



*STATE STREET PEDESTRIAN SAFETY
AND
ACCESS STUDY*

for

Bismarck, North Dakota



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CERTIFICATION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of North Dakota.

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Date: 5/13/99 Reg. No.: 2847



**STATE STREET PEDESTRIAN
SAFETY AND ACCESS STUDY**

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I. INTRODUCTION

A. Purpose

The purpose of the State Street Pedestrian Safety and Access Study is to:

1. Plan facilities that can provide reasonably convenient access for all persons to retail businesses, nearby residential areas, recreational facilities, other proposed or existing pedestrian facilities, and other points of attraction.
2. Consider the possible use of facilities by walkers, joggers, roller bladers, bicyclists, persons with disabilities, etc. and develop recommendations to provide for extra width, signing, or other special design elements where appropriate.
3. Develop facilities that can provide as much travel convenience and least pedestrian indirection as feasible, consistent with optimum pedestrian and vehicular safety.

With these purposes as the criteria for alternative development, analysis of needed pedestrian facilities, crosswalk protection, and traffic control can be undertaken.

B. Objectives

When evaluating the sufficiency of a pedestrian/bicycle facility system, there are a number of objectives that should be taken into consideration. Those objectives include:

1. It is desirable to promote pedestrian crossings of heavily-traveled roadways only where traffic signals, flashing beacons, or grade separations exist and except for special circumstances, the system should avoid use of midblock crossings.
2. The system should present consistent signing and pavement markings.
3. The system should aim to channelize pedestrians away from conflicting movements with traffic.
4. The system should be continuous. Gaps or dead ends in the facilities should be avoided.
5. The system should provide direct pedestrian routes between generators and attractors. This is especially important when the attractor is a school or park.

C. Definitions

1. Multi-Use-Trail - An asphalt or concrete paved path separated from automobile traffic. Multi-use paths are often shared by pedestrians, bicyclists, and roller

bladers. Most paths or trails within Bismarck are 10-foot wide and paved with asphalt.

2. Sidewalk - A concrete paved pedestrian facility that can be multi-use except within the Central Business District. Sidewalks are 4.5-feet wide in residential areas and 6.0-feet wide in commercial areas. The sidewalk system along Century Avenue includes a 10-foot wide section along the north side of the roadway.

II. DISCUSSION OF EXISTING CONDITIONS

A. Study Area

The State Street Pedestrian Access and Safety Study Area consists of that portion of East Boulevard Avenue from North 4th Street to State Street and State Street from East Boulevard Avenue to 43rd Avenue Northeast including the surrounding areas and facilities as shown in Figure 1. Most of the land use adjacent to State Street is commercial with residential properties located one or two blocks away. State Street currently consists of a rural roadway section from North 10th Street to 43rd Avenue Northeast and an urban roadway section from North 4th Street to North 10th Street.

B. Generators and Attractors

The locations of existing generators of pedestrian travel provide insight into where facilities are most needed. They also indicate the level of activity that can be anticipated along a given route. Residences serve as the primary generators of pedestrian travel within the Study Area. Motels, hotels, restaurants, and other places of business also serve as pedestrian travel generators, primarily during normal dining hours.

Schools, parks, commercial areas, and churches are all attractors of pedestrian travel within the Study Area. The State Capitol Grounds is also a significant attractor of pedestrian travel. Major generators and attractors are shown in Figure 2.

C. Sidewalk and Multi-Use Trail Facilities

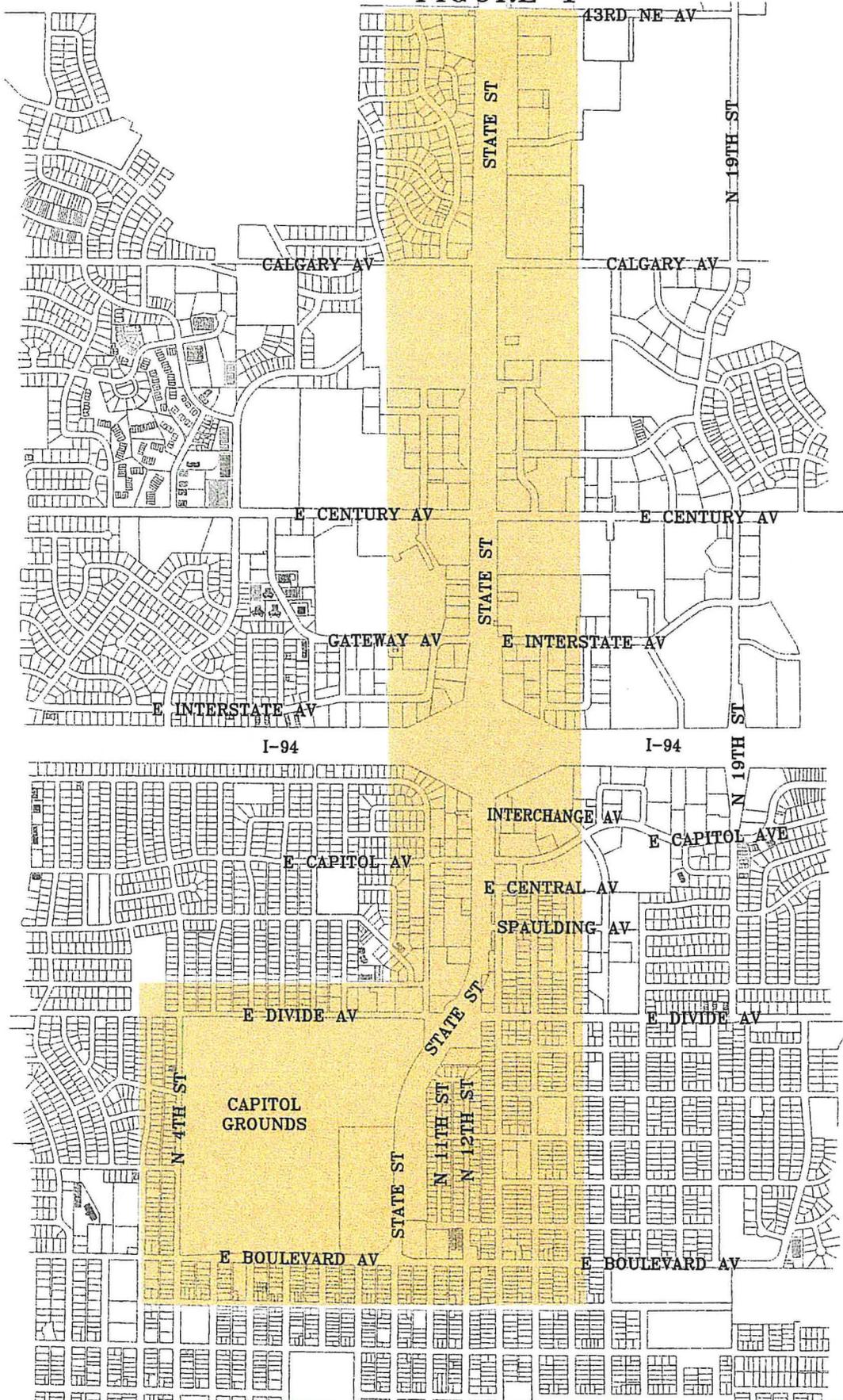
Currently, no multi-use trail facilities exist in the study area and only a few areas along State Street have sidewalk. Sidewalk facilities exist along the west side of State Street between Interchange Avenue and East Interstate Avenue. Sidewalk is also present at some intersection corners where signalized pedestrian crossings exist. Sidewalk facilities exist along both sides of East Boulevard Avenue.

A pedestrian bridge exists on the west side of State Street at the Interstate 94 interchange structure. The bridge spans 254.5 feet and is only eight feet wide. The sidewalk approaches to both the south and north ends of the bridge are in poor shape. The sidewalk approaches have been undermined and are collapsing and cracked. The approaches are shown in Appendix I.

All existing facilities along East Boulevard Avenue and State Street are not in accordance with the Americans with Disabilities Act (ADA) Standards. Most medians at existing crossings are not handicap accessible. However, where sidewalk exists at intersection corners, handicap accessibility is present at most pedestrian crossings. In the area from North 5th Street to North 9th Street, most intersection corners are handicap accessible but the medians are not, which creates a very undesirable situation. This is shown in

STATE STREET PEDESTRIAN SAFETY AND ACCESS STUDY AREA

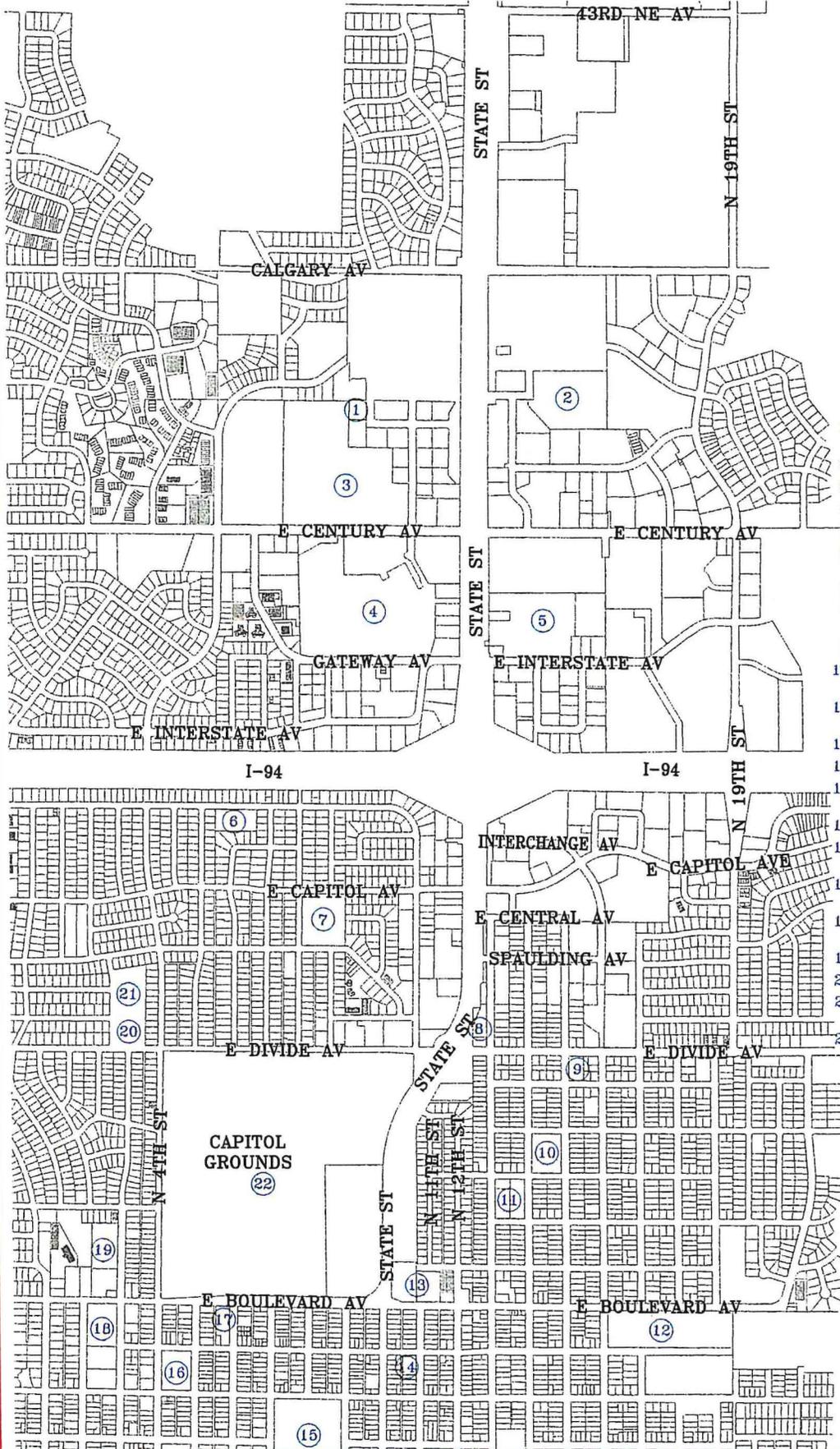
FIGURE 1



N.T.S.

PEDESTRIAN GENERATORS AND ATTRACTORS

FIGURE 2



1. CAPITAL RACQUET AND FITNESS
2. EVANGEL TEMPLE
3. CENTURY HIGH SCHOOL
4. GATEWAY MALL
5. KMART
6. BETHEL LUTHERAN CHURCH
7. NORTH CENTRAL PARK
8. CAPITOL HEIGHTS BAPTIST CHURCH
9. WORD OF FAITH CHURCH
10. PIONEER ELEMENTARY SCHOOL
11. ST. ANNE'S CHURCH AND SCHOOL
12. HILLSIDE PARK
13. BAPTIST HOME
14. FIRST UNITED METHODIST CHURCH
15. BISMARCK HIGH SCHOOL
16. WILL-MOORE ELEMENTARY SCHOOL
17. MCCABE UNITED METHODIST CHURCH
18. ST MARY'S CENTRAL HIGH SCHOOL
19. ARROWHEAD PLAZA
20. FIRST BAPTIST CHURCH
21. NORTHBRIDGE ELEMENTARY SCHOOL
22. NORTH DAKOTA STATE CAPITOL, DOT, HERITAGE CENTER AND LIBRARY



N.T.S.



Appendix II.

In the early 1980's, the City of Bismarck developed a bikeway map showing bike routes throughout the City. These bike routes were signed but no specific riding area was designated. Over the years, the Bismarck Parks and Recreation has developed a multi-use trail system, which both pedestrians and bicyclists use. The multi-use trial system has become very popular with Bismarck residents. Thus, the bike route system of the early 1980's has faded away. The Bismarck Parks and Recreation existing and future multi-use trail system is shown in Figure 3.

D. Crossing Signs and Markings

Current signing and pavement markings along East Boulevard Avenue and State Street are not consistent. At some signalized pedestrian crossings, crosswalks are not marked. At some crossings, pedestrian signing is not present. At other crossings, only advanced pedestrian signs are present and at other crossings, there are only pedestrian signs located right at the crossings.

E. Signalized Crossing

Along East Boulevard Avenue and State Street, from North 4th Street to 43rd Avenue Northeast, ten signalized intersections exist. Not all of these intersections have pedestrian indicators with the traffic signals.

The following table summarizes where pedestrian indicators are located.

