

Staff Report

INCLUSION CROSSWALK (5TH STREET AND DOUGLAS AVENUE)

June 25, 2019

BACKGROUND:

Staff was asked by the City Council to evaluate a possible decorative crosswalk treatment at the 5th Street and Douglas Avenue intersection as part of the City’s efforts to promote inclusion and diversity. The evaluation was to review and report back regarding the regulatory requirements that may affect the use of decorative treatment within the crossing area and estimated costs for some alternatives.

REGULATORY REQUIREMENTS:

All crosswalk markings are governed by Chapter 3 of the Manual on Uniform Traffic Control Devices (MUTCD). Specifically, the standard in section 3B.18(04) is *“When crosswalk lines are used, they shall consist of solid white lines that mark the crosswalk. They shall not be less than 6 inches or greater than 24 inches in width.”* Therefore, for the decorative crossing treatment to comply with the MUTCD it will need to have six-inch white lines along the edges of the treatment. The area within crossing marking can be whatever design the City Council approves as long as the treatment uses slip-resistant materials and does not create a hazard for any users of the intersection.

ESTIMATED COSTS FOR ALTERNATIVES:

Staff utilized current bid pricing for standard road paint to generate cost estimates for options for the decorative crossing treatment, as well as, solicited in-formal quotes for thermal plastic treatments specially designed for large-area decorative treatments. Below is a comparison of each material type:

Standard Road Paint

Pros

- Inexpensive

Cons

- Non-Durable (Less than a Year Life)
- Slip-Resistant material can wear off
- Tends to darken quickly from road wear
- Labor extensive installation (May require ~3 days) – volunteer labor possible

Thermal Plastic

Pros

- Durable (5-year Life)
- Slip-resistant material throughout
- Fade Resistant Colors
- Installs quickly (~1 day)

Cons

- Expensive (3 to 4 times the cost)

It should be noted that any option using standard road paint is likely to require either extensive manual labor and stenciling materials to assure a professional looking product. Whereas the thermal plastic comes in 1ft x 3ft, or 2ft x 3ft printed tiles (of any design or pattern), which can be assembled on the street very similarly to gym flooring tiles.

OPTIONS:

Staff was given two possible alternatives for the decorative crossing; 1) 6x6 foot multicolor blocks (incorporates three pride designs), 2) Inclusive pride “rainbow” design using 1ft stripes. A third alternative, Option 3: international style “bars,” was created as a way to possibly reduce costs while still taking advantage of the durability and quality of thermal plastic. **It should be noted that the area of the crosswalk changes slightly depending on the design because of the available sizes of the thermal plastic tiles. For comparison purposes, it is assumed that the same area be done in standard road paint even though road paint can be done in any amount.**

Option 1:



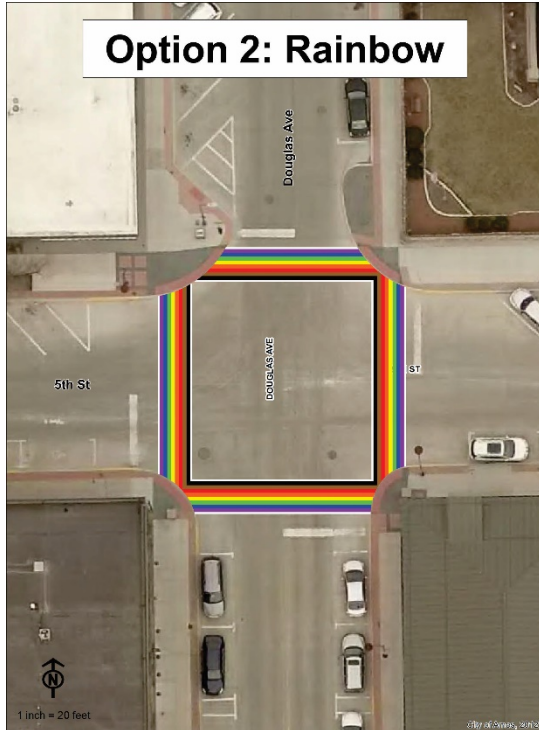
thermal plastic tiles compared to standard road paint:

