


## COUNCIL COMMUNICATION

	Number:	<b>25-138</b>	Meeting:	<b>April 7, 2025</b>
	Agenda Item:	<b>6</b>	Roll Call:	<b>25-0482</b>
	Submitted by:	<b>Steven L. Naber, P.E., City Engineer</b>		

### AGENDA HEADING:

Ordering construction of the following: Intelligent Transportation Systems (ITS) Upgrade - Phase 5 - Receiving bids, (4-15-25), and Setting date of hearing, (5-5-25). (Construction Estimate - \$1,625,000).

### SYNOPSIS:

Recommend the City Council order construction of the improvement and set dates to receive bids and hold a public hearing, as required by Iowa Code, utilizing the method of financing referenced below. The project includes upgrading the communications infrastructure, communications network, traffic signal cabinet/controller and ITS equipment of the traffic signal system along major corridors, and installation of dynamic message signs. The existing traffic signal controllers have outdated technology and will be replaced with 2070 Advanced Transportation Controllers (ATCs), which are the new modern standard controllers.

### FISCAL IMPACT:

Amount: \$1,625,000 City Engineer's Estimate

Funding Source: Fiscal Year (FY) 2024-2025 Capital Improvement Program (CIP), Page 163, Traffic System Operation Improvements, TR097, Being: \$500,000 (maximum) Surface Transportation Block Grant (STBG) program Federal-aid funds up to 80% of eligible construction costs under STP-U-1945 (877)--70-77, and the remaining \$1,125,000 in G.O. Bonds

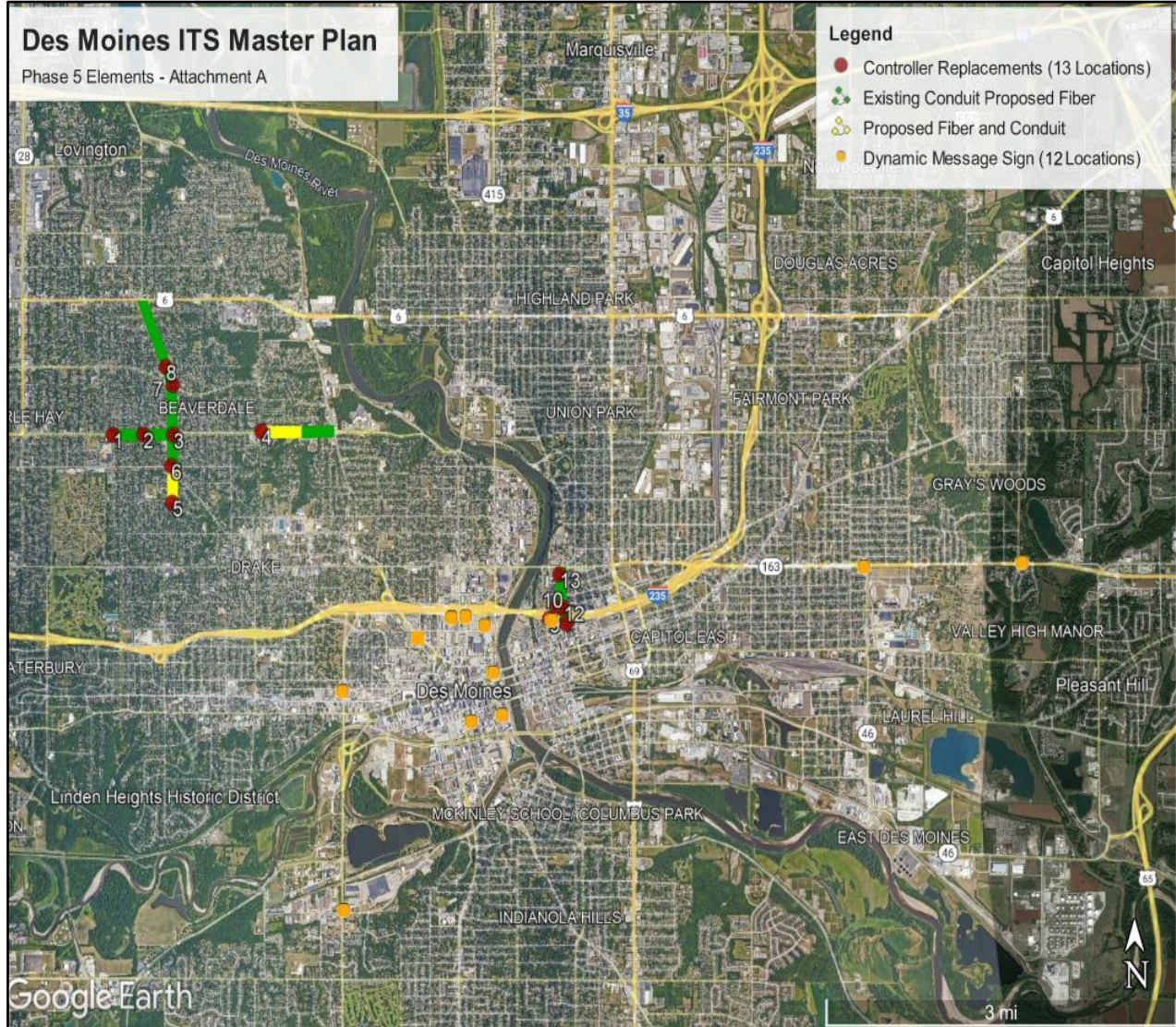
### ADDITIONAL INFORMATION:

