

Mason City Complete Streets

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Project Scope

The Mason City Complete Streets Design revitalizes a seven block stretch of Pennsylvania Avenue located just east of downtown Mason City. This revitalization incorporates complete street criteria to accommodate pedestrians, bicyclists, and motorists.

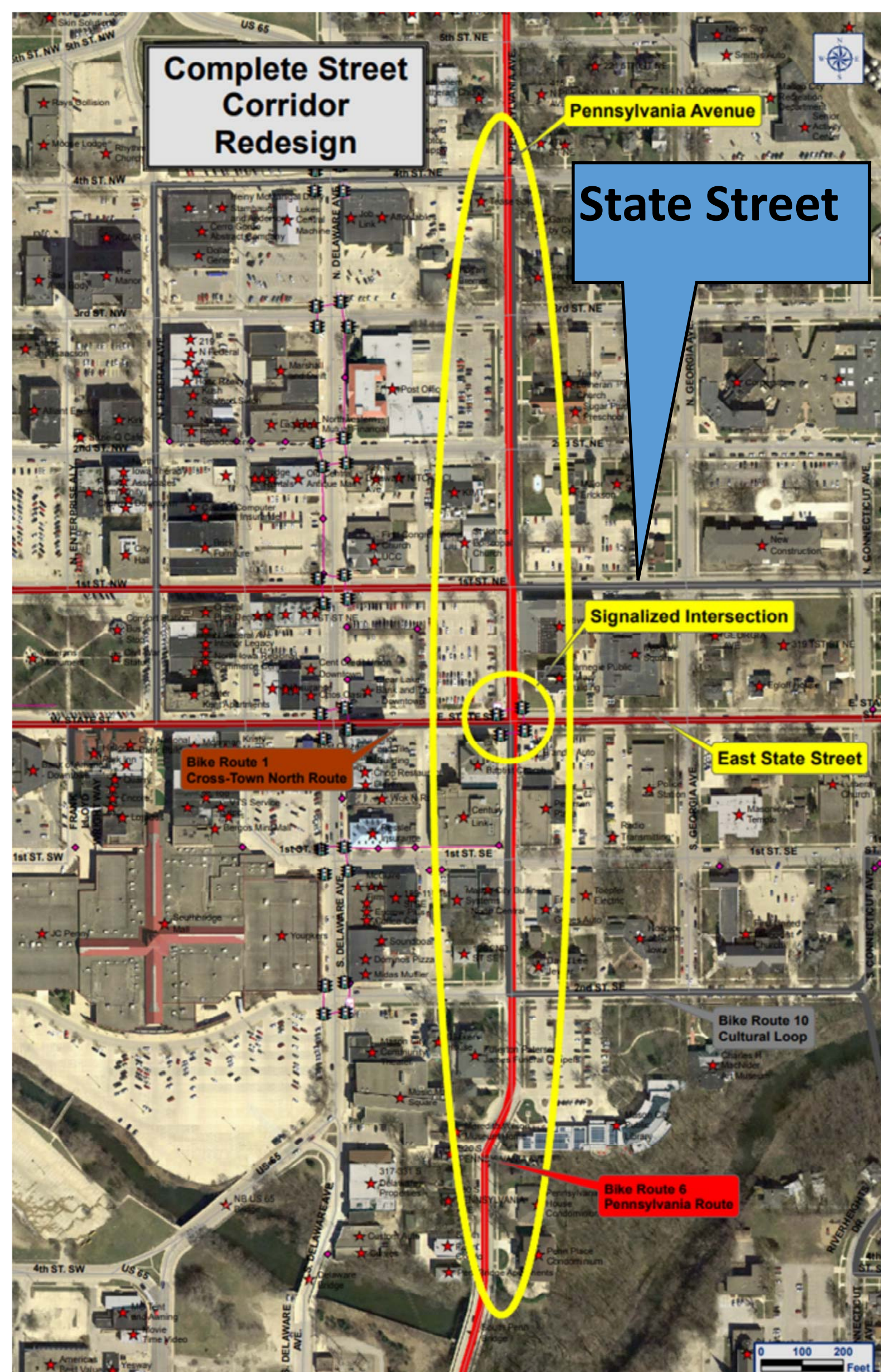


Figure 1: Site Map

Background

This stretch of corridor is one that includes pedestrian traffic from the Public Library, multiple churches and funeral homes, post office, farmer's markets, multiple business, and The Music Man Square. Pedestrian and bicycle safety were the main emphasis for the redesign of the street surface.

