## OFFICE OF THE CITY MANAGER DES MOINES, IOWA

## CITY COUNCIL COMMUNICATION 97-074 FEBRUARY 17, 1997 AGENDA

SUBJECT:	TYPE:	SUBMITTED BY:	
30TH/31ST STREET REALIGNMENT PROJECT (UNIVERSITY TO FOREST A VENUE)	RESOLUTION ORDINANCE RECEIVE/FILE	HAROLD E. SMITH CITY ENGINEER	

#### SYNOPSIS -

The 30th/31st Street Realignment Project consists of the reconfiguration of the 30th/31st Street intersection to eliminate the existing offset at University Avenue, and also to make improvements at the Forest Avenue intersection. On May 6, 1996, by Roll Call No. 96-1633, City Council approved an agreement with the Iowa Department of Transportation (IDOT) for \$500,000 of State Traffic Safety Funds to be applied to this project. Four alternatives were developed and presented at a public meeting on October 22, 1996. A meeting was also held on December 11, 1996 with the Drake Neighborhood Association.

A copy of staff's report is attached describing the background and possible alternatives. Staff recommends that Council approve Alternative 2 as the approved alternative, and that the Engineering Department be authorized to complete the final design and right-of-way acquisition phases of this project.

#### FISCAL IMPACT -

Alternate 2 has an estimated cost of \$1.9 million, of which \$500,000 is available from the IDOT's Traffic Safety Improvement Program. The approved 1996-97/2001-02 CIP (page 336) provides \$50,000 for project design. In future years of the CIP, \$800,000 is programmed. This amount will be adjusted as the project design is completed. Drake University has indicated that they will provide the necessary right-of-way that they own at no cost to the City, which is estimated to be \$500,000.

#### RECOMMENDATION -

Approve Alternate 2 as the selected alternative and authorize the Engineering Department to complete the final design.

#### BACKGROUND -

In 1996, the City Traffic Engineering staff prepared a report for distribution at the public meeting which was held in October 1996. Attached is a copy of this report, entitled the "30th/31st Street Connector Project at University Avenue." It includes the history of this project, the submittal and approval process of the Traffic Safety Funds, and the development of the four alternatives that were analyzed and presented to the public.

At the public meeting on October 22, 1996, most of the concern was in the area of 31st Street between I-235 and University Avenue, which is outside the limits of this project. A copy of the discussion summary from this meeting is attached. By letter dated October 14, 1996, Drake University

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recommended that Alternate 2 be approved and indicated their willingness to participate in a portion of the right-of-way costs (see attached letter).

On December 11, 1996, City staff met with the Drake Neighborhood Association. At that meeting, their Board voted to support Alternate 2, with east/west traffic provisions made on 31st Street at either Kingman Boulevard or Cottage Grove Avenue to be done at the same time. Staff has conducted a traffic study in this area and recommends that a traffic signal be installed at the intersection of 31st Street and Kingman Boulevard, with a portion of the funding to be requested from the IDOT's Traffic Safety Improvement Program. A separate roll call is on the agenda addressing this request.

This item was reviewed by the Traffic Safety Committee and approved at their February 11, 1997, meeting.

## 30th/31st Street Connector Project at University Avenue

## City of Des Moines, Traffic and Transportation Department October, 1996

[This summary was prepared by the City of Des Moines Traffic and Transportation Department for presentation and distribution at the Corridor Public Informational meeting on October 22, 1996 at the Olmsted Center, Drake University campus.]

## · Existing Conditions and Project Justification

The 30th/31st Street corridor is an important north-south arterial street in the western area of Des Moines, traversing from south of Grand Avenue on the south to the north city limits and beyond via Lower Beaver Road on the north. Within the proposed project area, it is a two-lane facility, 24 feet wide, and has traffic volumes ranging from 6400 vehicles per day near Clark Avenue to 12,000 vehicles per day south of University Avenue. The estimated year 2020 traffic projections for this corridor are approximately 15,000 vehicles per day.

