



City of Grand Forks
Staff Report
Committee of the Whole – August 12, 2019

Agenda Item: Project Update for City Project No. 7818 – State Transportation Improvement Program Comments

Submitted by: Engineering Department, David J Kuharenko, PE (Principal Civil Engineer)

For Information Only

BACKGROUND:

This staff report is intended to provide an update on the project funding requests which were submitted last fall as well as provide some updated information on projects which have been programmed in the latest draft State Transportation Improvement Program (STIP). The draft STIP is preliminary and is anticipated that some changes may occur before it is finalized by the North Dakota Department of Transportation (NDDOT). Staff is not anticipating significant changes in the listed projects relating to our requests between the draft and final STIP documents.

Staff has submitted comments to the NDDOT regarding the draft STIP in the form of two letters. The first letter details our concerns regarding the lack of an environmental document to address the congestion on 32nd Ave S. This environmental document would lay the ground work and determine the preferred alternative. Based on the I-29 study completed by the Grand Forks/East Grand Forks Metropolitan Planning Organization (MPO) it appears that a high ranking alternative could be a new interchange located near 47th Ave S. Staff has requested that the environmental document be added back into the STIP. The NDDOT sent a response back indicating that they are unable to accommodate this request, and if this continues to be an important project for the City we can certainly move forward with the environmental document as a city project or we may continue to submit a request for funding as part of the yearly solicitation process. The second letter details our request to transfer Urban Roads Program funding from the University Ave mill & overlay project to fund the reconstruction on N 5th St. We have received a letter from the NDDOT indicating their concurrence to transfer the funding.

ANALYSIS AND FINDINGS OF FACT:

As the engineering department develops the City's six year capital improvement plan, these programmed federally funded projects receive first priority funding. Funding and scheduling of locally funded projects are adjusted and stacked around these first priority projects.

Both the environmental document and construction project to address congestion on 32nd Ave S could lead to the construction of a new I-29 interchange at 47th Ave S. The congestion on 32nd Ave S was previously identified in the MPO's 2017 I-29 traffic operations study. The traffic models in that study projected that by 2025 the interchange at 32nd Ave S will see the I-29 northbound off-ramp traffic stacking onto I-29 mainline and deficient operations at both ramps, as well as the adjacent intersection of 32nd Ave S and S 38th St. A new interchange at 47th Ave S is anticipated to reduce the projected congestion on 32nd Ave S by as much as 40%, thereby effectively removing the need to widen 32nd Ave S within the planning horizon.

A portion of 32nd Ave S is also Business US 81 and is under the jurisdiction of the NDDOT. As the study projected a new interchange at 47th Ave S to be one of the better options to reduce congestion on 32nd Ave S, regional road funding was requested for the project. In May of 2018, the NDDOT sent out a memo regarding the decision document for 2017 Urban Interstate Priority Process (UIPP). This memo identified and prioritized projects on a short, medium and long range basis located on the interstate system throughout the state. In this document the environmental document for the future I-29/47th Ave S interchange is located in the short range time band and was not priority ranked. The 47th Ave Interchange construction can be found on the medium range list with a ranked priority of #3.

Typically an environmental document for a project of this magnitude would need to be completed in advance of a construction project to determine the appropriate alternative. As the environmental document was not included within the 2020-2024 timeframe, the next potential year that the environmental document would be completed would likely be in 2025, with the potential construction in the following years. With the current growth in the area surrounding the potential 47th Ave S interchange, further discussions will need to be held in the future regarding the likelihood of an interchange at this location.

