

**MERRIFIELD ROAD AND I-29
INTERCHANGE JUSTIFICATION
REPORT
GRAND FORKS, NORTH DAKOTA**

**Submitted to
Grand Forks/East Grand Forks MPO**

Submitted by

October 3, 2002

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Submitted To:

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Submitted By:

HWS CONSULTING GROUP INC.

Interchange Justification Report

Executive Summary

The Grand Forks-East Grand Forks Metropolitan Planning Organization (MPO) is interested in studying the potential benefits and impacts of an interchange on I-29 at Merrifield Road. Currently, Merrifield Road is an overpass at I-29. The nearest interchanges are at 32nd Avenue South in Grand Forks and at the Thompson Exit south of Merrifield Road.

The Federal Highway Administration and North Dakota Department of Transportation have strict guidelines for determining whether or not new interchanges on the interstate system are needed and feasible. The eight (8) criteria are summarized below:

1. Are the existing roads and interchanges congested or will be during the design year?

Currently, both the Thompson Interchange and the 32nd Avenue South Interchange operate at an acceptable level of service. Both of these interchanges are expected to still operate at an acceptable level of service with the 2025 projected traffic volumes. However, with 2025 traffic volumes, some intersections along 32nd Avenue South are expected to experience unacceptable level of service between I-29 and Washington Street and a couple of the individual movement level of service at the I-29 and 32nd Avenue South interchange operate at a level of service 'D'. These results of this analysis are illustrated in Figure 3-2.

With the proposed interchange at Merrifield Road, it reduces the traffic volumes along 32nd Avenue South by approximately 10% which reduces the expected average delay along this corridor. The projected average daily traffic volumes are illustrated in Figures 3-1 and 3-4.

2. Were all reasonable alternatives evaluated?

After reviewing the other locations for a possible interchange to address the concerns for safety, congestion, user costs and I-29 traffic flow, it was determined that the Merrifield Road location was the best location. This was due to the businesses already in this area and potential for new businesses and their requirement for significant truck access. Also, this location was spaced far enough away from the Thompson interchange and the 32nd Avenue South interchange that it does not adversely affect the I-29 traffic. Section 3.2 provides a detailed discussion about the alternative analysis.

3. Will the new interchange have adverse effects?

The new interchange does not adversely affect I-29. A merge analysis was conducted and the results indicated that the merge level of service ranged between level of service A to B. Table 3-2, on page 3-9 summarizes the results from the merge analysis.

4. Will there be connections only to public roads and provide all movements?

There will only be connections made to Merrifield Road and the ramp terminals will provide access to all movements. Figure 3-3 provides an illustration depicting the proposed interchange configuration.

5. Will this project be coordinated with other transportation improvements?

This project will be coordinated with the improvements recommended in the long range transportation plan update, which is currently being updated.

6. Is this consistent with metropolitan and statewide transportation plan?

The North Dakota Department of Transportation has reviewed this issue and has found that the proposed Grand Forks Merrifield Interchange conforms with the Statewide Strategic Transportation Plan. A detailed description of the conformity is attached in the appendix of this report.

The Grand Forks/East Grand Forks Metropolitan Planning Agency amended their long range transportation plan to include an interchange at Merrifield Road and Interstate 29. The minutes from these meetings are attached in the appendix of this report.

7. Are there potential environmental impacts?

A study of the Merrifield Road and I-29 intersection was performed to identify any hazardous waste sites and to determine the probability of environmental contamination resulting from disturbance of any identified sites. This involved a search of state and federal environmental records. The search was performed by an environmental database service and conformed to the American Society of Testing and Materials (ASTM) standards for environmental studies.

Sites within a one-mile radius of the project were analyzed. No potential hazardous waste sites were identified in the project area. Section 2.3, on page 2-2 discusses the existing environmental constraints.

8. Was there appropriate documentation of planning and environmental process?

As a part of this process there was a meeting with the properties owners in the area and their comments are contained in the appendix of this report. Also, in May 2002, over 50 letters were sent out soliciting information from utility companies and public agencies regarding potential impacts to their facilities if an interchange were constructed at Merrifield Road. A summary of their comments is contained in the appendix of this report.

In addition to the property owner meetings, both Grand Forks and East Grand Forks planning committees approved the project. Minutes from those meetings are included in the appendix of the this report.

Therefore, due to the fact the interchange does not adversely affect the I-29 traffic and provides many safety and user cost benefits, it is recommended to construct an interchange at the existing overpass of I-29 and Merrifield Road.

TABLE OF CONTENTS

	Page
Chapter 1 - Introduction	1-1
Background.....	1-1
Methodology.....	1-1
Chapter 2 Existing Conditions	2-1
Existing Transportation Network.....	2-1
Existing Traffic Data.....	2-1
Existing Environmental Constraints	2-2
Chapter 3 Alternatives	3-1
No Build Conditions	3-1
Alternative.....	3-1
Chapter 4 Recommendations	4-1
Appendix	
Solicitation of Views	
Property Owner Meeting Minutes	
Meeting Minutes	
Conformity to the NDDOT Statewide Transportation Plan Letter	

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1-1	Merrifield Interchange Vicinity Map.....	1-2
2-1	Existing P.M. Peak Turning Movements and Lane Configuration.....	2-3
2-2	Existing P.M. Peak Level of Service	2-4
3-1	Year 2025 No Build Average Daily Traffic	3-2
3-2	Year 2025 P.M. Peak No Build Level of Service	3-3
3-3	Diamond Interchange.....	3-5
3-4	Year 2025 Alternative #1 Average Daily Traffic	3-7
3-5	Year 2025 Alternative #1 Level of Service	3-8
3-6	Major User Costs – Alternative #1	3-12

LIST OF TABLES

<u>Table</u>		<u>Page</u>
2-1	Level of Service	2-2
3-1	Preliminary Construction Cost Estimate.....	3-6
3-2	Alternative #1 Merge Analysis	3-9
3-3	Alternative #1 Benefit / Cost Ratio.....	3-11

Chapter 1

INTRODUCTION

1.1 Background

The Grand Forks-East Grand Forks Metropolitan Planning Organization (MPO) is interested in studying the potential benefits and impacts of an interchange on I-29 at Merrifield Road. Currently, Merrifield Road is an overpass at I-29. The nearest interchanges are at 32nd Avenue South in Grand Forks and at the Thompson Exit south of Merrifield Road.

The Merrifield Road I-29 intersection is located approximately three (3) miles south of Grand Forks, North Dakota at milepost 135. Figure 1-1 illustrates the approximate location of the intersection

1.2 Methodology

The Federal Highway Administration and North Dakota Department of Transportation have strict guidelines for determining whether or not new interchanges on the interstate system are needed and feasible. The eight (8) criteria are summarized below:

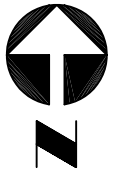
1. Show existing roads and interchanges are congested or will be during the design year.
2. Evaluate all reasonable alternatives.
3. Show new interchange will not have adverse effects.
4. Connections are only to public roads and provide all movements.
5. Coordinate with other transportation improvements.
6. Consistency with metropolitan and statewide transportation plan.
7. Evaluate potential environmental impacts.
8. Appropriate documentation of planning and environmental process.

The scope of work outlined below is intended to identify the work tasks necessary to address the criteria identified above for a new interchange on I-29.

WORK TASKS:

Task 1 – Project Management

This task includes all work necessary to manage the study in terms of coordination with the MPO and appropriate agencies, as well as within the consultant team.



Not to Scale

City of
Grand Forks

32nd Ave. South

Merrifield Rd. (GF #6)

Columbia Road (GF #16)

Washington Street

Proposed Merrifield Interchange

I-29

5 miles

Thompson Exit (NDDOT #15)

MERRIFIELD ROAD INTERCHANGE
GRAND FORKS, NORTH DAKOTA

Merrifield Interchange Vicinity



FIGURE 1-1

Task 2 – Public Involvement

This task includes all of the activities involved in meeting with the general public and adjacent property owners. It includes the dissemination of information as well as collecting information from stakeholders.

Task 3 – Data Collection

This task involves collecting traffic data as well as physical information including maps, utilities, aerial photography, known environmental features and other information necessary to fully understand the key issues surrounding the potential Merrifield interchange.

Task 4 – Traffic Engineering/Transportation Planning

This task includes the development of P.M. peak hour turning movements using existing turning movements at key intersections in the study area and traffic projections provided by the MPO's Travel Demand Model. The task also includes an analysis of key intersections for the determination of future deficiencies and possible mitigation techniques.

Task 5 – Alternative Development and Evaluation

This task involves a comparison of the costs and impacts of the no-build and alternative improvement options to the construction of the Merrifield Road/I-29 interchange.

Task 6 – Environmental Review

This task includes activities involved with the review of the existing environmental features within the proposed interchange area. A review of all known environmental features will be conducted to determine the impacts and potential mitigation to construction of an interchange.

Task 7 – Project Documentation

This task includes the preparation of all monthly progress reports as well as the Draft and Final Interchange Feasibility Report.

Chapter 2

EXISTING CONDITIONS

In the vicinity of the Merrifield Road and I-29 intersection it is mostly agricultural with some industrial uses. Some residential exists approximately ½ mile to the east of the proposed interchange on Merrifield Road. Two businesses base their operations within the area of the proposed interchange. Ag Depot is located in the southwest corner of the project area and over 110 trucks per day use the facility. Telpro is located in the northwest corner of the project area and also has significant truck traffic. Both businesses have plans for future expansion in the project area.

2.1 Existing Transportation Network

Interstate 29 is an interstate freeway serving north/south travel throughout the United States. It has been identified by congress as a corridor of high priority. In the vicinity of Grand Forks, I-29 is a 4-lane median divided roadway with paved shoulder along the inside and outside edges. The posted speed limit is 70 mph. Merrifield Road (GF County Road #6) is a two lane paved roadway which serves east/west travel south of Grand Forks. It is currently a 2-lane roadway with a posted speed limit of 55 mph. Merrifield Road junctions South 42nd Street on the west side of the interstate, and South Columbia Road (GF County #16) on the east side of the interstate. These junctions are stop controlled in the north-south direction. 42nd Street is a gravel township road that is signed restricting loaded truck traffic. The loaded truck traffic must use Washington Street (Hwy 81) which is 2 miles east of South 42nd Street.

The two (2) closest interchanges to this intersection are the 32nd Avenue South interchange and the Thompson interchange. The 32nd Avenue South interchange is located three miles to the north of the proposed interchange, and is a standard urban diamond design with each of the ramp termini being signalized at 32nd Avenue South. 32nd Avenue South is a 4-lane roadway with exclusive left and right turn lanes onto each ramp. The posted speed limit on 32nd Avenue South is 40 mph. Both on/off ramp terminals at the interchange have similar roadway geometry. Both the northbound and southbound off ramp have an exclusive right turn lane and a shared through/left turn lane, with the southbound ramp having dual lefts. Thompson interchange is located five miles to the south and is a standard rural diamond design.

2.2 Existing Traffic Data

The existing traffic data was provided by the GF/EGF MPO for the affected intersections. They include Merrifield Road and South Columbia Road, 32nd Avenue South and I-29 ramps, 32nd Avenue South and South Columbia Road, and 32nd Avenue South and South Washington Street. Figure 2-1 illustrates the existing turning movements and lane configurations at each intersection.