The proposed I-235 improvements will change the major access points from the freeway to the Drake University area. Currently, eastbound traffic utilizes the 35th Street exit, and westbound traffic uses the Cottage Grove exit. The proposed I-235 facility identifies that the eastbound 35th Street exit will be removed and relocated to the existing interchange at 31st Street. The Cottage Grove exit westbound will not provide as direct access to the area as currently exists. Hence the most direct access to from I-235 both eastbound and westbound will be via the 30th / 31st Street Corridor.

Between University Avenue and Forest Avenue, 30th Street is the western roadway boundary along the present Drake University campus. Traffic signals are located at the 31st/University and 30th/Forest intersections. The intersection of 30th/University is not signalized.

Currently, at University Avenue there is a 250 foot offset, or jog, between 30th Street and 31st Street. This offset dates back to when the original sections were laid out, and University Avenue was identified as a Survey Correction Line. Because of the survey correction, there are many offset intersections in the north-south streets that cross University Avenue. These offset intersections create severe difficulty in providing proper signalization, and because of this the 30th/University intersection is not currently signalized. Left turns from 30th Street onto University are difficult, and traffic southbound on 30th desiring to continue onto 31st Street toward I-235 must turn right at University and immediately cross two lanes of traffic to make their left turn onto 31st Street.

Because of the discontinuity in the north-south street system in this area west of Drake University, a considerable amount of traffic currently diverts from the major street network, utilizing several local residential streets, such as 32nd Street and 34th Street, to travel through the area. This is not desirable from a neighborhood standpoint, and also results in a number of the intersections experiencing an accident rate that is higher than normal.

### History

The concept for a connection to provide continuity for through traffic along the 30th/31st Street corridor has been under consideration for over 70 years. A "Major Streets Plan" for Des Moines completed in 1925 defined a connection from 30th/Forest southeast to 28th/University (through Drake University's existing campus) to provide better access from the northwest area into the downtown. Another study conducted by the City Plan Commission in 1939 showed a similar route that connected to 29th/University from the 30th/Forest area.

In 1963, with the advent of the freeway network and the proposed interchange on I-235 at 31st Street, the long-range (1980) General Plan prepared by the City of Des Moines identified a realignment of this north-south corridor to approximately 33rd Street in the area between University and Clark Avenues that provided a connection to Beaver Avenue.

In 1968, a document prepared by Drake University and reviewed by the City of Des Moines entitled the "Drake Plan for Access, Parking, and Circulation" identified that the 30/31st Street Corridor should be reconstructed to provide a major arterial route along the western side of their campus.

In 1974, the Year 1990 Des Moines Urbanized Area Transportation Plan as prepared by the Central Iowa Regional Association of Local Governments identified a straightened alignment of the 30th/31st Street corridor. In 1977, The Des Moines City Council again reviewed the possible realignment of 30/31st Streets and concurred in an alignment similar to the currently proposed Alternate Four.

More recently, the Year 2000 Transportation Plan (adopted in 1984) and the Year 2020 Transportation Plan (adopted in 1994) as developed by the Des Moines Area Metropolitan Planning Organization identified the 30/31st corridor for a realignment project.

This project is identified in the current "Recommended City of Des Moines 1996-97/2001-02 Capital Improvements Program," with construction proposed for 1998.

## 1993 Traffic Safety Fund Submittal

Following continuing discussions with Drake University, in 1993 the City of Des Moines submitted an application to the Iowa Department of Transportation for \$500,000 to apply towards an improvement of the 30th/31st Street corridor. The funds were requested as part of

the Iowa DOT's Traffic Safety Improvement Program, which is a statewide competitive program to improve high-accident locations by providing up to \$500,000 toward each approved project.

The application reviewed the accidents occurring within a study area that was bounded by Forest Avenue, 30th Street, University Avenue, and 34th Street. Within this area, from 1989 through 1992 there were an average of 39 intersection accidents per year resulting in 13 injuries per year. It was estimated that by constructing the proposed connector, the number of accidents and resulting injuries could be reduced by 25 percent over a similar 3 year period. [More recently, in reviewing the accidents between 1993-1995, there have been an average of 37 accidents per year resulting in 10 injuries per year.]