Option Name	Width	Area (ft^2)
Blocks	6.5 ft	1410

Material	\$/ft^2	Total Cost	Life (Yr)	Cost / Year
Thermal Plastic	20.43	32,890	5	6,578
Road Paint	6.75	9,518	1	9,518

Option 1 - Blocks includes three separate pride designs represented by 6x6 foot blocks of color with a six-inch white border for the official crosswalk lines. The estimate assumes the use of the 2x3 foot

Option 2:



Option 2: Rainbow

wide color stripes and a six-inch white border for the official crosswalk lines, which results in a larger coverage area. The estimate assumes the use of the 1x3 foot thermal plastic tiles compared to standard road paint:

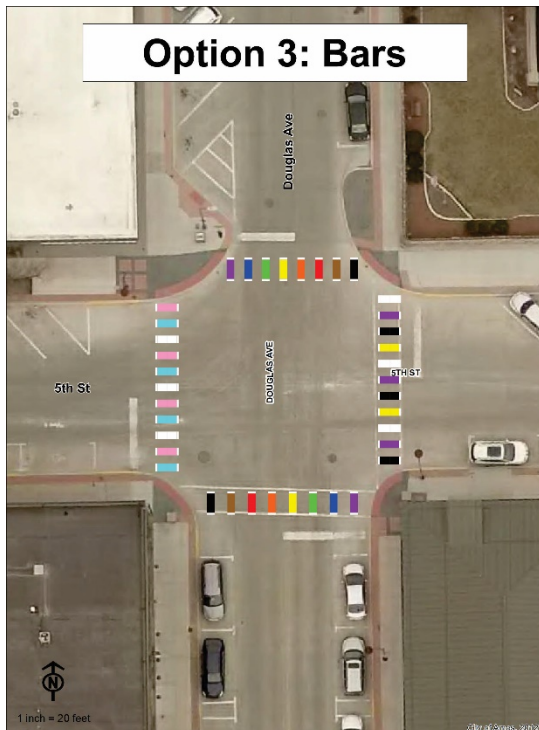
Option Name	Width	Area (ft ²)
Rainbow	9 ft	1960

Material	\$/ft ²	Total Cost	Life (Yr)	Cost / Year
Thermal Plastic	20.43	45,740*	5	9,148
Road Paint	6.75	13,230*	1	13,230

*Modifying the design to include other pride flag designs will not affect cost.

Option 2 - Rainbow includes a single pride design represented by one-foot

Option 3:



Option 3: Bars

Option 3 - Bars is a cost-effective alternative to Option 1, which still includes three separate pride designs now represented by 2x6 foot bars of color with a six-inch white border for the official crosswalk lines. This alternative tries to mimic the high-visibility (international) style crosswalk. The estimate assumes the use of the 2x3 foot thermal plastic tiles compared to standard road paint:

Option Name	Width	Area (ft ²)
Bars	6 ft	520

Material	\$/ft ²	Total Cost	Life (Yr)	Cost / Year
Thermal Plastic	20.43	12,140	5	2,428
Road Paint	6.75	3,510	1	3,510

STAFF COMMENTS:

This project could serve as a symbol of the City Council's commitment to Diversity and Inclusion. Assuming the City Council wants to move forward with the project, it would appear to staff that the wisest course of action would be to implement the "Bars" Option 3 at an estimated cost of \$12,140. The use of plastic material in lieu of painting will result in an extended life, greater ease to install, and more attractive outcome. Funding for the project could come from the FY 2018/19 Council Contingency Account.