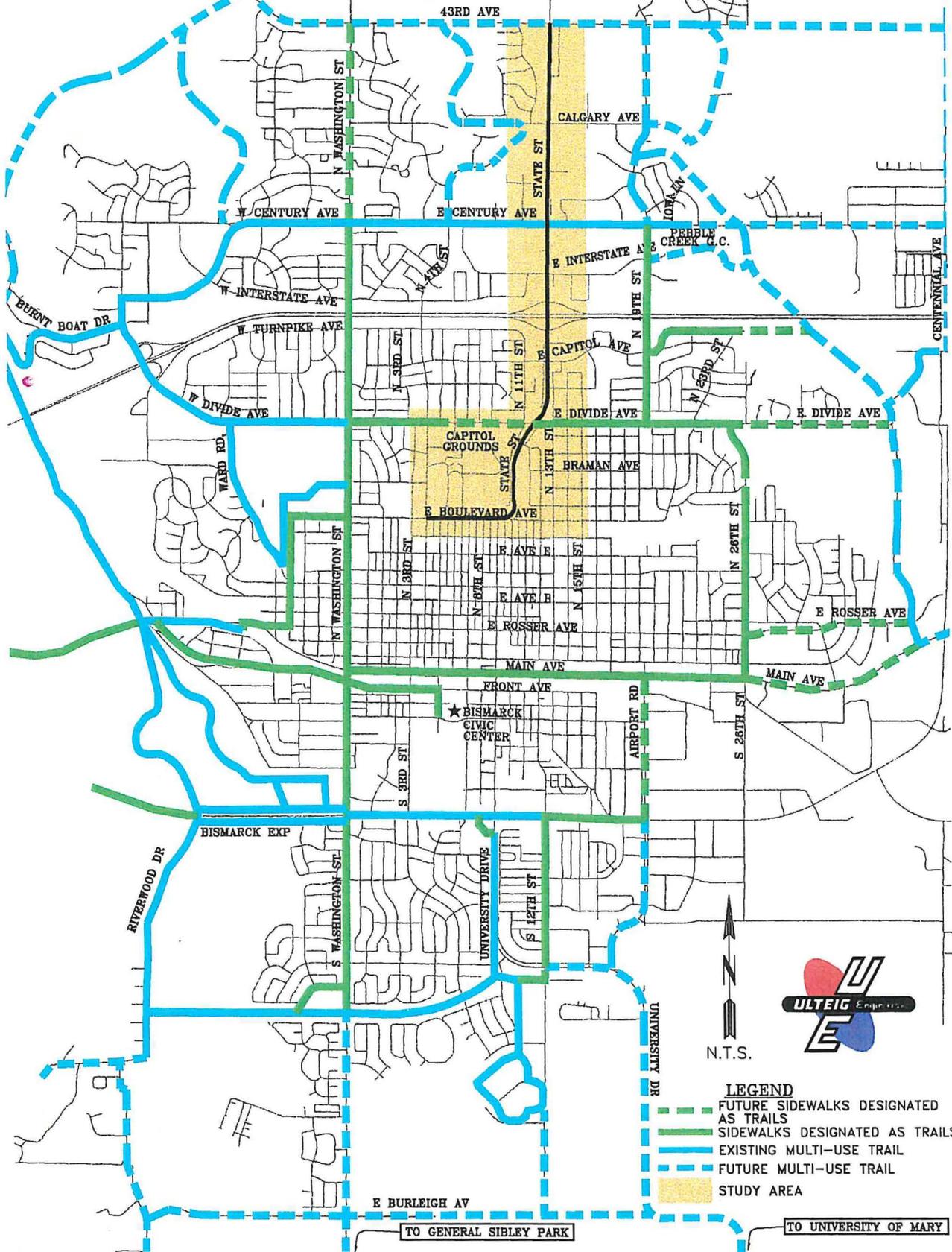
PEDESTRIAN INDICATOR LOCATIONS				
Intersection	Side of Intersection			
	North	South	East	West
North 4 th Street	x	x	x	x
North 6 th Street				
North 7 th Street	x	x		x
North 9 th Street	N/A	x		x
East Divide Avenue	x			
East Capitol Avenue				
I-94 Eastbound				x
I-94 Westbound				x
East Interstate Avenue	x			x
East Century Avenue	x		x	x

F. Street Lighting

Street lighting currently exists from North 4th Street to 43rd Avenue Northeast.

BISMARCK MULTI-USE TRAILS

FIGURE 3



N.T.S.



LEGEND

-  FUTURE SIDEWALKS DESIGNATED AS TRAILS
-  SIDEWALKS DESIGNATED AS TRAILS
-  EXISTING MULTI-USE TRAIL
-  FUTURE MULTI-USE TRAIL
-  STUDY AREA

TO GENERAL SIBLEY PARK

TO UNIVERSITY OF MARY

III. ANALYSIS OF TRAFFIC AND PEDESTRIAN COUNT DATA

A. Existing Traffic Counts

Existing average daily traffic information was obtained from the 1997 Bismarck Traffic Volume Map. These counts, as they relate to the study area, are shown in Figure 4. Sixteen hour turning movement count data were provided by the City of Bismarck and the North Dakota Department of Transportation for all signalized intersections and two unsignalized intersections along State Street and East Boulevard Avenue.

B. Accident Data

Since only pedestrian and bicycle accident data would be applicable to this study, this information was not collected. Normally, only one or two of these types of accidents are reported over time at any given location. In these instances, the accident analysis will not provide sufficient information pertaining to the cause of the accident.

However, provisions for safe pedestrian and bicycle facilities are the primary objective of this study. While review of accident data can sometimes give insight into which locations are potentially unsafe, a more accurate method to address safety issues lies in the provision for crossings where traffic control is present, use of consistent standardized marking and signing, and street lighting to allow safe crossings to be made. This report provides recommendations which address all of these important safety features for the proposed pedestrian/bicycle multi-use facility system.

C. Signal Warrants

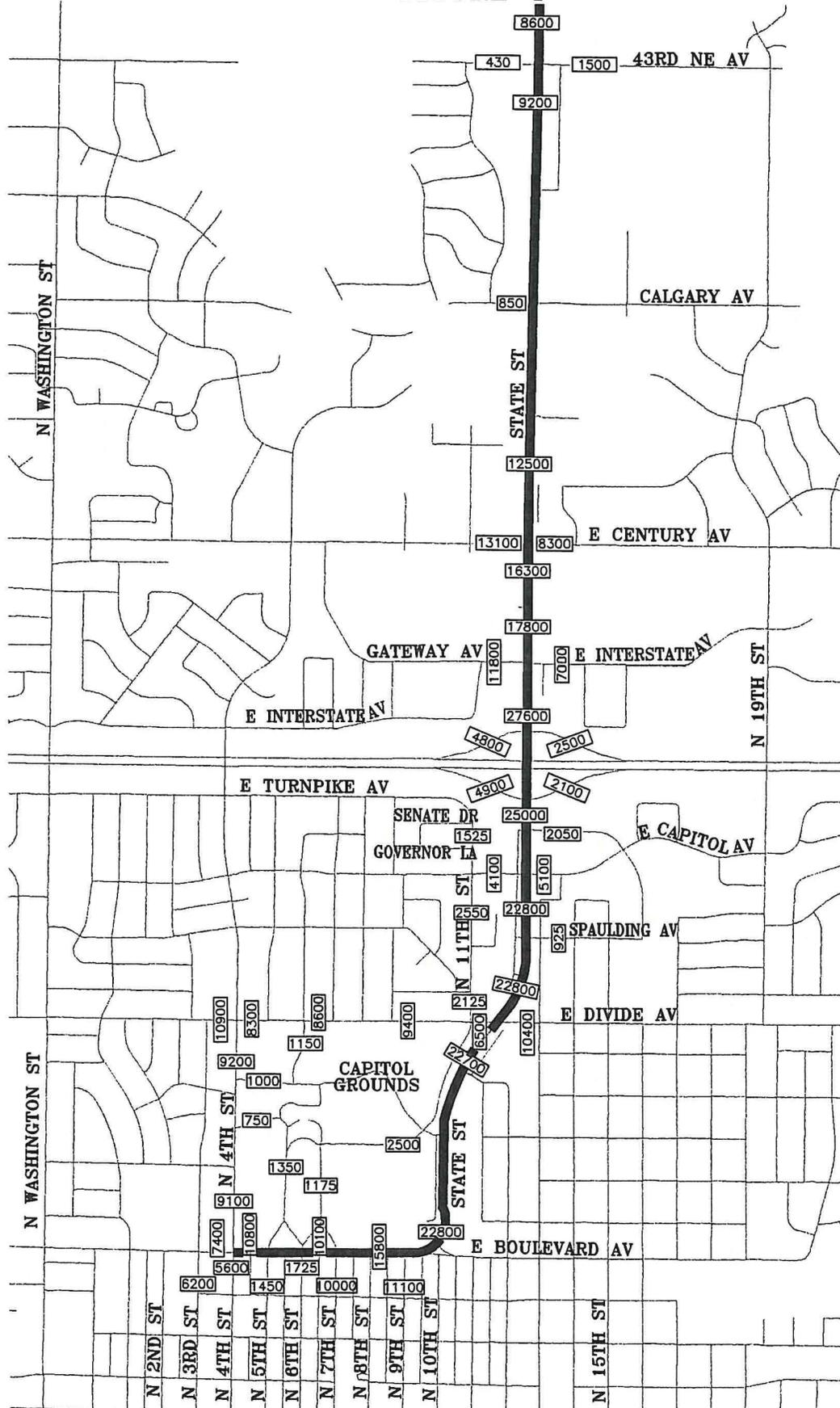
The two unsignalized intersections (Gateway Mall/KMart entrance and the State Capital Grounds east entrance) were checked to determine whether either met warrants for traffic signalization. The Gateway Mall/KMart entrance did not meet signal warrants.

The State Capitol Grounds east entrance met warrants for traffic signalization (the peak hour warrant was met and the four-hour volume warrant was six vehicles short on the minor street approach from being met).

According to the Manual on Uniform Traffic Control Devices (MUTCD), "Traffic control signals should not be installed unless one or more of the signal warrants in this Manual are met. The satisfaction of a warrant or warrants is not in itself justification for a signal. Information should be obtained by means of engineering studies and compared with the requirements set forth in the warrants. The engineering study should indicate the installation of a traffic signal will improve the overall safety and/or operation of the intersection. If these requirements are not met, a traffic signal should neither be put into

EXISTING TRAFFIC COUNTS

FIGURE 4



operation nor continued in operation (if already installed).”

It is not the objective of this report to determine changes in traffic controls for the State Street Corridor. The NDDOT is currently conducting a study intended to address those issues. Therefore, further discussion concerning signalization at the State Capitol Grounds east entrance will be presented in relation to other alternatives for improving pedestrian/bicycle crossings at this location. Refer to Section V. C. of this report for further information regarding signalization as an alternative.

D. Level of Service

A level of service analysis is being conducted by the NDDOT as part of their Corridor Study; therefore, it was not included in this report. Based on a review of pedestrian count information shown in Table I, pedestrian volumes present along State Street are insufficient to impact signalized level of service along State Street.

Along Boulevard Avenue, pedestrian volumes are much higher. For these signalized intersections, pedestrian activity should be considered regarding their impact on intersection level of service. Currently, the 4th Street, 6th Street, 7th Street, and 9th Street intersections along Boulevard are all signalized. Only the 6th Street intersection is without pedestrian indicators. Based on our level of service analysis for this intersection, the level of service during the peak hour will remain LOS B with or without pedestrian indicators.

**TABLE 1
PEDESTRIAN COUNT DATA
Per Sixteen Hours**

	<u>State Street</u> <u>Crossings</u>	<u>Side Street</u> <u>Crossings</u>
<u>State Street Intersections</u>		
43 rd Avenue N.	N/A	N/A
Calgary Avenue	4	3
Century Avenue	10	16
KMart/Gateway Entrance	4	28
Interstate Avenue	8	10
I-94 North Ramps	8	25
I-94 South Ramps	4	39
Capitol Avenue	13	12
Divide Avenue	12	41
State Capitol Entrance	0	18
Boulevard Avenue	N/A	N/A
	<u>Boulevard</u> <u>Crossings</u>	<u>Side Street</u> <u>Crossings</u>
<u>Boulevard Intersections</u>		
9 th Street	81	16
7 th Street	124	28
6 th Street	173	66
5 th Street	N/A	N/A
4 th Street	37	32

IV. DESIGN DEVELOPMENT

A. Improvements

Three types of improvements, to include signing and traffic control, sidewalks and multi-use trails, and pavement markings, were considered for pedestrian safety and access along State Street and East Boulevard Avenue.

Improvements to sidewalks and multi-use trails consist of new facilities. Sidewalks would be four and a half feet wide in residential areas and six feet wide in commercial areas and multi-use trails, which support pedestrians and bicyclists, ten or twelve feet wide. All new facilities would be built in accordance with the Americans with Disabilities Act (ADA) Standards and existing facilities would be analyzed to see if they meet these standards.

Pavement marking improvements consist of adding crosswalks, either the Standard or Continental type, where crossings exist or will be proposed. Standard crosswalks consist of two six-inch transverse lines a minimum of six feet apart and are used at intersection crossings where stop conditions exist. Continental crosswalks consist of 24-inch by a minimum of 6 foot lines placed longitudinally with the roadway and are used for added visibility at special crossings such as for schools, multi-use trails, or mid-block crossings. Channelization markings, which direct conflicting movements into definite and safe paths, may be needed to better control traffic and pedestrian movements.

Signing and traffic control improvements consist of pedestrian crossing signs and advanced pedestrian crossing signs, pedestrian push buttons, signalization, and flashing beacons.

Proposed improvements located on private property are dependent upon the Owner's decision to allow and pay for the improvements.

B. Continuity and Consistency

Continuity and consistency are key objectives in the development of any sidewalk or multi-use trail system. System continuity refers to providing facilities without gaps or dead ends. The system should also provide access to pedestrian generators and attractors. Where possible, this access should be direct.

System consistency refers to the constant application of standardized pavement marking, signing, and traffic control. This standardization is important to both pedestrians and motorists. Standardization allows both to easily recognize where crossing locations have been established. The City of Bismarck has a policy of using both standard and continental crosswalks. Currently, some signalized pedestrian crossings have marked crosswalks and some do not. These locations should have crosswalks added where

crossings are desired. In the case of crossings at low traffic volume streets, provision of crosswalks should be considered on a case by case basis.

Inconsistent use of pedestrian crossing signs and advanced pedestrian crossing signs and pedestrian signal (push buttons) was also identified at various locations along State Street and East Boulevard Avenue. The MUTCD provides guidance in the application of these signs and signals and recommendations will be provided in later chapters to address this issue.

C. Rural Versus Urban

Two distinct differences exist between rural and urban roadway sections. One difference is that urban roadways have curb and gutter and rural roadways do not. On urban roadways, curb and gutter helps in delineation of pedestrian facilities, roadway edge delineation, drainage control, and aesthetics. The second difference is that surface drainage is carried by a storm sewer system on an urban roadway and by ditches on a rural roadway section.

Some uncertainty exists as to where the new sidewalk and multi-use trail facilities should be placed because of the possible future reconstruction of State Street. If a rural roadway section is planned, the new facilities would go along the right-of-way lines. This would require facilities to bend out at intersections to provide crossings in front of stop bars. However, if an urban curb and gutter section is planned, the facilities could be moved in toward the back of curb. A grass boulevard or decorative brick sidewalk would be used to separate these items.

The North Dakota Department of Transportation is currently studying the rural versus urban roadway section options for the future reconstruction of State Street. Some advantages with an urban roadway section include better lighting of sidewalks and multi-use trails since they are placed near the roadway. Surface drainage would be handled by a storm sewer system in an urban roadway, thus standing water would not be present adjacent to the pedestrian facilities, as with the rural section. One advantage of the rural roadway section is that the facility user is separated from the roadway by a greater distance, thus creating a safer condition for the facility user. A disadvantage of the rural roadway section is that additional curves are needed to move the pedestrian facilities closer to the roadway at intersections so crossings are in front of the stop bars.

V. DESCRIPTION OF PROJECT CONCEPTS

The Study Area was divided into six segments. The following narratives describe concepts developed for each segment.

A. North 4th Street to North 9th Street

Sheet 1 of Appendix III shows the concepts for this area.

