



**CITY OF URBANA, ILLINOIS  
DEPARTMENT OF PUBLIC WORKS**

*ADMINISTRATION*

**M E M O R A N D U M**

**TO:** Bruce K. Walden, Chief Administrative Officer

**FROM:** William R. Gray, P. E., Public Works Director

**DATE:** December 6, 2001

**RE:** **Green Street and Wright Street Intersection Improvements**

**INTRODUCTION**

The City of Champaign is moving forward with streetscape improvements to Green Street, between Fourth Street and Wright Street. (A map showing this was distributed at the October 1 Council Meeting.) This work has been in the planning stages for the last couple of years. The City of Champaign plans to provide streetscape improvements throughout campus town. Part of the proposed improvements along Green Street involves the intersection of Wright Street, for which the east leg of the intersection is in Urbana.

This coming Monday, December 10, at the Committee of the Whole Meeting, Champaign's consultant, Clark Dietz, Inc., along with Champaign City staff and Champaign-Urbana MTD representatives will be presenting the proposed traffic circulation plan in this portion of the University District, along with the proposed improvements.

It is anticipated that the City Council will need to approve an intergovernmental agreement at a future meeting with the City of Champaign to allow said work to commence. It has not been determined at this time what cost-share the City of Urbana will have for this improvement, if any. Improvements, as proposed, will not lock the City of Urbana into any particular lane configuration or circulation on Green Street to the east. For your reference, attached is the existing and proposed circulation plan and a draft interim report.

The CATS mission statement is, ". . .to better accommodate pedestrian, bicycle, transit, and vehicle movements in a more user-friendly environment." Keeping this in mind, and after reviewing the traffic circulation in Champaign and reviewing this proposed improvement, staff is supportive of what is planned.

WRG:kf

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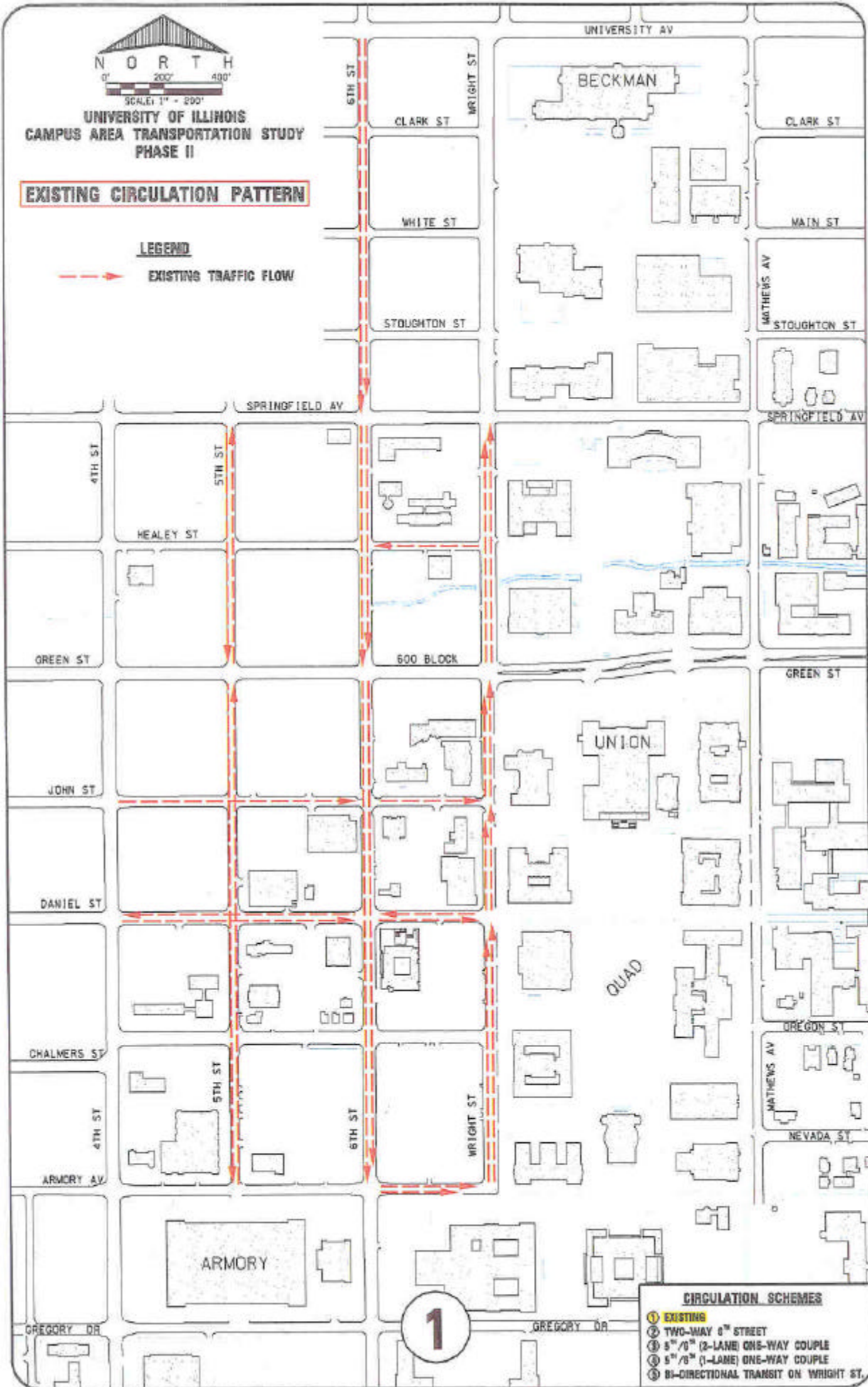