- The Engineering Department has prepared plans, specifications, form of contract documents, and City Engineer's estimate for the construction of the ITS Upgrade - Phase 5, Activity ID 04-2024-009. The improvements include removal of pavement, Portland Cement Concrete (PCC) sidewalk paving, and upgrading the communications infrastructure, communications network, dynamic message sign (DMS) installation, traffic signal cabinet/controller and ITS equipment of the traffic signal system, all in accordance with the contract documents, including Plan File No. 673-011/100 at the following locations, and as depicted in the figure below: 41st Street from Germania Drive to Beaver Avenue, Beaver Avenue from 41st Street to Douglas Avenue, Hickman Road from 48th Street to Beaver Avenue, Hickman Road from 30th Street to Martin Luther King Jr. Parkway, Pennsylvania Avenue from EB I-235 ramps to E. University Avenue, WB I-235 ramps from E. 6th Street to Pennsylvania Avenue, E. 6th Street from EB I-235 ramps to WB I-235 ramps, Martin Luther King Jr. Parkway from Cottage Grove Avenue south approximately 1,000 feet, E. University

Avenue from E. 25th Street to E. 26th Street, E. University Avenue at Winegardner Road, 2nd Avenue from Vine Street to Court Avenue, Grand Avenue from 2nd Avenue to the Des Moines River bridge, 3rd Street from Crocker Street north approximately 230 feet, 5th Street from School Street south approximately 150 feet, 6th Avenue from Cherry Street south approximately 160 feet, 7th Street from School Street south approximately 130 feet, Keosauqua Way from 12th Street to approximately 380 feet southeast, Fleur Drive from John R Grubb Lane north approximately 500 feet, Fleur Drive from Bell Avenue to approximately 550 feet.

- The estimated construction cost is \$1,625,000. The proposed plans, specifications, and form of contract documents are available for public inspection in the Des Moines City Engineer's Office.
- The results and recommendations of the ITS Master Plan were presented to Council at a work session on October 22, 2018. The ITS Master Plan was adopted as a framework for the City of Des Moines future traffic management and communication system infrastructure at the November 19, 2018, Council meeting.
- The ITS Master Plan addresses major components: signal system hardware and software, work order system, fiber communications infrastructure, video observation cameras, and dynamic message signs.
- The current ITS infrastructure for the City of Des Moines primarily consists of antiquated technologies, including traffic signal controllers using 1970's technology and video observation cameras that are often not operable.
- The ITS Master Plan is broken into several phases prioritized on vehicle volumes, roadway capacity, annual crashes, truck/transit route needs, existing operational issues, and conditions of existing communications.
- Phase 1 construction was completed in 2022. Phase 2 construction was completed in 2023. Phase 3 construction was substantially completed in the fall 2024. Phase 4 construction started in the spring 2024 and is scheduled to be completed in the spring 2025.
- Phase 5 includes upgrading 13 traffic signal locations generally in the Beavertdale Neighborhood and on E. 6th Street and Penn Avenue, adjacent to Interstate 235, as shown in the map below. At each intersection, Phase 5 will include the following activities:
  - Communication infrastructure upgrades.
  - Communication network upgrades.
  - Traffic Signal Cabinet/Controller/ITS Device Upgrades.
- Phase 5 of this project will include upgrading the existing dynamic message signs throughout downtown, with improvement locations shown in Attachment A below. The new dynamic message signs will be used to inform drivers on parking availability, construction activities, and street use events that may impact travel. Eight (8) existing dynamic message signs throughout downtown will be replaced. Four (4) additional signs will be added as shown in Attachment A below.

- Construction of this project is anticipated to begin in summer 2025 and be completed by summer 2026.



**PREVIOUS COUNCIL ACTION(S):**

Date: July 15, 2024

Roll Call Number: [24-0945](#)

Action: [Authorization](#) to proceed with acquisition of the necessary property interests for the ITS Upgrade – Phase 5 Project. ([Council Communication No. 24-288](#)) Moved by Gatto to adopt. Second by Coleman. Motion Carried 7-0.

Date: May 20, 2024

Roll Call Number: [24-0725](#)

Action: [Approving](#) and authorizing the execution of the Iowa Department of Transportation (IDOT) Agreement for the ITS Upgrade Phase 5. ([Council Communication No. 24-209](#)) Moved by Gatto to adopt. Second by Voss. Motion Carried 7-0.

**BOARD/COMMISSION ACTION(S):**

Board: Transportation Safety Committee

Date: September 11, 2018

Resolution Number: N/A

Action: MOTION was made by Jim Windsor to support investments in new technology and infrastructure; seconded by Scott Bents. Motion passed 8:0.

**ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:**

Anticipated actions include public hearing, receive and file bids, designate lowest bidder, and approve contract and bond; also partial payments to the contractor and final acceptance of work.

For more information on this and other agenda items, please call the City Clerk's Office at 515-283-4209 or visit the Clerk's Office on the first floor of City Hall, 400 Robert D Ray Drive. Council agendas are available to the public at the City Clerk's Office on Thursday afternoon preceding Monday's Council meeting. Citizens can also request to receive meeting notices and agendas by email by calling the Clerk's Office or sending their request via email to [cityclerk@dmgov.org](mailto:cityclerk@dmgov.org).