In this segment, sidewalk facilities exist on both sides of the street. However, the sidewalk on the north side should be widened or reconstructed to 10 feet to be consistent with multi-use trail standards.

The main concern in this area is handicap accessibility and most of the medians in this segment need ADA ramps. The medians on the west side of North 6th, 7th, 8th, and 9th Streets all need to be upgraded to ADA Standards. The median on the east side of North 8th Street also needs to be upgraded. There are three corner approaches on North 5th Street, two on North 6th Street, one on North 7th Street, and two on North 9th Street that need to be made handicap accessible as well.

Due to safety concerns in this segment, crossings will only be designated at signalized intersections. Pavement markings at North 5th Street and North 8th Street would be obliterated and the pedestrian crossing signs at North 5th Street removed. However, the crossings would become ADA compliant so if a disabled pedestrian tries to cross, refuge could be taken on the center medians.

B. North 9th Street to East Divide Avenue (Excluding East Capitol Grounds Entrance)

Sheets 2 and 3 of Appendix III show the concepts for this area.

The multi-use trail would extend along the west side of State Street in this segment and connect into the future multi-use trail system along East Boulevard Avenue. On the south side of East Divide Avenue, the facility could split and go west. This westward extension could make a connection to the Tom O'Leary Multi-Use Trail. At the east entrance to the Capitol Grounds, a branch would go west and connect into the Capitol Grounds sidewalk system on the south side of the North Dakota Department of Transportation building.

C. East Capitol Grounds Entrance

The east entrance to the State Capitol Grounds was evaluated to determine whether the current crossing conditions could be improved. A variety of alternatives were explored and are discussed in this section. Before alternatives can be properly evaluated, one must answer the question of whether a crossing at this location is really needed, and if one is needed, how much use is it likely to receive. The following paragraphs analyze and

discuss a pedestrian crossing at the east entrance to the State Capitol Grounds.

Based on our review of existing and projected pedestrian and bicycle facilities, and pedestrian generators and attractors, a number of observations were made. First, this crossing is not needed as a school crossing. Second, the primary use of this crossing would be for pedestrians traveling between the State Capitol Grounds and the many residences located south of East Divide Avenue, north of East Boulevard Avenue, and east of State Street. These pedestrians have no other viable options for crossing State Street between East Divide Avenue and East Boulevard Avenue.

Depending on the type of crossing provided, the amount of use at the crossing will vary. With little or no traffic control, crossing at this location will continue to be hazardous and can be expected to range between 0-5 daily. With improvements, such as flashing beacons or traffic signals, one would expect crossing numbers similar to other signalized intersections along State Street, which range between 5-15 daily.

Provisions for a grade separation (underpass or overpass) at this location were originally part of the 1979 State Street Roadway Improvements, but it was removed from the final State Street reconstruction Plans. A grade separation would undoubtedly generate more activity than would other possible types of crossing improvements and would be a great asset if the State of North Dakota would develop their land on the east side of State Street. While it is difficult to estimate how much activity a grade separation at this location would attract, one could assume that pedestrian activity at the facility would include persons who currently travel along State Street (approximately 40 pedestrians near Divide Avenue) and new pedestrian activity that would be able to access the State Capitol Grounds by walking or biking (approximately 12 pedestrians at a typical State Street intersection) for a total of 52 pedestrians. It is anticipated that bicycle activity on this facility would, say 10-20 bicyclists per day under optimal weather conditions, since other locations are more readily accessible to bicyclists.

The Design and Safety of Pedestrian Facilities, prepared by the Institute of Transportation Engineers, recommends that the pedestrian hourly volume should be more than 300 in the four highest continuous hour periods in order for a grade separated pedestrian crossing to be warranted. Therefore, based on the projected age, a grade separated pedestrian crossing would not be justified.

The MUTCD states that a traffic signal may be warranted where the pedestrian volume crossing the major street during an average day is 100 or more for each of any four hours; or 190 or more during any one hour. Since anticipated use with signalization is 5-15 pedestrian per day, placement of signals at this location would not be warranted or justified on the basis of pedestrian crossing need. As the report stated earlier, signals were warranted on the basis of peak hour count information.

The NDDOT will need to determine whether placement of traffic signals at this location is advisable on the basis of the findings of their Corridor Study, which is now underway. If traffic signals are placed at this location, pedestrian push buttons, pavement marking, and signing should accompany their installation.

Flashing beacons are another improvement that can improve driver's awareness that a crossing exists. However, given that crossing volumes under this scenario would number only 5-15 per day, flashing beacons do not meet NDDOT warrants for installation.

Considering the high traffic volume and speed of travel present at this location, it is questionable whether provisions for only crosswalk marking and signing are adequate for those wishing to use the crossing. In view of this, it is recommended, that unless traffic signals are provided at some time in the near future, the crossing should be signed to prohibit pedestrian crossings and that other crossing facilities be promoted. Unless a grade separation is provided, it is probably best to provide direct access from the State Street/Divide Avenue intersection and the East Boulevard/9th Street intersection for destinations within the State Capitol Grounds.

The present analysis cannot justify the installation of a grade separation but sometimes the bigger picture needs to be looked at. The State Capitol Grounds, without a doubt, is one of the most majestic areas of the City. The architecture, historic presence, landscaping and awe of this facility makes it a destination for many pedestrians within the area. Those who are able to easily access this facility greatly benefit. Those that live south, west and north of the Capitol grounds can easily and safely access it. Those many residences that live east of the Capitol Grounds cannot because of the barrier created by State Street. Lack of vision for futures needs can sometimes be lost in the requirements to justify today. A grade separation that would allow safe access to the State Capitol Grounds for the many residents to the east of State Street would certainly be a step toward the future. With the reconstruction of State Street in the next years, there will never be a better time to do this. The next opportunity might not arise for another fifty to sixty years. If pedestrian safety and access is truly an objective, then that alone would probably be the reason for a grade separation. It is felt that every avenue should be investigated to install a multi-use grade separated facility at this location.

D. East Divide Avenue to I-94 Interchange

Sheets 4 and 5 of Appendix III show the concepts for this area.

A multi-use trail on the west side of State Street in this segment has two options. One option is to take the multi-use trail north of the International Restaurant to North 11th Street. North 11th Street would then be classified as a shared lane multi-use trail from this point to East Divide Avenue. Since crossing East Divide Avenue at North 11th Street

would be difficult, this crossing wouldn't be marked and signing would direct crossings east to State Street.

The second option for the multi-use trail is to locate it on the west side of North 12th Street. This would provide the many businesses in the area with good pedestrian access. However, by doing this, the multi-use trail crosses many access points within a short distance.

A sidewalk system on the east side of State Street from East Divide Avenue to Interchange Avenue exists in segments. Recommendations are to place sidewalk around the entire block bordered by State Street, East Capital Avenue, and Interchange Avenue and along State Street from East Capital Avenue to the intersection of North 13th Street and East Central Avenue.

The main area where pavement marking and signing would be needed is at the East Capitol Avenue and State Street intersection. Pedestrian indicators would be needed for all directions to promote safe crossings. The State Street medians would need push buttons installed along with making them handicap accessible.

Pedestrian indicators should be added to the west side of the East Divide Avenue and State Street to promote a safe crossing for the multi-use trail. The west side would also need to become handicap accessible. This includes an ADA ramp on the northwest corner to cross south and making the southwest median ADA accessible.

E. I-94 Interchange to East Interstate Avenue

Sheet 6 of Appendix III shows the concepts for this area.

The facilities in this segment are, for the most part, in place and limited due to the crossing of Interstate 94. East of State Street along Interstate Avenue a small segment of sidewalk is needed on the south side and a large segment is needed on the north side. A pedestrian indicator should be added on the east side of the intersection also.

The sidewalk and pedestrian bridge is only eight feet wide. This is not wide enough to meet multi-use trail standards so signing for bicyclists to walk their bicycles across the interstate bridge should be installed. The approaches to the pedestrian bridge need to be rehabilitated because they are collapsing and cracked as shown in Appendix I.

Pavement marking and signing in this segment are very minimal.

F. East Interstate Avenue to East Century Avenue

Sheet 7 of Appendix III shows the concepts for this area.

The ten-foot multi-use trail on the west side of State Street would provide access to the

Gateway Mall area. If placed along the right-of-way, it would provide easy access to the businesses located in the area. However, if State Street becomes an urban section in the future, the multi-use trail could be placed behind the curb separated by a decorative brick sidewalk as on East Century Avenue. If this is done, separate sections of sidewalk will be needed to connect to the businesses in the area.

Sidewalk on the east side would provide access to businesses such as K-Mart, McDonalds's, and Arby's.

In this segment there are some optional private property improvements proposed that would need to be paid for by the property owners. The improvements include segments of sidewalk to connect the multi-use trail to the adjacent businesses and a longer segment of sidewalk that would extend along the north side of the east Gateway Mall Entrance. With the use of channelization marking, the pedestrian will then be directed to southeast corner of Gateway Mall.

G. East Century Avenue to 43rd Avenue Northeast

Sheets 8-10 of Appendix III show the concepts for this area.

On the west side of State Street, a ten-foot multi-use trail would provide facilities for the new residential development north of Calgary Avenue and Capital Racquet and Fitness which is located two blocks west of State Street. The multi-use trail from Calgary Avenue to 43rd Avenue Northeast could be built when State Street is reconstructed or when development along and north of 43rd Avenue Northeast occurs. A sidewalk needs to be built along the north side of Calgary Avenue to connect the multi-use trail and the residential development sidewalk system on Lockport Street.

Sidewalks could be built on the east side of State Street from Century Avenue to Harvest Lane. Sidewalk from Harvest Lane Avenue to 43rd Avenue Northeast is not practical due to lack of development and the big coulee between Stan Puklich Chevrolet and the State Street Professional Center. Sidewalks from East Century Avenue to Harvest Lane along North 14th Street could be constructed as development on adjacent properties occurs.

Pedestrian crossings at Calgary Avenue and Harvest Lane will not be designated due to safety concerns, primarily because of speed. In the future as these intersections become signalized, pedestrian crossings should be incorporated into the signal system design.

VI. RECOMMENDED IMPROVEMENTS

A. Short Term

Short term improvements along the State Street Corridor should be completed prior to the reconstruction of State Street in the next 5 to 10 years. These improvements include:

- Rehabilitation of pedestrian bridge approaches over interstate 94.
- Remove pedestrian crossing signs at North 5th Street and East Capitol Grounds Entrance.
- Obliterate pavement markings at North 5th Street, North 8th Street, and the East Capitol Grounds Entrance.
- Additional signing at East Boulevard Avenue and North 11th Street.
- Pedestrian signalization at East Boulevard Avenue and North 6th Street.
- Pedestrian ramps along East Boulevard Avenue.
- Sidewalk east of State Street along East Capitol Avenue, Interchange Avenue, and East Interstate Avenue.
- Sidewalk connecting East Century Avenue to K-Mart.

These improvements will immediately create a better environment for pedestrians and enhance the areas around businesses.

B. Long Term

The long term improvement will take place with the reconstruction of State Street in the next 5 to 10 years. The main improvements are the multi-use trail on the west side of State Street, pedestrian signalization along State Street and a possible grade separation along the east side of the Capitol Grounds Entrance. It is recommended that at all signalized intersections the use of safety yellow signal standards, mast arms and heads be used to increase visibility of these items. Other minor improvements are shown in Appendix III.

VII. PUBLIC INPUT

On February 11, 1999, a Public Input Meeting was held to present the proposed recommendations of this Study to the general public. Copies of the Notice, Handout, Attendance Roster, and written comments are found in Appendix V. Though sparsely attended, there were some excellent comments received from the general public at this meeting.

Of most concern was the proposed improvements in the vicinity of the 6th Street and Boulevard Avenue intersection. One gentleman's wife had been involved in an accident at this location so he was very interested. It was pointed out that the signals were very difficult to detect due to color and the use of post mounted heads instead of mast arms for northbound and southbound motorists.

Other commentors felt the installation of a grade on the eastside of the Capitol grounds separation for pedestrian movements was desirable. They felt it would allow safer movements for users of the Capitol grounds as well as others that need to cross this busy roadway.

VIII. CONCLUSION

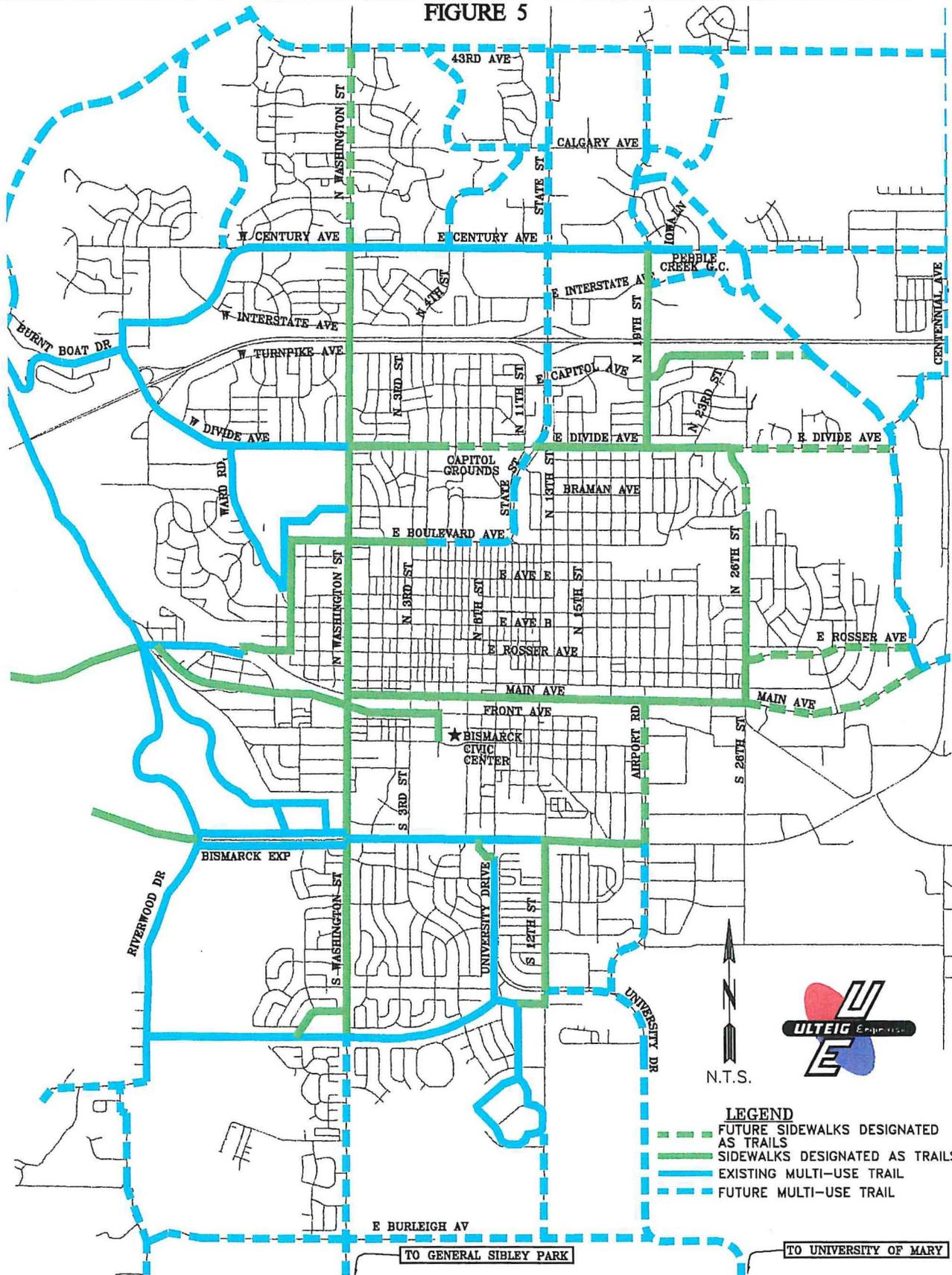
The proposed recommendations of this study effectively address the defined purpose and objectives. Once all recommendations are constructed, Bismarck's multi-use trail system will be greatly enhanced. These improvements will provide the needed connectivity that was previously void in the central part of the system. Figure 5 depicts the multi-use trail system with these proposed recommendations incorporated. Review of Figure 5 depicts a system that effectively encompasses the City thereby providing access for pedestrian needs throughout the City.