The city's application identified two possible realignment alternatives. Both involved the construction of a two-lane facility with left turn lanes added at the major intersections. The first would utilize 31st Street between University and Forest Avenues, then transition back to 30th Street between Forest and Clark (similar to Alternate Four). The second alternate would realign 31st Street over to 30th Street at the University Avenue intersection (similar to Alternate Two). Both proposals would provide continuity of the 30th/31st Street corridor, with left-turn lanes on the north/south approaches to University and Forest Avenues. No changes would be made in the width of University Avenue, which has four through lanes plus a left-turn lane, or Forest Avenue, which is four lanes wide without turn lanes.

In November, 1993, the Iowa Department of Transportation approved \$500,000 in State funds to apply toward this project, and in May, 1996, an agreement was approved between the City of Des Moines and the Iowa DOT for this project.

#### · Review of the four alternates

Over the past two years, two additional variations of the original alternatives were developed and reviewed, which would also provide the 30th/31st Street continuity but with different impacts on the adjacent properties. All four alternatives consist of a 2-lane facility with added left-turn lanes at the major intersections. Each alternative is further described below:

#### Alternate One:

This alternative would realign 31st Street south of University toward the east beginning at the alley south of Brattleboro Avenue and would connect to 30th Street approximately 400 feet north of University Avenue. 30th Street would be widened at Forest Avenue to provide north/south left turn lanes. Parking insets for the Drake University housing complex would be constructed on the east side of 30th Street between University and Forest Avenues. Short sections of existing 31st Street south of University and 30th Street north of University would be eliminated. A total of 4 residences would be displaced as part of this alternative, along with a portion of Drake's parking lot east of 31st Street between Brattleboro and University Avenues. The estimated project cost for Alternate One is \$1.4 million.

#### Alternate Two

This alternative would shift 31st Street to the east beginning at University Avenue, connecting to 30th Street at Carpenter Avenue. 30th Street would be widened at Forest to provide north/south left turn lanes. Parking insets for the Drake University housing complex would be constructed on the east side of 30th Street between University and Forest Avenues. A short section of 30th Street north of University Avenue would be eliminated. South of Carpenter Avenue, existing 31st Street would become a cul-de-sac street. A total of 8 residences and 1 commercial building would be displaced. The estimated project cost for Alternate Two is \$1.9 million.

#### Alternate Three

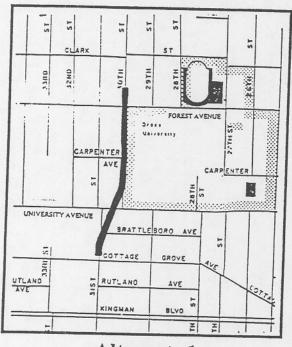
This alternate would shift 31st Street toward the west beginning at University Avenue, connecting to 31st Street approximately 350 feet north of University. Between Carpenter and Forest Avenues, a new roadway would be constructed connecting 31st Street to 30th Street. 30th Street would be widened at Forest to provide north/south left turn lanes. South of Forest Avenue, 31st Street would become a cul-de-sac street. A total of 14 residences and 1 commercial building would be displaced. The estimated project cost for Alternate Three is \$2.25 million.

#### Alternate Four

This alternate would shift 31st Street toward the west beginning at University Avenue, connecting to 31st Street approximately 350 feet north of University. It would follow the 31st Street alignment to Forest Avenue. Between Forest Avenue and Clark Street, a new roadway would be constructed connecting 31st Street to 30th Street. Existing 30th Street north of Forest Avenue and 31st Street south of Clark Street would become cul-de-sac streets. 14 residences and 1 commercial building would be displaced. The estimated project cost for Alternate Four is \$2.4 million.

Because this plan provides the shortest-distance connection for traffic from the Beaverdale area to I-235, it would provide the most positive impacts in removing the through traffic from 34th Street and 32nd Street in the study area.

