



Edison Neighborhood Redevelopment

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Client Information and Site Location

Our client is the City of Waterloo, who expressed interest in redeveloping the former Edison Elementary School site into a new neighborhood.

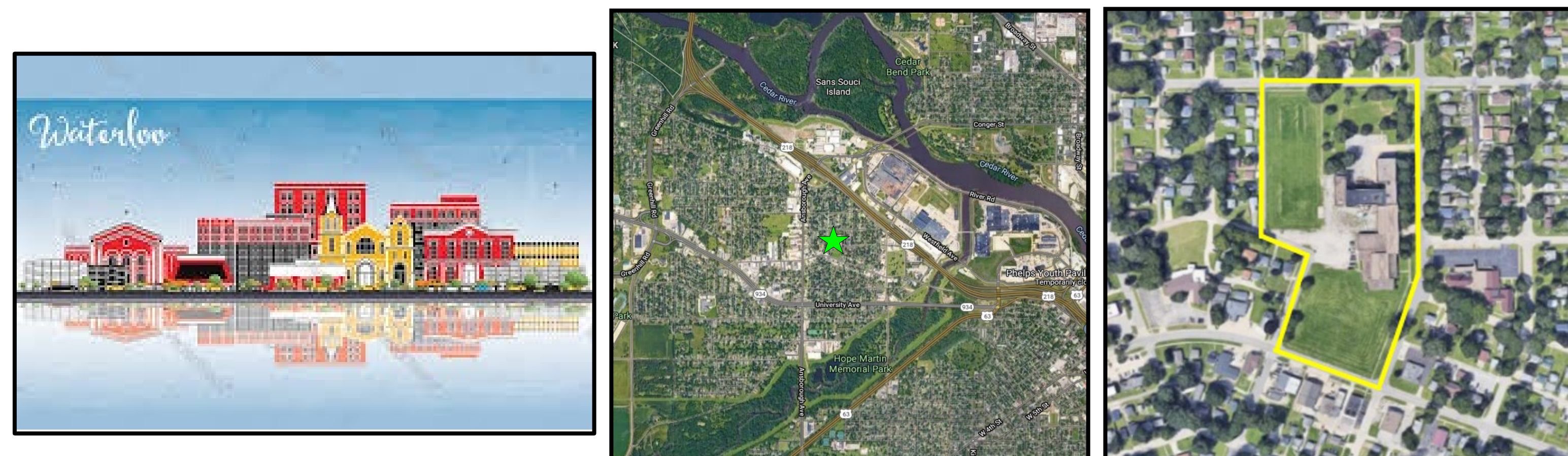


Figure 1: Site Location and Layout

Design Objectives

The overall goal of the development was to create a new neighborhood that fits into the surrounding area. It also needed to include single-family housing, a recreational park, and a commercial zone in the southern section of the site. A transitional area of duplexes between the residential and commercial zones seemed appropriate as well.

The commercial area was designed to have apartment units above the establishments. The residential units needed to be compact in width, but our envisioned designs would be modern and attractive. The park is proposed to include a trail, a picnic shelter, a playground and much more.



Figure 2: Commercial, Residential, and Recreational Park Concepts

Final Design

The final design closely resembled our first alternative, with some ideas from the other concepts. The section of Hardwood Ave that ran between the residential and transitional lots was replaced with green space to be used as a stormwater basin. Residential lot widths were increased to better fit standard houses. The transitional lots were also reoriented to allow for access through a central alley, changing to a front-to-back duplex design.