UNIVERSITY OF ILLINOIS  
CAMPUS AREA TRANSPORTATION STUDY  
PHASE II

**EXISTING CIRCULATION PATTERN**

**LEGEND**

 EXISTING TRAFFIC FLOW



**CIRCULATION SCHEMES**

- ① EXISTING
- ② TWO-WAY 8<sup>TH</sup> STREET
- ③ 5<sup>TH</sup>/6<sup>TH</sup> (2-LANE) ONE-WAY COUPLE
- ④ 5<sup>TH</sup>/6<sup>TH</sup> (1-LANE) ONE-WAY COUPLE
- ⑤ BI-DIRECTIONAL TRANSIT ON WRIGHT ST.

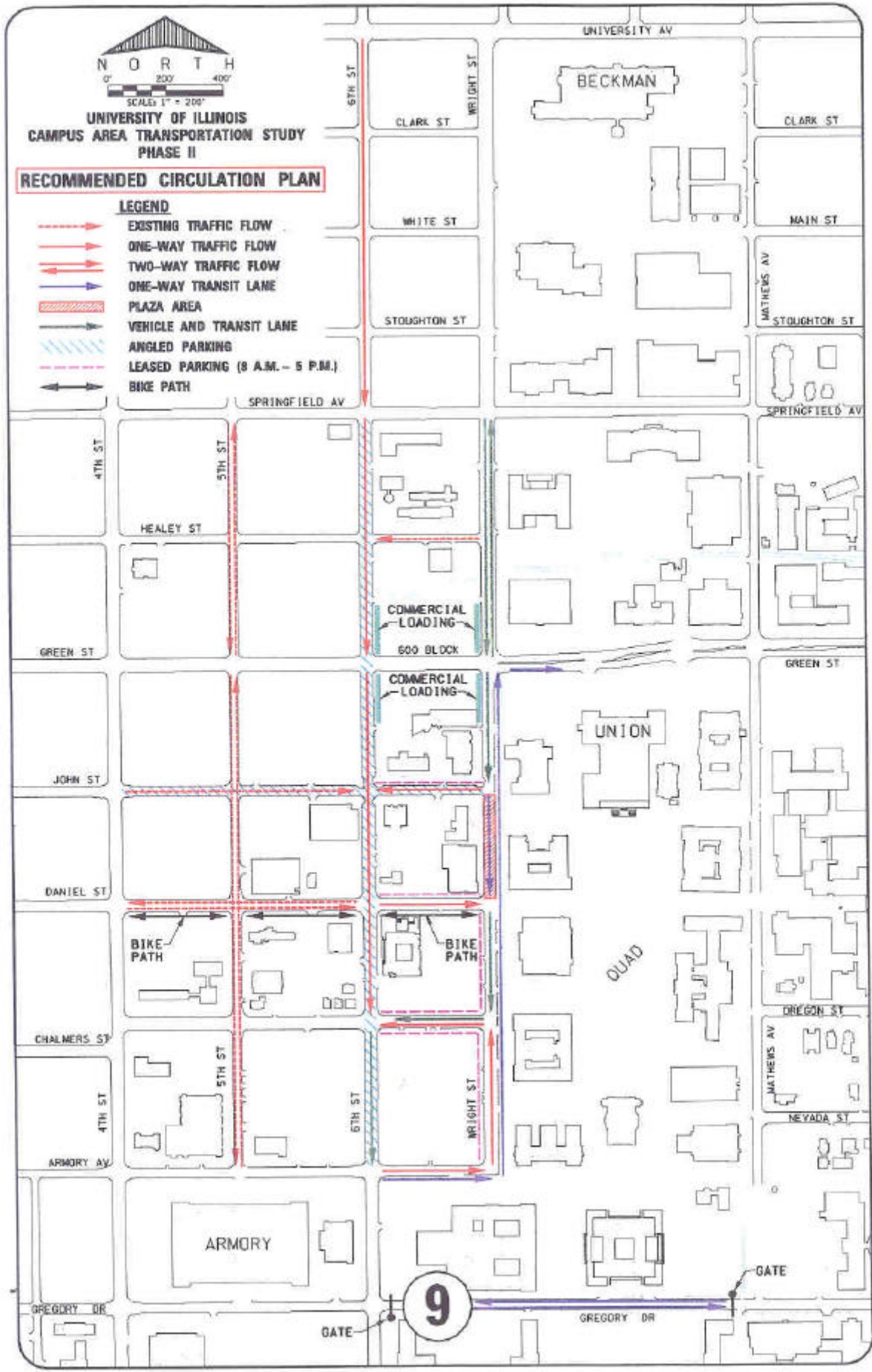


UNIVERSITY OF ILLINOIS  
CAMPUS AREA TRANSPORTATION STUDY  
PHASE II

**RECOMMENDED CIRCULATION PLAN**

**LEGEND**

- EXISTING TRAFFIC FLOW
- ONE-WAY TRAFFIC FLOW
- TWO-WAY TRAFFIC FLOW
- ONE-WAY TRANSIT LANE
- PLAZA AREA
- VEHICLE AND TRANSIT LANE
- ANGLED PARKING
- LEASED PARKING (8 A.M. - 5 P.M.)
- BIKE PATH



# **Interim Report on Campus Area Transportation Study, Phase II From the Technical Advisory Committee Prepared September 2001**

## **A. Introduction**

This report is a mid-project update and status report of the Campus Area Transportation Study Phase II (CATS II). The City of Champaign, City of Urbana, University of Illinois and the Champaign-Urbana Mass Transit District fund this project. In addition, the Illinois Department of Transportation has provided partial funding through a planning grant. The four local agencies have entered into an intergovernmental agreement for CATS II, and are referred to as the Project Partners. Main topics in this mid-term report include:

- Brief project history
- Overview of progress made on CATS II to date.
- Public participation summary
- Project schedule update
- Discussion of the project budget

## **B. Brief Project History**

As a reminder, CATS Phase I was a planning study. Because of this, it was not intended to provide detailed recommendations on the design of recommended improvements. Instead, this study developed an overall philosophy and general recommendations for addressing identified transportation problems in the area. Before many of these recommendations could be implemented, additional design work was needed.

CATS Phase 2 is a conceptual design study, which is jointly conducted and paid for by the City of Champaign, University of Illinois, City of Urbana, and the Mass Transit District. The cost of this study was originally estimated at \$150,000 with the cost share divided on the same basis as the original study (Champaign and UI, 30% each and Urbana and MTD, 20% each). An RFP was issued in early 2000 and Clark Dietz, Inc., (CDI) was selected after interviews. Based on the scope of services proposed for Phase 2, the contract negotiated with CDI has a cost of \$275,000. Staff believes the amount accurately reflected what was anticipated to be necessary to carry out the proposed scope.