Capacity analysis at the existing intersections identified above was conducted to determine the amount of delay currently experienced at these locations. Intersection

capacities have been analyzed in accordance with the requirements of the 2000 Highway Capacity Manual (HCM), using the “operations” methodology. The result of such an analysis is an intersection or movement level of service (LOS), which is a qualitative assessment of the traffic flow characteristics described by a letter designation ranging from A to F. LOS A represents essentially uninterrupted flow with minimal delay, while LOS F represents breakdown of traffic flow with excessive congestion and delay. LOS C is generally regarded as the desirable minimum performance level. The level of service is determined by the average delay per vehicle at each intersection. Table 2-1 illustrates the level of service ranges. The results of the analysis are shown in Figure 2-2

Table 2-1 Level of Service

LOS	Delay Range in Seconds
A	0 -10
B	11 - 20
C	21- 35
D	36 - 55
E	56 - 80
F	> 80

There is also extensive truck traffic in this area. The two businesses located on the west side of I-29 and Merrifield Road have significant truck traffic that either uses the 32nd Avenue interchange or the Thompson interchange. This then requires the trucks to drive over 3 miles on the county roads to access the businesses. The trucks that arrive and depart from Ag Depot carry **placarded farm chemicals** and have average loads of 30,000 – 40,000 pounds each (A fully loaded truck weighs about 75,000 – 80,000 pounds). A majority of the trucks go east on Merrifield Road to Washington Street and then go north to 32nd Avenue to fuel up before accessing I-29 at the 32nd Avenue Interchange. This provides safety concern due to the high volume of trucks carrying farm chemicals passing through the developed areas of Grand Forks.

2.3 Existing Environmental Constraints

A study of the Merrifield Road and I-29 intersection was performed to identify any hazardous waste sites and to determine the probability of environmental contamination resulting from disturbance of any identified sites. This involved a search of state and federal environmental records. The search was performed by an environmental database service and conformed to the American Society of Testing and Materials (ASTM) standards for environmental studies.

Sites within a one-mile radius of the project were analyzed. No potential hazardous waste sites were identified in the project area.

Chapter 3

ALTERNATIVES

3.1 No Build Conditions

The City of Grand Forks is expecting substantial growth in population and development in the southern part of the City over the next 20 years. With this growth, it is anticipated that some of the southern arterials will have increasing congestion.

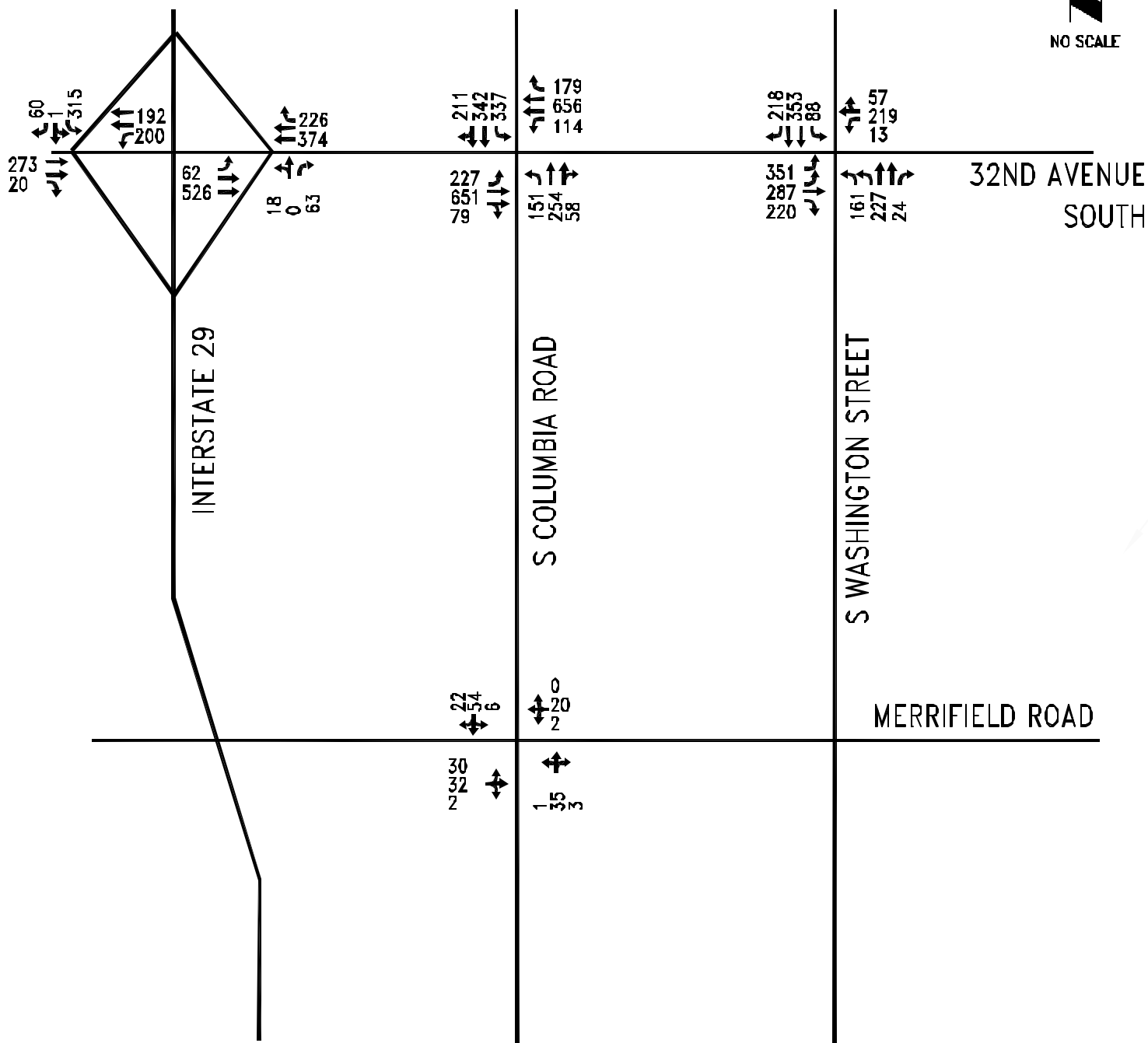
Figure 3-1 illustrates the projected year 2025 average daily traffic volumes at the key intersections for the no build condition. The average daily traffic volumes were then converted to peak hour turning movements using TMOVES software. The peak hour turning movements were then analyzed on the existing + committed roadway configuration using the HCM methodology. The results of these analyses are illustrated in Figure 3-2.

As illustrated in Figure 3-2 the intersection of 32nd Avenue South and Columbia Road operates at a level of service 'F' and the intersection of 32nd Avenue South and Washington Street operates at a level of service 'D' with the projected year 2025 traffic volumes. The 32nd Avenue South and I-29 interchange ramps both operate at an acceptable level of service for the overall intersection, however, there are two individual movements that operate at a level of service 'D'. This illustrates that with the no build option the 32nd Avenue South corridor is expected to experience congestion with the future traffic projections.

Both of the businesses on the west side I-29 and Merrifield Road have plans for expansion over the next 20 years. Ag Depot is planning on doubling the size of their operation, which could create over 200 trucks per day using the facility. In the Grand Forks Land Use Plan, they are showing land uses in this area that would accommodate a truck stop and other highway type uses. With the increase in truck traffic in this area there is safety concern of the trucks using the two lane county roads to access the businesses and passing through developed areas. The increase in truck traffic is likely to cause an increase in accidents involving trucks. There is also an additional safety concern since some of the trucks are loaded with farm chemicals.

3.2 Alternatives

After reviewing the other locations for a possible interchange to address the concerns for safety, congestion, user costs and I-29 traffic flow, it was determined that the Merrifield Road location was the best location. This was due to the businesses already in this area and potential for new businesses and their requirement for significant truck access. Also, this location was spaced far enough away from the Thompson interchange and the 32nd Avenue South interchange that it does not adversely affect the I-29 traffic.



Legend

→ Existing Lane

XXX Turning Volumes

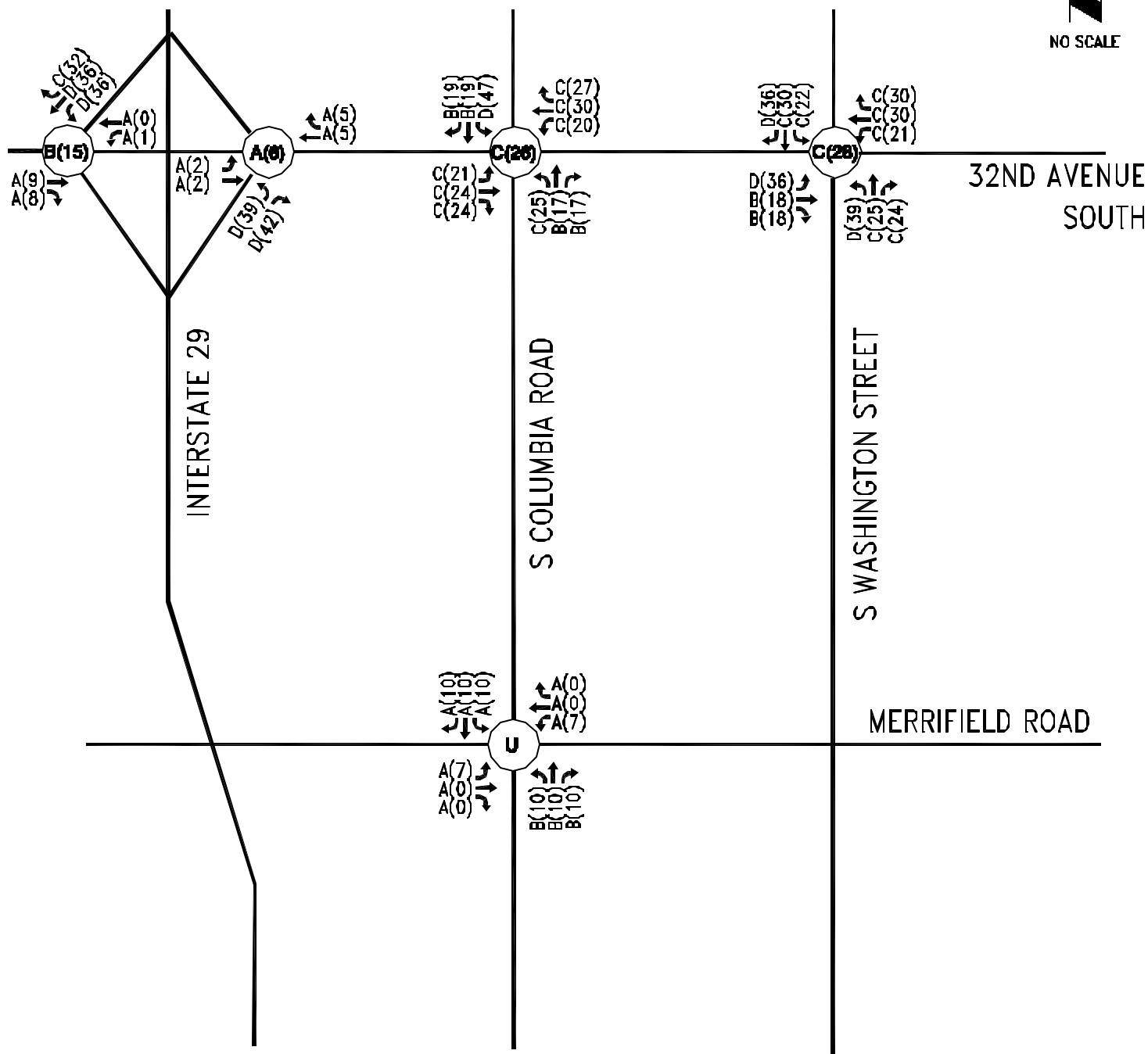
* Existing traffic volumes are actual year 2001 counts provided by the GF/EGE MPO.