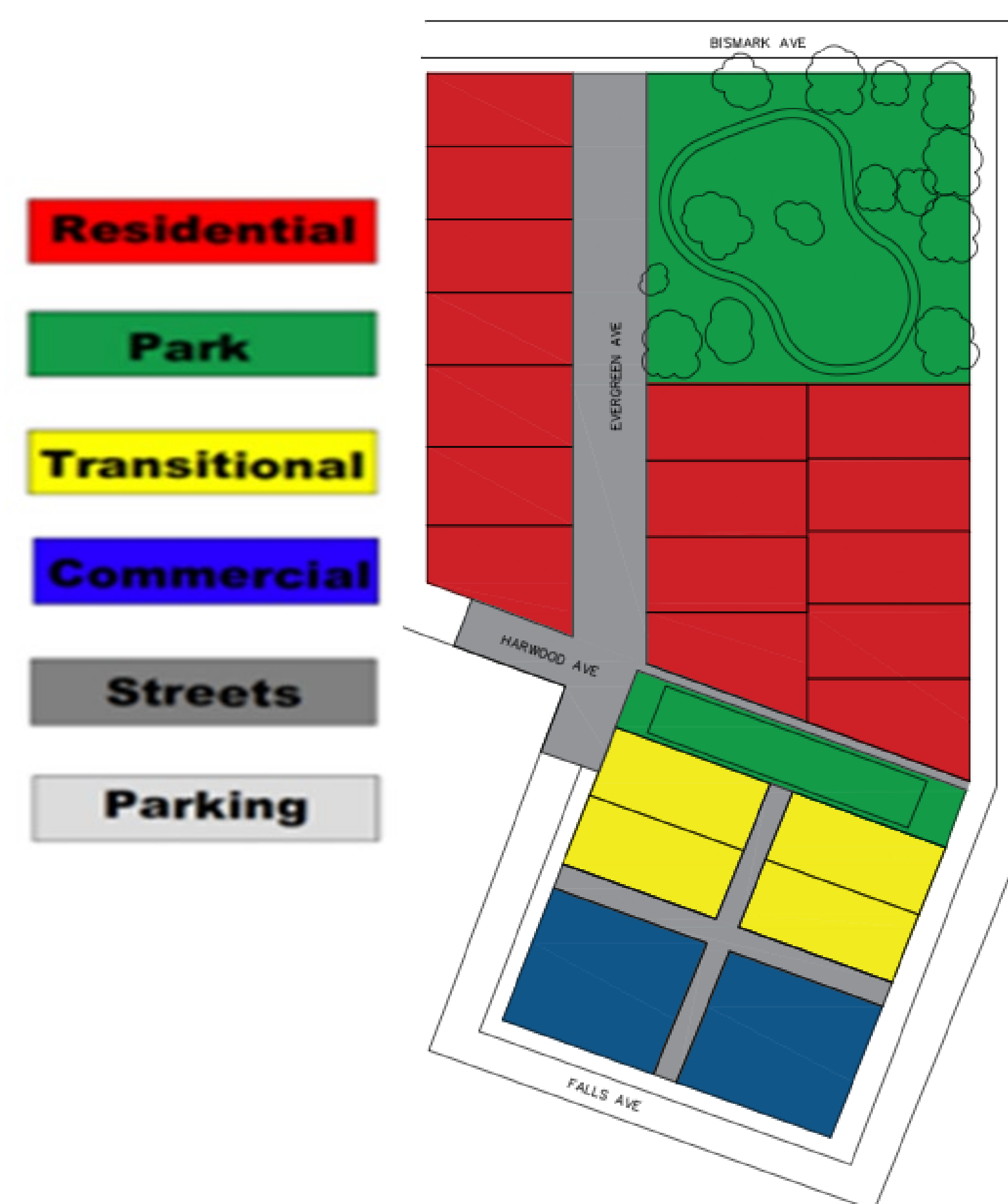


Figure 3: Final Design Layout

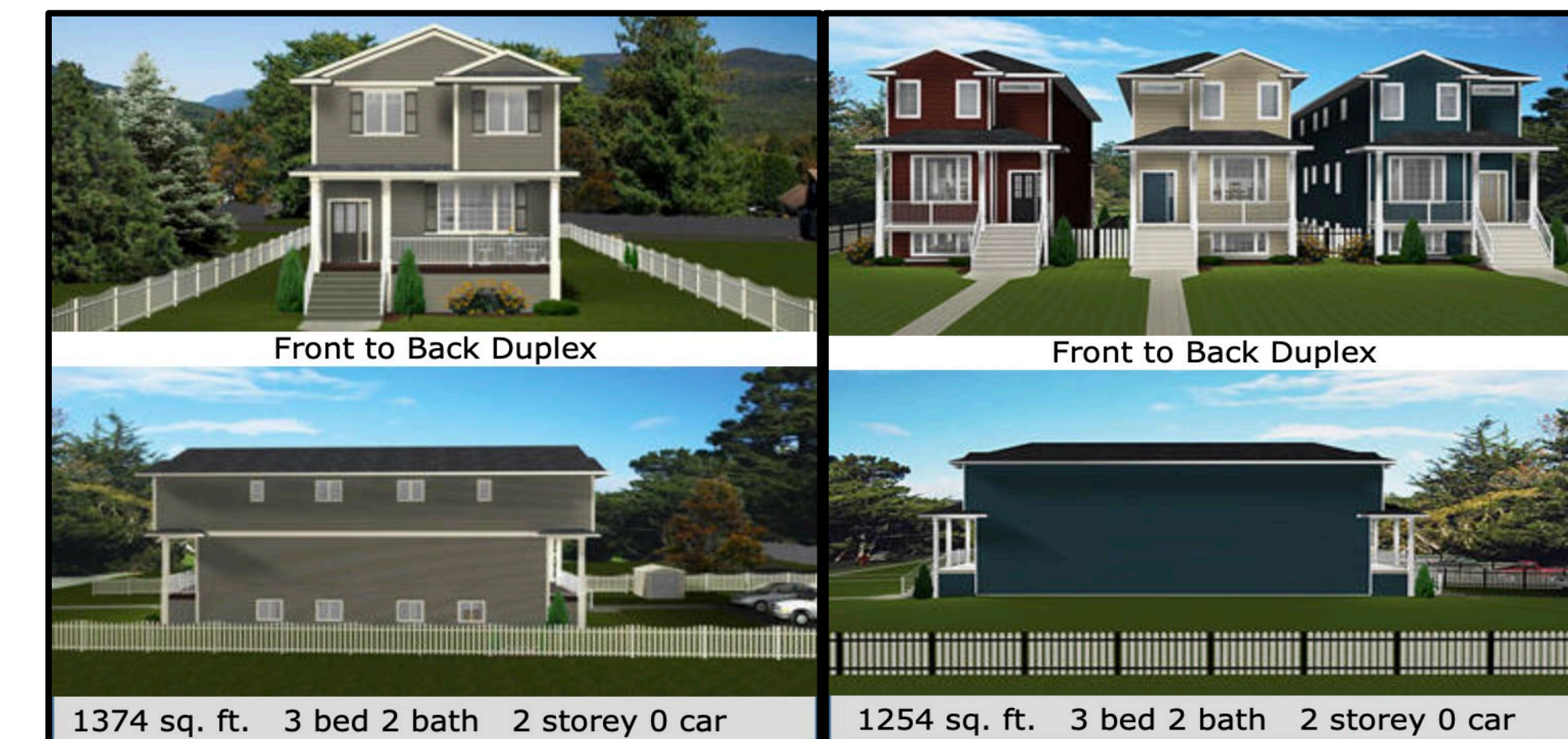


Figure 4: Front-to-Back Duplex Concepts

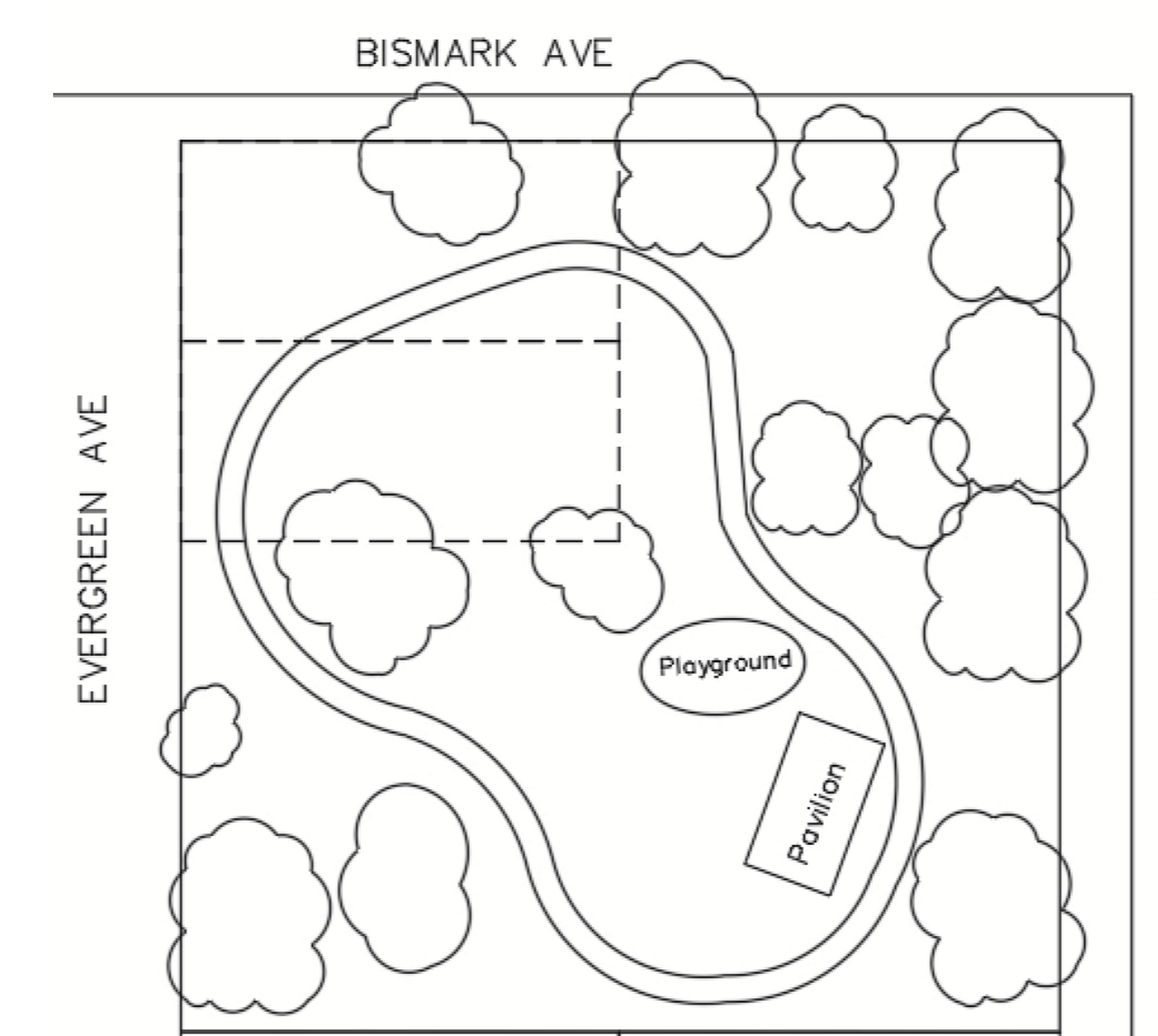


Figure 5: Proposed Park Design and Layout

Project Cost

The total cost of the project includes the construction of the roadway addition, the stormwater basin and other stormwater management components, grading for the entire neighborhood site, the material needed for the park trail and path along the basin, and the water and sewer piping, hookups, and potential maintenance requirements. This cost is projected to be roughly \$367,000.

The City can recover costs of the project through the sale of lots, while providing affordable and convenient housing options for members of the Waterloo community.

Conclusion

The Edison neighborhood redevelopment is a cost-effective design to repurpose the old Edison Elementary School site into an attractive and economical location for families and businesses, that will be beneficial to both the City of Waterloo and its inhabitants.

References

- Iowa DOT Design Manual
- Iowa DOT Interactive AADT Data
- Iowa DOT Turning Movements
- Iowa LiDAR Data
- Iowa Regional Coordinate System
- Iowa Stormwater Management Manual (ISWMM)
- Statewide Plan Coordinate Zone
- SUDAS Design Manual