

Project Location



Figure 1: Project Map

Agency Street Trail

City of West Burlington, IA
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This trail project starts at the existing Gear Ave trail in West Burlington, IA, and connects the existing sidewalk across West Burlington Ave. A second portion of the trail connects an existing sidewalk north of Broadway St to extend south to meet the existing trail at the RecPlex. With implementation of this new trail, the intersection must be safe for pedestrians and intersection evaluations must be simulated.

Trail Recommendations

Using AutoCAD's Civil 3D, the trail is designed 10' wide with 6" thick pavement and 6" subbase with 4:1 daylighting. This team recommends an 8' clear space between the new trail and the roadside. The trail should avoid utility obstructions and provide pedestrian access to businesses. A trail should connect to the mall/Target intersection to provide pedestrians access to a safer crossing.

Intersection Conclusion

With the construction of this new trail, adding a pedestrian signal to the effected intersections has little effect on current traffic flow and signal timing and phasing. This new phase will provide safe pedestrian crossing without obstructing traffic flow.

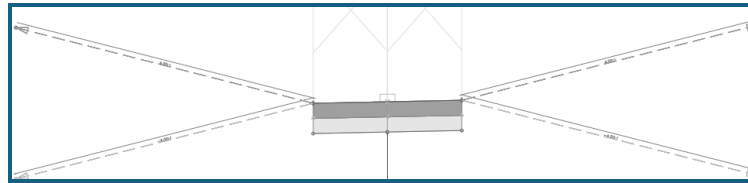


Figure 9: Pavement Cross sections

Cost Estimation

Total Costs	
Entity	Cost
Intersections & Crosswalks	\$ 38,811.50
Agency St. Trail	\$ 435,110.00
Broadway St. Trail	\$ 255,365.50
Mall Trail	\$ 16,286.40
Total Project Cost	\$ 745,573.40

Design Standards Used:
Iowa DOT Design Manual
Manual of Uniform Traffic Control Devices
Statewide Urban Design and Specifications

New Intersection Design



Figure 3: Broadway St & Agency St intersection

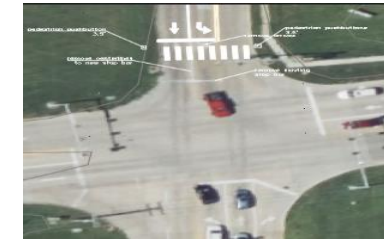


Figure 4: West Burlington Ave & Agency St

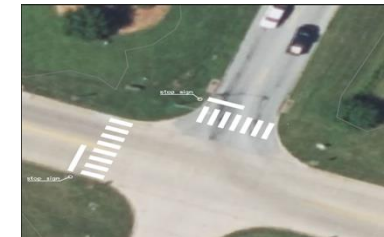


Figure 5: Division St & Broadway St



Figure 6: Gear Ave & Agency St

- The intersections use longitudinal crosswalks for better visibility.
- Standard curb ramps are implemented on each end of the crosswalks to meet existing pavement.
- Stop lines are implemented to provide a safe distance from stopped vehicles.
- Existing traffic detectors in the pavement need to be moved back with new crosswalk.
- Existing stop lines must be removed.
- Agency St, West Burlington Ave, and Gear Ave lane indicator arrows need removed and repainted farther back.
- Stop signs on Division St & Broadway St intersection need moved by new stop line.
- Detectable warning surfaces on each curb ramp.

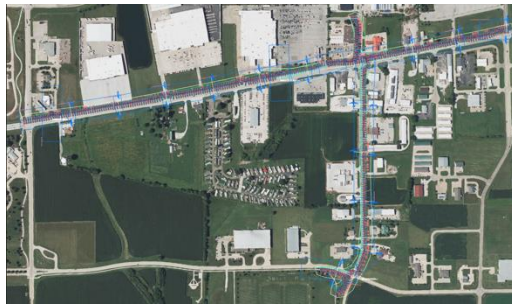


Figure 2: Trail Layout



Figure 7: Stand-alone pedestrian pushbuttons

Stand-alone pedestrian pushbuttons are installed at each end of the crosswalk, as in Figure 7.



Figure 8: Pedestrian signal indicators

Pedestrian signal indicators are mounted on each end of each crosswalk, as in Figure 8.