MERRIFIELD ROAD INTERCHANGE
GRAND FORKS, NORTH DAKOTA



EXISTING PM PEAK TURNING MOVEMENTS AND LANE CONFIGURATIONS

FIGURE 2-1



Legend

- C** Level of Service
- U** Unsignalized Intersection
- Lane Group
- (XXX)** Delay in Seconds

3.2.1 Alternative #1

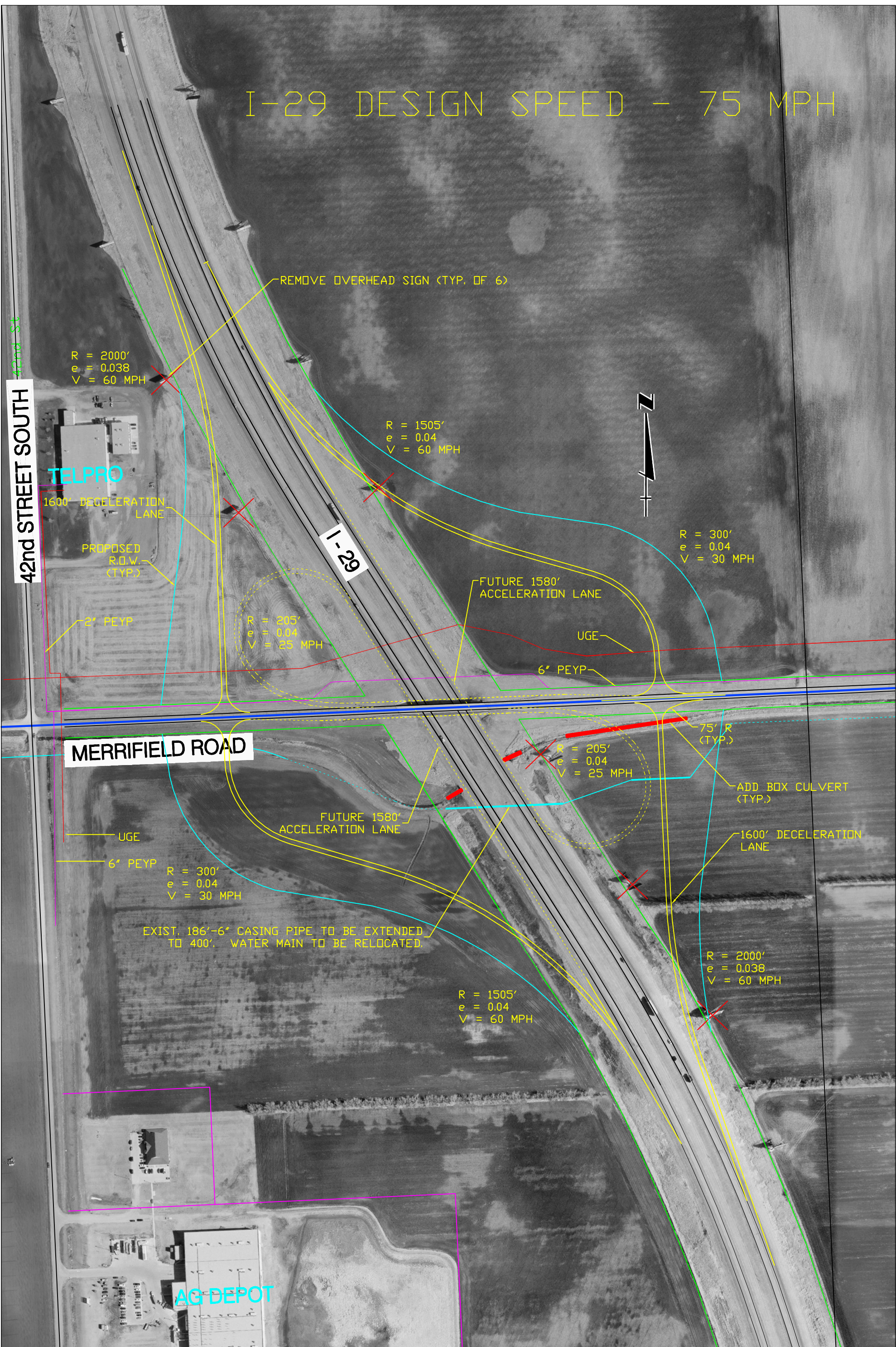
The purpose of this study is to evaluate the feasibility and impacts associated with the construction of a new I-29 interchange south of Grand Forks at the Merrifield Road intersection. Alternative #1 includes the building of the urban diamond interchange at the intersection of I-29 and Merrifield Road.

Figure 3-3 illustrates the proposed Merrifield Interchange. The proposed interchange is an urban diamond with additional space provided for future loops in the northwest and the southeast corners. The figure illustrates how the future loops might be configured, however, this study only assumes the construction of an urban diamond. With the year 2025 traffic projections the two ramp terminals do not meet signal warrants. It is anticipated that both of these intersections will be stop sign controlled.

The preliminary construction cost estimate is located in Table 3-1. The cost estimate does not include the possible future loops, but it does include widening the bridge from 28' to 40'. This cost estimate does not include making improvements to Merrifield Road, however, Merrifield Road is planned to be rebuilt as a part of a flood control project. The preliminary cost estimate to construct the interchange ramps is approximately 5.1 million dollars. However, if it is determined to construct the loops and replace the bridge structure, the total cost estimated at approximately 10 million dollars.

The average daily traffic volumes for this alternative are shown in Figure 3-4. As illustrated by this figure the traffic volumes on Merrifield Road increase by approximately 500% just east of the proposed interchange, over the no build scenario. At 32nd Avenue South, just east of the interchange, the traffic is projected to decrease by approximately 10%.

The average daily traffic volumes were converted to peak hour turning movements using TMOVES software. The peak hour turning movements were then analyzed on the existing + committed roadway configuration using the Highway Capacity Manual methodology. The results of these analyses are illustrated in Figure 3-5. The intersection of 32nd Avenue South and Columbia Road improves to a level of service of 'E' and the intersection of 32nd Avenue South and Washington Street improves to a level of service 'C'. The update to the Long Range Transportation Plan, which is currently underway, will further address the issue of congestion along 32nd Avenue South. The level of service at the 32nd Avenue South interchange ramps also improved from a level of service 'C' and 'B' to a level of service 'B' and 'B' with all the individual turning movements level of service 'C' or better. This alternative provides additional capacity at the 32nd Avenue South interchange to accommodate future traffic growth at the interchange.



PRELIMINARY CONSTRUCTION COST ESTIMATE

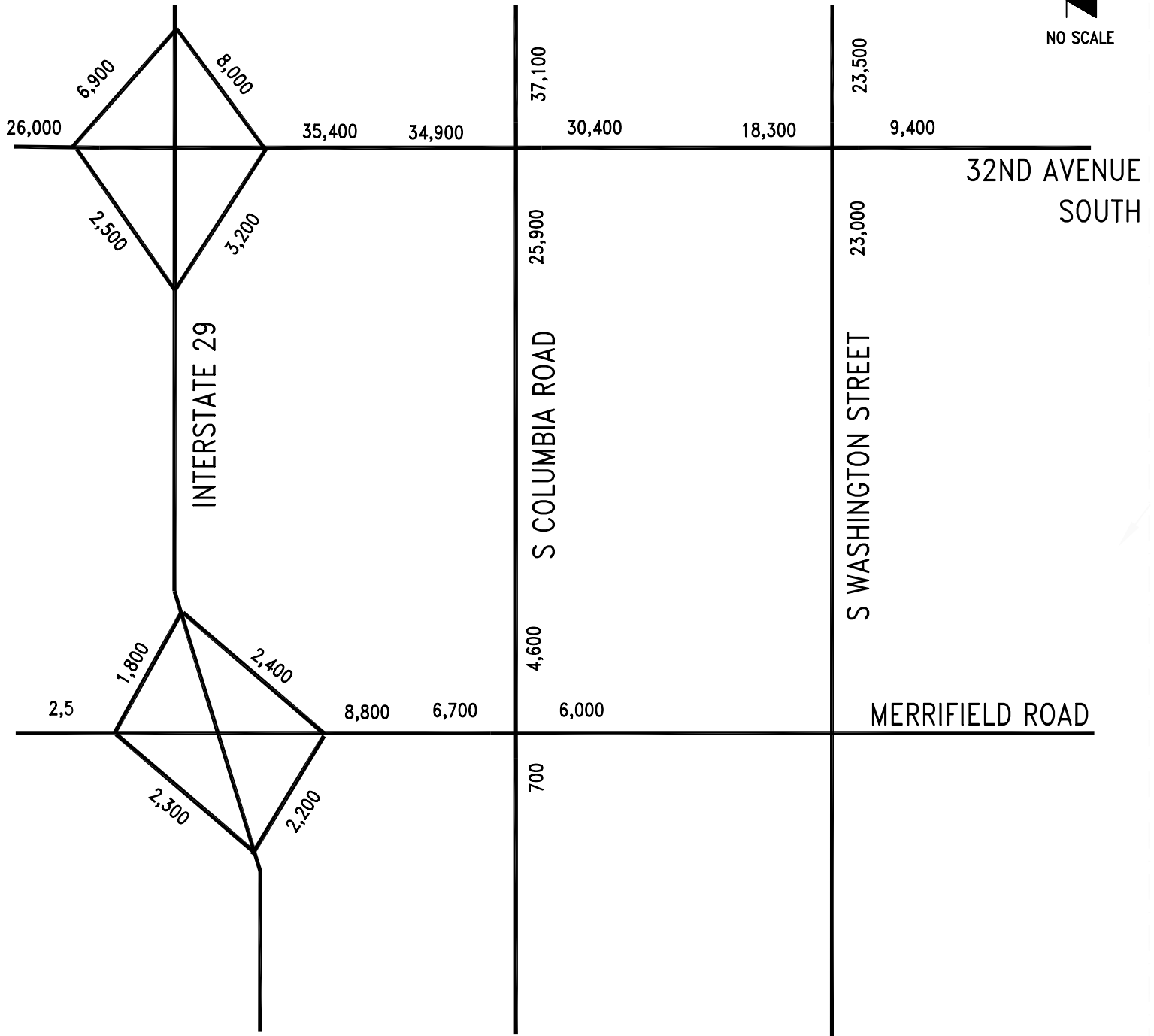
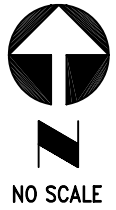
August 22, 2002