Originally, the four agencies proposed to divide the costs between them as follows:

- Champaign - \$70,353
- University - \$70,353
- MTD - \$55,000
- Urbana - \$30,000

The study would complete the following tasks:

- Confirm that each recommended change, when implemented, will contribute to improved traffic circulation.
- Confirm the appropriate phasing of the recommendations.
- Establish design standards that will ensure consistent design of the projects when they are implemented by different agencies.
- Develop more accurate cost estimates, and proposed responsibility for implementation and cost sharing on each recommendation.

Campustown Infrastructure and Streetscape Project (CTISS) – The RFP for this project was issued at the same time as the CATS Phase II RFP and consultant interviews were conducted at the same time. This was done because of the need to coordinate these two projects. The CTISS project began in June. The CATS Phase II project was delayed while funding issues were resolved. The CTISS project design is intended to implement the recommendations of CATS. This will allow the final design of streetscape improvements for Campustown to be consistent with the CATS recommendations.

### **C. Overview of Progress Made on CATS II to Date.**

1. Recommended Circulation Plan, Alternative 9. The attached circulation pattern for Campustown has permitted Clark Dietz, Inc. to proceed with geometric analysis of the changes and produce workable geometric designs for the proposed improvements (*See Attachment A*). This circulation pattern is the result of a circulation evaluation matrix and a public charette.
2. Study Update. The Consultants for CATS II, Clark Dietz Incorporated (CDI) developed a circulation evaluation matrix wherein they weighed and cross-tabulated various street segments based on CATS goals and priorities. The circulation evaluation matrix was designed to rank highest the circulation patterns that are pedestrian and bicycle friendly, with transit and then private vehicles weighed as lower priorities as stated in CATS. The resulting circulation pattern surfaced after careful and thorough review of 27 potential scenarios. These scenarios were narrowed to the top 5 for discussion at a public workshop held on April 4, 2001 (and as further detailed in the Appendix A). Nearly 100 interested citizens participated in this event.

The workshop focused in the Champaign portion of the study for two reasons: it is the only place where circulation changes were recommended by CATS I; and answers were needed in this area to keep the streetscape project on schedule. Geometric changes will be recommended throughout the area, but the circulation pattern needed to be established before the geometric design can proceed.

The two remaining design issues, Matthews Avenue changes and possible extra parking on Green Street are currently being explored in CATS II.

3. Proposed Circulation Pattern. The following is a street-by-street description of the proposed changes to the existing circulation:
  - a. Sixth Street. Sixth Street will be reduced to a one way, one-lane southbound street from University to Armory with angled parking on one side. The parking lot entrance/exit

booth for Lot J will be changed to Healey Street. No northbound couple will be needed for Sixth because Fifth and Fourth Streets will provide adequate northbound capacity. Staff wanted to avoid the need for a traffic signal at Fifth Street and Green Street.

- b. Wright Street. This street is being considered for two-way transit. This would allow the Mass Transit District (MTD) to remove buses from Green Street and Sixth Street to eliminate buses from an area where the Technical Advisory Committee is trying to improve the pedestrian environment. This provides MTD with a primary artery of transit vehicles versus their existing various smaller transit routes. This also paves the way for future light rail on Wright Street for the MTD through campus, as the Wright street corridor would follow the same route. MTD would use White, Wright and Daniel Streets as alternative bus routes. This would significantly reduce the total traffic volumes on Wright Street approximately 80%, by minimizing private automobiles.
- c. Transit and authorized vehicles only will be allowed into the transit mall between John and Daniel since it would only permit width for two-way transit but no parking of any type.
- d. Farther south, there will be vehicles reintroduced to Wright Street as Daniel will be one way Eastbound. From Daniel to Chalmers along Wright, leased parking is proposed.
- e. At Chalmers, transit vehicles will turn west onto Chalmers to exit Wright Street and back onto Sixth Street southbound. Two large buses turning in opposite directions at Armory Drive require more space than is available at the Wright/Armory intersection and there would be significant impacts in that area. However, there will be vehicle access allowed Northbound from Armory and turning west on Chalmers because there is metered parking and a church in the northwest quadrant and vehicles must be allowed to access it.
- f. North of Green along Wright, if bus traffic is moved off of Sixth & Green, two-way transit on Wright will be necessary. Buses currently using Sixth would be moved over to Wright Street allowing for better service to the pedestrians needing to get to the quad area. Essentially, this will bring pedestrians closer to the quad area, which is where they need to be, and would facilitate changing Sixth Street to a one-way, one-lane street. This would make it safer for pedestrians and help solve the traffic jams caused by buses stopping and halting traffic, as is currently the case at Sixth and Green. Also, this allows for angled parking on Sixth Street and will facilitate a well streetscaped area.
- g. The traffic volumes on Wright Street will be reduced by combining managed parking, restricted use, and a transit corridor; allowing traffic on Wright to function in a totally different manner. The consultants project that there will be an 80% reduction in traffic volumes and fewer points of conflict on Wright because of the leased parking and transit mall; probably about 1/5 or 1/4 of current traffic volumes along Wright street.
- h. Wright Street Leased Parking – The leased parking is depicted by a pink dashed line in *Attachment A* from Sixth to Wright along John, Daniel, and Chalmers Streets and on Wright Street from Daniel to Armory. Essentially, the only vehicles needing to go to Wright Street will be parking from 8 a.m. – 5 p.m., or dropping off/picking someone up. In a southbound direction from Green to Chalmers, some private traffic must mix with transit because there are private properties on Wright Street that will need vehicular