To assure that the system can improve present accessibility and connectivity and also meet future needs, it is strongly recommended that the east side Capitol grade separation be considered. This structure will add \$250,000 to \$300,000 to the State Street reconstruction, but without it the roadway will always remain a barrier to safe pedestrian movements in this area. Without it there will be no improvement. With it the opportunities are far reaching. Based upon the input of many organizations and entities, the community supports a grade separation at this location. Though no-one has offered to financially help fund a structure, it is felt such support would be obtainable.

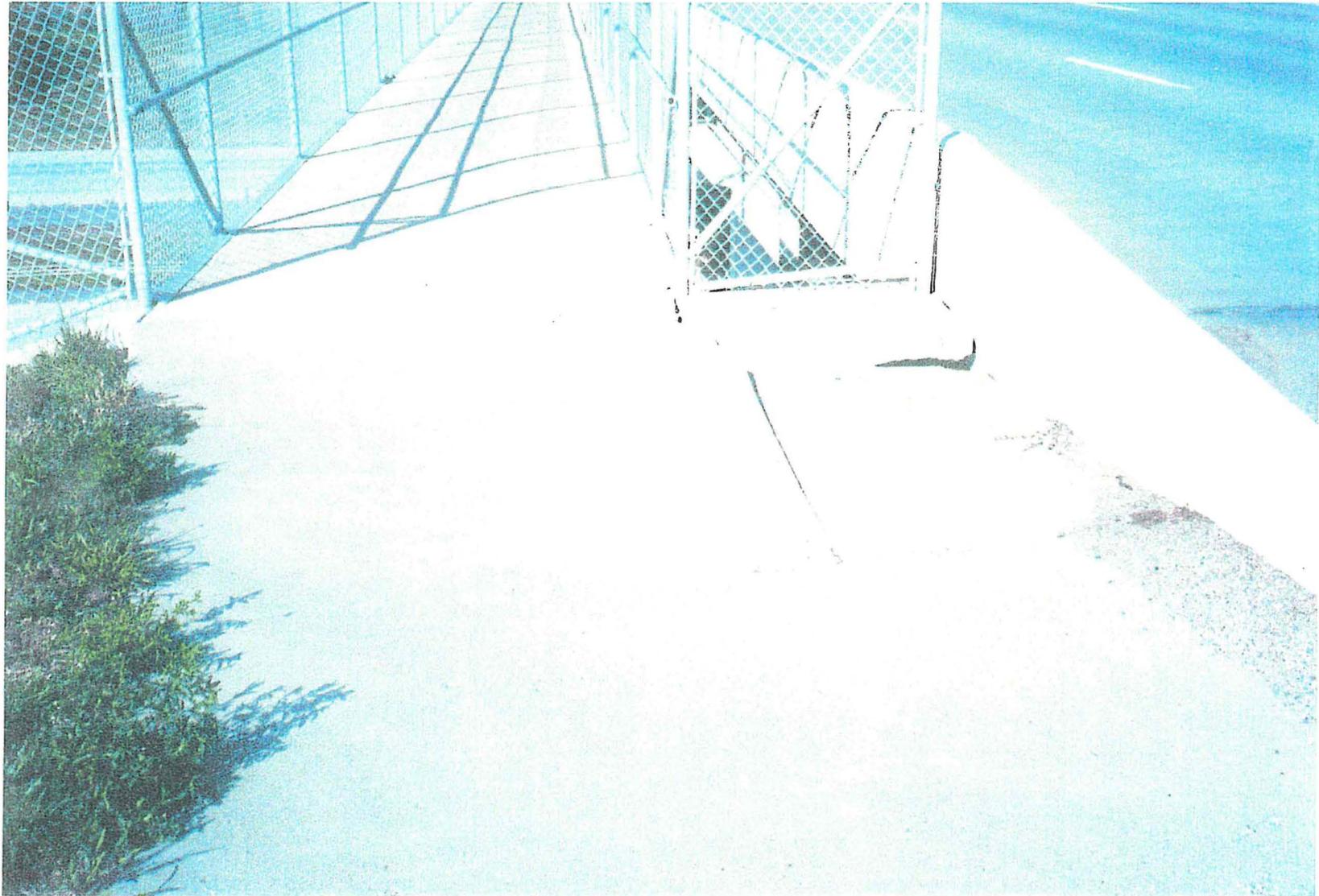
The proposed improvements will provide safe and accessible facilities for pedestrian movements in this are of the City. The City needs to pursue and take a strong position in seeing that these recommendations become a reality. They will make Bismarck a better community.

BISMARCK MULTI-USE TRAILS WITH RECOMMENDED IMPROVEMENTS

FIGURE 5



APPENDIX I
PEDESTRIAN BRIDGE APPROACHES



SOUTH PEDESTRIAN BRIDGE APPROACH

11/3/98
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NORTH PEDESTRIAN BRIDGE APPROACH

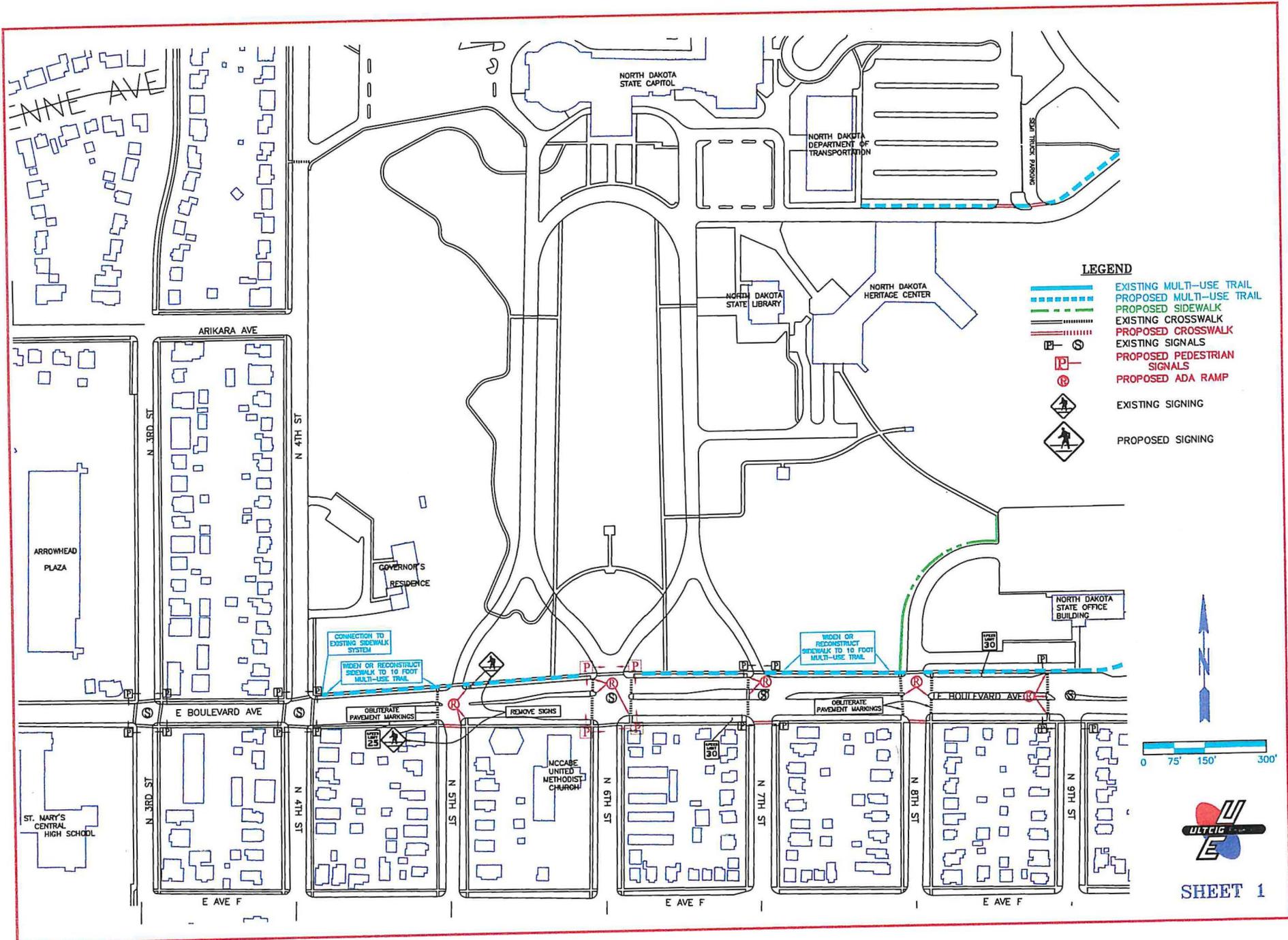
APPENDIX II
HANDICAP ACCESSIBILITY CONCERNS



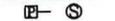
HANDICAP ACCESSIBILITY CONCERNS

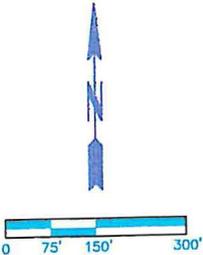
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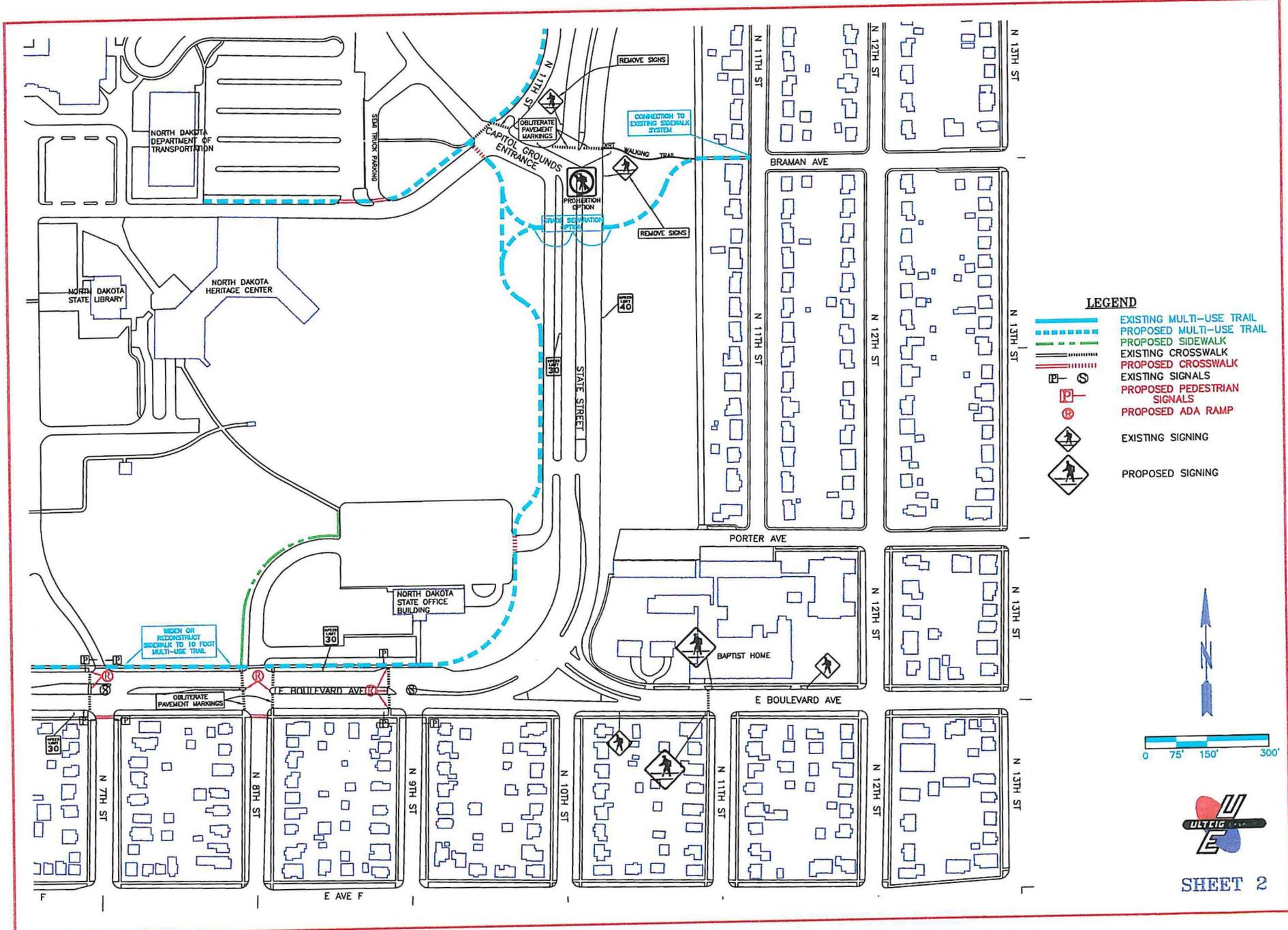
APPENDIX III
PROJECT CONCEPTS



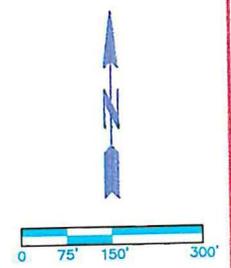
LEGEND

-  EXISTING MULTI-USE TRAIL
-  PROPOSED MULTI-USE TRAIL
-  PROPOSED SIDEWALK
-  EXISTING CROSSWALK
-  PROPOSED CROSSWALK
-  EXISTING SIGNALS
-  PROPOSED PEDESTRIAN SIGNALS
-  PROPOSED ADA RAMP
-  EXISTING SIGNING
-  PROPOSED SIGNING