RAMP CONSTRUCTION

URBAN DIAMOND INTERCHANGE

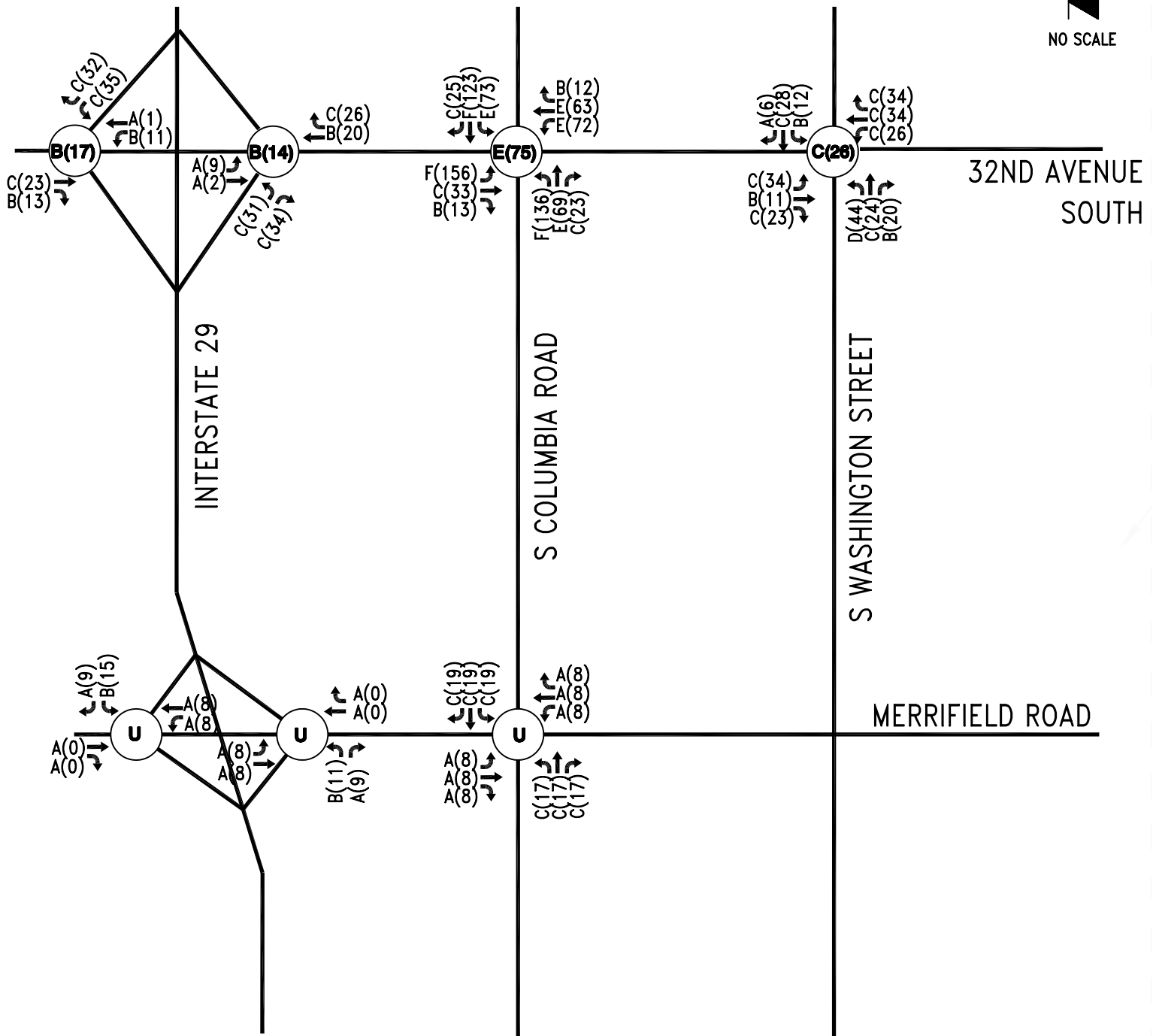
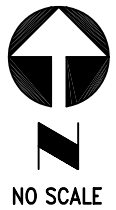
ITEM	QUANTITY	UNIT	UNIT COST	TOTAL COST
MOBILIZATION	1	LS	\$50,000.00	\$50,000
CLEARING & GRUBBING	1	LS	\$5,000.00	\$5,000
PURCHASE & REMOVE BILLBOARD SIGNS*	6	EA	\$50,000.00	\$300,000
REMOVAL OF PAVEMENT (ASPHALT)	2520	SY	\$4.00	\$10,080
PIPE CONC REINF 24IN CL III *	800	LF	\$45.00	\$36,000
END SECT-CONC REINF 24IN CL III *	8	EA	\$750.00	\$6,000
PRECAST RCB CULVERT *	450	LF	\$800.00	\$360,000
PRECAST RCB END SECTION *	4	EA	\$5,000.00	\$20,000
CRUSHED ROCK BEDDING FOR STORM SEWER	1000	TON	\$15.00	\$15,000
INSTALL 6" CASING PIPE	750	LF	\$75.00	\$56,250
WATER MAIN 4" PVC *	2000	LF	\$25.00	\$50,000
GATE VALVE & BOX 4IN *	4	EA	\$650.00	\$2,600
WIDEN BRIDGE FROM 28' TO 40'	1	LS	\$555,000.00	\$555,000
FIRE HYDRANT INSTALL *	1	EA	\$2,200.00	\$2,200
DUCTILE IRON FITTINGS (WATER MAIN)	2000	LB	\$2.50	\$5,000
CONNECT TO EXIST WATER MAIN	2	EA	\$750.00	\$1,500
ROADWAY FILL	150000	CY	\$8.00	\$1,200,000
SUBGRADE PREPARATION *	15000	SY	\$1.50	\$22,500
AGGREGATE BASE COURSE (PCC SECTION)	8860	TON	\$11.00	\$97,460
10IN NON-REINF CONCRETE PAVEMENT *	12500	SY	\$35.00	\$437,500
DOWELED CONTRACTION JT. ASSEMBLY *	7750	LF	\$5.50	\$42,625
6IN ASPHALT SHOULDERS	3840	TON	\$45.00	\$172,800
BARRICADE & TRAFFIC CONTROL	1	LS	\$50,000.00	\$50,000
PREFORMED PATTERNED PVMT MK *	15000	LF	\$3.50	\$52,500
SILT FENCE (DURING CONSTRUCTION)	15500	LF	\$2.00	\$31,000
SEEDING *	40	AC	\$750.00	\$30,000
EROSION CONTROL FABRIC *	38000	SY	\$1.75	\$66,500
LANDSCAPING (TREES)	100	EA	\$70.00	\$7,000
RAMP CONSTRUCTION SUBTOTAL				\$3,685,000
20% CONTINGENCY				\$737,000
15% ENGINEERING & INSPECTION				<u>\$663,000</u>
RAMP CONSTRUCTION TOTAL				\$5,085,000

NOTE: UNIT COSTS FOR ITEMS MARKED WITH AN (*) WERE OBTAINED FROM THE NDDOT WEBSITE. ALL OTHER UNIT COSTS WERE ESTIMATED.



MERRIFIELD ROAD INTERCHANGE
GRAND FORKS, NORTH DAKOTA

YEAR 2025 ALTERNATIVE #1 AVERAGE DAILY TRAFFIC



MERRIFIELD ROAD INTERCHANGE
GRAND FORKS, NORTH DAKOTA

YEAR 2025 PM PEAK ALTERNATIVE #1 LEVEL OF SERVICE



FIGURE 3-5

An analysis of the interchange was performed to determine whether the interchange would degrade the level of service on I-29. Analysis on the merging sections for each entrance ramp onto I-29 was performed to determine the level of service. The Highway Capacity Manual 2000 Exhibit 25-4 lists the densities with the corresponding level of service. The analysis is based upon the freeway flow approaching the merge area, the ramp flow, and length of acceleration lane. Table 3-2 shows level of service for various lane lengths at each merge area.

Table 3-2
Alternative No. 1, Merge Analysis

Merge Area	Acceleration Lane Length (ft)	Level of Service
Southbound I-29 Entrance Ramp	0	B(10)
	500	A(7)
	1000	A(4)
Northbound I-29 Entrance Ramp	0	B(11)
	500	A(8)
	1000	A(5)

As illustrated above, that with the 2025 traffic projections the proposed Merrifield interchange merge areas operate at an acceptable level of service.

A weaving analysis was not conducted for the proposed interchange due to the 3 mile and the 5 mile spacing between nearest interchanges. Therefore, the proposed interchange does not degrade the level of service on I-29.

An analysis was run using the GF/EGF transportation model to determine the vehicle miles traveled (VMT) and vehicle hours traveled (VHT) with the proposed interchange. These results were then compared to the VMT and VHT from the no build model. With the year 2000 traffic volumes there is a savings of 3436 daily VMT and a savings of 47 daily VHT, with alternative #1. With the year 2025 traffic volumes there is an increase of 3182 daily VMT and a savings of 551 daily VHT, with alternative #1. The reason there was an increase in vehicle miles traveled with this alternative was to due to the change in the land use plan due to the interchange at Merrifield Road. With an interchange at Merrifield Road, the land use plan assumes additional development in the area of the interchange which increase the trip length from the existing developed areas of Grand Forks.

A benefit cost analysis was performed for a 20 year planning horizon. The 20 year planning horizon is typical for transportation planning economics. Table 3-3 shows the cost savings from year 2002 to year 2022 and also shows the yearly benefit to cost ratio. As shown in Table 3-3, the total cumulative present value of the user cost savings is \$5,615,000. Figure 3-6 graphs the benefits versus the costs for Alternative #1. As illustrated in the graph, after the second year Alternative #1 has a greater than one (1) benefit to cost ratio. There will also be possible savings due to the decrease in truck volumes on the county roads and in the developed areas and the reduced exposure for accidents. These savings are difficult to quantify but could potentially be significant.

Alternative #1 Benefit / Cost Ratio

Year	User Cost Savings (\$1,000's)										Depreciation ⁵ (\$1,000's)	Benefit/ Cost Ratio
	Time Savings			Vehicle Operating Costs			Residual Value ⁴ (\$1,000's)					
	Future Value ¹	Present Value ²	Cum P. Value	Future Value ³	Present Value ²	Cum P. Value						
2022	686	177	4553	-278	-72	1061	5615	943	309	1440	2393	2.35
2021	662	183	4376	-248	-69	1133	5509	974	340	1440	2331	2.36
2020	639	189	4193	-218	-65	1202	5395	1005	371	1440	2269	2.38
2019	615	195	4004	-189	-60	1267	5270	1037	402	1440	2206	2.39
2018	591	200	3809	-159	-54	1326	5135	1068	433	1440	2144	2.40
2017	568	206	3609	-129	-47	1380	4989	1100	464	1440	2082	2.40
2016	544	211	3403	-99	-38	1427	4830	1131	494	1440	2019	2.39
2015	520	216	3192	-69	-29	1465	4657	1163	525	1440	1957	2.38
2014	497	221	2976	-40	-18	1494	4470	1194	556	1440	1895	2.36
2013	473	225	2755	-10	-5	1512	4267	1225	587	1440	1833	2.33
2012	450	229	2531	20	10	1516	4047	1257	618	1440	1770	2.29
2011	426	232	2302	50	27	1506	3808	1288	649	1440	1708	2.23
2010	402	234	2070	80	46	1479	3549	1320	680	1440	1646	2.16
2009	379	236	1836	109	68	1433	3269	1351	711	1440	1583	2.06
2008	355	236	1601	139	93	1365	2965	1382	742	1440	1521	1.95
2007	331	236	1364	169	120	1272	2636	1414	773	1440	1459	1.81
2006	308	235	1128	199	152	1151	2279	1445	803	1440	1396	1.63
2005	284	232	893	229	187	1000	1893	1477	834	1440	1334	1.42
2004	260	227	662	258	226	813	1475	1508	865	1440	1272	1.16
2003	237	221	434	288	269	587	1022	1540	896	1440	1209	0.84
2002	213	213	213	318	318	318	531	1571	927	1440	1147	0.46

