

MEMORANDUM

To: Mayor and City Council

From: Mindy Sanders

Date: December 14, 2015

Subject: **Discussion of Tilly Mill Road Sidewalk Concepts**

DISCUSSION

Sidewalk construction along the west side of Tilly Mill Road is being considered in coordination with pavement resurfacing from N. Peachtree Road to Womack Road. This segment of Tilly Mill Road scored high according to the city's sidewalk policy based on several factors including the traffic volumes and speed limit on Tilly Mill Road, the demonstrated demand, transit opportunities, and the number of trip generators in proximity to the project.

The southern part of the project from N. Peachtree Road to Cherring Road consists of two-12' wide travel lanes, which transitions to a three-lane section that includes two-12' wide travel lanes and a center turn lane along the northern portion to Womack Road. An existing sidewalk is located on the east side of the road. There are currently no existing bike lanes. The new sidewalks will involve filling in the existing drainage ditches on the west side of the road and adding new curb and gutter and stormwater pipe. Illustrations of the existing and proposed cross sections are attached to this memo.

Three alternatives were presented at a public meeting held in April 2015 primarily attended by the adjacent property owners. Three general concepts were presented. Alternative 1 consisted of constructing a sidewalk with shared bicycle accommodations within the existing travel lanes. Alternative 2 provided dedicated 4 ft wide bike lanes in both directions. Alternative 3, a hybrid of Alternatives 1 and 2 added bike lanes only along the existing 2-lane section between N. Peachtree Road and Cherring Road.

These general concepts were discussed at the May 26, 2015 Council Meeting. The council directed staff to consider other scenarios such as removing the center turn lane to add the bike lanes and widening to both sides to minimize right of way impacts. This resulted in a total of eight variations of Alternatives 1, 2 and 3 to be compared for construction costs and right of way impacts as summarized in the attached table.

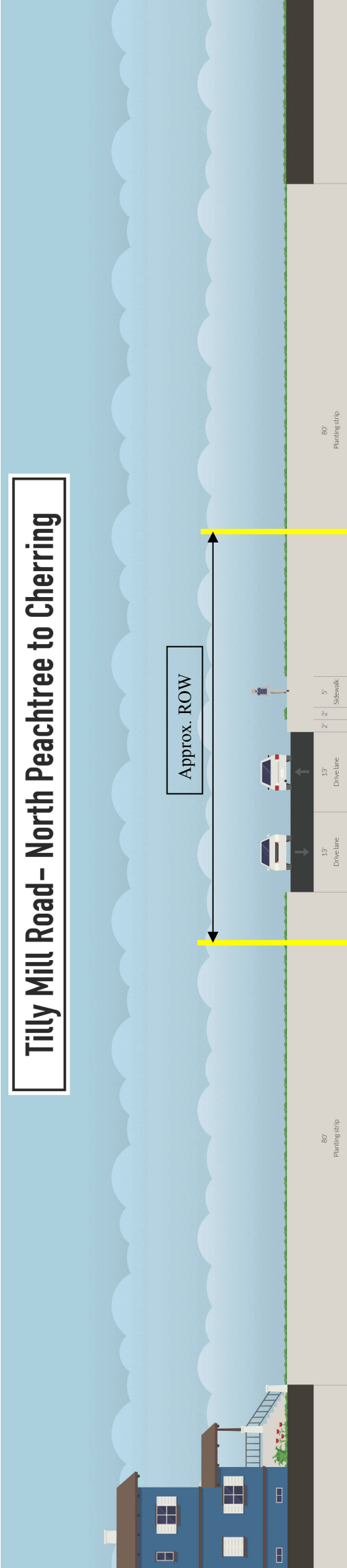
The total right of way and construction cost estimates for the various options range from approximately \$800,000 to \$1,250,000. Staff recommends removing 2B through 2F from consideration. Alternative 2B, which involves adding bike lanes to the existing roadway by widening to both sides, is the most costly and directly impacts the most adjacent properties. Alternatives 2C through 2F provide bike lanes at a mid-range cost with less property impacts but they require removal of the existing turn lane. Removal of the turn lane would only be practical from Cherring to Spring Hill Cove which is less than half the length of the existing lane and removal would negatively impact the level of service for vehicles.