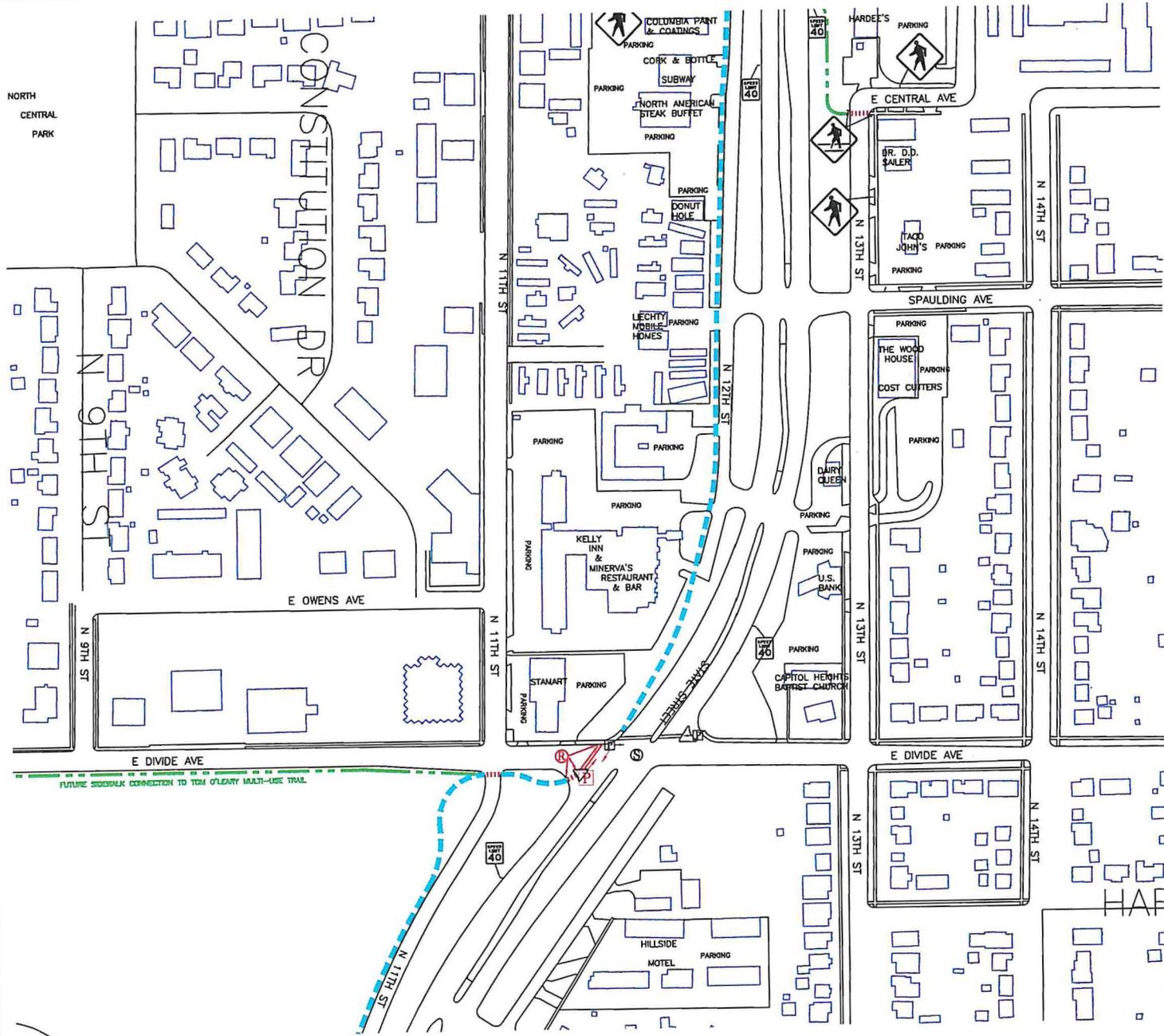




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 - PROPOSED MULTI-USE TRAIL
 - PROPOSED SIDEWALK
 - EXISTING CROSSWALK
 - PROPOSED CROSSWALK
 - EXISTING SIGNALS
 - PROPOSED PEDESTRIAN SIGNALS
 - PROPOSED ADA RAMP
 - EXISTING SIGNING
 - PROPOSED SIGNING



SHEET 2



NORTH
CENTRAL
PARK

CONSTITUTION PR

N 9TH ST

E OWENS AVE

E DIVIDE AVE

FUTURE SIDEWALK CONNECTION TO TOM O'LEARY MULTI-USE TRAIL

COLUMBIA PAINT & COATINGS
PARKING
CORK & BOTTLE
SUBWAY
NORTH AMERICAN STEAK BUFFET
PARKING
DONUT HOLE
PARKING
LECHTY MOBILE HOMES
PARKING

KELLY INN & MINERVA'S RESTAURANT & BAR
PARKING
STAMAT
PARKING
Dairy Queen
U.S. BANK
CAPITOL HEIGHTS BAPTIST CHURCH
PARKING

HILLSIDE MOTEL
PARKING

HARDEE'S
PARKING
E CENTRAL AVE
BR. D.D. SALES
TACO JOHN'S
PARKING

SPAULDING AVE
THE WOOD HOUSE
PARKING
COST CUTTERS
PARKING

E DIVIDE AVE

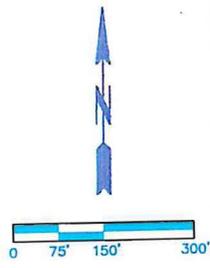
N 14TH ST

N 14TH ST

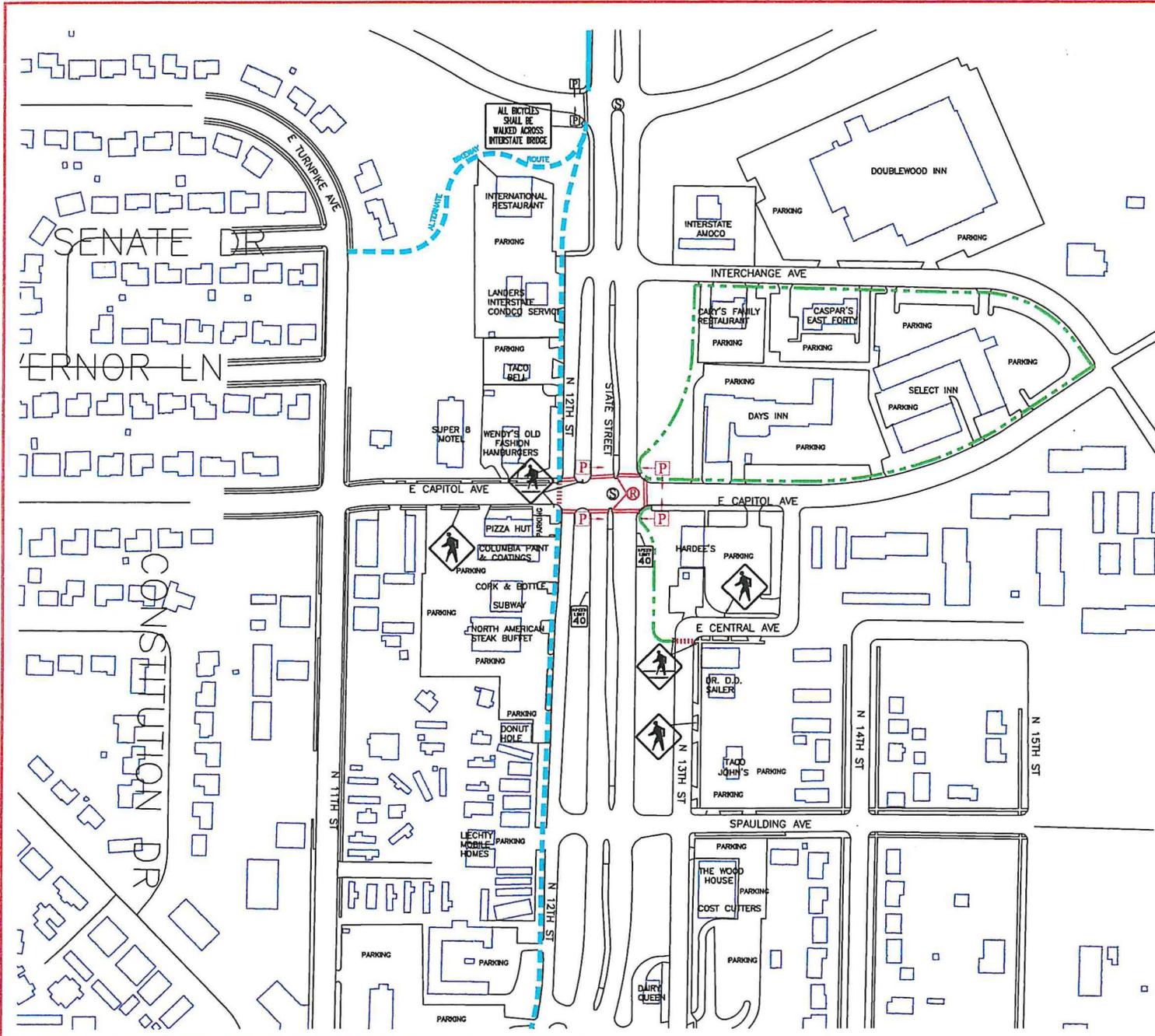
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LEGEND

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- PROPOSED SIDEWALK
- EXISTING CROSSWALK
- PROPOSED CROSSWALK
- EXISTING SIGNALS
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- PROPOSED ADA RAMP
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- PROPOSED SIGNING

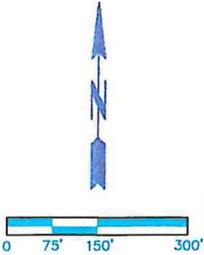


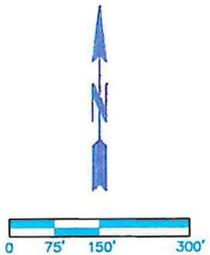
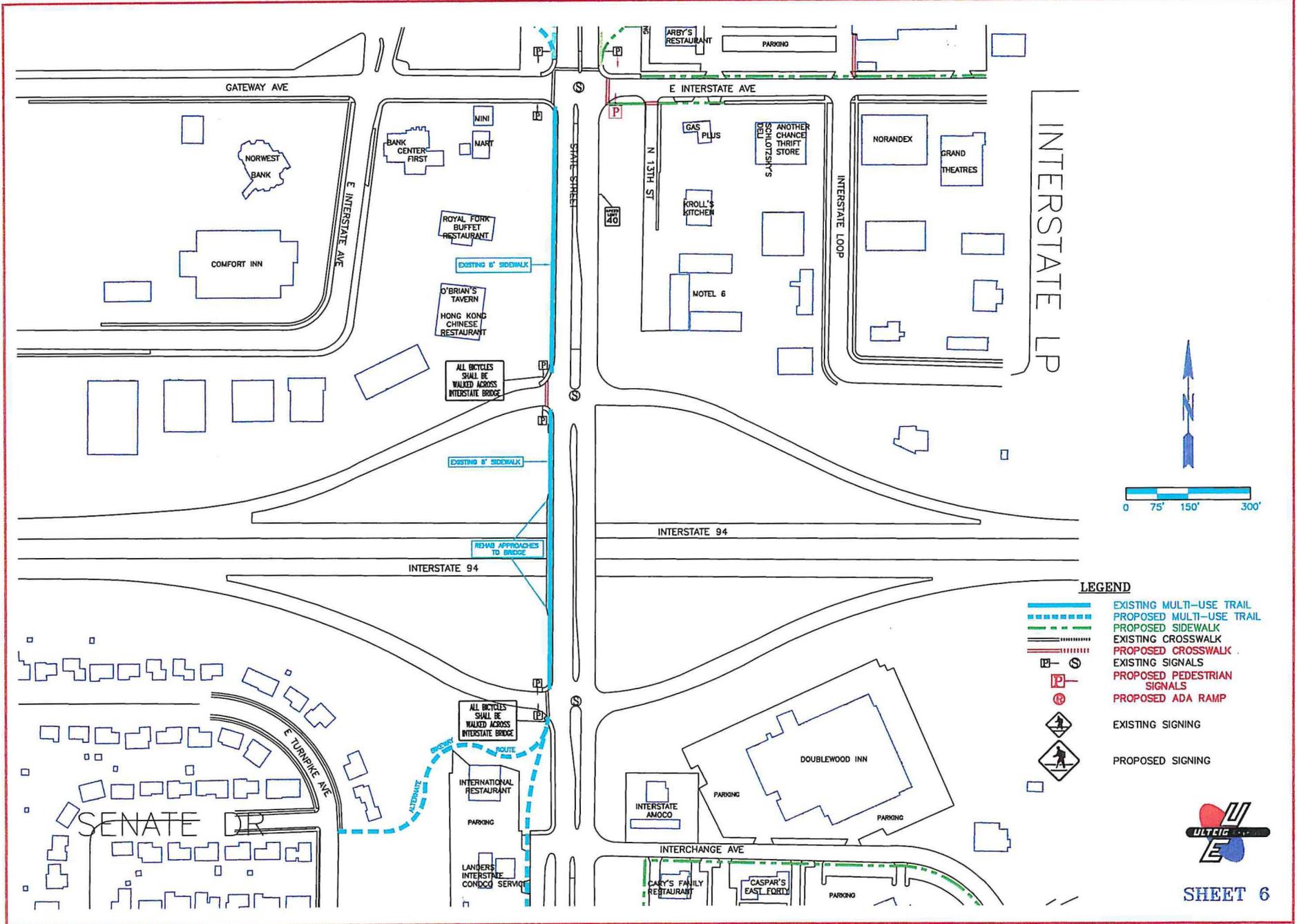
SHEET 4



LEGEND

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-  PROPOSED SIDEWALK
-  EXISTING CROSSWALK
-  PROPOSED CROSSWALK
-  EXISTING SIGNALS
-  PROPOSED PEDESTRIAN SIGNALS
-  PROPOSED ADA RAMP
-  EXISTING SIGNING
-  PROPOSED SIGNING

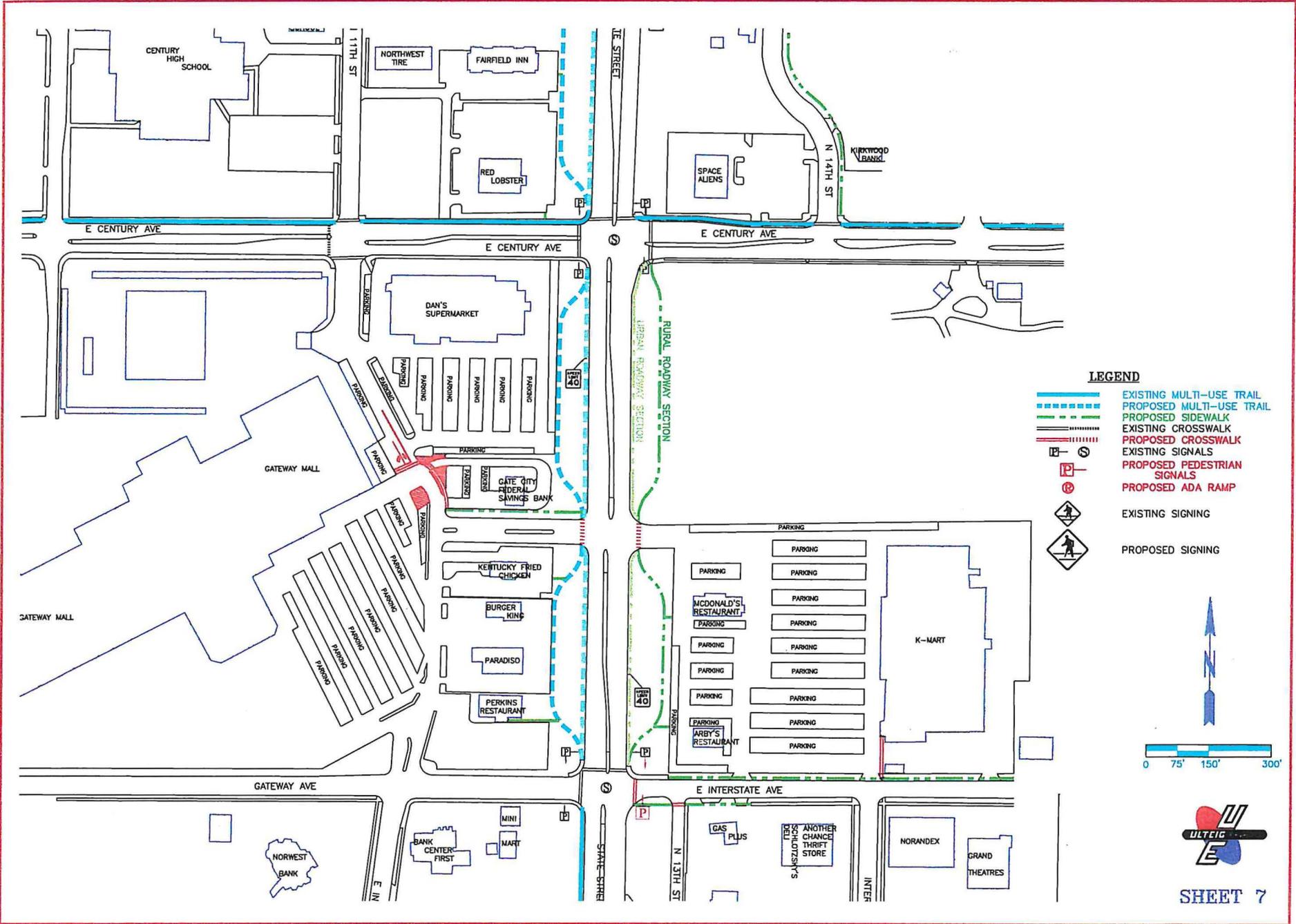




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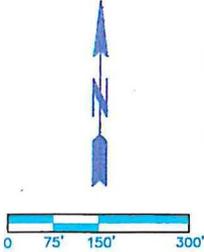
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- PROPOSED MULTI-USE TRAIL
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- PROPOSED CROSSWALK
- EXISTING CROSSWALK
- EXISTING SIGNALS
- PROPOSED PEDESTRIAN SIGNALS
- PROPOSED ADA RAMP
- EXISTING SIGNING
- PROPOSED SIGNING