# 30th / 31st Street Connector Alternatives



CARPENTER

CARPENTER

AVE

COTTAGE

GROVE

STATTLEBORO AVE

STATTLEBORO AV

Alternate 1

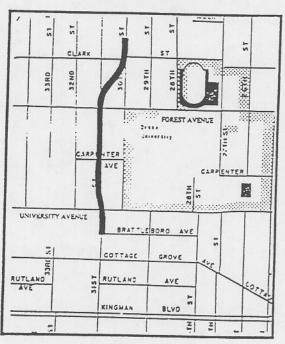
CLARK

ST

OR ST

Alternate 3

Alternate 2



Alternate 4

## 30th/31st Street Connector at University Avenue Corridor Public Meeting October 22, 1996

## City of Des Moines Traffic and Transportation Department

On Tuesday evening, October 22, 1996, the City of Des Moines held a Corridor Public Information Meeting for the 30th/31st Street Connector Project at University Avenue. The meeting was held at the Olmsted Center on the Drake University campus. The meeting began just after 7:00 PM, with approximately 35 people in attendance. A copy of the sign-in sheet is attached.

Gary Fox, Assistant Director of the Traffic and Transportation Department, reviewed the background and history of the proposed project, and presented a description of each of the four different alternatives that are under consideration. The summary of this presentation is attached, and was also available at the meeting. The presentation was followed by statements and questions from the audience. Below is a summary of these concerns and questions:

- 1. Catherine Dietz-Kilen representing the Drake Neighborhood association stated that their group did not receive the notice of the meeting in time to allow them to review the alternatives and provide comments. Because the neighborhood group meets only once a month, they need more than a month's advance notice to assure they have adequate time to review the information and consider it at a meeting. The City stated that they had tried to provide adequate advance notice (two weeks) of the meeting, and would be willing to attend an upcoming neighborhood association meeting to discuss the alternatives and get input from the neighborhood group.
- 2. Al Cubbage representing Drake University stated that Alternate 1 would take a portion of Drake's parking lot south of University Avenue and also would keep the existing portion of 30th very close to Goodwin-Kirk residence hall, which is not desirable. Alternates 3 and 4 present problems with Drake's future plans. They prefer Alternate 2 (see Drake's letter dated October 14, 1996).
- 3. John Hochne, 673 31st Street, was concerned that the intersection of 31st and Woodland would have increased traffic, and that this location currently has accident problems. Also, 31st Street south of I-235 has some steep grades and Callanan Middle School is close.
- 4. Gary Barr, 1072 31st Street, stated that 31st Street is already a speedway, and that there are accidents at the intersections of 31st at Cottage Grove and at Kingman Blvd. He is concerned that the additional traffic, especially truck traffic, will cause additional problems. [A summary of the reported accidents on 31st Street from University Avenue to Grand Avenue for 1993-95 is attached.]

- 5. Luwon Buckner, 1116 31st Street, indicated the same concerns of speeding and accidents on 31st Street between University Avenue and I-235, and that the two lanes on 31st Street are not adequate. The City should widen 31st Street now to accommodate the future needs. Gary Fox responded that the main purpose of the meeting is to consider the four alternatives for connecting 31st Street with 30th Street and the impacts of these alternatives, generally between University and Forest Avenues. South of University Avenue, each of the alternatives tie into 31st Street on its existing alignment, and would not change the traffic conditions from what currently exists. The different alternatives do have different impacts on traffic volumes on various streets between University and Forest, and that is what we should consider.
- 6. Ray Thode has a business at 3015 University which will not be taken. He stated that using 31st Street as an access to Drake University will be better for traffic. He preferred Alternate 1 which would not take any businesses. There is a need for additional parking in the area for the businesses. He also stated that the proposed insets on 31st Street for loading and unloading for the Drake dormitories would be very necessary.
- 7. The residents at 938-31st Street were concerned about speeding and additional traffic on 31st Street. Jim Thompson indicated that 31st Street now carries 12,000 vehicles per day in this area, which is expected to increase to 15,000 by the year 2020. The increase is primarily due to the closure of the 35th Street exit ramp from I-235 which will be moved to 31st Street. Mr. Thompson stated that the city would propose that 31st Street be eventually widened to a three-lane facility, not to four lanes, and that we should begin planning for this roadway by planting new trees to take the place of those that will need to be removed by the future widening.
- 8. Jay Wangerin of Dick's Pharmacy, 31st and Forest, asked if signals could be placed at this intersection without taking part of his building. Jim Thompson responded that signals could be placed without taking part of the building. It is proposed that the widening of 31st Street at Forest for a left-turn lane would be to the west side of the street, which would allow sufficient room on the east side of the street for placing the signal pole.
- 9. The city was asked if much consideration was given to leave the existing street pattern alone and to install/alter the traffic signals. Gary Fox stated that the detailed review of the traffic patterns and traffic accidents in the area indicated that the installation of signals at 34th and Forest or other locations might address some of the concerns, but would not provide an adequate nor comprehensive solution to the cut-through traffic and the accident problems.

