



Memorandum

To: Town Council
From: Thomas Dansie, Director of Community Development
Date: March 8, 2019
Re: March 13, 2019 Town Council Meeting
Street Light Louvered Shield Update

In the February meeting the Council reviewed different shielded options for the streetlights. The Council determined the louvered shield designed and produced by staff was the most effective at controlling the light trespass issues associated with the streetlights.

The Council requested staff research methods and costs to mass produce and install the shields. The Council requested staff to research the cost difference between using sheet metal and aluminum to produce the shields.

Staff has obtained one quote from a metal worker to produce the shields in sheet metal. We are still waiting from other metal workers for more estimates, including estimates to manufacture the shields out of aluminum. We hope to have those estimates available prior to the meeting.

Staff has also estimated costs and staff resources required to produce the shields ourselves. The following summary outlines probable production costs.

Option One: Send the shields to a metal worker for manufacture

Cost per shield for sheet metal production:	\$280 to \$300 (based on one bid)
Cost per shield for aluminum production:	\$360 to \$400 (based on sheet metal bid + material cost increase for aluminum)
Installation per shield:	\$50
Total per shield:	\$350 sheet metal / \$450 aluminum

Option Two: Produce the shields ourselves

Material costs per shield	
Sheet metal:	\$36
Aluminum:	\$108
Paint (not powder coat ¹) per shield:	\$5
Installation per shield:	\$50
Total per shield:	\$91 sheet metal / \$163 aluminum <i>Plus \$800 one-time costs for equipment</i>
Staff time required per shield:	3 staff hours

¹ Alternatively we could send the shields to a painter for powder coating, estimated at \$50 per shield

Staff suggests the Council review these estimated costs (including the additional bids we hope to receive prior to the meeting) and provide direction on the following issues:

- 1- Should we manufacture the shields out of aluminum (3x materials cost), or sheet metal (3x weight)?
- 2- Should we manufacture the shields ourselves, or send the shields to a metal worker for production?
- 3- If we manufacture the shields ourselves should we also paint them ourselves? Or should we send them to a painter for powder coating?

Finally, the Council should provide direction on how many shields to produce. In a previous meeting it was suggested to only shield the lights that impact residential properties, but not those that are adjacent to commercial properties. The Council directed staff to research how many lights are adjacent to commercial property, and how many are adjacent to residential. There are approximately 20 lights adjacent to residential property, the remainder (approximately 40) are adjacent to commercial property.

However, staff has received some requests from commercial property owners who would like shields installed on lights near their properties. Also, some properties are used both residentially and commercially. And finally, some lights are placed between a residential and commercial property. Thus, it may be more complex to determine which lights receive shields and which do not than originally anticipated. Staff would appreciate the Council's direction on how many shields to produce, and where to locate them.

Based on the Council's direction staff will begin the shield production and installation process.

Attachments

- 1- Cost breakdown spreadsheet
- 2- Shield diagram

Method	NOL	cost	RR cost/hr	Material coast	Labor cost/hr	Total	per unit	Schedule
Grate install	60		50	0		3000	50	
Grate Manufacture	60	280				16800	280	Includes powder coat
Grate + install	60					19800	330	
Grate material	based on 3 fixtures per sheet							
steel	60			36		2160	36	
aluminum	60			108		6480	108	
cut/roll	60		1		30	1800	30	
assemble/weld	60		1		30	1800	30	
paint	60		1		30	1800	30	
paint	60			5		300	5	
Steel Grate + install	60					10860	181	
Aluminum Grate + install	60					15180	253	
Miscellaneous cost								
roller	\$200 to build, \$500 to buy							
spray gun	\$300 to buy							
powder coat	guess \$50 per fixture							

