



TO: Mayor Shaun Sipma
Members of the City Council

FROM: Stephen Joersz, PE, PTOE, Traffic Engineer

DATE: January 21, 2020

SUBJECT: **2019 SIGNAL IMPROVEMENT PROJECT – AWARD OF CONSTRUCTION BID (4429)**

I. RECOMMENDED ACTION

1. Recommend council to award the bid for the construction portion of the 2019 Signal Improvement Project to the low bidder, Main Electric Inc. in the amount of \$520,880.00; and
2. Recommend approval of the budget amendment ordinance allocating the unused 2019 Signal Improvement funds into the 2020 Signal Improvement funds; and
3. Authorize the Mayor to sign the Agreement.

II. DEPARTMENT CONTACT PERSONS

Lance Meyer, City Engineer	857-4100
Stephen Joersz, Traffic Engineer	857-4100

III. DESCRIPTION

A. Background

In 2012, the Engineering Department conducted a Traffic Signal Pole Inspection Report that documented the condition of one-hundred and twelve (112) traffic signal poles throughout the City of Minot. An initial round of traffic signal standard replacements was completed in 2014. The 2019 Signal Improvement project will continue addressing the worse of the worst signal standards.

Additionally, the 2019 Signal Improvement project will replace ten (10) traffic signal cabinets. Most of these locations have cabinets and controllers over twenty (20) years old. Maintenance has become difficult as spare parts are rare and product service has ceased. The new signal cabinets and controllers will be compatible with a future Intelligent Transportation System (ITS).

B. Proposed Project

The 2019 Signal Improvement Project features both traffic signal cabinet and traffic signal standard upgrades at the following locations:

Signal Cabinet Improvement Locations:

- Site 1 - 20th Avenue SW and 4th Street SW
- Site 2 - West Burdick Expressway and 6th Street SW
- Site 3 - West Burdick Expressway and 16th Street SW
- Site 4 - South Broadway and 20th Avenue SW
- Site 5 - West Burdick Expressway and South Broadway

- Site 6 - South Broadway and 2nd Avenue SW
- Site 7 - South Broadway and 22nd Avenue SW
- Site 8 - South Broadway and 27th Avenue SW
- Site 9 - South Broadway and 11th Avenue SW
- Site 10 - 16th Street SW and 37th Avenue SW

Signal Standard Improvement Locations:

- Site 1 - 20th Avenue SW and 4th Street SW (All 4 Signals)
- Site 2 - West Burdick Expressway and 6th Street SW (All 4 Signals)
- Site 3 - West Burdick Expressway and 16th Street SW (West 2 Signals)

C. Consultant Selection

On Tuesday, January 14, 2020 at 11:00 am, bids were opened for the construction portion of the 2019 Signal Improvement project. Below is a bid tabulation summary that shows the bid comparisons as they relate to the engineer’s estimate:

BID TABULATION 2019 Signal Improvement Project - Construction City Project # 4429 Tuesday, 01/14/2020, 11:00 AM				
Engineers Estimate: \$ 447,106.00				
Bidder	Bid Bond	Contractor License	Acknowledge Addendum	Total Bid
Main Electric Construction Inc.	X	X	X	\$ 520,880.00
Edling Electric Inc.	X	X	X	\$ 978,500.00
Fusion Automation Inc.	X	X	X	\$ 1,107,966.04

During a review of the bids, it was apparent that the two of the bids either inflated costs or did not incorporate that the City of Minot purchased a significant portion of the materials. Therefore, the Engineering Department recommends that the construction portion of the 2019 Signal Improvement project be awarded to Main Electric Inc. with their bid of \$520,880.00, which is 17% over the Engineer’s Estimate.

IV. IMPACT:

A. Strategic Impact:

Public safety and efficient traffic operations is a priority for the City.

B. Service/Delivery Impact:

This project will provide the construction and implementation of much needed traffic signal improvements throughout the City of Minot. Traffic control will be required to manage traffic during construction.

C. Fiscal Impact:

At the December 2, 2019 City Council meeting, the council approved the equipment procurement for the 2019 Signal Improvement project. That equipment procurement utilized \$621,027 of the \$900,400 available 2019 dedicated funds.

The construction portion of the 2019 Signal Improvement Project will be paid for by utilizing the remaining 2019 Signal Improvement Funds and a portion of the 2020 Signal Improvement Funds. For the purposes of this memo, the Signal Improvement Funds combines the Traffic Signal Cabinet, Signal Pole/Mast Arm Replacement and Battery Backup funds, as dedicated in the Capital Improvement Plan.

Project Costs

Equipment Procurement Bid Price	\$ 621,027.00
Ad for Bid – Equipment Procurement	\$ 139.08
Ad for Bid – Construction Bid	\$ 248.52
<u>Construction Bid Price</u>	<u>\$ 520,880.00</u>
Total	\$1,142,294.60

Funding Source

2019 Traffic Signal Improvement Funds	\$ 900,400.00
<u>2020 Traffic Signal Improvement Funds</u>	<u>\$ 575,920.00</u>
Total	\$1,476,320.00

2020 Signal Improvement Funding Remaining \$ 334,025.40

V. ALTERNATIVES

Alt 1. The City Council could choose not to award the signal construction bid. This will result in a delay in construction and implementation of the 2019 Signal Improvement project improvements.

VI. TIME CONSTRAINTS

Approving the contract in a timely manner will allow the paperwork to be in place so construction may begin as soon as weather allows.

VII. LIST OF ATTACHMENTS

- A. 2019 Signal Improvement Plan Cover Sheet
- B. 2019 Signal Improvement Budget Amendment