access from Wright Street. There will be far fewer vehicles overall on this street in spite of the addition of southbound transit traffic on this street.

- i. The bike path is proposed for the south side of Daniel Street between Fourth and Wright because it ties into the bike path that crosses the quad and ties in well to points east in Urbana.
- j. John Street –John Street will be reversed to a one way, one-lane Westbound street from Wright to Sixth Streets with angled parking on one side. Changing the entry location for the parking deck at Sixth and John was not possible, so reversing John Street will not allow traffic into the pedestrian-heavy area on Wright Street.
- k. Commercial Loading Zones immediately north and south of Green Street along Sixth & Wright will alleviate much of the traffic congestion in that area. These zones will be 24-hour commercial loading zones, requiring commercial plates on vehicles parked in the zone.
- l. Daniel Street – Daniel Street will be a one way, one lane Eastbound street from Sixth to Wright.

#### **D. Public Participation**

Extensive involvement and input has occurred throughout the Campustown redevelopment process and the CATS Phase II. In particular, merchants, property owners, University students/faculty/staff, and Campustown 2000 all contributed to the CATS Phase II at a November 29, 2000 Community Meeting. This meeting launched the CATS Phase II project and walked participants through the project process and introduced all the parties involved. There were 43 participants attending this meeting.

On April 4, 2001, the Technical Advisory Committee hosted a Public Input and Education Charette to discuss elements of traffic circulation so that participants could assist with developing a traffic circulation plan that functions well and is user friendly. Eighty-four participants joined this exercise and gave key *user* input to the circulation plans.

On May 3, 2001, the Campustown Infrastructure and Streetscape Project Consultants held a public workshop to discuss conceptual designs, design alternatives, and cost estimates for that project. The CATS Phase II circulation plan was presented as a work in progress as many of the recommended elements from the April 4<sup>th</sup> Charette had not yet been resolved. Eighty participants came out to this public workshop and called for a timeless and unique style for Campustown that is not overdone, but rather simple, clean, and uses good straight lines. The consultants took direction from the community's vision for Campustown at that workshop and planned to exhibit some matching streetscape prototypes at the Open House on August 8, 2001.

On May 15, 2001, members of the TAC were invited by Vice-Chancellor Charles Colbert to a University of Illinois Faculty Senate Committee of Operations meeting to brief them and take input on the proposed CATS II circulation plan. The committee was very critical of the entire notion of CATS II. Committee members made highly critical remarks about the incompetence of the CATS I consultants, Bucher, Willis and Ratliff, and indicated that the results of CATS I were flawed. Many implied that any work done as a follow up in CATS II would be flawed as

well. One professor of mathematics was incensed that his opinion was not sought out. As the TAC members present tried to outline the number of public information meetings where he could have given his input, he was outraged and rebutted that he did not need to go to the meetings to give his input and that we should have gone to him. He objected to the lack of bike trails and proposed two-way transit on Wright Street. Another professor asked where the circulation plan came from, as far as he could tell it “just dropped out of the sky”. He correctly noted there was no analysis attached to the circulation plan presented to them, no background, no explanation of how it was developed. When the TAC members tried to explain some of these questions and talked about the 27 different alternatives analyzed using the objective measures, the committee wanted to see the measures and test whether or not they were relevant.

