



Preston Nonmotorized Connectivity

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 Prepared for the City of Preston Iowa



Project Scope

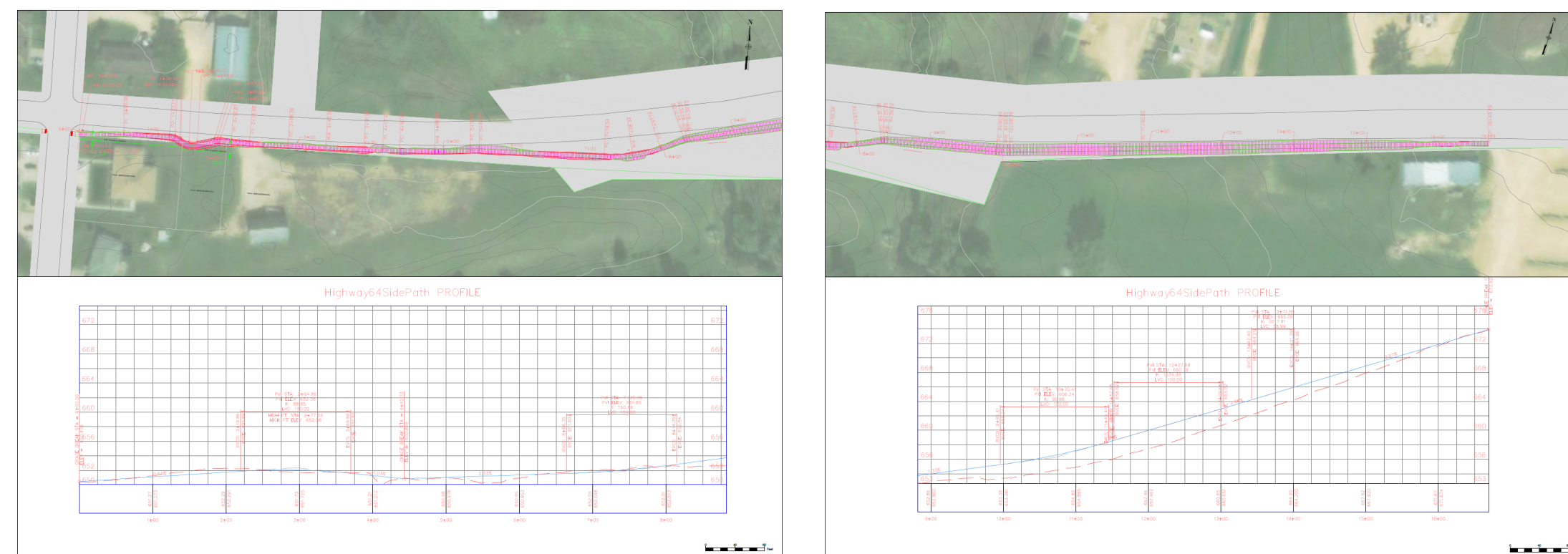
The City of Preston identified a need for improved walkability within their city. Ingenium consulting designed additions to the existing pedestrian infrastructure for 5 main areas of concern. Costs for each alternative and design area were estimated separately so the city can choose how and when to implement each solution.



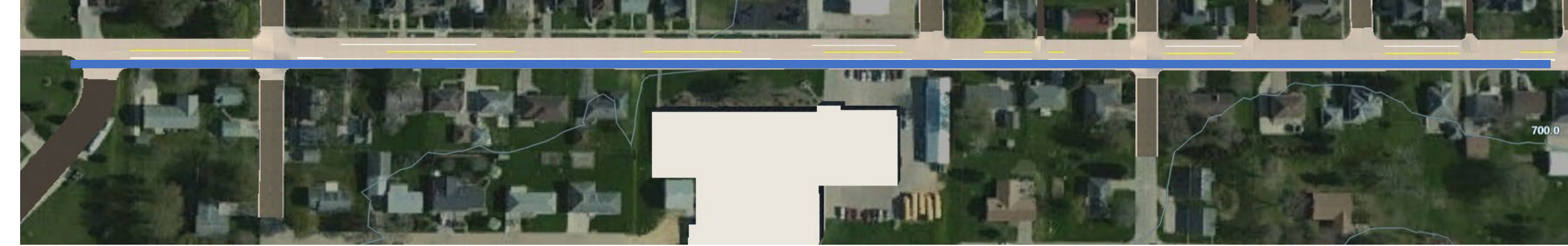
If all recommended alternatives are implemented, the total project cost including materials, labor, equipment, overhead, and profit was \$255,500.