RECOMMENDED ACTION

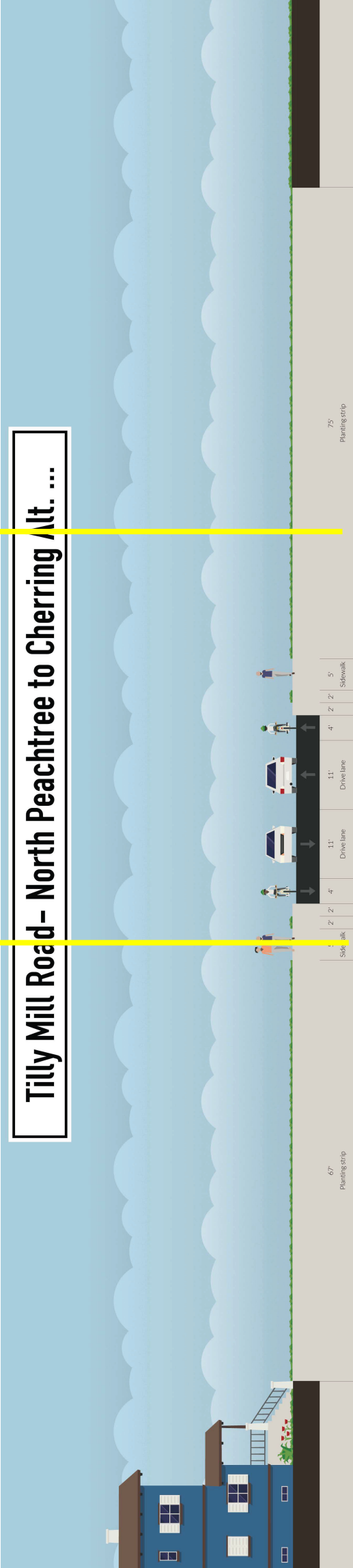
Staff recommends Alternative 3A which provides bike lanes on the two lane segment and a shared lane on the three lane segment. The construction would also include a small shift in the existing alignment of the curve between the two and three lane section to reduce right of way impacts on the west side of the road. The cost to provide bike lanes along the full length is estimated to be about 25% higher than the lowest cost alternative of providing shared lanes along the full length (Alternative 1A) and requires right of way from an additional 7 parcels. Compared to the lowest cost alternative, alternative 3A would result in a cost increase of about 12% and similar right of way impacts. While 3A would not provide the level of service/accommodation that full bike lanes would, the level of service would not be deficient and the alternative would be consistent with the city's complete streets policy and comprehensive transportation plan.

Staff also requests approval of an increase in the design contract from \$48,790 to \$74,000 in the amount of \$25,000 for Wolverton & Associates to complete the design and construction documents. This additional amount includes \$8,700 for the additional alternative layouts and cost estimates plus additional survey and design costs totaling \$15,200 for the recommended alternate, which includes shifting the alignment through the existing curve.