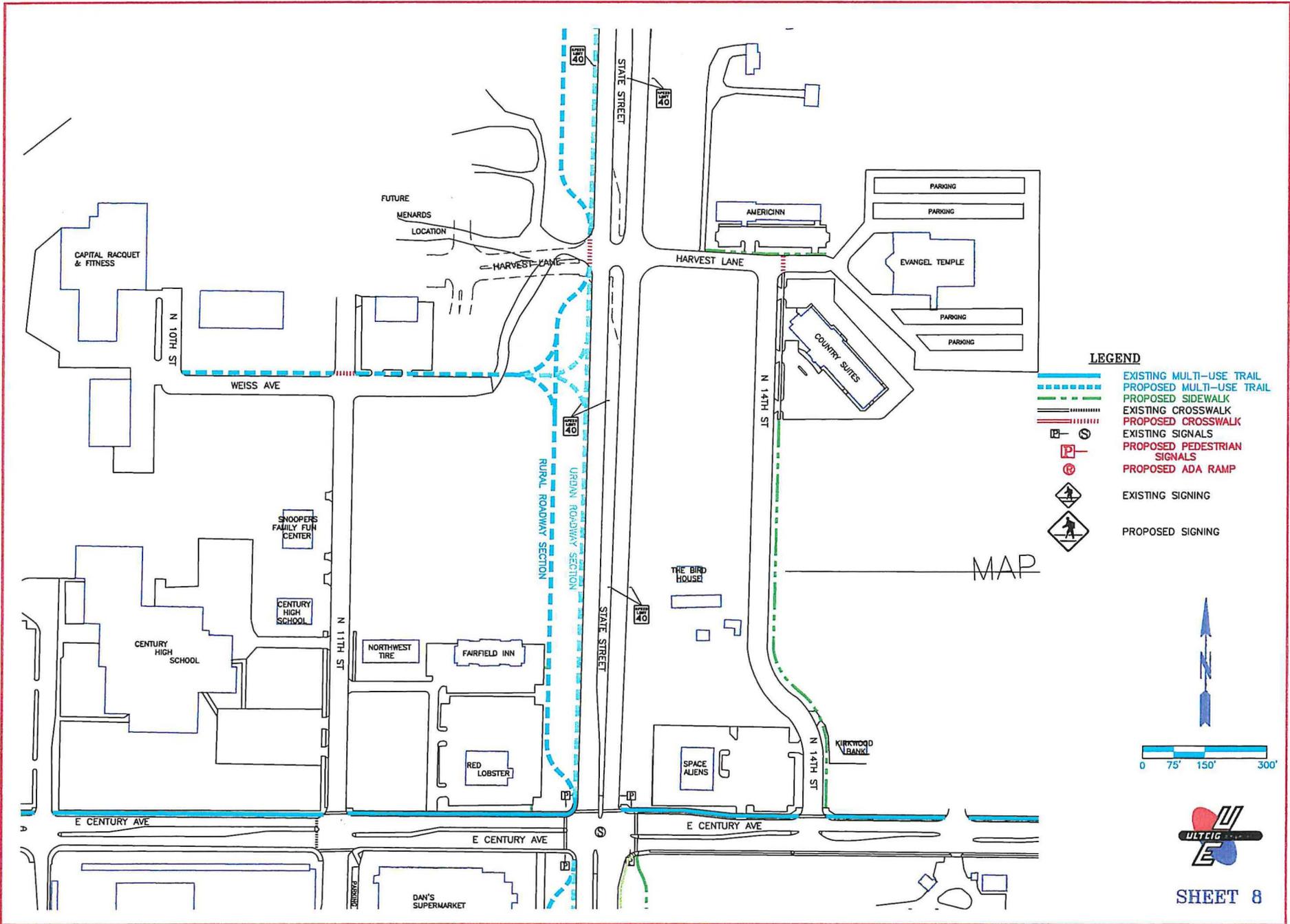


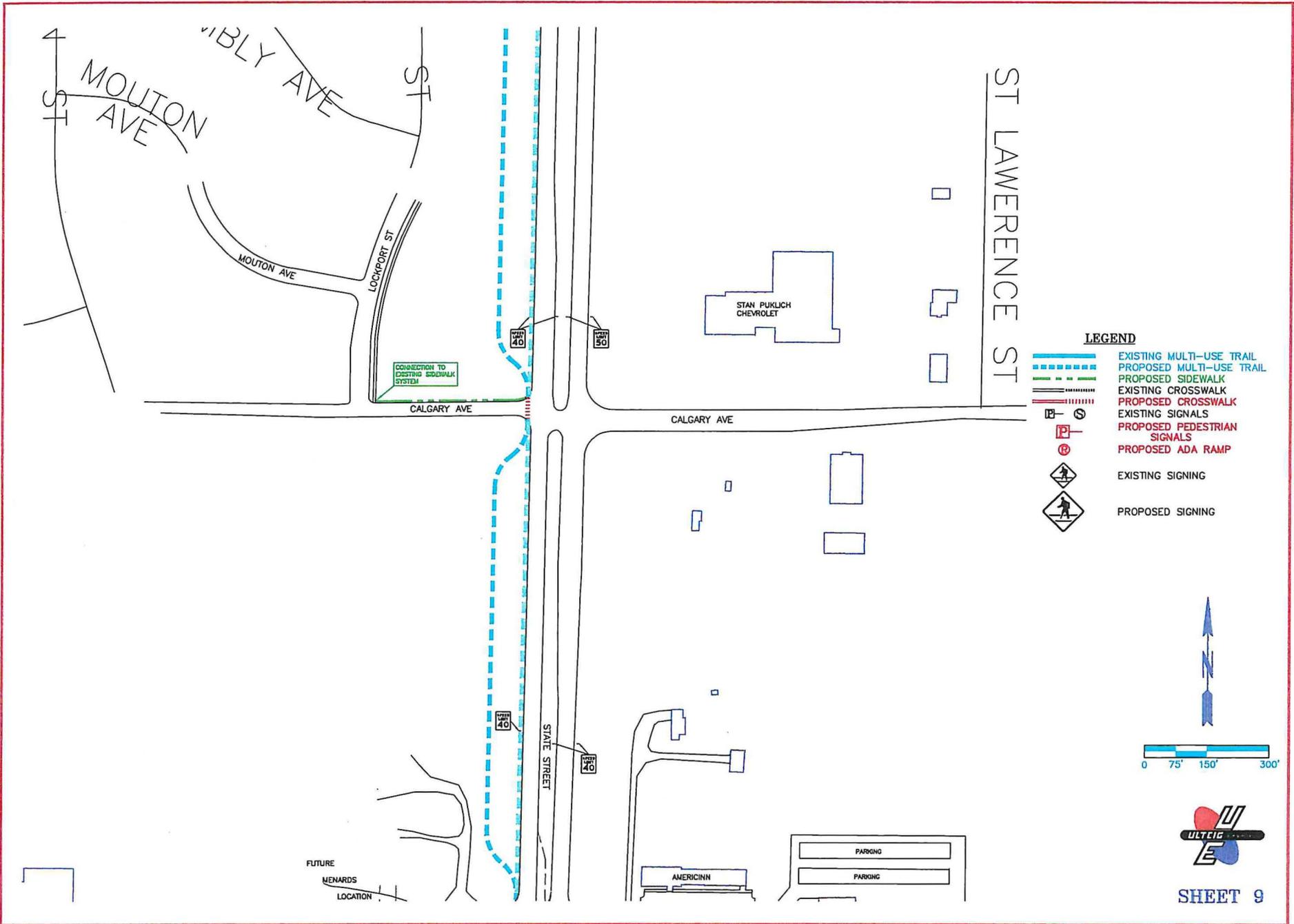


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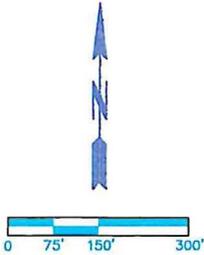




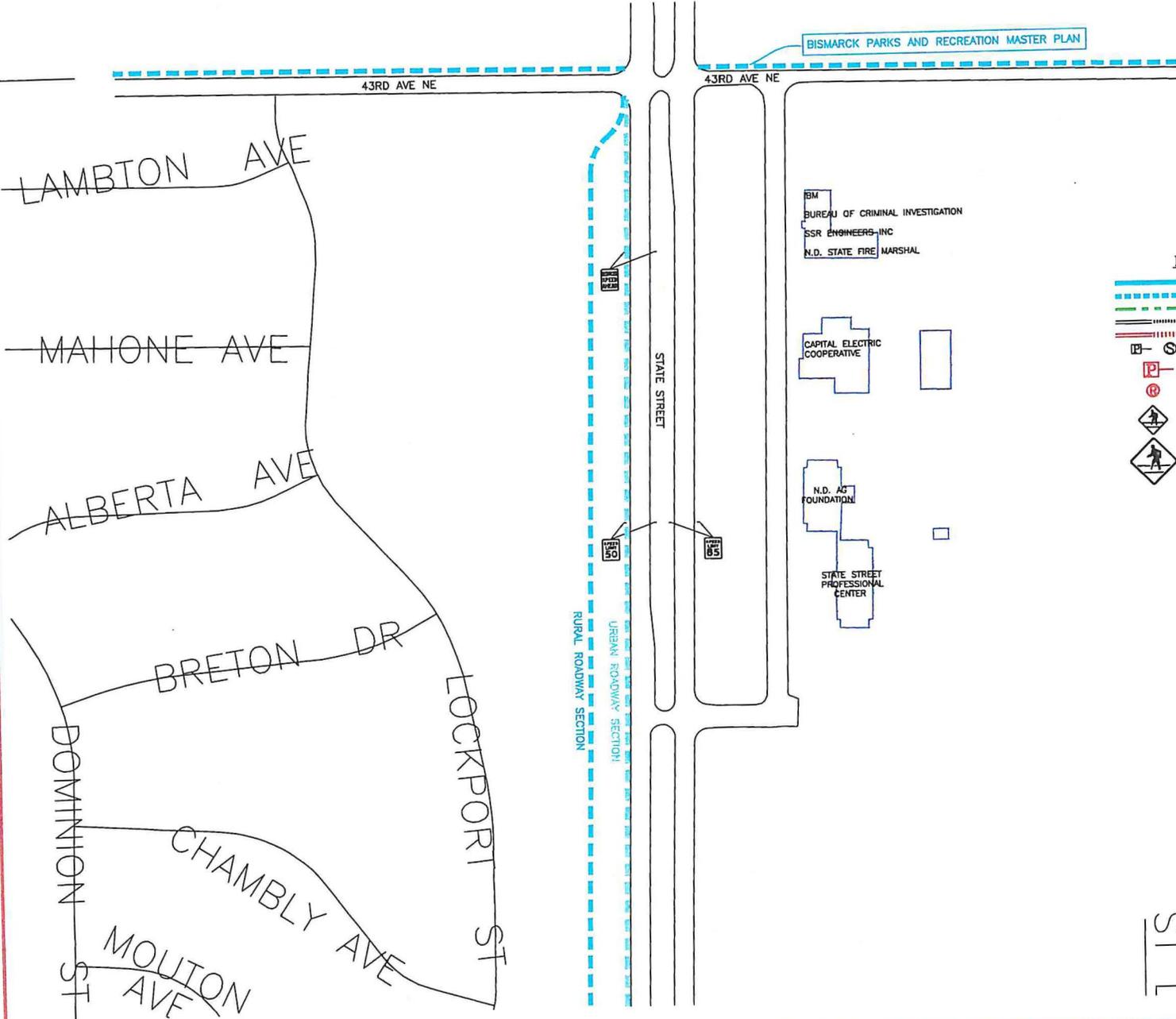


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-  PROPOSED PEDESTRIAN SIGNALS
-  PROPOSED ADA RAMP
-  EXISTING SIGNING
-  PROPOSED SIGNING



BISMARCK PARKS AND RECREATION MASTER PLAN



BM
BUREAU OF CRIMINAL INVESTIGATION
SSR ENGINEERS-INC
N.D. STATE FIRE MARSHAL

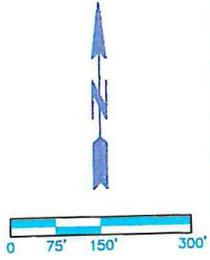
CAPITAL ELECTRIC
COOPERATIVE

N.D. AG
FOUNDATION
STATE STREET
PROFESSIONAL
CENTER

RURAL ROADWAY SECTION
URBAN ROADWAY SECTION

LEGEND

-  EXISTING MULTI-USE TRAIL
-  PROPOSED MULTI-USE TRAIL
-  PROPOSED SIDEWALK
-  EXISTING CROSSWALK
-  PROPOSED CROSSWALK
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-  PROPOSED PEDESTRIAN SIGNALS
-  PROPOSED ADA RAMP
-  EXISTING SIGNING
-  PROPOSED SIGNING



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APPENDIX IV
REVIEW MEETINGS



ULTEIG ENGINEERS, INC.

1701 SOUTH 12TH STREET
BISMARCK, ND 58504-6644

PHONE 701/258-6507
FAX 701/224-1163

PO BOX 2041
BISMARCK, ND 58502-2041

OTHER OFFICES:

FARGO, ND
MINNEAPOLIS, MN

MEMO

TO: File

FROM: Jason P. Gullicks 

SUBJECT: State Street Pedestrian Access and Safety Study
Preliminary Review Meeting
UEI #98-0849

DATE: December 17, 1998

On the above date, a preliminary review meeting was held at Ulteig Engineers, Inc. to gather comments on the preliminary draft before going to the public in late January.