¹ Assumes \$12.30/hr value of time

² 7% discount rate

³ Assumes \$0.365/mile traveled

⁴ Structure Life = 50 years, Pavement Life = 30 years, Grading and ROW Life = Infinite

⁵ Depreciation = Total Project Cost - Total Residual Value

TABLE 3-3

MAJOR USER COST - ALTERNATIVE 1

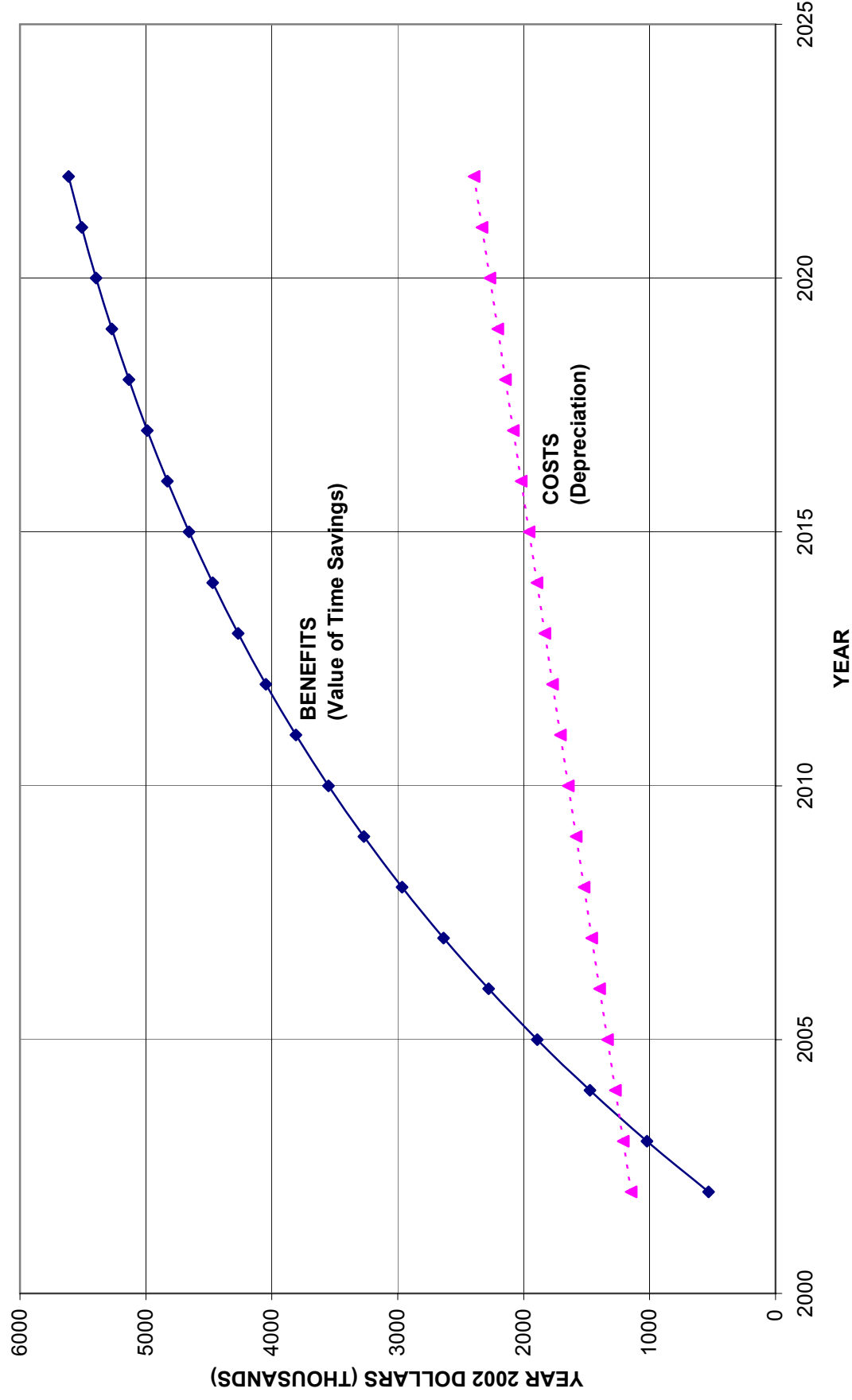


FIGURE 3-6

Chapter 4

RECOMMENDATIONS

The proposed Merrifield and I-29 interchange has many benefits and does not degrade the level of service along the I-29 corridor. This alternative helps reduce congestion along 32nd Avenue South between I-29 and Washington Street. Although, even with this alternative, some intersections along this corridor are over capacity in year 2025, the average delay per vehicle at these intersections is greatly reduced.

The proposed interchange also helps reduce truck traffic on the county roads. Currently, the truck traffic that accesses the businesses along the west side of I-29 and Merrifield Road use the interchanges and 32nd Avenue South and the Thompson interchange. This then requires the trucks to use county roads and/or urban arterials to access these facilities. Both of the existing businesses have plans to expand their operations and in the proposed City of Grand Forks land use plan they are expecting more businesses to locate in this area. This would greatly increase the truck traffic in the area. With the high volumes of trucks, with some carrying farm chemicals, using the county roads and passing through the developed areas it creates safety concerns and concerns with maintaining the county roads. With an interchange at Merrifield Road the trucks would not have to travel through the urban area. This would significantly reduce the exposure rate for possible accidents involving trucks carrying farm chemicals.

This alternative also creates a greater than one benefit cost ratio after the second year. These cost savings are due to the savings in vehicle miles traveled and vehicle hours traveled. The net present value of these savings over a 20-year period is \$5,615,000.

An analysis was conducted to determine if a new interchange at this location would degrade the level of service along I-29. Since the closest interchange was 3 miles away from this location a weaving analysis was not conducted. However, a merge analysis was conducted for both of the on ramps and it was determined that the level of service for the merge points ranges from level of service A to B, depending on the acceleration lane length. Therefore, this new interchange would not adversely affect the traffic flow on I-29.

Therefore, due to the fact the interchange does not adversely affect the I-29 traffic and provides many safety and user cost benefits, it is recommended to construct an interchange at the existing overpass at I-29 and Merrifield Road.

Appendix

SOLICITATION OF VIEWS

In May, 2002, over 50 letters were sent out soliciting information from utility companies and public agencies regarding potential impacts to their facilities if an interchange were constructed at Merrifield Road. Of those responding, only six (6) had comments that will impact the study. The following summarizes those comments:

1. North Dakota Department of Transportation

The North Dakota Department of Transportation asked that a Class I Cultural Resource Inventory be conducted.

2. City of Grand Forks – Engineering Department

- Requested better delineation of drainage facilities, what needs to go with the proposed design and what needs to be constructed in the future.
- Show impacts to existing drains
- Show proposed toe of slopes for all fill areas.
- The right-of-way appears to be more than what property owners expected.
- Identify the design vehicle used for turning radii.

3. City of Grand Forks – Planning Department

- Indicated concern over Solicitation of Views letter being sent now rather than with Project Concept Report.
- Cited issues relating to flood protection project, acquisition/relocation of billboards and modifications to the county road system.

4. NODAK Electric Cooperative

NODAK provided information on the existing underground facilities in the area.

5. State Historical Society of North Dakota

Requested Section 106 consultations come through FHWA or North Dakota DOT rather than the cities of the consultant.

6. North Dakota Department of Health

They generally think the impacts of constructing the interchange will be minor but provided information regarding construction techniques to minimize noise, dust and water quality problems.

The results of the Solicitation of Views process indicate that for the most part there are no facilities in the vicinity that would stop the construction of an interchange. Concerns for utilities and other features are typical for a project of this type. The most serious issue is the impact of the ongoing flood protection project. The details of this project are currently unknown and therefore, it is not possible to completely identify mitigation strategies. This information will need to be determined in greater detail with a development of a Project Concept Report.

**MINUTES OF
MERRIFIELD ROAD/I-29 INTERCHANGE
PROPERTY OWNER MEETING
November 8, 2001, 8:30 A.M.
Grand Forks City Hall, Grand Forks**

ATTENDEES:

Cindy Voigt
Richard Onstad
Dennis Potter
John Drees
Duane Maatz
Dave Young

Roland Young
Larry P. Young
Cheri Reitmeier
John Erickson
Earl Haugen
Mike Gorman

PURPOSE:

The Purpose of the meeting was to talk with property owners adjacent to the proposed I-29/Merrifield Road interchange to discuss existing farming and business operations and future plans for development and/or expansion. This information will be used to estimate existing future use of a proposed interchange and it's impacts on the adjacent roadway system.

DISCUSSION:

- Mike Gorman presented a scaled drawing of a proposed rural type interchange at I-29 and Merrifield Road. The drawing showed the general geometrics of proposed on and off ramps, traffic controls and modifications to the existing Merrifield Road. Mr. Gorman explained that the drawing was developed with a rural interchange in mind. If the traffic projections indicate that a more urban type interchange will be needed in the future, the proposed interchange design could change significantly.
- Representatives from Ag Depot discussed their current operation.
 - They have over 100 employees.
 - Over 110 trucks per day use the facility.
 - They are planning a 70,000 sf addition.
 - They are experiencing a 34% annual growth rate.
 - They store bulk and package goods.
 - They currently have a 10,000 sf office with 40 employees.
 - They are planning over a 20 year time frame. The size of the operation could double in that time.
 - Webster, Iowa has a similar site called Vandiest.
 - The consultant and members of the city and MPO staff were invited to come out and tour the facility.
 - Trucks and personnel going to and from the site currently use the Thompson interchange or 32nd Avenue South interchange.

- 42nd Street is in bad shape and is getting beat up because of the amount of trucks and vehicles using the roadway. Mike Gorman noted that there is an existing load limit sign north of Merrifield Road on 42nd Street and south of 32nd Avenue South. There is a concern of the safety of trucks that use this roadway.
 - Something needs to be done with the 42nd Street, Columbia, and Merrifield Road intersections. Some trucks are using the Columbia/Merrifield Road interchange to get to commercial areas in the southern part of Grand Forks.
- Discussion occurred with the property owner in the northeast corner of the intersection. He indicated that this is currently being used as farmland, however, it could be a commercial or residential site in the future.
 - Telpro has plans to eventually add on to the south end of the building. Their truck traffic is currently using the same route as the Brown Corporation. They currently have 50 employees. Ten are at the original facility and they may want to do something with retail operation in the area immediately in the northwest quadrant of the I-29/Merrifield Road intersection.
 - Southeast corner property owner supports interchange, but something needs to be done with drainage in the area. This is an important factor that needs to be considered.
 - Consultant needs to determine future access points. How close could an access point on Merrifield Road be to potential off-ramps?
 - The Corps of Engineers is completing a hydrological study which will be available to the consultant soon.
 - Property owners in the area have petitioned the state and city to look at advanced construction of an interchange. They would like to start construction around the year 2003 timeframe. They will advance to the State funding for 2003 construction, hoping for 2004/2005 fund reimbursement. The most important thing is to get the Interchange Justification Report (IJE) completed as soon as possible.
 - There is a natural gas pipeline in the interchange area. We need to find out about all the utilities in the interchange area as the IJR is completed.
 - Nodak Electric Power is also in the interchange area.
 - The consultant needs to check with the North Dakota Department of Transportation to find out if the Merrifield Road over I-29 needs to be widened if there is an interchange. After much discussion it was determined that widening probably would not be necessary.
 - The NDDOT has told property owners that the cost of the interchange may be as high as \$5.5 - \$6 million. Mike Gorman said this probably high if the bridge does not need to be replaced.
 - Mike Gorman will meet with the North Dakota Department of Transportation to document the design criteria.