10. A resident on 31st north of Forest asked what would be done with the alleys on Alternative 4; would they be made dead end? Gary Fox responded that the City had not studied that issue, but would give it consideration if Alternative 4 is selected for further development.

Following the question and answer session, the meeting was adjourned at approximately 9:00 PM. The City will review the comments made at the meeting, and will also meet with the Drake Neighborhood Association to receive additional input from them. Once the preferred Alternative is selected, the residents in the area and the participants of the corridor public meeting will be notified of this decision.

Attachments

## PUBLIC INFORMATION MELING

## 30th/31st STREET CONNECTOR IMPROVEMENT

W. O. No. 0206-96-008 Project No. CS-TSF-1945(9)—85-77

### ATTENDANCE

Olmsted Center, Drake University Campus 29th Street and University Avenue Tuesday, October 22, 1996 -- 7:00 p.m.

NO. 1. 2. 3.	Therenez Elverchinen A. CNE SHAD	ADDRESS	DUONE
2.	Flanner Worthman H. ONE SHAD		PHONE
	1 1 1 1	3021 - UNIVERSITY	2743492
	Michael Bryens H-ONE Shade	3321- Crocker	255-0086
4.	Kate Wilz University Book Store	3003 Forest Ave.	274-3401
5. h	GAR, B. BAHR	1072 3155 50	255-3723
6.	atherine, Jin & Nora Dietz-Kilen	2909 Cottage grove	277-776/
1	LYNA CHORMLY & GREGORY HUFF	938 31st ST	279-3384
7.	Jims Kuru Baker	3,16 Forest	279-1019
8.	Ray Thedr	3015 University	
9.	Jahn Hochne	673 3/st st	283799Y
10	Jim Schutz PECCIS COM	3020 FOREIT ALE	322.8831
11.	Finny Wargerin, Dick Pharmacy	4532-70 PL	255-7676
12.	tay Wanger Duck planen	4532-704 Pl. Wbands	251-7676
13.	alestuat /	1426-36 PSM	755-556
14.	Ken and Draw Munkel	(1439 - 315F) 1546 46+4 ST	279-4957
15.	Tony Schmitt	2406 Kingman	255-9295
16.	nike + Breky Jungst	1430 3074	279 [1004]
17.	Mancy Jeige	2704 Moyen	277-6350
18.	Taul Arecelly	2900 FOREST AVE	271-3294
19.	Andy Sanilson	305 Traffic a Trans Saffy	2844960
20.	Al Children	Drako	271215
	MR & mRS Robert Hoston	3105 HSTh Place	276-4785
	IDNA J. BULLOCK		277 804 6
23	Suvon Buckner	11/6 3/5+	255-78-26
	D CONLINE	682 37457	255-3044
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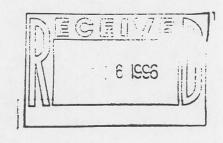
31st Street Accident Data								
Location	1993	1994	1995	Average				
University	10	9	8	9				
Brattleboro	0	0	. 0	0				
Cottage Grove	12	6	6	8				
Rutland	1	0	0	0				
Kingman	3	5	8	5				
School	3	2	1	2				
lola	1	1	1	1				
Crocker	1	1	1	1				
I-235	7	2	0	3				
Center	2	2	10	1				
Pleasant	0	0	1	0				
Woodland	6	3	4	4				
High	0	0	2	1				
ngersoll	17	10	12	13				
Grand	17	14	13	15				
500 Block	0	0	1	0				
500 Block	2	0	0	1				
900 Block	0	0	1	0				
1000 Block	2	0	2	1				
100 Block	3	1	0	1				
Total	87	56	61	68				