SUPPORT MATERIALS:

- Letter to the NDDOT Dated July 24, 2019 comments on the Draft STIP (2 pages)
- Letter from the NDDOT Dated August 6, 2019 response to comments (1 page)
- Letter to the NDDOT Dated July 25, 2019 request to transfer funds (1 page)
- Letter from the NDDOT Dated July 30, 2019 concurrence to the transfer (1 page)
- Relevant Pages of Urban Interstate Priority Process Memo (3 pages)

255 N. 4th St.
PO Box 5200
Grand Forks, ND 58206-5200



Allen R. Grasser, PE
City Engineer
(701) 746-2640
Fax# (701) 787-3744

July 24, 2019

Stacey Hanson
Local Government Division
NDDOT
608 E. Boulevard Ave.
Bismarck, ND 58505-0700

Dear Stacey:

The Grand Forks/East Grand Forks Metropolitan Planning Organization completed the I-29 corridor study in 2017. The study identified increasing levels of traffic, decreasing level of service, and safety concerns particularly around I-29 & 32nd Ave S/Bus US 81 interchange. This study looked at multiple alternatives to address these issues which included widening 32nd Ave S/Bus US 81, ramp additions or modifications, a diverging diamond interchange, and constructing a new interchange at 47th Ave S with spot improvements on 32nd Ave S. As this was only a study, it did not narrow down any of the alternatives; however, it did identify a preferred alternative which was spot improvements on 32nd Ave S/Bus US 81 with a new interchange located at 47th Ave S. The study indicated that this alternative could reduce traffic volumes by up to 40% which would allow the state to avoid a costly widening of 32nd Ave S/Bus US 81.

During discussions regarding this study it became apparent that if a new interchange were to be installed around 47th Ave S that it would likely need to be shifted south, and that there would need to be access control in the area surrounding a proposed interchange. The city has requested the environmental document be completed in 2020 to address the issues the study identified on 32nd Ave S/Bus US 81 so that if a new interchange is the selected alternative, we have sufficient time to reserve the appropriate right of way and access control in the appropriate location to minimize complications for design and construction. Development has already reached 45th Ave S within a half mile of the interstate, and may cross 47th Ave S in the next two or three years. In an attempt to show the city's desire to move forward and show our support in addressing the congestion on an NDDOT highway, in the project scoping worksheet that was submitted, the city proposed a 50%/50% cost share between the city and the state to complete this work.

If the environmental document is not completed in the near future, it could lead to increased complications in project development. If the delayed document determines that a new interchange is the best solution, the land adjacent to the interstate may already be developed which could lead to an interchange being moved further south, which would likely reduce the amount of traffic pulled from 32nd Ave S/Bus US 81. If a new interchange is impractical, then it may become necessary to widen 32nd Ave S/Bus US 81 which would lead to increased construction costs and future maintenance costs to be addressed by the NDDOT.

Per the request for public and agency input on the draft STIP, please consider a comment and request by the City of Grand Forks to place the environmental document back on the final STIP. Consideration should be given to both interstate and regional funding as 32nd Ave S/Bus US 81 is a state highway.

Sincerely,

A handwritten signature in black ink, appearing to read "Allen R. Grasser". The signature is fluid and cursive, with a long horizontal stroke at the end.

Allen R. Grasser, PE
City Engineer

August 6, 2019

Allen Grasser, PE
City Engineer
PO Box 5200
Grand Forks, ND 58206-5200

DRAFT STIP COMMENT - 47TH AVE S INTERCHANGE ENVIRONMENTAL
DOCUMENT

Thank you for the review and comments on the Draft 2020-2023 STIP. The environmental document of the 47th Avenue South interchange was a project submitted to the NDDOT as part of the Urban Program solicitation process. During development of the Urban Program all projects submitted from across the state are reviewed for inclusion into the program; however, we are unable to accommodate all requests received. If this continues to be an important project for the City you can certainly move forward with the environmental document as a city project or you may continue to submit a request for funding as part of the yearly Urban Program solicitation process.

If you have any questions or concerns, please call me at 701-328-4469.



