



CITY OF NORMAN, OK STAFF REPORT

MEETING DATE: 11/28/2023

REQUESTER: Katherine Coffin

PRESENTER: David Riesland, Transportation Engineer

ITEM TITLE: CONSIDERATION OF ADOPTION, REJECTION, AMENDMENT, AND/OR POSTPONEMENT OF RESOLUTION R-2324-87: A RESOLUTION OF THE COUNCIL OF THE CITY OF NORMAN, OKLAHOMA, APPROPRIATING \$578,549 FROM THE CAPITAL FUND BALANCE FOR LOCAL SHARE AND DEPOSIT PAYMENT TO THE OKLAHOMA DEPARTMENT OF TRANSPORTATION FOR THE NORMAN TRAFFIC MANAGEMENT CENTER.

BACKGROUND:

A Traffic Management Center (TMC) is a component of a transportation management system that improves traffic flow and incidence response. Many cities throughout the country, including Oklahoma City, Tulsa and Edmond in the state of Oklahoma, have TMC's designed to better manage the flow of traffic on their streets.

TMCs collect information about the transportation network and combine it with other operational and control data to manage the transportation network and to provide traveler information. TMCs communicate transportation-related information to the media and to the motoring public. It is a place where agencies can coordinate their responses to transportation situations and conditions. The TMC uses closed circuit video equipment, and roadside count stations to enable decision makers to identify and react to an incident in a timely manner based on real time data.

For the last two decades, the City has been working on the development of an Advanced Traffic Management System (ATMS) and communication network of underground fiber optic cable. There are currently ten closed-loop traffic signal coordinated systems and approximately 60 miles of fiber optic cable in the ground connecting 127 of the City's 156 traffic signals. The remaining 29 signals are stand-alone signals and are not currently part of a coordination system.

The City utilizes video detection systems as its primary means of detection; however, a few intersections do feature in-pavement loop detectors. Where fiber optic cable is available at a given intersection with video detection, the feeds from these cameras are linked to the offices of the Transportation Engineer in the Municipal Complex and the Traffic Control Division Building located in North Base, using the ATMS software. All of the City's school zone flashers utilize cellular modems to provide communications to and from the office through a wireless

communication system. The City also maintains a number of driver feedback speed limit signs with and without school zone flashing beacons.

The City of Norman has already laid the foundation for the establishment of a TMC with its robust fiber optic communication network, state of the art traffic signal controllers and modern vehicle video detection systems. On April 2, 2019, Norman citizens approved a \$72 million proposition to fund 19 transportation projects, including \$366,000 earmarked for the design of a TMC that will ultimately be constructed using federal transportation funds. On October 22, 2019, the Norman City Council approved Contract K-1920-49 with Stantec Consulting Services, Inc., to prepare the Systems Engineering Analysis needed to qualify for federal funding of the TMC. On May 10, 2022, the Norman City Council approved Amendment 1 to Contract K-1920-49 with Stantec Consulting Services, Inc., (Stantec) for the design of a traffic management center that included all technology. The technology will be initially located in "Building C" of the Municipal Complex which is being designed by The McKinney Partnership Architects (McKinney) for renovation. A portion of the Building C remodel, the existing southwest corner of the building, will house the future traffic management center (a copy of the floor plan is attached).

The Federal Fiscal Year 2021-2022 (FFY 2022) Transportation Improvement Plan, developed by the Association of Central Oklahoma Governments (ACOG) and approved by the Oklahoma Department of Transportation (ODOT), includes a \$3 million grant for the City's first TMC. The project achieved a perfect score of 100 in the ACOG competitive ranking process. All of the accumulated funds for the TMC will pay for the modifications to the southwest corner of Building C as well as the equipment and communication network necessary to achieve a fully functioning TMC. During the final plans development stage, it was determined, jointly by the City of Norman staff as well as ODOT staff that assistance with bidding as well as equipment procurement would be needed for a project the likes of which has never been undertaken by the City or ODOT. On June 13, 2023, the Norman City Council approved Amendment 2 to Contract K-1920-49, allocating funds for Stantec to act in a System Integrator role with the construction of the TMC.

The TMC design is in its final stages. Final plans and specifications for the building and the equipment were delivered to the City on or before November 15, 2023, that were then forwarded to ODOT for future bidding. ODOT is in the process of preparing an invoice to be sent to the City of Norman for its 20 percent share of the anticipated construction costs for the TMC. This invoice will be based upon the amount of the grant secured through ACOG. This grant, which was secured under the Surface Transportation Block Grant/Urbanized Area (STBG-UZA) Program, including a 20 percent local match, was in the amount of \$3,000,000. This will result in an invoice to the City in the amount of \$600,000, arriving in early December ahead of a January bid for the TMC building modifications in Building C as well as the necessary ITS equipment for a fully functioning TMC.

DISCUSSION:

80 percent of the funds associated with the System Integrator role of Stantec will be reimbursed to the City by ODOT as their share from our grant funding; however, as the System Integrator role will coincide with construction, those reimbursements will arrive after the ODOT invoice will need to be paid. The amount of the invoice, is being based on the original estimate submitted with the ACOG grant application in 2021. That estimate assumed things that will not be featured in the TMC that will be constructed including the large video wall with connections to work stations that are prominent in the prototypical TMC. Instead, Norman's TMC will feature modular

workstations that will each include a row of large monitors to replace the large, expensive video wall (a copy of the modular work station is attached). As such, a refund should be expected from ODOT at conclusion of the TMC construction to account for bids coming in below the original estimate.

The Traffic Management Center Pay-As-You-Go, Construction (Account 50596688-46101; Project BG0087) currently has a balance of \$21,451.52. This is well short of the anticipated \$600,000 invoice that ODOT will send to the City of Norman. To offset this shortfall, a request for transfer of \$578,549 from the Capital Fund Balance (Account 50-29000) will allow the construction of the TMC to commence. Upon completion of the TMC, reimbursements from ODOT for the System Integrator as well as a refund from the original \$600,000 invoice for local match can be deposited back to the Capital Fund Balance.

If approved, City staff anticipates that the Building C renovations to accommodate the TMC and the installation of all necessary equipment will be completed by late fall of 2024. The City's Traffic Management Center will then be fully operational before the end of calendar year 2024.

RECOMMENDATION 1:

Staff recommends approval of Resolution R-2324-87.

RECOMMENDATION 2:

Staff recommends appropriation of \$578,549 from the Capital Fund Balance (Account 50-29000) to the Traffic Management Center Pay-As-You-Go Construction Account (50596688-46101; Project BG0087) to pay the ODOT invoice for local share of the TMC construction and equipment bids.