**PROCEEDINGS OF THE
EXECUTIVE POLICY BOARD OF THE
GRAND FORKS/EAST GRAND FORKS
METROPOLITAN PLANNING ORGANIZATION**

**Friday, July 12, 2002 – 12:00 Noon
Grand Forks City Hall Conference Room A102**

MOTION TO AMEND AGENDA

Grassel reported that a request has been made to amend the agenda to include an additional item: Amendment To The Transportation Plan To Include The Merrifield Road Interchange As A Construction Project Rather Than Just Corridor Preservation.

Moved by Kweit, seconded by Mattson, to Amend The Agenda To Include An Amendment To The Transportation Plan To Include The Merrifield Road Interchange As A Construction Project Rather Than Just Corridor Preservation. Motion carried unanimously.

**MATTER OF AMENDMENT TO THE LONG RANGE TRANSPORTATION PLAN TO
INCLUDE THE MERRIFIELD ROAD INTERCHANGE AS A CONSTRUCTION
PROJECT RATHER THAN JUST CORRIDOR PRESERVATION**

Haugen referred to copies of the staff report, which was delivered earlier, and explained that the MPO Executive Policy Board had asked HWS, Inc., to look at a possible Merrifield Interchange, and to prepare an Interchange Justification Report for it. He stated that a Draft Interchange Justification Report, a second draft actually, was prepared and distributed, and is recommending that an interchange be constructed, with a cost estimate of \$4.3 million dollars.

Haugen reported that the current Long Range Transportation Plan calls for just corridor preservation activity along Merrifield Road, for both an interchange and a future Red River Bridge. He stated that the request is for the MPO Executive Policy Board to submit, to both cities, for their plan amendment process, and consideration, to amend their transportation plans to change, at this location, from corridor preservation activities to actual construction. He said that this will allow the MPO Executive Policy Board, after they forward recommendations, or after 60-days, to consider taking final action to amend the MPO's Long Range Transportation Plan to change the corridor activities at this site to actual construction, which will then allow that the final IJR be forwarded to Federal Highway through the NDDOT.

Haugen referred to a copy of the Technical Advisory Committee' tentative timeline for this project, which was attached as part of the staff report, and pointed out that as this goes through the local plan amendment process, NDDOT and Bismarck Federal Highway will be providing us with comments, so we will be involving them along the way, so that, it is hoped, by September 11th we will have a document that everyone is comfortable with and easily approved and adopted.

Haugen stated that what we are asking today is for the MPO Executive Policy Board to submit a request to both cities to consider an amendment to the Long Range Transportation Plan to change from corridor activities along Merrifield Road and I-29 to construction of an interchange.

Kweit commented that he can report that the Grand Forks Planning Commission gave preliminary approval to this report at their meeting on Wednesday, July 10th. He said he recalls that when discussion on this first began, we had to get everything in place by a certain date in order to get the land donated for the interchange, where does this stand today. Haugen responded that he doesn't know if this has changed any, that we are still working towards meeting those dates. Potter stated that Brown Corporations is not here today, so he would not presume to say what their status is on this.

Grassel asked for a brief history on this issue, that he seems to recall that the Merrifield Interchange was, at one time, included in the Long Range Transportation Plan, then was removed because of the bridge issue. Beauchamp said this was correct, that this is the long-and-short of it. Kvasager commented that everyone seemed to think this project was so far out in the future, that a bridge would have to be planned and a corridor preserved, before an interchange could even be considered, but that now some of the business along that corridor feel there is a need to do this as soon as possible. Mattson mentioned that when this was discussed with the Minnesota delegation, they stated that the interchange would need to be built before a bridge crossing would even be considered. Haugen said that NDDOT's perspective was just the opposite.

Beauchamp said he doesn't want to get hung up on process, that he wants to see it move forward, but he asked if this was something we normally do, change it from corridor preservation to a project, and then wait for all these drafts. Haugen responded that it was the normal process.

Moved by Kweit, seconded by Beauchamp, To Grant Preliminary Approval To An Amendment To The Long Range Transportation Plan To Include The Merrifield Road Interchange As A Construction Project Rather Than Just Corridor Preservation, And To Submit A Request To The Cities Of Grand Forks And East Grand Forks And Grand Forks County To Consider Amending Their Transportation Plans As Such. Motion carried unanimously.

PLANNING AND ZONING COMMISSION MEETING MINUTES City of Grand Forks, North Dakota

July 10, 2002

MERRIFIELD ROAD/I-29 INTERCHANGE

Potter asked the Commission to suspend the rules and introduce a text ordinance to amend the Land Use Plan to add the Merrifield Road/I-29 Interchange to the section in the Land Use Plan related to the Metropolitan Planning Organization.

Potter referred members to the document titled Merrifield Road and I-29 Interchange Justification Report. During a meeting with the Technical Advisory Committee of the Metropolitan Planning Organization, the committee arrived at a time schedule of September 12 for the MPO Policy Board to 1) add the Merrifield Interchange to the existing long-range transportation plan; and 2) approve the interchange justification report and submit to the State of North Dakota. To be able to complete the timeline, the city has to amend the comprehensive plan to add the Merrifield Interchange and in order to do that and meet the September 12 deadline, the request is to introduce the text ordinance and grant preliminary approval to amend the Land Use Plan. This would allow a hearing at the Council of the Whole on July 22, introduce the ordinance at the City Council meeting on August 5. The final approval by the Planning and Zoning Commission would be on August 7 and the City Council would review for final approval on August 19, 2002.

MOVED BY DREES AND SECONDED BY GRASSER TO SUSPEND THE AGENDA, INTRODUCE AN ORDINANCE TO AMEND THE LAND USE PLAN AND ADD THE MERRIFIELD ROAD/I-29 INTERCHANGE. MOTION CARRIED UNANIMOUSLY.

(GF City Council)

COMMITTEE OF THE WHOLE

Monday, July 22, 2002 - (following special council meeting at 7:00 p.m.)

3.4 Amend Section 18-0802 of the Land Development Code relating to The Grand Forks East Grand Forks 2022 Transportation Plan Update.

No comments.

**PROCEEDINGS OF THE CITY COUNCIL
OF THE CITY OF GRAND FORKS, NORTH DAKOTA**

August 5, 2002

INTRODUCE ORDINANCE AMENDING THE COMPREHENSIVE

PLAN RELATED TO THE GRAND FORKS-EAST GRAND FORKS
2022 TRANSPORTATION PLAN UPDATE BY ADDING THE
MERRIFIELD ROAD/I-29 INTERCHANGE

The staff report from the Planning Department relating to the request from the Planning Department to amend Section 18-0802 of the Land Development Code related to the Grand Forks-East Grand Forks 2022 Transportation Plan Update, with recommendation to introduce an ordinance amending the Land Development Code related to The Grand Forks-East Grand Forks 2022 Transportation Plan Update by adding the Merrifield Road/I-29 Interchange.

Dennis Potter, city planner, asked the council give preliminary introduction and first reading to this ordinance and change the public hearing date from August 19 in the Planning staff report to September 3, 2002.

Council Member Glassheim asked status of the interchange - funding, estimated cost and timelines; Mr. Potter stated they are giving approval to adding the Merrifield Road/I-29 Interchange to the City's comprehensive plan and making a recommendation to the Metropolitan Planning Organization that they take the same action; the issues of payment will be part of the next round of discussions that go on when get to the project concept report and look to see how actually funded, the current concept is to try to achieve what's called advance funding and that would lead to a funding package made up of State funds and local funds, the exact split is still under consideration and will be defined as part of the project concept report; and looking to get it done by 2005.

Council Member Glassheim stated he was concerned about the lengthening of the city farther south, and what that means to the entire city, and asked if urban sprawl would be created. Mr. Potter stated you are faced with the fact that you have development in the area where Merrifield Road and I-29 are (Telpro and Agsco) and they are generating a significant amount of traffic, that Agsco is currently using Merrifield Road and coming into and out of their facility, going east to Columbia Road and depending on traffic and destination, going south on Columbia Road getting onto old 81, and going to connector road to Thompson interchange and getting on the Interstate or coming north to the city and going to 32nd Avenue South and getting on the freeway; and this becomes one of the trade-off issues that you look at when doing planning and if want to have that traffic which is going to increase, assuming both companies are successful, coming onto Columbia, etc. or want to have an interchange there that will deal with that traffic (could also increase and have some development occur in that area). He stated there is residential development in that area which is served by individual septic tank systems and by rural water and question is if there is a political will to say no, we are going to draw line in the sand and say no more development of any type south of a given line, because when get into urban sprawl; and non-urban sprawl discussion, somewhere a political body has to draw a line and say not going to do it. and not easy question.

Council Member Hamerlik stated that several years ago we included the Merrifield Road and the bridge into the concept, and this broadens that out to make it more useful. Mr. Potter stated it does and in theory you're not going to have a useful bridge over the Red River of the North on Merrifield Road unless you put an interchange at I-29 and Merrifield.

It was moved by Council Member Kreun and seconded by Council Member Christensen to approve the recommended action and to include the change of the public hearing date to September 3, 2002. Carried 7 votes affirmative.

Council Member Brooks introduced an ordinance entitled "An ordinance amending the Comprehensive Plan, amending Chapter XVIII, Article 8, Comprehensive Plan; Section 18-0802, Elements of the Grand Forks City Code of 1987, as amended, pertaining to the Grand Forks-East

Grand Forks 2022 Transportation Plan Update (2001 Bikeway, 1999 Pedestrian Element; 2002 Transit Element, 2001 Street and Highway Element, and 2000 Grand Forks/East Grand Forks ITS Strategy Plan Element)", which was presented, read and passed on its first reading.

PLANNING AND ZONING COMMISSION MEETING MINUTES

City of Grand Forks, North Dakota

August 7, 2002

- 3-7. (PUBLIC HEARING) MATTER OF THE REQUEST FROM THE PLANNING DEPARTMENT FOR FINAL APPROVAL OF AN ORDINANCE TO AMEND THE TEXT OF THE LAND DEVELOPMENT CODE, CHAPTER XVIII OF THE GRAND FORKS CITY CODE OF 1987, AS AMENDED, SECTION 18-0802 RELATING TO THE GRAND FORKS-EAST GRAND FORKS 2022 TRANSPORTATION PLAN UPDATE.**

Potter reviewed the ordinance, stating the ordinance would add an interchange on I-29 at Merrifield Road. This would be added to the plan and recommend to the City Council and the GF-EGF MPO that they approve the recommendation. Staff recommendation is for approval.

Hagness asked what happens to the state highway user's funds for that project. Is it the city or the county that has to prioritize it?

Potter stated that once it is an approved site and gone through the interchange justification report and been accepted by the Federal Highway Administration then it goes into the Project Concept Report phase, this opens a parallel negotiation track with the state over who will pay and how much of the cost.

Hagness wanted to know where 17th Avenue South and I-29 was involved in the priority? Potter said that has nothing to do with the Merrifield Interchange because the city has not approved an interchange on 17th Avenue South/I-29. The state does not have that under consideration.

Hagness asked if the city or the county could afford an interchange at Merrifield Road. Potter said this was a very serious attempt to do an interchange at Merrifield and I-29 by 2005.

Hagness asked where the funds were coming from and Potter said it would be paid by negotiation process that would involve the state and federal dollars and also negotiation with the local sponsor which would be the city. There could also be private sector dollars used.