STACEY M. HANSON, PE, ASSISTANT LOCAL GOVERNMENT ENGINEER

38/smh

c: Les Noehre, NDDOT Grand Forks District

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PO Box 5200
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July 25, 2019

Stacy Hanson
NDDOT Local Government Division
608 E Boulevard Avenue
Bismarck ND, 58505-0700

Re: Mill & Overlay N 5th Street (Gateway Drive to Demers Avenue)
City Project No. 7886 – NDDOT Project No. SU-6-002(126)910

Dear Stacey:

NDDOT and City staff have previously discussed reconstructing a section of N 5th Street in lieu of milling and overlaying it. The section of 5th Street currently exists as an asphalt overlaid section, approximately 246' in length, and located between 1st Ave N and a section of N 5th Street that is proposed to be constructed as part of the Demers Avenue Reconstruction project. This 246' long section is the only portion of N 5th Street from Demers to 2nd Avenue N that would exist as an asphalt overlaid section upon completing the Demers Avenue Reconstruction project.

As was discussed earlier this spring during the management presentation for this project, to encourage the NDDOT to reconstruct this 246' long section of 5th Street in lieu of mill and overlaying it, the City supports the transfer of \$250,000 of Urban Funds from the University Avenue Mill and Overlay project to the above referenced 5th Street project. We are planning to update our City Council at the next Committee meeting regarding this transfer and are confident they will support it as well.

With the transfer of this funding, we understand that this 246' long section could then be reconstructed as part of the N 5th Street Mill and Overlay project. We also understand that streetscape features proposed to be installed adjacent to the Hugo's development which were deleted from the Demers Avenue Reconstruction project will be included in the 5th Street project. Lastly, streetscape features similar to that used on the Demers Avenue project will be included along the 246' section of 5th Street. Based on the latest cost estimate received from the NDDOT (dated 7-1-19), the estimated cost to reconstruct the 246' section of 5th Street, including a 10% engineering fee, is \$478,487, so the \$250,000 of Urban Funds would cover more than half the estimated cost.

In closing, we wish to thank the NDDOT for permitting this 246' section to be reconstructed. If you have any questions or require further information, please call either myself or Mark Walker at 701-746-2640.

Sincerely,

Allen R. Grasser, P.E.
City Engineer

cc: Mark Walker
David Kuharenko
Les Noehre
Earl Haugen

July 30, 2019

Allen Grasser, PE
City Engineer
PO Box 5200
Grand Forks, ND 58206-5200

FUNDING TRANSFER FROM UNIVERSITY AVENUE TO 5TH STREET

Thank you for your July 25, 2019 letter, regarding providing Urban Roads funding for the reconstruction segment from DeMers Avenue to 2nd Avenue North on the North 5th Street mill and overlay project in Grand Forks.

The North Dakota Department of Transportation (NDDOT) will process the transfer of \$250,000 of Urban Roads federal aid from the University Avenue project (PCN 22372) to the North 5th Street project (PCN 21842). The new federal aid cap for the University Ave project will be \$2,209,000.

NDDOT values your continued partnership in accomplishing these important transportation projects in Grand Forks.

If you have any questions or concerns, please call me at 701-328-4469.



STACEY M. HANSON, PE, ASSISTANT LOCAL GOVERNMENT ENGINEER

38/smh

c: Mark Walker, City of Grand Forks
David Kuharenko, City of Grand Forks
Les Noehre, NDDOT Grand Forks District
Earl Haugen, Grand Forks/East Grand Forks MPO

