



Memorandum

To: Daniel Ford, Purchasing Manager

cc: Paul Knippel, P.E., Director of Engineering Services
Brian Moen, P.E., Assistant Director of Engineering Services

From: Shelley Lang, P.E., Traffic Operations Division Manager
Tracy Nichols, Traffic Superintendent

Date: November 1, 2016

Subject: Purchase of Traffic Signal Equipment from Paradigm Traffic Systems, Inc.

Transportation engineering estimates the need to purchase \$416,000 in traffic signal equipment, hardware and school zone flasher equipment from Paradigm Traffic Systems, Inc. in fiscal year 2017. These purchases will be used for upcoming capital improvement projects and for signal maintenance purposes in fiscal year 2017.

A significant portion (\$175,000) of the City's purchases from Paradigm Traffic Systems, Inc., this fiscal year includes video detection equipment, cable, battery backup systems, pedestrian poles, and LED's for signal heads for capital projects listed below via the BuyBoard Contract #432-13:

- Dallas Pkwy at Rockhill Rd (Bond Funds)
 - LED's for Signal Heads
- Legacy Dr. at Cotton Gin Rd (Bond Funds)
 - Video cable
 - LED's for Signal Heads
- Warren Pkwy at John Hickman (Reimbursed by Developer)
 - Video cable
 - Battery Backup System
 - LED's for Signal Heads
- US 380 at Windsong/Hollyhock (Reimbursed by Developer)
 - Video cable
 - Battery Backup System
 - LED's for Signal Heads
- Gaylord Pkwy at Avenue of the Stars (Bond Funds)
 - Video cable

Agenda Memorandum
Paradigm Traffic Systems, Inc. Purchases
November 1, 2016 City Council Meeting
Page 2 of 3

- Battery Backup System
- LED's for Signal Heads
- Fire Station #3 Emergency Signal (Bond Funds)
 - Video cable
 - Battery Backup System
 - LED's for Signal Heads
- Rectangular Rapid Flashing Beacon on Lebanon, west of FM 423 (Bond Funds)
 - Battery Backup System
- US 380 at Dallas Pkwy (Reimbursed by TxDOT)
 - Video cable
 - Battery Backup System
- US 380 at Preston Rd (Reimbursed by TxDOT)
 - Video cable
 - Battery Backup System
- Parkwood Blvd at Gaylord Pkwy & Warren Pkwy (Bond Funds)
 - Video cable
 - LED's for Signal Heads
- Preston Rd at Warren Pkwy, Lebanon Rd & Stonebrook/Rolater Rd (Bond Funds)
 - Video cable
 - New pedestrian poles
 - LED's for Signal Heads
- Preston Rd at Wade Blvd (Bond Funds)
 - Video cable
 - Battery Backup System
 - New pedestrian poles
 - LED's for Signal Heads
- Legacy Dr. at Veneto Dr. (Bond Funds)
 - Video cable
 - Battery Backup System
 - LED's for Signal Heads
- Stonebrook Pkwy at 4th Army (Bond Funds)
 - Video cable
 - Battery Backup System
 - LED's for Signal Heads
- Signal Maintenance – video detection equipment and cable

Additional signal hardware purchases for this year include 48 new batteries for battery backup systems, 100 astrobrac clamps with cables for signal head and sign installations, 16 red light confirmation light assemblies for new permanent signals, 8 programmable louvers for new traffic signal on Dallas Parkway at Rockhill Rd, and 12 pan-tilt-zoom camera brackets. These items are estimated to be purchased with signal maintenance funds for \$26,000 via the BuyBoard Contract #432-13.

Agenda Memorandum
Paradigm Traffic Systems, Inc. Purchases
November 1, 2016 City Council Meeting
Page 3 of 3

Another significant portion of our purchase with Paradigm will be for school zone flasher equipment. As approved in the new FY17 general fund budget, we will be purchasing 57 new school zone flasher modems and clocks to change out the existing unreliable and no longer supported pager and clock system. We also estimate the need to purchase 3 new radar speed boards for maintenance purposes to change out older boards that can no longer be repaired. The remaining school zone flasher related purchase is for 10 new gel cell batteries for maintenance purposes. The total estimate for the school zone related purchase is \$215,000. All of the school zone flasher items will be purchased via the BuyBoard Contract #432-13, except the gel cell batteries that we purchase via the City Bid #1202-039.

We request this item be placed on the next regular City Council agenda for consideration. Please let us know if you need additional information.