Site 1 Highway 64 Side Path

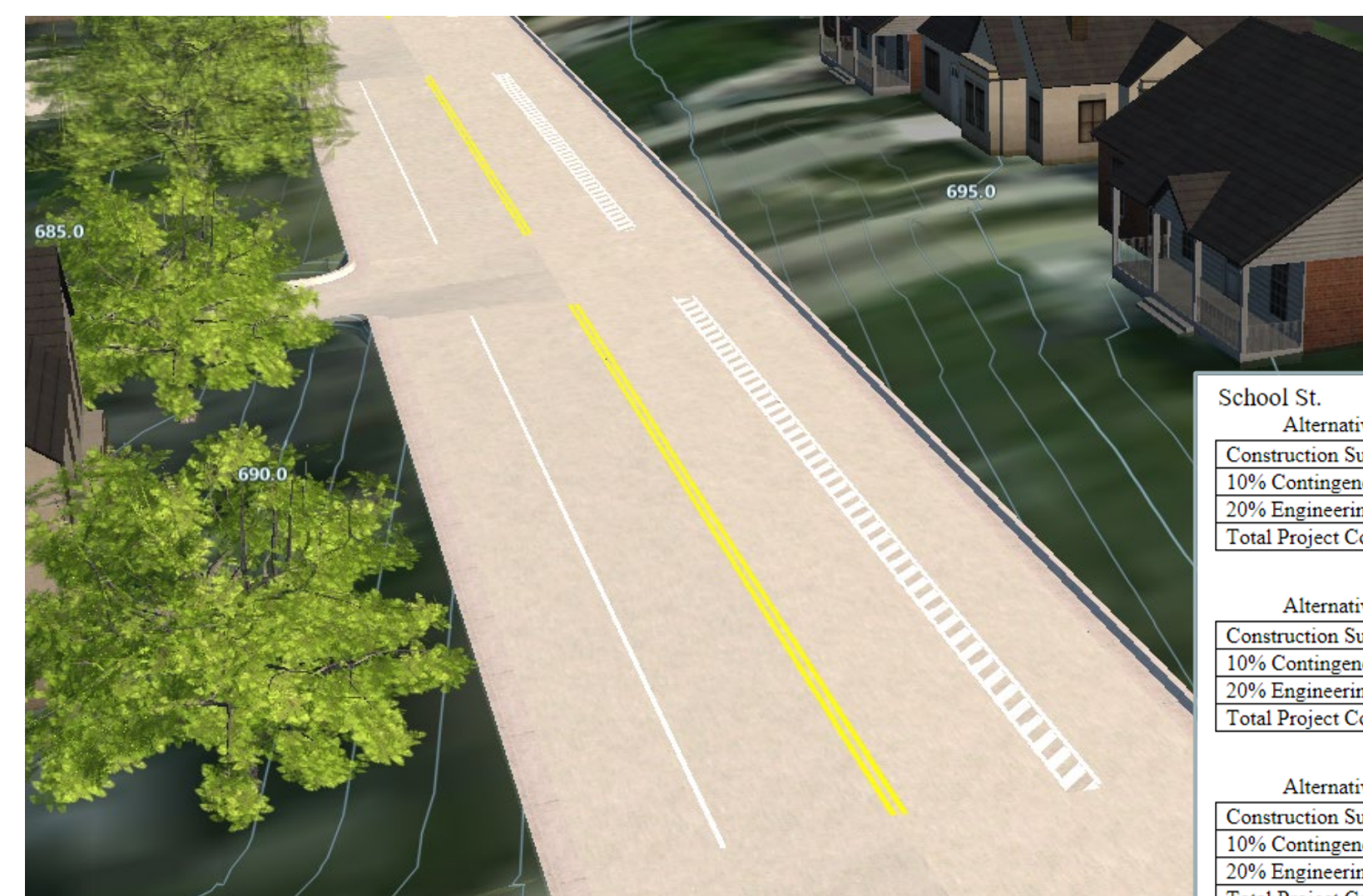
ADA-accessible connectivity from Winter Street to the new Dollar General was a priority. The route was designed using existing ROW for Highway 64 when possible, avoiding power poles, and following Iowa DOT Design Manual Chapter 12-B.



Site 2 School St.



In order to improve connectivity between Easton Valley School and St. Joseph Church a pedestrian lane was designed to connect between Main St. and the church. The lane is 9 ft wide with a 2 ft painted buffer. Design was completed in accordance with the Small Town and Rural Design Guide for visually separated pedestrian lanes.



In addition to the pedestrian lane, 2 sidewalk design alternatives are provided in the report for cost comparison.