Short Range

<u>Rank</u>	<u>City</u>	<u>Location</u>	<u>Description</u>	<u>Estimate</u>
1	Jamestown	Exit 258 (US 281)	Traffic Signals	\$700,000
2	Grand Forks	Exit 141 (Gateway Drive/US 2)	ITS QUEUE Flushing and Pedestrian Improvements	\$160,000
2	Grand Forks	Exit 138 (32nd Ave/US 81 Bus)	ITS QUEUE Flushing and Pedestrian Improvements	\$160,000
3	Fargo	Tri-Level (I-94/I-29)	Ramp Realignment and Auxiliary Lanes	\$7,000,000
4	Dickinson	Exit 59 (West I-94 Bus Loop)	Traffic Signals	\$700,000
5	Dickinson	Exit 64 (East I-94 Bus Loop)	Ramp Realignments	\$2,000,000
6	Mandan	Exit 153 (Mandan Ave/ND 1806/Refinery Road)	Interchange Reconfiguration	\$800,000
NR	West Fargo	Exit 343 (US 10/West Main)	Mainline, Bridge, and Ramp Improvements	-
NR	Fargo	Exit 350 (25th St)	Red River Drainage	\$2,500,000
NR	Grand Forks	47th Ave (Future GF Exit 137)	Interchange Environmental Document	\$2,500,000
NR	Valley City	Exit 290 (I-94 Bus Loop)	Drainage Improvements	\$1,000,000
NR	Jamestown	Exit 256 (US 52/US 281 Bypass)	Additional Interstate Signing	\$100,000
NR	Bismarck	Exit 159 (State St/US 83)	Dual Left Turn Lanes	-
NR	Mandan	Memorial Hwy	Update Study	\$1,000,000

Medium Range

<u>Rank</u>	<u>City</u>	<u>Location</u>	<u>Description</u>	<u>Estimate</u>
1	Grand Forks	Exit 140 (Demers Ave/ND 297)	Capacity Improvements, No Widening	\$9,000,000
2	Bismarck	Exit 159 (State St/US 83)	SPUI	\$30,000,000
3	Grand Forks	47th Ave (Future GF Exit 137)	Interchange	\$30,000,000
4	Mandan	Exit 152 (Sunset Drive)	Reconstruction	\$25,000,000
5	Jamestown	Exit 257 (Flyover)	Flyover Removal	\$1,000,000
6	Jamestown	Exit 256 (US 52/US 281 Bypass)	Frontage Road Realignment	\$5,000,000
7	Dickinson	Exit 61 (ND 22)	Reconstruction	\$25,000,000
8	Bismarck	66th St (Future Bismarck Exit 163)	Interchange	\$30,000,000
9	West Fargo	Exit 347 (Veterans Blvd)	Loop Construction	\$3,700,000

Long Range (long range projects were not ranked)

<u>Rank</u>	<u>City</u>	<u>Location</u>	<u>Description</u>	<u>Estimate</u>
NR	Mandan	Midway	Reconfiguration/Reconstruction	\$33,000,000
NR	Bismarck	Exit 161 (I-94 East Bus Loop)	SPUI	\$30,000,000
NR	Mandan	Exit 153 (Mandan Ave/ND 1806/Refinery Road)	Reconstruction	\$25,000,000
NR	Mandan	Grant Marsh Bridge	Reconstruction/Expansion	\$125,000,000
NR	Mandan	56th Ave (Future Mandan Exit 149)	Interchange	\$30,000,000
NR	Mandan	Exit 147 (ND 25/I-94 Bus Loop)	Frontage Road Realignment	\$5,000,000
NR	Mandan	32nd Ave (Future Mandan Exit 150)	Interchange	\$25,000,000
NR	Valley City	Exit 294 (I-94 Bus Loop)	Frontage Road Realignment	\$5,000,000
NR	Dickinson	Exit 59 (West I-94 Bus Loop)	Reconstruction or Widening	\$25,000,000
NR	Dickinson	50th Ave	Grade Separation	-
NR	Grand Forks	North Wash (US 81)	Geometric Improvements	\$12,500,000
NR	Grand Forks	Exit 141 (Gateway Drive/US 2)	NE Loop Ramp	\$8,100,000
NR	Grand Forks	Merrifield Road (Future Exit 135)	Interchange	\$16,500,000
NR	Fargo	76th Ave (Future Horace Exit 58)	Interchange	\$25,000,000