Hagness asked why the city would be the sponsor instead of the county. Potter said because the area in the city's two-mile area and the county deferred to the city on the project. Hagness said they would because they don't want to pay for it.

Malm opened the public hearing. There was no one to speak and the public hearing was closed.

Drees asked to be excused from voting. **MOVED BY MATEJCEK AND SECONDED BY LEE TO EXCUSE DREES FROM VOTING ON THE ISSUE. MOTION CARRIED UNANIMOUSLY.**

MOVED BY KREUN AND SECONDED BY KWEIT TO GRANT FINAL APPROVAL OF THE ORDINANCE. MOTION CARRIED UNANIMOUSLY.

**EAST GRAND FORKS
PLANNING COMMISSION MINUTES
Thursday, August 8, 2002 – 7:30 p.m.
East Grand Forks Council Chambers**

1. MATTER OF REQUEST FOR PRELIMINARY APPROVAL OF AN
AMENDMENT TO THE LONG RANGE TRANSPORTATION PLAN TO
INCLUDE THE MERRIFIELD ROAD INTERCHANGE

Mr. Brooks explained that the Long Range Transportation Plan is part East Grand Forks' Comprehensive Plan, so anytime we want to make an amendment to the Transportation Plan, such as including an interchange at Merrifield, or a bridge, we are required to seek preliminary and final approval on that amendment from the Planning Commission and the City Council. He added that this is the case in Grand Forks as well.

Mr. Brooks further explained that if the City of East Grand Forks wishes to make a change to the Long Range Transportation Plan, this body makes a recommendation to the City Council for approval or disapproval, the City Council then submits their recommendation to the MPO, who then determines what they want to do with the request, approve or disapprove it for inclusion in their Long Range Transportation Plan.

Mr. Brooks explained that the MPO Executive Policy Board is made up of two East Grand Forks City Council representatives, two Grand Forks City Council representatives, one Planning Commission Representative from each city, one representative from both Polk County and Grand Forks County. He stated that, currently Dick Grassel is a member of that board as a City

Council representative, and that Gary Sanders is the Planning Commission's representative on the board.

Mr. Brooks reported that the City of Grand Forks is requesting approval to include an interchange at Merrifield in the Long Range Transportation Plan, which is the reason for this item being on the agenda. He gave a brief overview of the proposed project, explaining that the main reason for the interchange is to address safety issues with chemical transport, to try to keep trucks carrying chemicals, etc., from having to come into the city.

Mr. Brooks commented that an Interchange Justification Report is in the process of being finalized for this proposed project, so there is still a question as to whether or not the project will be approved by Federal Highways. He added that even if this project is approved by the two Cities, there is, of course, always the chance that it will never be built.

Discussion ensued.

Mr. Brooks explained that there are three different plans in effect, the East Grand Forks Long Range Transportation Plan, the Grand Forks Long Range Transportation Plan, and the MPO Long Range Transportation Plan, that ideally, there should only be one, but that most likely won't ever be a reality.

Mr. Brooks reminded that he is asking for preliminary approval today, that if this body does not act on this issue, the MPO can still act on it after 60-days. He explained that if this occurs, the project will not be included in the East Grand Forks plan, but the MPO can still act on it and put it in their plan.

Mr. Grassel commented that he is not opposed to this at all, but that he also feels we need another bridge as well, and would like to see a corridor preserved for one. Mr. Brooks said that he thinks we are really looking at two bridges, that from a planning perspective we need an inter-city bridge for residential traffic, and we need a by-pass.

Mr. Brooks stated that he feels this project is needed, that it makes good planning sense, and that we really need to stress the safety issues involved with it. He commented that this body's job is to determine whether or not this is good planning, if it is a good project.

Mr. Brooks commented that as far as an additional residential bridge is concerned, Grand Forks is going to have to make a decision on a bridge, and they are aware of this. He explained that the traffic right now, from the Point and the Sorlie Bridges, are both dumping onto DeMers and Washington. He stated that right now that intersection functions okay, but that is not going to be the case in the next 20 years or so, which is what is looked at through the Long Range Transportation Plan. He said that if nothing is done about a bridge, in twenty years or so the City of Grand Forks will be looking at having to do a major construction project, a Diamond Interchange, at the intersection of DeMers Avenue and South Washington Street, which will cost about the same as a bridge.

Moved by Mr. Grassel, seconded by Mr. Hecht, to grant preliminary approval to an Amendment to the Long Range Transportation Plan to include the Merrifield Road Interchange. Motion carried unanimously.

PROCEEDINGS OF THE CITY COUNCIL
OF THE CITY OF GRAND FORKS, NORTH DAKOTA
September 3, 2002

The city council of the city of Grand Forks, North Dakota, met in the council chambers in City Hall on Tuesday, September 3, 2002, at the hour of 7:00 p.m. with Mayor Brown presiding. Present at roll call were Council Members Brooks, Hamerlik, Glassheim, Gershman, Christensen, Kerian, Kreun – 7; absent: none.

**ADOPT ORDINANCE NO. 3941, AMENDING COMPREHENSIVE
PLAN, SECTION 18-0802, ELEMENTS OF THE GRAND FORKS
CITY CODE OF 1987, AS AMENDED, PERTAINING TO THE
GRAND FORKS-EAST GRAND FORKS 2022 TRANSPORTATION
PLAN UPDATE (2001 BIKEWAY, 1999 PEDESTRIAN ELEMENT,
2002 TRANSIT ELEMENT, 2001 STREET AND HIGHWAY
ELEMENT, AND 2000 GRAND FORKS/EAST GRAND FORKS
ITS STRATEGY PLAN ELEMENT)**

An ordinance entitled “An ordinance amending the Comprehensive Plan, amending Chapter XVIII, Article 8, Comprehensive Plan; Section 18-0802, Elements of the Grand Forks City Code of 1987, as amended, pertaining to the Grand Forks-East Grand Forks 2022 Transportation Plan Update (2001 Street and Highway Element, and 2000 Grand Forks/East Grand Forks ITS Strategy Plan Element),” which had been introduced and passed on its first reading on August 5, 2002, and upon which public hearing had been scheduled for this evening, was presented and read for consideration on second reading and final passage.

The city auditor reported that the required legal notice had been published calling for a public hearing to be held on this matter this evening and further that to date no protests or grievances had been filed with his office.

Mayor Brown opened the public hearing, there were no comments and the hearing was closed.

Dennis Potter, city planner, stated that this ordinance is only adding (5) addition of Merrifield Road/I-29 Interchange. Council Member Christensen stated this should be adopted so that our Comprehensive Master Plan reflects that we are proposing a Merrifield Road/I-29 Interchange and that last year talking about designating the Merrifield Road as a thoroughfare and probably build a tie-back for our dike along that road and this is a formality so that the master plan and transportation plan reflect an interchange at that location when funding is available. Mr. Potter stated that the MPO’s process asks that Grand Forks and East Grand Forks basically approve this proposal and send it to them so that they can put it in their long-range plan, which opens the door to move forward to secure funding.

Upon call for the question of adoption of this ordinance and upon roll call vote, the following voted “aye”: Council Members Brooks, Hamerlik, Glassheim, Gershman, Christensen, Kerian, Kreun – 7; voting “nay”: none. Mayor Brown declared the ordinance adopted.

EAST GRAND FORKS PLANNING COMMISSION MINUTES

Thursday, September 12, 2002 – 7:30 p.m.

East Grand Forks Council Chambers

Gordy Parr, Secretary, called the meeting to order with the following members present: Judy Hanson, Greg Leigh, and Dick Grassel. Staff present were: Earl Haugen, GF/EGF MPO Executive Director and Peggy McNelis, GF/EGF MPO Administrative Specialist.

A quorum was present.

1. MATTER OF PUBLIC HEARING AND FINAL APPROVAL OF AM
AMENDMENT TO THE LONG RANGE TRANSPORTATION PLAN TO
INCLUDE THE MERRIFIELD ROAD INTERCHANGE

Moved by Mr. Grassel, seconded by Mr. Leigh, to open the public hearing. Motion carried unanimously.

Mr. Grassel commented that he knows that there has been some discussion by the GF/EGF MPO Executive Policy Board on this matter. He stated that at the last East Grand Forks Planning Commission meeting he did discuss the bridge issue in conjunction with this item, and added that he doesn't feel there is a problem with the overpass, however, he thought there may be some additional developments concerning this item.

Mr. Haugen reported that since the last Planning Commission meeting there have been a couple of changes to the interchange project, that the first change deals with an increase in the cost of the project by approximately \$500,000. He explained that the existing overpass does not meet the current width standards, therefore, widening it on each side would be necessary, thus the increase in cost. He added that there is still the possibility, however, that as they look at the existing structure, they may find that it needs to be completely removed and replaced, which would increase the cost by \$5 Million Dollars. Mr. Grassel asked what the cost estimate is for just the on- and off-ramps. Mr. Haugen responded that it is \$4.5 Million Dollars. Mr. Haugen commented that it has been known for some time that a more in-depth look at the existing structure is needed before they will be able to determine if it can just be widened, or if it will need to be replaced entirely. He pointed out that should it need to be replaced, the cost will then rise to about \$10 Million Dollars.

Mr. Leigh asked where the funding will be coming from for this project. Mr. Haugen responded that it will come from federal funds, most of it from Transportation Dollars, and that the typical split for an interstate interchange would be 90% Federal and 10% Local Dollars. Mr. Leigh asked if this was attainable considering how the budgets are now, particularly if it would need to be removed entirely and replaced. Mr. Haugen responded that he feels there might be a political reality that monies might be earmarked for this project, however, the question is how much will be earmarked. He commented that the Brown Corporations has floated the idea of financing the

construction themselves, with the idea that they would be reimbursed later, which is allowed and is called “Advanced Construction”.

Mr. Haugen reported the other change involves traffic operations, and what this interchange will mean to our traffic patterns. He explained that our previous study provided a broader scope of traffic operations; that they found that 32nd Avenue South, with or without an interchange, in twenty-five years will have failing operations at Columbia Road and Washington Street. He explained that as far as traffic operations are concerned, the GF/EGF MPO expanded the future street network, such as 36th Avenue South, 40th Avenue South, and 20th Street (north-south roadway), so it raised the Level of Service a letter grade on 32nd Avenue, but it is still a failing Level of Service at the Intersection of Columbia Road and 32nd Avenue South, so, and interchange, in and of itself does help, but we will still have to address problems on Columbia Road and 32nd Avenue South.

Mr. Grassel asked if they are not already addressing the problems with Columbia Road and 32nd Avenue South at this time. Mr. Haugen responded that the Long Range Transportation Plan Update process is just beginning to look at other alternatives for consideration besides the

Merrifield Interchange. Mr. Grassel asked if 17th Avenue South would be one of the alternatives looked at. Mr. Haugen responded that it would, that an interchange at 17th Avenue South will be look at as an alternative, or just an overpass.

Mr. Leigh asked, if they need to completely replace the bridge at Merrifield; have they, or will they look at locations closer to city limits for an interchange. Mr. Haugen responded that they are looking at other locations besides 17th Avenue; that they will be looking at 47th Avenue.

Mr. Haugen explained that the current transportation plan calls for corridor preservation along Merrifield Road for both an interchange and a bridge over the Red River. He stated that what this amendment does is changes the wording for the interchange from corridor preservation to actual construction.