It was the first negative response that the TAC had received to the CATS II project and the TAC members present offered to provide the committee with the decision making matrix of all 27 alternatives analyzed and a summary of the decision making process.

On August 8, 2001 the Campustown Infrastructure and Streetscape Project and the CATS Phase II Project joined forces to host an Open House for the public to come in and see how the CATS II implementation would merge with the Infrastructure and Streetscape project in Champaign. The Open House was planned to be an interactive Open House in which participants were able to see some possible light fixtures for Campustown, photo realistic images of Green and Sixth Streets “after” the infrastructure/streetscape improvements, etc. Nearly 40 participants came out to the Open House and gave constructive feedback on the projects. The results from this Open House will be compiled into a Final Report for the Campustown Infrastructure and Streetscape Project and a proposed final design will be presented at a Public Meeting on September 12, 2001.

As support and on-going public information, the TAC has maintained a Web Page to provide updates regarding the study process and all meeting materials have been posted to the site. The TAC also established an E-mail address to provide updates regarding the study process for individuals seeking specific answers regarding the project.

#### **E. Schedule Update**

The analysis of circulation alternatives including two-way Wright Street transit operations summarized in Appendix A took four months of additional work by both Clark Dietz staff and the Technical Advisory Committee. This impacted the planned schedule for completion of CATS II. The Technical Advisory Committee has arranged to meet for weekly progress meetings on CATS II developments with Clark Dietz Staff to avoid any further scheduling impacts. The CATS II project carries a very dynamic scope of work and the TAC recognizes that the remaining scope of work is subject to change. Hence, the timetable listed below assumes that the project proceed with the original scope of work outlined in the CATS II contract. All efforts are being made to remain within that scope and timeline.



<b>Task</b>	<b>Status Estimated Completion</b>
<b>Part I – Data Collection</b>	<b>Complete</b>
<b>Part II – Concept Studies</b>	<b>In Progress</b>
Develop Alternative Concepts	Complete
Plan Workshop	Complete
CATS Workshop #1	Complete
Compile Concept Studies	Spring 2001 – Fall 2001
U of I Faculty Senate Campus Operations Meeting	Complete
TAC Approval of Circulation Plan	Complete
CATS II & Streetscape Combined Workshop	Complete
PAC Approval of Concept Design	Fall 2001
Champaign City Council Study Session	September 25, 2001
<b>Part III – Report Development</b>	<b>In Progress</b>
Prepare Report & Exhibits	Summer 2001 – Fall 2001
Agency Member Review	Fall 2001
Submit Final Report	Winter 2001
<b>Part IV – Report Presentation</b>	<b>Fall 2001 – Winter 2001/2002</b>
Champaign City Council Study Session	September 25, 2001
Champaign City council Regular Session CATS II Final Report Approval	January/February 2002
<b>Project Close Out</b>	<b>Fall 2001 – Winter 2001/2002</b>
Print Reports	Fall/Winter 2001/2002
Final Project Documents	Fall/Winter 2001
Final Payments	Winter 2002

## **F. Project Budget**

CATS II has experienced a budget overrun due to the extra work needed to complete circulation studies in the Campustown area. The purpose of CATS II is to resolve specific design issues on Sixth Street, Green Street, Springfield Avenue, Goodwin Avenue and Matthews Street that were left unresolved by the first phase of CATS, completed in June 1999. The outcome from CATS II will consist of a project report with specific design recommendations, a project budget estimate, an implementation plan, and an assignment of implementation responsibilities.

