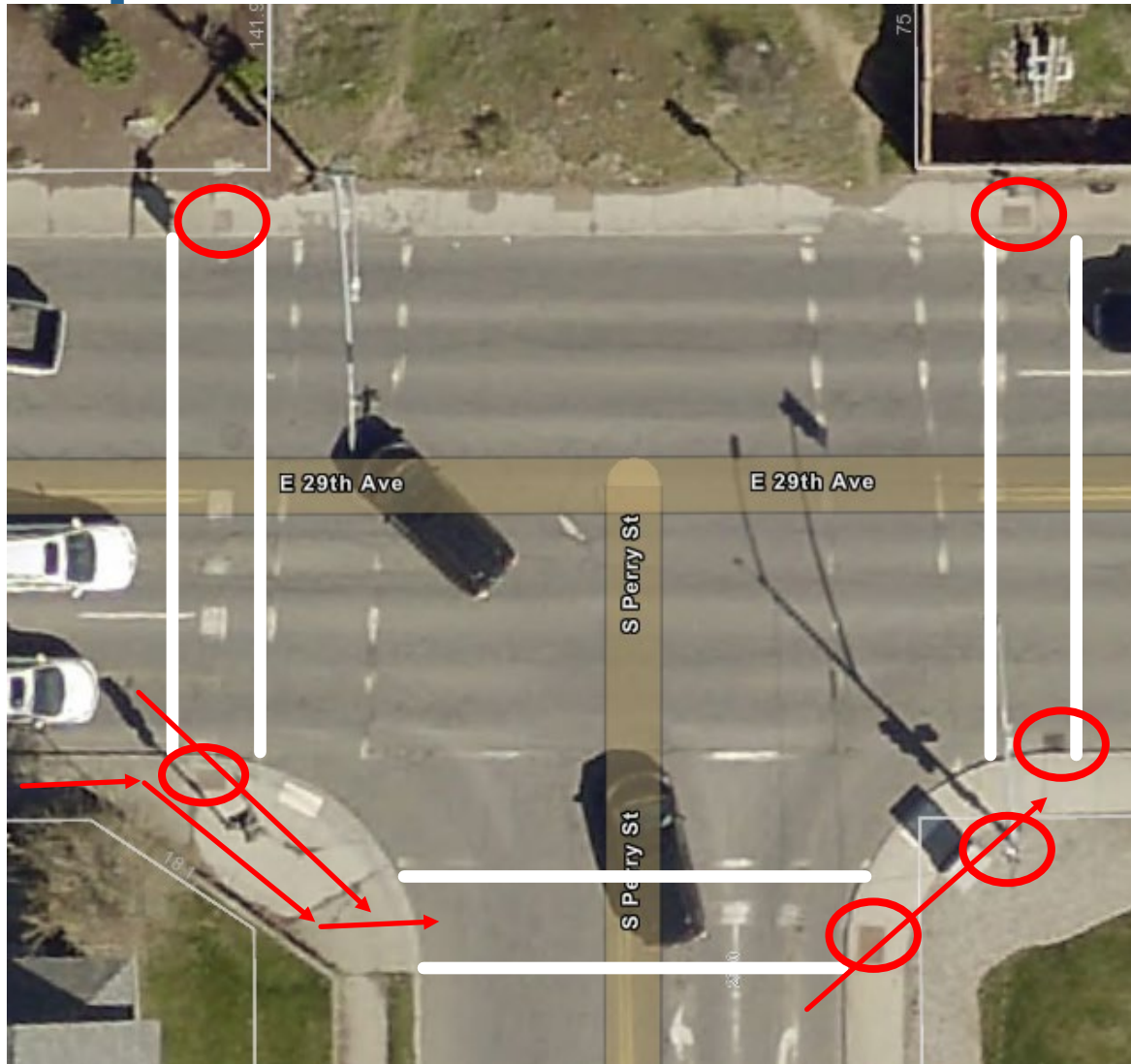


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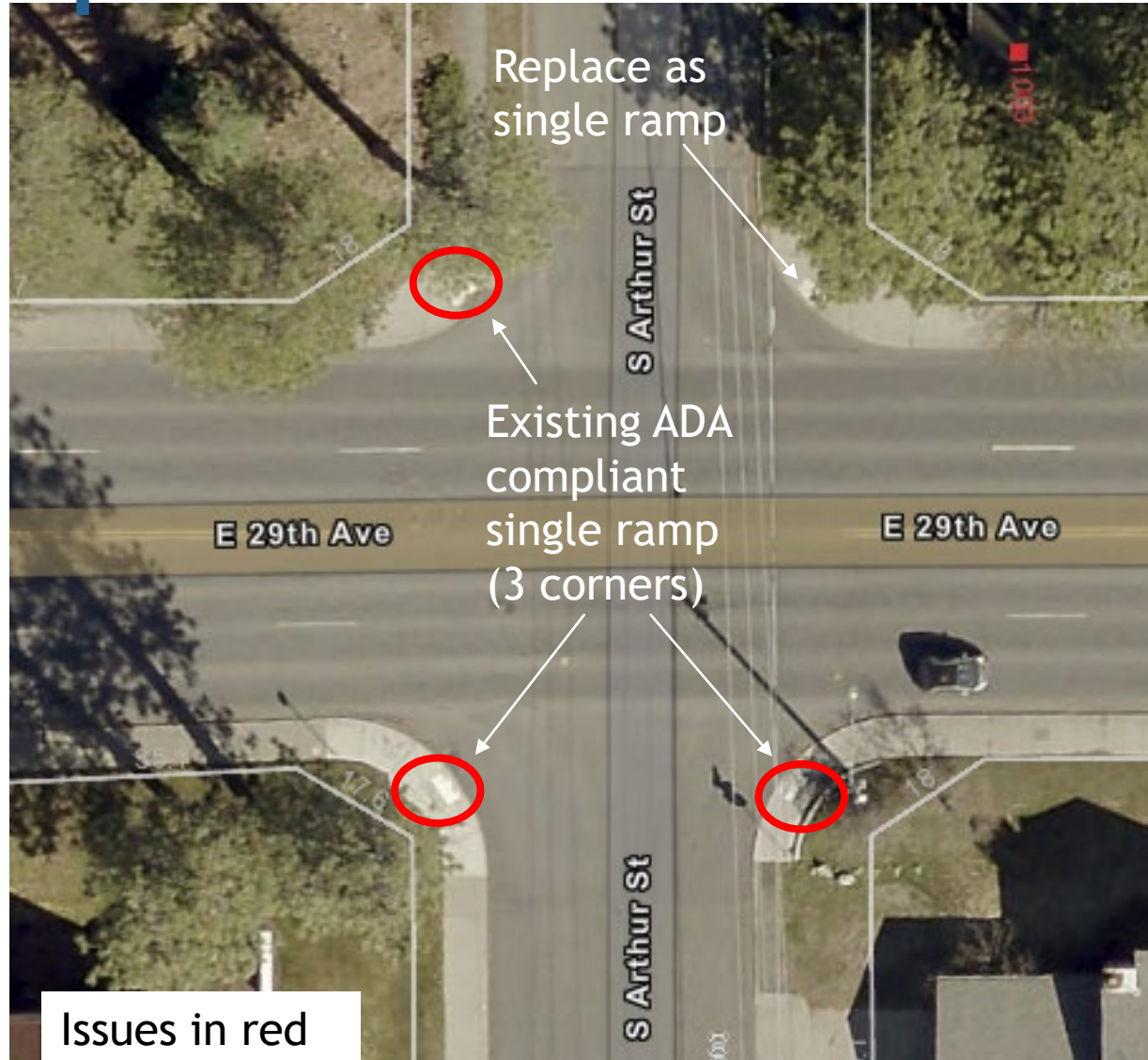




# Examples of Limitations



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# Conclusion

- Two ramps is our goal and on new construction, we will usually meet the goal.
- But on retrofit/preservation work in a built environment, which is most of our projects, we will do the best we can but frequently we won't be able to achieve that goal.