Steve Grabill presented some key points of the analysis. First, good tie-ins with the existing and future pedestrian/bikeway facilities are needed. Before this can happen accurately, Brant Malsam stated the Pedestrian and Bikeway System map needs to be updated. Everyone was in agreement and Brant will set up a meeting with Mel Bullinger, Carl Hokenstad, Steve Neu, and Ben Kubishta to update the system plan.

Steve Grabill continued to describe the inconsistencies in signing and marking along State Street and East Boulevard Avenue. The highest pedestrian crossing volumes are along East Boulevard Avenue and are much greater than the crossing volumes along State Street.

The two unsignalized intersections at K-Mart and the East Capitol Entrance were analyzed. The K-Mart intersection didn't meet any signal warrants and no recommendations were stated. The East Capitol entrance has many alternatives. They included signalization, a flashing beacon, signing and marking, a grade separation, and the prohibition option. Adrian Feser said that the crossing is dangerous and something should be done. Everyone was in agreement that signing or a flashing beacon would be dangerous also because two cars may stop, but what if the third car doesn't. Bob Fode said that the underpass may not be the best option either because he has seen that pedestrians at UND do not use the underpass installed on Columbia Drive. The pedestrians continue to cross the roadway. Steve Grabill explained why the prohibition option was recommended.



There is some question on whether the East Capitol entrance meets signal warrants. Steve Grabill's analysis shows it does meet the warrants; however, the NDDOT analysis does not. Steve Grabill and Bob Fode will get together and resolve this. (Following the meeting, the NDDOT determined that the peak hour signal warrant was met as presented).

With new facilities, the question of maintenance comes up. Mel Bullinger stated that if the facility is a bikeway, the Parks and Recreation Department is responsible for the maintenance. The other facilities are the responsibility of the adjacent property owner.

Jason Gullicks presented some of the more detailed project concepts along State Street. These included the locations of new pedestrian signals, ADA ramps, signing and marking, and some of the reasoning behind the location of the facilities.

Steve Grabill went through the short term recommendations. Everyone seemed agreeable to the items depending upon cost and how long it is until State Street reconstruction occurs. State Street north of Interstate 94 is scheduled for 2001 and south of Interstate 94 in 2004. Mel Bullinger stated there is a 36-inch watermain stubbed on the southwest corner of State Street and East Divide Avenue. Before any improvements are made, this watermain must be extended to the east. Sidewalk around the block encircled by State Street, East Capitol Avenue, and Interchange Avenue should be added to the short term recommendations.

The bikeway through the Capitol Grounds west of North 11th Street should be moved next to the roadway south of East Divide Avenue.

A master plan of the Capitol grounds is being undertaken. Brant posed the questions of how this will affect some of the improvements in the area. No one could answer at this time.

Another meeting was set for 2:00 P.M. January 14, 1999, to review material before going to the public. Comments from attendees are due prior to this date.

ATTENDANCE ROSTER

PROJECT State Street Pedestrian
Safety and Access Study
 MEETING LOCATION Ulteig Engineers
 DATE/TIME Dec. 17, 1998 2 pm

Name	Representing	Title	Phone	Fax
Adrian S. Feser	NDDOT	Constr. Coord.	328-6953	328-6933
Terry Udland	NDDOT	West Region Operations Engr	328-6977	
Dave Leftwich	NDDOT	Local Government	328-4334	
PAUL BENNING	NDDOT	LOCAL GOVERNMENT	328-2217	328-1404
Bob Fode	NDDOT	PIG PRC	8-2607	
Paul Zent	NDDOT	Local Gov't	8-3482	328-1404
Roger Middaugh	City of Bismarck	Traffic Eng.	222-6444	222-6593
Carl Hokenstad	City of Bismarck	City Planner	222-6447	222-6450
Mel Bullinger	City of Bismarck	City Engineer	222-6580	222-6593
Steve Samoy	City of Bismarck	Traffic Planner	222-6447	222-6450
Steve Madill	UET	Engineer	258-3211	
Jason Gullicks	UET	"	258-6507	
BRANT MALSAM	UET	"	258-6507	
Kevin Levi				





ULTEIG ENGINEERS, INC.

1701 SOUTH 12TH STREET
BISMARCK, ND 58504-6644

PHONE 701/258-6507
FAX 701/224-1163

PO BOX 2041
BISMARCK, ND 58502-2041

OTHER OFFICES:

FARGO, ND
MINNEAPOLIS, MN

MEMO

TO: City of Bismarck Engineering
City of Bismarck Planning
City of Bismarck Parks and Recreation
NDDOT - Local Government
NDDOT - Bismarck District
NDDOT - West Region

FROM: Jason P. Gullicks 

SUBJECT: State Street Pedestrian Safety and Access Study
Preliminary Review Comment Meeting
UEI #98-0849

DATE: January 8, 1999

On January 14, 1999, at 2:00 P.M. in the office of Ulteig Engineers, Inc. at 1701 S. 12th Street, a meeting will be held to receive and review comments on the preliminary study draft prior to going to the public.

If time permits, we would like to discuss updating the current Pedestrian/Bikeway System Map for the City of Bismarck.



ATTENDANCE ROSTER

PROJECT State Street Pedestrian Study

MEETING LOCATION Ulteig

DATE/TIME 1-14-99 / 2:00 p.m.

Name	Representing	Title	Phone	Fax
Brant Mulsam	Ulteig			
Randy Bina	Bis. Parker & Recant			
Jason Gullicks	Ulteig			
Robert Fode	NDDOT			
MEL BULLINGER	ENGINEERING DEPT	CITY/ENGINEER		
Roger Middelburg	City of Bis			
Kevin Levi	NDDOT			
Adrian S. Feser	NDDOT			
Terry Udland	NDDOT			



APPENDIX V
PUBLIC INPUT MEETINGS



ULTEIG ENGINEERS, INC.

1701 SOUTH 12TH STREET
BISMARCK, ND 58504-6644

PHONE 701/258-6507
FAX 701/224-1163

PO BOX 2041
BISMARCK, ND 58502-2041

OTHER OFFICES:

FARGO, ND
MINNEAPOLIS, MN

MEMO

TO: Adjacent Properties

FROM: Brant P. Malsam, P.E. *BPM*

SUBJECT: State Street Pedestrian Safety and Access Study
UEI #98-0849

DATE: February 2, 1999

On behalf of the City of Bismarck, Ulteig Engineers, Inc. has been undertaking a Pedestrian Access and Safety Study along the State Street Corridor. Study limits are from the intersection of North 4th Street and Boulevard Avenue to the intersection of 43rd Avenue North and State Street.

A Public Input Meeting will be held on February 11, 1999, to present the findings and recommendations of this Study. The meeting will be held in the Tom Baker Room of the City-County Building located at 221 N. 5th Street in Bismarck. Meeting will be an open house format.

City and Consultant Staff will be present starting 7:30 P.M. to present the recommendations, answer questions, and record comments.

We hope you can find the time to stop by to view and discuss the proposed recommendations.



Memo's RE: Public Input Mtg
2-11-99

7800011
Mailing list

MOTEL 6
2433 STATE ST N
BISMARCK ND 58501

ARBY'S RESTAURANT
2601 STATE ST
BISMARCK ND 58501

PARADISO OF BISMARCK
2620 STATE ST
BISMARCK ND 58501

PENSKE AUTO CENTERS
2625 STATE ST
BISMARCK ND 58501

BURGER KING
2626 STATE ST
BISMARCK ND 58501

KENTUCKY FRIED CHICKEN
2630 STATE ST
BISMARCK ND 58501

MCDONALDS
2631 STATE ST
BISMARCK ND 58501

MENARDS CASHWAY LUMBER
2700 STATE ST
BISMARCK ND 58501

GATE CITY FEDERAL SAVINGS BANK
2710 STATE ST
BISMARCK ND 58501

SUNSET MEMORIAL GARDENS OF BISMARCK
2745 STATE ST
BISMARCK ND 58501

BAUER'S BODY SHOP
3039 STATE ST
BISMARCK ND 58501

BIRD HOUSE
3101 STATE ST
BISMARCK ND 58501

ELEM RENT ALL
3101 STATE ST
BISMARCK ND 58501

ASSEMBLY OF GOD EVANGEL TEMPLE
3225 HARVEST LANE
BISMARCK ND 58501

AMERICINN MOTEL
3235 STATE ST
BISMARCK ND 58501

STAN PUKLICH CHEVROLET
3710 STATE ST
BISMARCK ND 58501

COUNTRY SUITES
3205 N 14TH ST
BISMARCK ND 58501

KIRKWOOD BANK & TRUST
2911 N 14TH ST
BISMARCK ND 58501

FAIRFIELD INN
1120 E CENTURY AVE
BISMARCK ND 58501

RED LOBSTER RESTAURANTS
1130 E CENTURY AVE
BISMARCK ND 58501

SPACE ALIENS GRILL & BAR
304 E CENTURY AVE
BISMARCK ND 58501

PERKINS FAMILY RESTAURANT
1100 E INTERSTATE AVE
BISMARCK ND 58501

MINI MART
1115 E INTERSTATE AVE
BISMARCK ND 58501

GAS PLUS
1309 E INTERSTATE AVE
BISMARCK ND 58501

INTERSTATE AMOCO
1304 INTERCHANGE AVE
BISMARCK ND 58501

CARY'S
1307 INTERCHANGE AVE
BISMARCK ND 58501

DOUBLEWOOD INN
1400 INTERCHANGE AVE
BISMARCK ND 58501

CASPERS EAST FORTY
1401 INTERCHANGE AVE
BISMARCK ND 58501

SELECT INN
1505 INTERCHANGE AVE
BISMARCK ND 58501

STAMART
3936 E DIVIDE AVE
BISMARCK ND 58501

DAN SEIFERT
STATE FARM INSURANCE
1100 E CAPITOL AVE
BISMARCK ND 58501

SUPER 8 OF BISMARCK
1124 E CAPITOL AVE
BISMARCK ND 58501

DAYS INN
1300 E CAPITOL AVE
BISMARCK ND 58501

INTERNATIONAL RESTAURANT
2240 N 12T ST
BISMARCK ND 58501

LANDERS INTERSTATE CONOCO
2210 N 12TH ST
BISMARCK ND 58501

TACO BELL
2124 N 12TH ST
BISMARCK ND 58501

WENDYS
2112 N 12TH ST
BISMARCK ND 58501

PIZZA HUT
2020 N 12TH ST
BISMARCK ND 58501

COLUMBIA PAINT & COATINGS
2016 N 12TH ST
BISMARCK ND 58501

CORK & BOTTLE
2008 N 12TH ST
BISMARCK ND 58501

SUBWAY
2006 N 12 ST
BISMARCK ND 58501

NORTH AMERICAN STEAK BUFFET
2000 N 12TH ST
BISMARCK ND 58501

DONUT HOLE
1914 N 12TH ST
BISMARCK ND 58501

LEICHTY MOBILE HOMES
1830 N 12TH ST
BISMARCK ND 58501

KELLY INN
1800 N 12TH ST
BISMARCK ND 58501

HILLSIDE MOTEL
1601 N 12TH ST
BISMARCK ND 58501

TACO JOHNS
1911 N 13TH ST
BISMARCK ND 58501

WOOD HOUSE RESTAURANT
1825 N 13TH ST
BISMARCK ND 58501

COST CUTTERS FAMILY HAIR CARE
1823 N 13TH ST
BISMARCK ND 58501

US BANK
1730 N 13TH ST
BISMARCK ND 58501

BAPTIST HOME
100 E BLVD AVE
BISMARCK ND 58501

MCCABE UNITED METHODIST CHURCH
1030 N 6TH ST
BISMARCK ND 58501

NOTICE OF PUBLIC INPUT MEETING
FOR
STATE STREET PEDESTRIAN ACCESS AND SAFETY STUDY
NORTH 4TH STREET TO 43RD AVENUE NORTH

The City of Bismarck will conduct a Public Input Meeting regarding a Pedestrian Access and Safety Study along State Street between North 4th Street and 43rd Avenue North.

This will be an open house type of Public Input Meeting beginning at 7:30 PM on February 11, 1999. The Meeting will be held in the Tom Baker Room of the City-County Building, located at 221 N. 5th St. in Bismarck. City and consultant staff will be available to answer questions and record comments on the proposed study recommendations. All persons are invited to attend and comment on the Study.

The Preliminary Study will be available for Public review after February 1, 1999 at the following locations: Bismarck City Engineer's Office, 211 N. 5th St. (3rd Floor) and Ulteig Engineers, 1701 S. 12th St., Bismarck, ND.

Written comments will be accepted for five days after the Public Input Meeting. Written comments should be sent to: Mr. Brant Malsam, 1701 S. 12th St., Bismarck, ND 58504-6644.



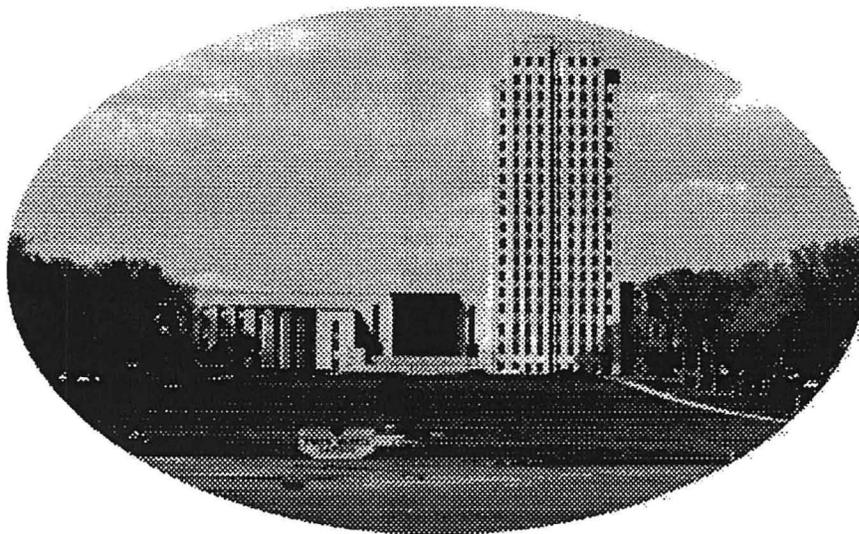
Public Input Meeting Handout

concerning the

*STATE STREET PEDESTRIAN SAFETY
AND
ACCESS STUDY*

for

Bismarck, North Dakota



Prepared by

Ulteig Engineers, Inc.

1701 South 12th Street

Bismarck, ND 58504

701-258-6507

➤ **REASON FOR STUDY**

During Project Development Stages for other proposed roadway improvements, many citizens voiced their concerns about lack of pedestrian facilities along State Street, especially north of I-94. As a result of the citizen concerns, the City of Bismarck has undertaken this Study to investigate and develop recommendations to improve safety and access for pedestrians along State Street. The limits of the Study are from North 4th Street and Boulevard Avenue to North 43rd Avenue and State Street.

➤ **PURPOSE OF STUDY**

The purpose of State Street Pedestrian Safety and Access Study is to:

1. Plan facilities that can provide reasonably convenient access for all persons to retail businesses, nearby residential areas, recreational facilities, other proposed or existing pedestrian facilities, and other points of attraction.
2. Consider the possible use of facilities by walkers, joggers, roller bladers, bicyclists, persons with disabilities, etc. and develop recommendations to provide for extra width, signing, or other special design elements where appropriate.
3. Develop facilities that can provide as much travel convenience and least pedestrian indirection as feasible, consistent with optimum pedestrian and vehicular safety.