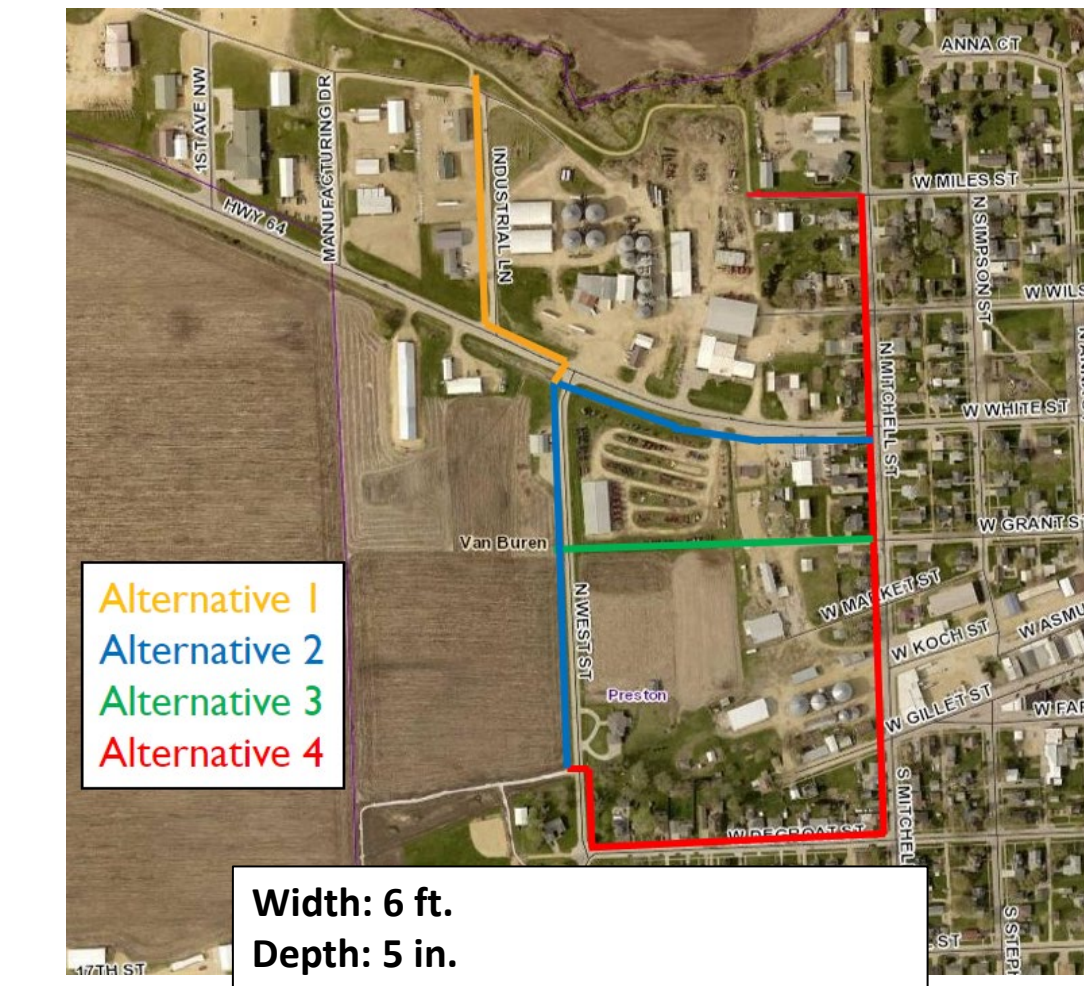
School St.	
Alternative 1	
Construction Subtotal	13,800
10% Contingencies	1,375
20% Engineering and Administration	2,775
Total Project Cost	18,000
Alternative 2	
Construction Subtotal	98,500
10% Contingencies	9,850
20% Engineering and Administration	19,700
Total Project Cost	128,000
Alternative 3	
Construction Subtotal	106,500
10% Contingencies	10,625
20% Engineering and Administration	21,300
Total Project Cost	138,500

The pedestrian lane design included space for an optional community-engaged pavement mural on School Street directly in front of Easton Valley Junior/High School. Students in art classes provided potential design ideas with the help of teacher Denise Larson, and the installation of the pavement mural, as well as maintenance in future years, will be incorporated into the annual art curriculum. Details on this design option are included in Appendix G of our report.



Site 4 Copper Creek Trail Connection

New trail facilities connecting the Copper Creek Trailhead northwest of town to the new baseball park on West Street were designed using the Iowa DOT Design Manual Chapter 12-B. Several alternative routes were designed using new and existing pavement with various crossing locations in mind. Our recommended design alternative is #4 in red, as it was most cost efficient and provided safe crossings.