Option 1: Blocks

Douglas Ave

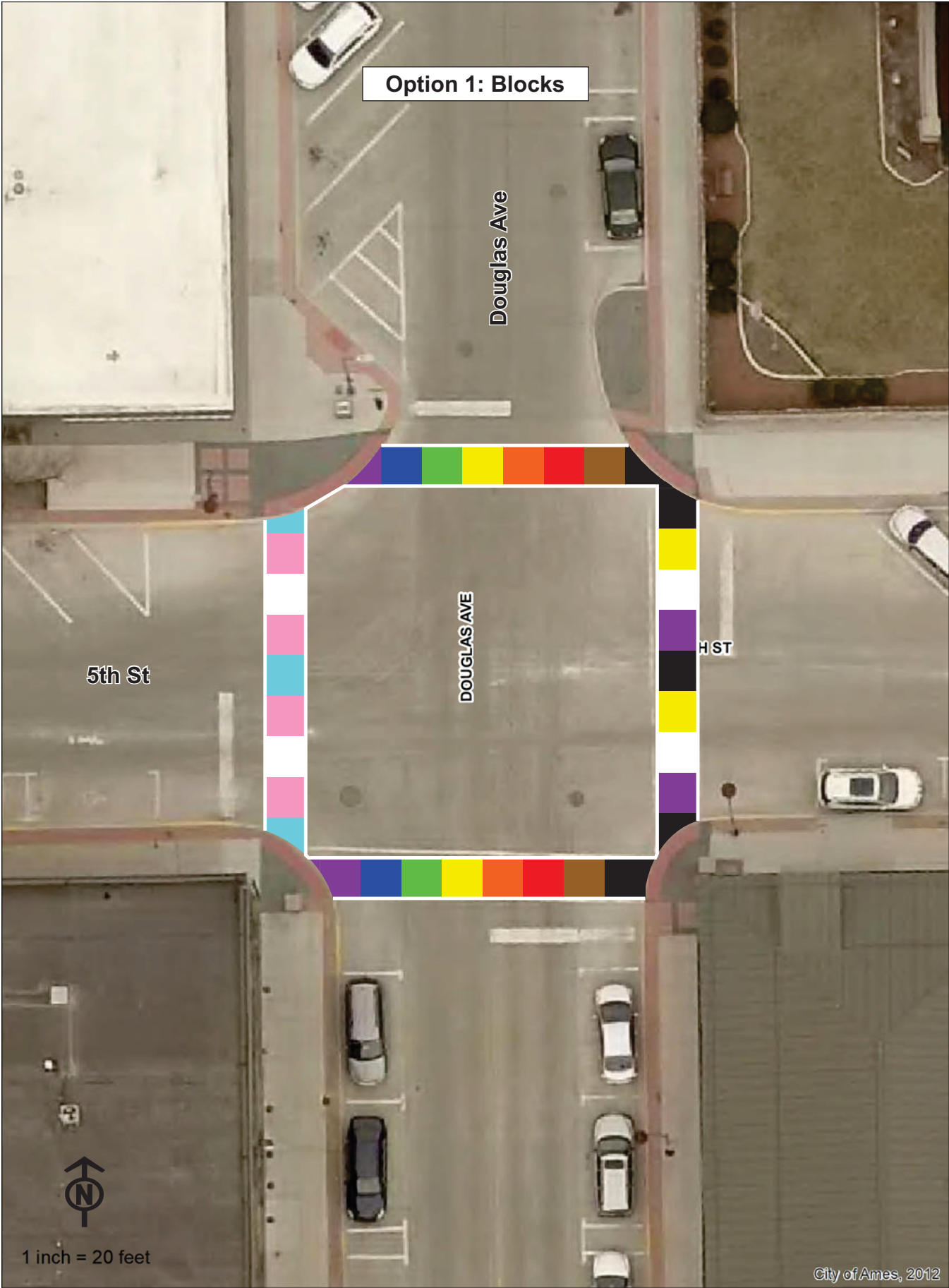
5th St

DOUGLAS AVE

HST



1 inch = 20 feet



Option 2: Rainbow

Douglas Ave