Moved by Mr. Leigh, seconded by Mr. Grassel, to close the public hearing and forward a recommendation to the GF/EGF MPO Executive Policy Board to grant final approval of an Amendment to the Long Range Transportation Plan to include the Merrifield Road Interchange. Motion carried unanimously.

**AGENDA
CITY COUNCIL
WORK SESSION AND REGULAR MEETING
CITY OF EAST GRAND FORKS
SEPTEMBER 19, 2002**

CALL REGULAR SESSION TO ORDER: 7:30 P.M.

Pursuant to due notice and call thereof, a regular meeting of the East Grand Forks City Council was held in the City Hall Council Chambers on Thursday, September 19, 2002 at 7:30 PM.

CALL OF ROLL:

On a Call of Roll the following members were present:

Mayor Lynn Stauss, Council President R.C. Beauchamp, Council Vice President Dick Grassel, Councilmembers Glen Trembath, Henry Tweten, Laura Driscoll, Mark Holy and Steve Gander.

Absent: None

SUSPENSION OF RULES:

A MOTION WAS MADE BY COUNCILMEMBER TREMBATH, SECONDED BY COUNCILMEMBER GRASSEL, THAT THE COUNCIL DESIRES TO SUSPEND THE RULES AND CONSIDER THE FOLLOWING FIVE ACTION(S).

APPROVE THE LABOR AGGREEMENT BETWEEN THE CITY OF EAST GRAND FORKS AND THE LAW ENFORCEMENT LABOR SERVICES, INC. (LELS) Local No. 152 - Police - January 1, 2002 Through December 31 2003.

AUTHORIZE DISPOSAL OF PLAYGROUND EQUIPMENT IN SHERLOCK PARK AND RR TRACKS AS SURPLUS PROPERTY.

CONSIDER APPROVAL OF AN EXEMPT PERMIT FOR A RAFFLE ON APRIL 27, 2003 TO "FRIENDS OF THE GREENWAY" AT SHERLOCK FOREST PLAYGROUND (Sherlock Park) AND WAVE THE 30-DAY WAITING PERIOD.

GRANT FINAL APPROVAL OF AN AMENDMENT TO THE LONG RANGE TRANSPORTATION PLAN TO INCLUDE MERRIFIELD ROAD INTERCHANGE.

ADJOURN THE REGULAR MEETING OF THE EAST GRAND FORKS CITY COUNCIL
OF SEPTEMBER 19, 2002 AT 8:10 PM.

Voting Aye: Beauchamp, Grassel, Trembath, Tweten, Driscoll, Holy, Gander.
Voting Nay: None.

**A MOTION WAS MADE BY COUNCILMEMBER TREMBATH, SECONDED BY
COUNCILMEMBER TWETEN, TO
APPROVE THE LABOR AGGREEMENT BETWEEN THE CITY OF EAST GRAND
FORKS AND THE LAW ENFORCEMENT LABOR SERVICES, INC. (LELS) Local No.
152 - Police - January 1, 2002 Through December 31 2003.**

**AUTHORIZE DISPOSAL OF PLAYGROUND EQUIPMENT IN SHERLOCK PARK
AND RR TRACKS AS SURPLUS PROPERTY.**

**CONSIDER APPROVAL OF AN EXEMPT PERMIT FOR A RAFFLE ON APRIL 27,
2003 TO "FRIENDS OF THE GREENWAY" AT SHERLOCK FOREST PLAYGROUND
(Sherlock Park) AND WAVE THE 30-DAY WAITING PERIOD.**

**GRANT FINAL APPROVAL OF AN AMENDMENT TO THE LONG RANGE
TRANSPORTATION PLAN TO INCLUDE MERRIFIELD ROAD INTERCHANGE.**

**ADJOURN THE REGULAR MEETING OF THE EAST GRAND FORKS CITY
COUNCIL OF SEPTEMBER 19, 2002 AT 8:10 PM.**

Voting Aye: Beauchamp, Grassel, Trembath, Tweten, Driscoll, Holy, Gander.
Voting Nay: None.

MEETING ADJOURNED AT 8:10 PM

Next Regular Meeting of the East Grand Forks City Council – October 8, 2002 – 7:30
PM

**PROCEEDINGS OF THE
EXECUTIVE POLICY BOARD OF THE
GRAND FORKS/EAST GRAND FORKS
METROPOLITAN PLANNING ORGANIZATION**

**Wednesday, September 25, 2002 – 12:00 Noon
Grand Forks City Hall Conference Room A102**

Punky Beauchamp, in Dick Grassel's absence, called the meeting to order with the following members present: Arvin Kvasager, Warren Strandell, Doug Christensen, Rob Kweit, Gary Sanders, and Steve Gander (Proxy for Dick Grassel). Staff present were: Earl Haugen, Executive Director; Lane Magnuson, Planner II; and Peggy McNelis, Administrative Specialist.

A quorum was present.

Guests present were: Dennis Potter, GF City Planner; Troy Schroeder, NWRDC; and John Erickson, Brown Corporations.

MATTER OF MERRIFIELD INTERCHANGE JUSTIFICATION REPORT

Haugen reported that copies of the second draft Interchange Justification Report, prepared by HWS, were included in the packets. He explained that the second draft incorporates all comments received, primarily those from NDDOT and FHWA, and that it also took a look at a more refined street network. He stated that basically, the justification for an interchange is there, that it will help relieve congestion on 32nd Avenue South, and the cost/benefit is still above 1. He pointed out that there is an increase in cost of about \$500,000, which is due to a need to widen the bridge structure if the existing overpass bridge is usable.

Haugen commented that the second draft of the report was discussed at the last Technical Advisory Committee meeting, and that a letter from NDDOT, in which they list some additional comments on the second draft, was also distributed. He explained that the letter discusses that one figure needs a correction made to it; and that there is a concern that the interchange does relieve traffic on 32nd Avenue South, however, not at the intersection of 32nd Avenue South and the interchange itself.

Haugen stated that the Technical Advisory Committee does recommend approval, subject to amendments to incorporate the figure change that NDDOT identified; to include, in the Executive Summary, the action this board takes on the next agenda item which is to approve amending the Long Range Transportation Plan to include Merrfield as a construction item; to incorporate all minutes from the public meetings that have taken place to discuss inclusion of the interchange; and to identify, in the Executive Summary, which page in the full-text of the body that those Executive Summary bullets are summarizing so that the reader has a quick reference to look up the detailed information to support the statements.

Moved by Kweit, seconded by Sanders, to approve the Merrifield Interchange Justification Report, subject to inclusion of those amendments discussed above.

Christensen asked how the interchange will be paid for, what is the typical source of funding. Haugen responded that the most typical source of funding for an interchange is through interstate monies that the state receives, and would be paid using a typical cost share of 90/10, with 90% coming from federal monies and 10% from state monies.

Christensen asked if the cost of the project is \$5,000,000 or \$10,000,000. Haugen responded that the base cost estimate for the project is \$5,000,000, however, when looking at the physical structure currently there it is determined that it is not usable, a new structure would need to be built and would cost an additional \$5,000,000. Christensen commented that the funding issue won't really become a concern until such time as it is determined the project will be built. Haugen responded that the next stage is to do a Project Concept Report (PCR), which will help determine what the cost of the project will be. He stated that, typically the state won't fund a PCR until they have the funding available to build the structure. He said that a PCR has a shelf life of about three-years, but could possibly be stretched to five-years if needed, which is why they don't usually do them until the funds are secured. Christensen asked who pays for the PCR. Haugen responded that again, a typical interchange project is a state project, therefore, the state would fund the PCR. Christensen asked when we would know if the state is going to fund the PCR. Haugen responded that, currently, this project is not on the state's horizon for funding, however, there is a possibility they could include it on their list in 2006.

Christensen asked how much the PCR will cost. Haugen responded that this will probably be an EIS (Environmental Impact Study), and will cost about \$125,000 to complete.

Motion carried unanimously.

MATTER OF APPROVAL OF AN AMENDMENT TO THE LONG RANGE TRANSPORTATION PLAN TO INCLUDE MERRIFIELD ROAD

Haugen reported that this entity just approved the Interchange Justification Report that says an interchange at Merrifield Road is justified, now an amendment is required to the Long Range Transportation Plan to include Merrifield Road is needed. He stated that both communities have submitted this amendment to their planning commissions and city councils, and have amended their plans to include this project as a construction activity. He added that this has also been submitted to the Technical Advisory Committee, and that they recommend approval as well.

Moved by Kweit, seconded by Gander, to approve an Amendment to the Long Range Transportation Plan to include Merrifield Road. Motion carried unanimously.



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North Dakota Department of Transportation

608 East Boulevard Avenue • Bismarck, ND 58505-0700

John Hoeven, Governor
David A. Sprynczynatyk, P.E., Director

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Website: discovernd.com/

June 28, 2002

Mr. Earl Haugen
Executive Director
Grand Forks/East Grand Forks MPO
P.O. Box 5200
Grand Forks, ND 58206

MERRIFIELD ROAD/I-29 INTERCHANGE CONFORMITY WITH NORTH DAKOTA'S STATEWIDE STRATEGIC TRANSPORTATION PLAN

This letter is in response to your June 19, 2002, e-mail concerning how the proposed Grand Forks Merrifield Road/I-29 Interchange conforms to North Dakota's Statewide Strategic Transportation Plan. The department has reviewed this issue and has found that the proposed Grand Forks Merrifield Road/I-29 Interchange conforms to the following TransAction Initiatives:

TransAction Initiative No. 1 - North Dakota will strategically prioritize its use of transportation resources. *The proposed interchange could fit this initiative by the MPO identifying improved access to Interstate 29 as a priority use of transportation resources. The interchange could be identified as a way to improve traffic circulation in the metropolitan area just as improving the load carrying capacity would improve the movement of freight on rural highways.*

TransAction Initiative No. 3 - North Dakota will enhance communication and facilitate cooperation and collaboration between and within governmental units, tribal authorities, modes of transportation, and the public and private sectors. *The proposed interchange could fit this initiative if the MPO, through its public involvement process, involved various groups to identify the interchange as a community transportation priority.*

TransAction Initiative No. 4 - North Dakota will improve the performance of priority transportation corridors and facilities. *The proposed interchange could fit this initiative where studies or reports showed that the interchange would improve traffic flows, safety, reduce business costs, etc.*

Mr. Earl Haugen

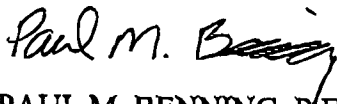
Page 2

June 28, 2002

TransAction Initiative No. 5 - North Dakota will incorporate economic competitiveness as an integral component of transportation investment strategies. *The proposed interchange could fit this initiative if the economic competitiveness of local businesses would be improved. It would be necessary to have some documentation of the actual proposed benefits in the form of reduced costs and time delays.*

TransAction Initiative No. 14 - North Dakota will increase its emphasis on safety and security as integral components in planning, developing, and maintaining the transportation system. *The proposed interchange could fit this initiative if the proposed interchange would improve traffic safety; e.g., re-routing trucks carrying hazardous material from within the city or by passing a rail-highway intersection, etc.*

Please call me at (701) 328-2217, if you have any questions or comments.



PAUL M. BENNING, P.E. - URBAN/MPO ENGINEER - LOCAL GOVERNMENT

38:PMB

c: Rob Griffith - FHWA Transportation Planner
Tim Horner - Transportation Programs Director
Dave Leftwich - Local Government Engineer
Darcy Rosendahl - Planning and Programming Engineer