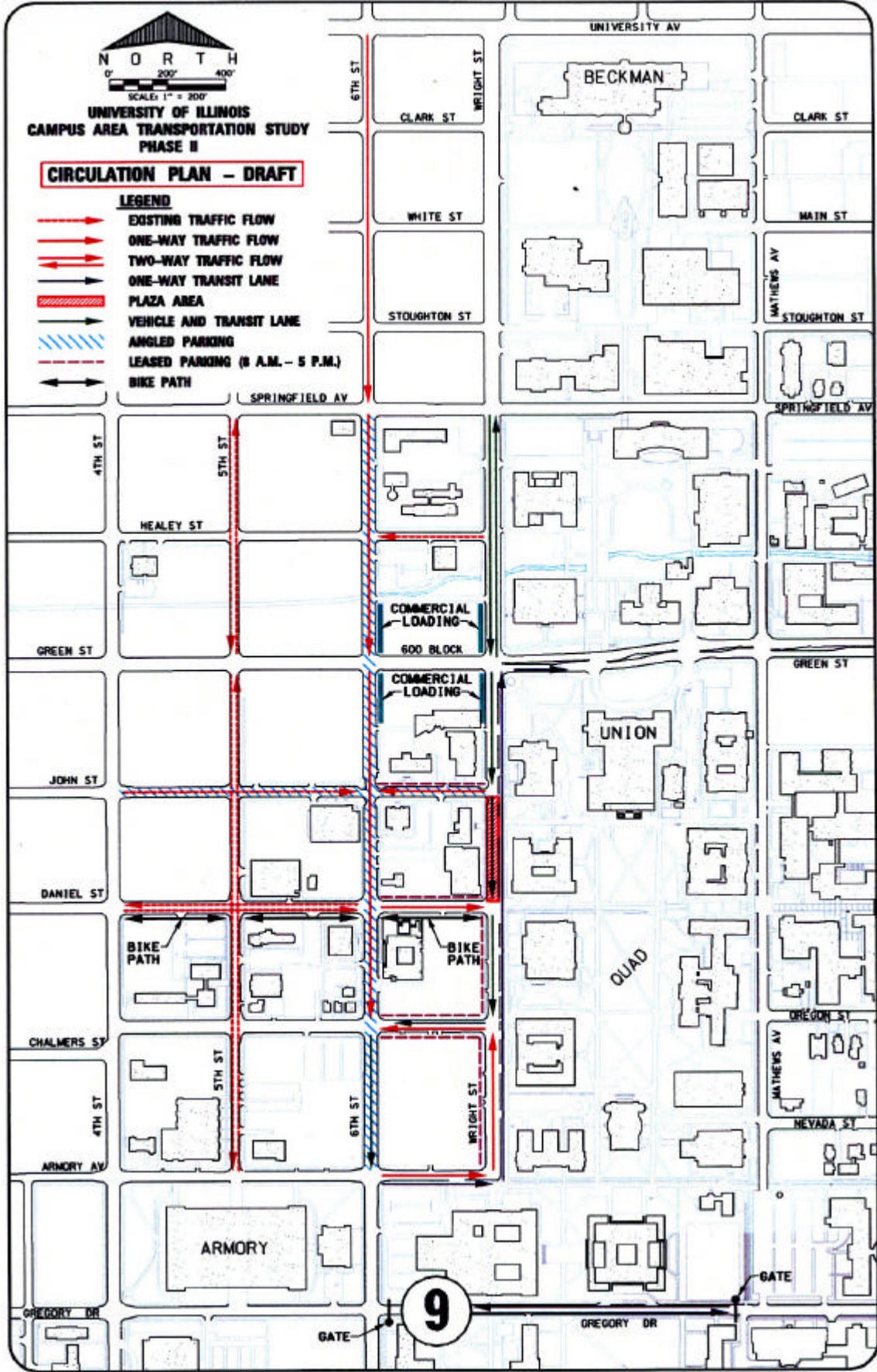
The CATS I report proposed changing the flow of traffic on Sixth Street from one-way to two-way traffic. CATS II design issues to be resolved on Sixth Street included how to provide for turning movements at the intersections, and how to provide adequate loading areas for freight. The geometric design of the Green-Sixth intersection is particularly critical because of the large number of pedestrians and potential conflicts with vehicles. During the early work on CATS II, it became evident that geometric designs for intersections and streets could not be started until the Project Partners were satisfied with the proposed circulation plan including two-way traffic on Sixth Street. In street design, form must follow function, and designs for a two-way street would be dramatically different than designs for a one-way street. (See appendix A for more details)