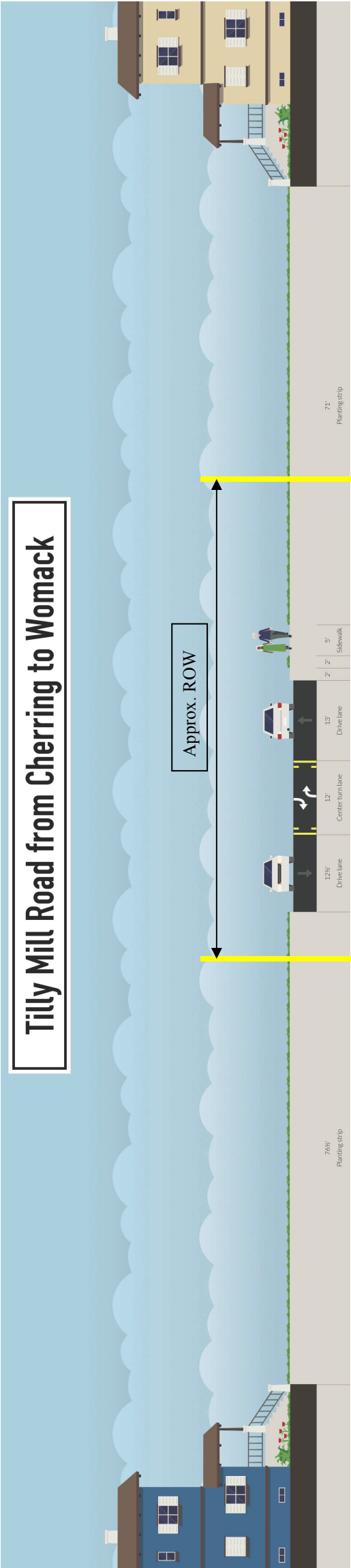
EXISTING



PROPOSED



Tilly Mill Road from Cherring to Womack



Tilly Mill Road from Cherring to Womack Atl. 3

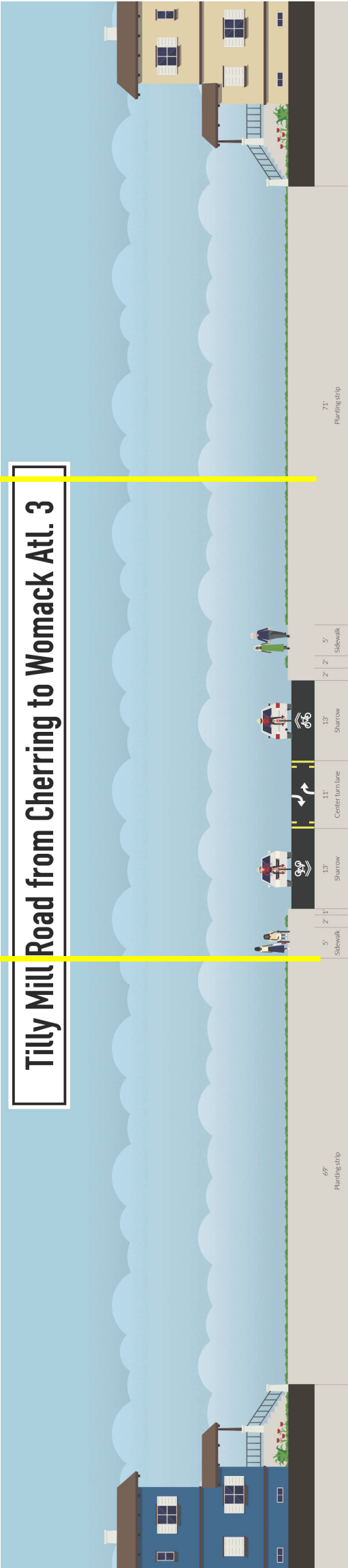


Table 1: Comparison of Alternates

	Alt. 1A	Alt. 2A	Alt. 2B	Alt. 2C	Alt. 2D	Alt. 2E	Alt. 2F	Alt. 3A
Bicycle Facility (Shared Lanes/Bike Lanes)	SL	BL	BL	BL	BL	BL	BL	BL/SL
Maintain Existing West Side Right of Way	○	○	●	●	●	○	○	○
Reduction of Center Turn Lane	○	○	○	●	●	●	●	○
Addition of KUMC Turn Lane	○	○	○	○	●	○	●	○
Number of Affected Yards (Includes those where all work is done within city's right of way)	21	21	36	24	24	21	22	21
Number of Properties Requiring Negotiations (Includes Easements)	21	21	29	24	24	21	25	21
Number of Right of Way Parcels	13	20	1	1	1	12	10	13
Right of Way Area	1,750	10,000	150	100	100	2,750	2,000	4,250
Easement Area	46,500	51,500	70,000	56,250	73,750	49,500	58,750	49,500
Right of Way Cost	\$ 55,000	\$ 115,000	\$ 70,000	\$ 60,000	\$ 75,000	\$ 65,000	\$ 70,000	\$ 75,000
Construction Cost	\$ 710,000	\$ 850,000	\$ 1,150,000	\$ 850,000	\$ 900,000	\$ 750,000	\$ 850,000	\$ 780,000
Total Cost	\$ 800,000	\$ 1,000,000	\$ 1,300,000	\$ 1,000,000	\$ 1,000,000	\$ 900,000	\$ 1,000,000	\$ 900,000