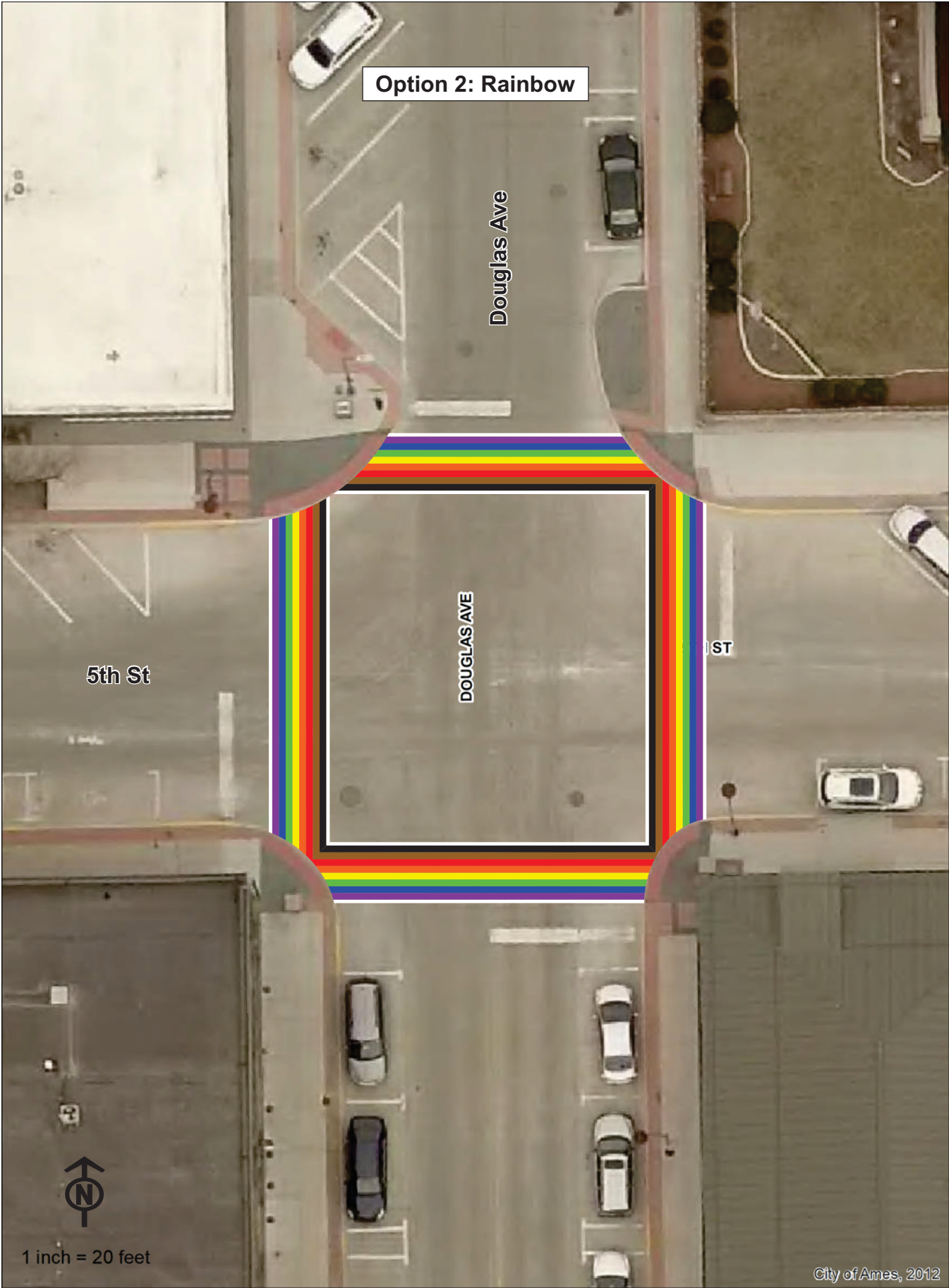
5th St

DOUGLAS AVE

ST



1 inch = 20 feet



Option 3: Bars

Douglas Ave

5th St

DOUGLAS AVE

5TH ST



1 inch = 20 feet