With these purposes as the criteria for alternative development, analysis of needed pedestrian facilities, crosswalk protection, and traffic control can be undertaken.

➤ **OBJECTIVES OF STUDY**

When evaluating the sufficiency of a pedestrian/bicycle facility system, there are a number of objectives that should be taken into consideration. Those objectives include:

1. It is desirable to promote pedestrian crossings of heavily-traveled roadways only where traffic signals, flashing beacons, or grade separations exist and except for special circumstances, the system should avoid use of mid block crossings.
2. The system should present consistent signing and pavement markings.
3. The system should aim to channelize pedestrians away from conflicting movements with traffic.
4. The system should be continuous. Gaps or dead ends in the facilities should be avoided.
5. The system should provide direct pedestrian routes between generators and attractors. This is especially important when the attractor is a school or park.

➤ **REMAINING STEPS**

Input from various agencies, adjacent properties, and the general public will assist in finalizing all recommendations presented here tonight. Utilizing this input and other resources, the Study will be finalized.

Once the Study has been finalized by City and Consultant Staff, there will be a formal presentation made to the Bismarck City Commission. If that Commission approves the recommendation of the Study, then it will be the responsibility of City Staff to follow through with implementation of the recommendations.

➤ **IMPLEMENTATION**

The NDDOT will be reconstructing State Street from 6th Street on Boulevard Avenue to 43rd Avenue North. This reconstruction is scheduled to begin in 2001 and continue through 2003. Many of the Study recommendations that fall within the reconstruction limits of State Street will be constructed as part of those roadway improvements. Recommendations outside the reconstruction limits of State Street, but still within City right-of-way could be constructed using established methods such as improvement districts. The Board of City Commissioners has the authority to direct that sidewalks be constructed in these areas. Recommended Improvements on private property would be the responsibility of the property owner.

➤ **COMMONLY ASKED QUESTIONS**

- How will improvements be paid for?
Those improvements that fall within the limits and Scope of State Street Reconstruction would be included in those costs. The City will be required to pay 10% of those costs. That 10% will be funded utilizing a number of possible options to include special assessments, sales tax dollars, etc. Improvements within the City right-of-way, but outside the State Street project limits can be special assessed to the adjacent properties or paid up-front by the property owner. All improvements on private property would be the landowner's responsibility.
- Who maintains the Pedestrian Facilities?
City Ordinance 10-03-03 stipulates it is the duty of the adjacent property owner to maintain sidewalks. However, when dealing with multi-use facilities such as bike trails there have been other agreements worked out between the City and Parks and Recreation to assist with maintenance.

➤ **INPUT**

Attached to the back of this handout is a comment sheet. This sheet can be used to record any comment you might have. We encourage you to use this comment sheet.

PLEASE PRINT

ATTENDANCE ROSTER

PROJECT STATE STREET PEDESTRIAN ACCESS AND SAFETY STUDY

MEETING LOCATION BISMARCK CITY HALL

DATE/TIME FEBRUARY 11, 1999 - 7:30 P.M.

Name	Address	Phone
LONDA ALMER	904 WEST BOWEN	258-9842
GERALDINE BENDER	411 W. INGALS AVE	258-1678
MEL BULLINGER	P.O. BOX 5503, BISMARCK	222-6580
Jason Gullicks	—	—
Steve Grabill	Ulteig Engineers, Inc.	—
Roger Middaugh	City of Bismarck	222-6580
BRANT MALSAM	Ulteig Engineers, Inc.	258-6507
Betty Bauer	3039 State St. Bismarck	255-0957
Martin Bauer	3039 State St. Bismarck	255-0957
Steve Saunders	City Transportation Planner	222-6449
Carl Hokenstad	P.O. BOX 5503, Bismarck	222-6447
Joe E Farrell	2007 N 8 th St	258-4988
Dan Grawsette	2310 Jackson Ave	223-6883

ULTEIG ENGINEERS INC
 Consulting Engineers
 Bismarck - Fargo - Minneapolis - Sioux Falls



Sheet _____ Of _____

FACILITY MANAGEMENT

A Division of the Office of Management and Budget

February 18, 1999

Mr. Brant Malsam
Ulteig Engineering
1701 12st S
PO Box 2041
Bismarck, ND 58502-2041

Dear Mr. Malsam,

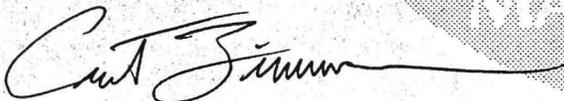
I wanted to follow up after our meeting regarding the State Street Pedestrian Safety and Access Study. As I indicated in the meeting, Facility Management needs to be kept informed as to the future planning for these proposed changes.

By statute the Capitol Grounds Planning Commission needs to grant permission for any changes to the Capitol grounds. As the designated secretary for the commission, I will be available to place you or any of your associates on the agenda to present information to the commission and ask for their approval, prior to any changes being made to the Capitol grounds.

The questions that I raised at our meeting were directed at the responsible party for maintaining the trails and the type of construction that would be aesthetically consistent with the Capitol grounds.

Thank you for having taken the time to meet with me and providing the maps and outline of the study. If you feel that we need to meet again, or if you need to schedule time to present the information to the Capitol Grounds Planning Commission, please feel free to call our office 328-2471.

Sincerely,



Curt Zimmerman
Director



ULTEIG ENGINEERS, INC.

1701 SOUTH 12TH STREET
BISMARCK, ND 58504-6644

PHONE 701/258-6507
FAX 701/224-1163

PO BOX 2041
BISMARCK, ND 58502-2041

OTHER OFFICES:

FARGO, ND
MINNEAPOLIS, MN

March 30, 1999

Curt Zimmerman, Director
Facility Management Division of OMB
600 E. Boulevard
Bismarck, ND 58505

Re: State Street Pedestrian
Access and Safety Study
UEI #98-0849

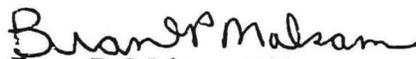
Mr. Zimmerman:

Enclosed please find the computer disk of the drawings depicting the Capitol Grounds. These drawings were developed from aerial photographs so the accuracy is not survey quality. You are free to use the drawings with this understanding.

In regards to your February 18, 1999, letter, we offer the following: The Final Study will be given to the City of Bismarck. It will be the responsibility of City Staff to oversee the implementation of recommendations within the Study. It is felt that most of the recommendations will be implemented with the reconstruction of State Street. The NDDOT is presently in the initial stages of designing State Street and construction is scheduled for 2001 through 2003. If any changes are proposed for the Capitol grounds, the NDDOT and the City of Bismarck, will need to work with the Capitol Grounds Planning Commission to secure permission. Ulteig Engineers may represent the City during this process if they so desire.

We will provide you with a final copy of the Study for your records. If you have any other questions concerning this Study, please contact us.

Sincerely,


Brant P. Malsam, P.E.

js

Enclosure

CC: Mel J. Bullinger, Bismarck City Engineer



COMMENT SHEET



PUBLIC OPEN HOUSE: STATE STREET PEDESTRIAN SAFETY AND ACCESS STUDY

NAME: (Please Print) Martin Bauer

ADDRESS: (Please Print) 3039 State Street, Bismarck, ND 58501

I wish to offer the following comments:

What do you mean by "Recommended Improvements on private property would be the responsibility of the property owner."? It's the last line under IMPLEMENTATION.

Also the last line under "How will improvements be paid for?" "All improvements on private property would be the landowner's responsibility." What kind of improvements?

Under "Who Maintains the Pedestrian Facilities? City Ordinance 10-03-03 stipulates it is the duty of the adjacent property owner to maintain sidewalks."? I have a very serious problem with that. Our State, City and County officials, their qualified Engineers and Contractors do the work and I am supposed to be responsible. The Contractors have been doing nothing but sloppy and shoddy work and getting filthy rich by overcharging. The Engineers approve it and our officials pay for it and the adjacent property owner gets assessed for it. When I said something about the contractors shoddy work at your Public Input Meeting, I was told, that not everything "can be perfect". This attitude explains why the contractors can do such sloppy, shoddy work and get away with it.

I am not against development but I want to get my money's worth. Is the job guaranteed? Are the inspectors held responsible in any way for the jobs they approve?

Return by 02/16/99 to:
Brant P. Malsam, P.E.
Ulteig Engineers, Inc.
1701 S. 12th Street
Bismarck ND 58504-6644
Fax 701/224-1163

(Continue on the Reverse Side if needed)

APPENDIX VI
ADJACENT PROPERTY OWNER MEETINGS



ULTEIG ENGINEERS, INC.

1701 SOUTH 12TH STREET
BISMARCK, ND 58504-6644

PHONE 701/258-6507
FAX 701/224-1163

PO BOX 2041
BISMARCK, ND 58502-2041

OTHER OFFICES:

FARGO, ND
MINNEAPOLIS, MN

MEMO

TO: File

FROM: Brant P. Malsam, P.E.

SUBJECT: State Street Pedestrian Safety and Access Study
UEI #98-0849

DATE: February 2, 1999

At 9:00 A.M. this date, we met with Curt Zimmerman and Loren Haid, of the State Capitol Grounds, to discuss the proposed recommendations of the State Street Pedestrian Access and Safety Study. An overview of that meeting follows:

- ▶ Presented short overview why Study is being undertaken.
 - Concerns expressed by pedestrian during previous project developments.
 - Few if any facilities in this area.
- ▶ Presented information about Input Meeting, purpose, objective, and maps of proposed recommendations.
- ▶ Immediate reaction was favorable but pointed out many items would need to be addressed.
 - Approval of Capitol Grounds Commission
 - Risk Management Involvement
 - Costs (who pays)
 - Maintenance (who does)
- ▶ Asked if we would attend Capitol Grounds Commission Meeting. Assured them we would and that possibly City Engineer would also attend.
- ▶ Encouraged them to send comments to us.





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PO BOX 2041
BISMARCK, ND 58502-2041

OTHER OFFICES:

FARGO, ND
MINNEAPOLIS, MN

MEMO

TO: File

FROM: Brant P. Malsam, P.E.

SUBJECT: State Street Pedestrian Safety and Access Study
UEI #98-0849

DATE: February 2, 1999

At 10:30 A.M. this date, we met with Ken Hoffert, of K-Mart, to discuss the proposed recommendations of the State Street Pedestrian Access and Safety Study. An overview of that meeting follows:

- ▶ Presented short overview why Study is being undertaken.
 - Concerns expressed by pedestrian during previous project developments.
 - Few if any facilities in this area.
- ▶ Presented information about Input Meeting, purpose, objective, and maps of proposed recommendations.
- ▶ Immediate reaction was favorable but pointed out many items would need to be addressed.
 - Approval of their real estate people
 - Costs (who pays)
 - Maintenance (who does)
- ▶ Encouraged them to send comments to us.





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PO BOX 2041
BISMARCK, ND 58502-2041

OTHER OFFICES:

FARGO, ND
MINNEAPOLIS, MN

MEMO

TO: File

FROM: Brant P. Malsam, P.E.

SUBJECT: State Street Pedestrian Safety and Access Study
UEI #98-0849

DATE: February 2, 1999

At 2:00 P.M. this date, we met with Principal Rita Kelly, of Century High School, to discuss the proposed recommendations of the State Street Pedestrian Access and Safety Study. An overview of that meeting follows:

- ▶ Presented short overview why Study is being undertaken.
 - Concerns expressed by pedestrian during previous project developments.
 - Few if any facilities in this area.
- ▶ Presented information about Input Meeting, purpose, objective, and maps of proposed recommendations.
- ▶ Immediate reaction was favorable. Will show drawings to others.
- ▶ Encouraged them to send comments to us.





ULTEIG ENGINEERS, INC.

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BISMARCK, ND 58502-2041

OTHER OFFICES:

FARGO, ND
MINNEAPOLIS, MN

MEMO

TO: File

FROM: Brant P. Malsam, P.E.

SUBJECT: State Street Pedestrian Safety and Access Study
UEI #98-0849

DATE: February 2, 1999

At 3:30 P.M. this date, we met with Principal Tom Hesford, of Bismarck High School, to discuss the proposed recommendations of the State Street Pedestrian Access and Safety Study. An overview of that meeting follows:

- ▶ Presented short overview why Study is being undertaken.
 - Concerns expressed by pedestrian during previous project developments.
 - Few if any facilities in this area.
- ▶ Presented information about Input Meeting, purpose, objective, and maps of proposed recommendations.
- ▶ Immediate reaction was favorable. Suggested that all future crossings of Boulevard be done at 7th Street. With new athletic field to the northeast, crossings to Capitol Grounds should be minimal.
- ▶ Encouraged them to send comments to us.





ULTEIG ENGINEERS, INC.

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FAX 701/224-1163

PO BOX 2041
BISMARCK, ND 58502-2041

OTHER OFFICES:

FARGO, ND
MINNEAPOLIS, MN

MEMO

TO: File

FROM: Brant P. Malsam, P.E.

SUBJECT: State Street Pedestrian Safety and Access Study
UEI #98-0849

DATE: February 3, 1999

At 9:30 A.M. this date, we met with Carol Cary, of Gateway Mall, to discuss the proposed recommendations of the State Street Pedestrian Access and Safety Study. An overview of that meeting follows:

- ▶ Presented short overview why Study is being undertaken.
 - Concerns expressed by pedestrian during previous project developments.
 - Few if any facilities in this area.
- ▶ Presented information about Input Meeting, purpose, objective, and maps of proposed recommendations.
- ▶ Immediate reaction was favorable. She will present drawings to Mall Owners for input.
- ▶ Encouraged them to send comments to us.



APPENDIX VII
CORRESPONDENCE FROM THE NDDOT



North Dakota Department of Transportation

West Region Office • 300 Airport Road • Bismarck, ND 58504-6005

Edward T. Schafer, Governor
Marshall W. Moore, Director

Information: (701) 328-6975

Fax: (701) 328-6913

TTY: (701) 328-4156

Website: <http://www.state.nd.us/dot/>

January 14, 1999

Mr. Brant Malsam
Ulteig Engineers, Inc.
1701 South 12th Street
Bismarck, ND 58504

Dear Brant:

Subject: Bismarck - State Street Pedestrian Safety and Access Study

We have reviewed your Study of the above referenced subject and offer the following:

1. The Department will be reconstructing State Street from 6th Street on Boulevard to 43rd Avenue North. This reconstruction is scheduled to begin in 2001 and continue through 2003.
2. It is anticipated that the basic design will be a 6-lane facility with frontage roads where appropriate.
3. The placement of sidewalks and bikeways throughout this corridor must be integrated into the future project design.
4. The Department will not want to participate in the funding of any interim sidewalks or bikeways if there is the possibility that they may have to be removed upon the future reconstruction.
5. Any pedestrian signalization or crosswalks within the future project limits must be integrated into the future project design. We suggest that this work also be "put on hold" until State Street reconstruction begins.

The Department supports any improvements that would enhance pedestrian safety and encourages advancing any improvements that would not be affected by the future reconstruction of State Street.

We appreciate the work that you have put into this Study and thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Francis G. Ziegler".

Francis G. Ziegler, P.E.
West Region Engineer

52:tru