Copper Creek Trail Connection	
Alternative 1	
Construction Subtotal	95,000
10% Contingencies	19,025
20% Engineering and Administration	19,000
Total Project Cost	123,500
Alternative 2	
Construction Subtotal	71,500
10% Contingencies	7,125
20% Engineering and Administration	14,300
Total Project Cost	93,000
Alternative 3	
Construction Subtotal	69,500
10% Contingencies	6,950
20% Engineering and Administration	13,900
Total Project Cost	116,500
Alternative 4	
Construction Subtotal	13,600
10% Contingencies	1,375
20% Engineering and Administration	2,725
Total Project Cost	17,800



Site 5 Highway 64 Crossings

To provide safer crossings of Highway 64 at Main Street and Mitchell Street, flashing pedestrian beacons, curb ramps, and sidewalks were designed using Iowa DOT Design Manual Chapter 12-A.



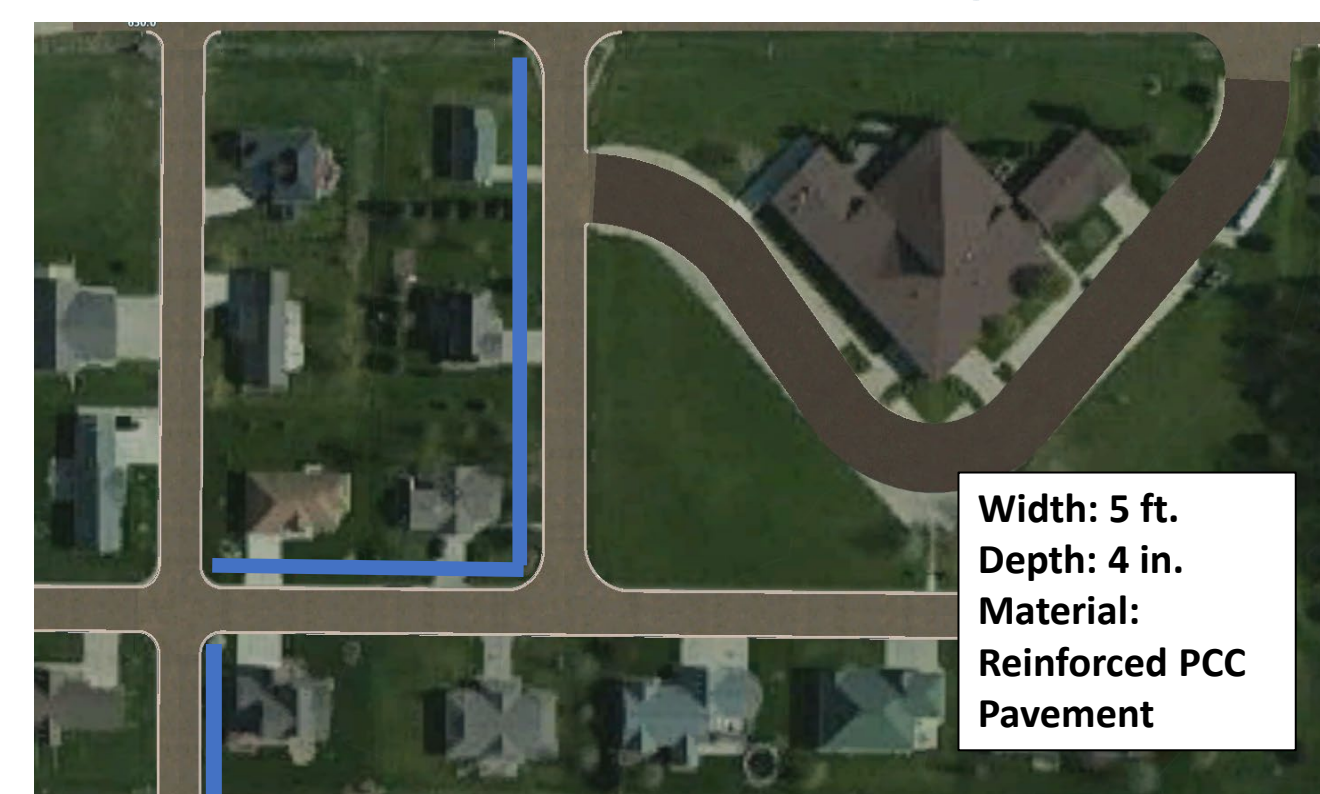
Highway 64 Crossings	
Construction Subtotal	22,100
10% Contingencies	2,200
20% Engineering and Administration	4,425
Total Project Cost	28,800

References

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Site 3 SW Neighborhood Development

Sidewalk connectivity between School Street and a new neighborhood development southwest of town was designed in accordance with Preston's Code of Ordinances. This route was chosen to minimize cost.



Width: 5 ft.
 Depth: 4 in.
 Material:
 Reinforced PCC
 Pavement

South-West Neighborhood Development	
Construction Subtotal	50,000
10% Contingencies	4,975
20% Engineering and Administration	9,950
Total Project Cost	64,500