BUSINESS AND FINANCE OFFICE OF THE VICE PRESIDENT

October 14, 1996

Mr. Jim Thompson, Director ·· City of Des Moines
Traffic and Transportation
602 E. First
Des Moines, IA 50309



Dear Mr. Thompson:

On behalf of Drake University, its Board of Governors and President Ferrari, I wish to express the University's appreciation for the opportunity to share its position regarding the proposed 30th/31st Street Connector. Drake is happy to be the forum for the Informational Meeting on October 22, 1996, at which this important issue will be reviewed. This decision is viewed as being of critical importance to the University's Campus Master Plan and the allocation of resources associated with it.

During the past year, this proposal has been reviewed in detail by the Buildings and Grounds Committee and the Board of Governors. Your presentation, Jim, to the Buildings and Grounds Committee at its meeting last December provided a valuable overview of the development of the four alternatives being considered and permitted the University to fully weigh the implications of each. Based on that review and deliberation, the Committee recommended and the Board of Governors subsequently approved at its meeting on January 20th, a resolution endorsing Alternate 2.

For the benefit of the record in this matter, I'll summarize the rationale for this conclusion:

- 1. Next to Alternate 1, it is the least costly among the alternatives;
- 2. Unlike Alternate 1, it is not disruptive to the large, newly expanded and well-used parking lot at the southeast corner of 31st and University. Alternate 1 would require the University to consider creating new parking areas in the areas adjacent to this parking area that now have residential uses;

3. Unlike Alternate 1, it directs the traffic away from the University's largest residence hall, Goodwin-Kirk at the northeast corner of 30th and University. This residence is very near the current right-of-way for 30th Street; increased traffic in the area immediately adjacent to this residence would increase risk to students;

4. Unlike Alternate 3, Alternate 2 would have only a minor impact on University property between University and Forest. The impact to the SE corner of the Drake parking lot in this area would be minor;

Mr. Jim Thompson City of Des Moines October 14, 1996 Page Two

- 5. Unlike Alternate 3 or 4, Alternate 2 provides the optimum opportunities to develop the area between 30th and 32nd Streets for uses supporting the campus community. In addition, Alternates 3 and 4 do not eliminate the needs for the maintenance of 30th Street so the residence halls can receive security and fire protection. Further, access to the service dock just north of 30th Street and Carpenter Avenue must be maintained to bring in foodstuffs for the dining rooms, other supplies, and as a staging area for the nearly 800 Meals-on-Wheels that leave that area every day;
- 6. Unlike Alternate 3 or 4, Alternate 2 retains the potential to take advantage of the topography in the area to develop a pedestrian overpass at Carpenter and 30th Street.
- 7. Finally, by retaining basic current flow of traffic north of Carpenter, Alternate 2 would retain and enhance the visibility and access to the Campus from the west, south, and north.

Please know the University is ready to work with the Traffic and Transportation Department to refine a plan corresponding to Alternate 2 that better meets the traffic and financial needs of the City, the concerns of the neighborhood, and the University issues described above. The University would like to work with the City to reduce the costs of the Alternate 2 associated with the Drake Right-of-Way. Drake is willing to do this to avoid the need to construct replacement parking south of University now devoted to residential purposes. If all of the "Drake Right-Of-Way" costs were to be absorbed by Drake, the nominal cost difference between Alternate 1 and Alternate 2 drops to just over \$30,000.

Again, on behalf of the University, I appreciate the opportunity to share our views regarding this important decision.

Sincerely,

Patrick D. Cavanaugh

Vice President

Business and Finance