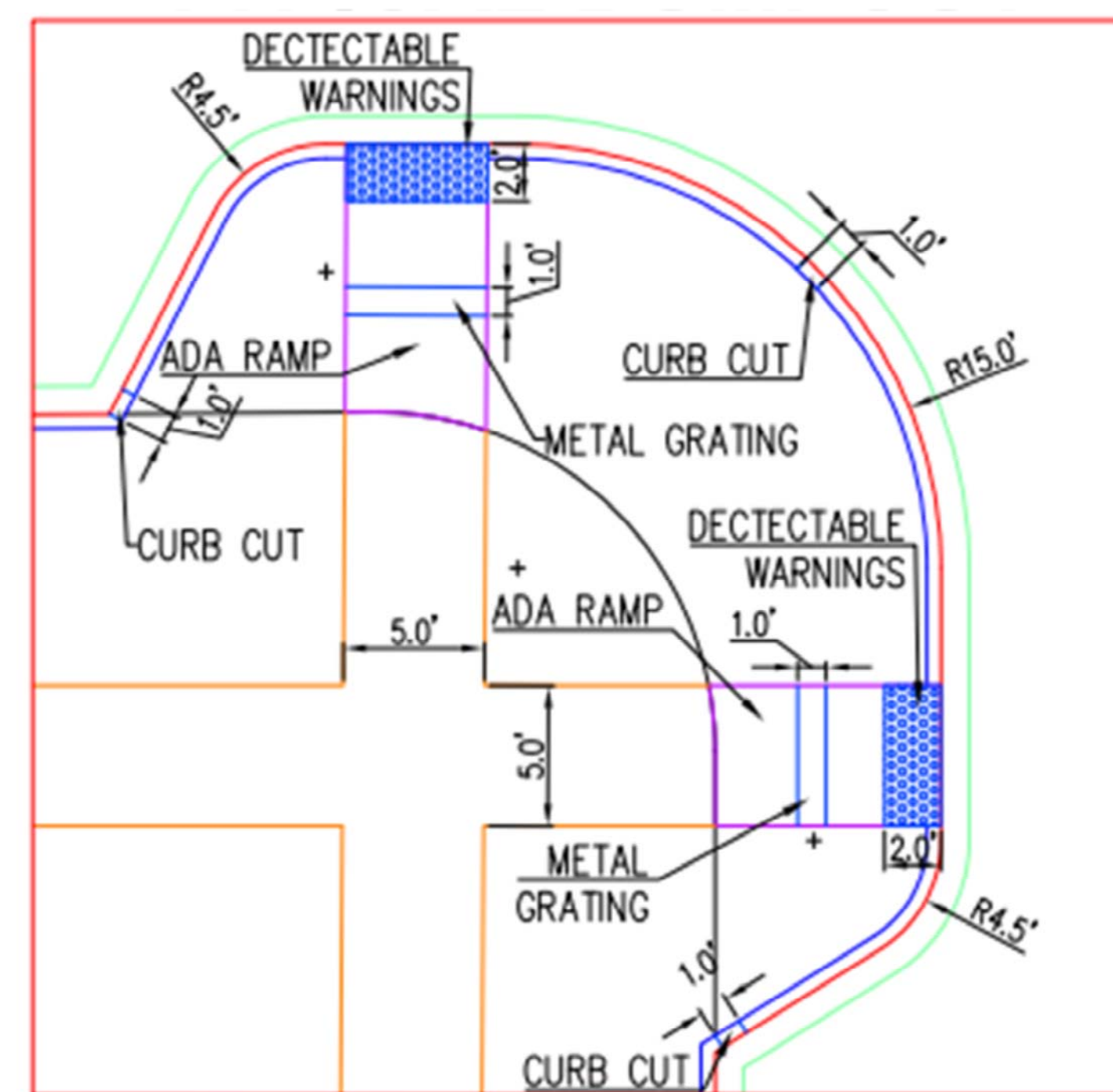


Figure 2: Typical Bump-out Pedestrian Bump-Outs

Pedestrian bump-outs are incorporated for pedestrian safety and include detectable warnings and shorter crossing distances.

Design Renderings



Figure 4: Alternative 1 Intersection



Figure 5: Alternative 2 Intersection



Figure 6: Alternative 3 Intersection



Figure 7: Alternative 3 Bike Lane

Alternative 1 removes and replaces the current HMA overlay. It also includes painting high-visibility cross walks, shared bike lane symbols, and stop bars. This is the most economical option and maintains all on-street parking.

Alternative 2 is the same design as Alternative 1 with the addition of pedestrian bump-outs at every corner of every intersection.

Alternative 3 adds a dedicated bike lane to the elements of the previous designs. This promotes bicycle safety and shrinks cross walk lengths.

Roadway Cross Section

The pavement cross-section in Figure 3 shows the street after paving. The crown of the road will be three inches thick and taper down to one inch thick at the curb line. It will average to be 1.5 inches thick across the roadway width.

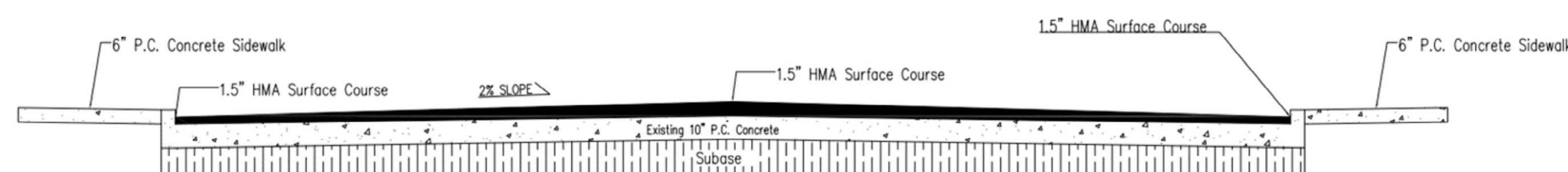


Figure 3: Roadway Cross Section

Conclusions

As seen in the renderings, Alternative 1 only included the resurfacing of the road and new pedestrian and bike street paint markings. Alternative 2 and 3 include the addition of pedestrian bump-outs at sidewalk crossings. Alternative 3 includes a dedicated bike lane. Alternative 3 is recommended as it is the only Complete Street design.

References

- AASHTO
- APAI
- BikeSafe
- Iowa DOT
- Iowa SUDAS
- Mason City Engineering Department
- RS Means