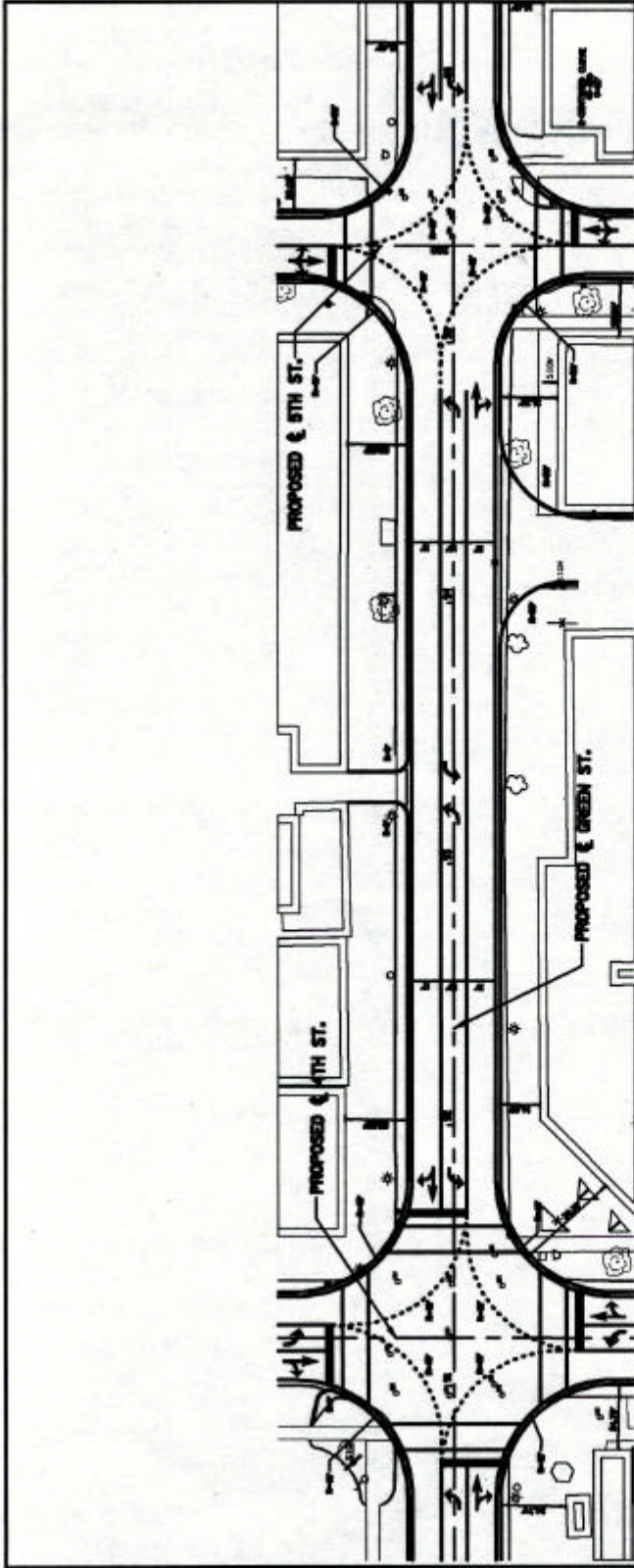
The analysis of circulation alternatives including two-way Wright Street transit operations summarized in Appendix A took four months of additional work by both Clark Dietz staff and the Technical Advisory Committee. The additional time and work consumed about \$60,000 of CDI staff time, which was not included or budgeted in the original scope of the CATS II project.

During the early phases of the additional work, CDI informed the TAC that the extra analysis work requested was outside the original scope of work. They advised that additional time would be needed to complete the entire project and the additional work could not be absorbed within the original project budget. CDI outlined two courses of action and asked the TAC how it wished to proceed: Stop and revise the scope of work and adjust the project budget before proceeding further or continue to work on the project for a few more weeks until the full scope of the budget impacts could be known. The advantage of the second alternative is that the alternative analysis work was at a critical stage and delaying it could jeopardize successfully reaching a circulation decision. Secondly, it was hoped that later phases of CDI's work with the TAC would proceed more quickly and with less cost than assumed in budget preparation. The TAC made a decision to continue working on the project, make a concerted effort to limit additions to the scope of work, and to re-evaluate the entire project scope of work when 75% of the project budget had been expended.

On July 17, 2001, a TAC sub-committee consisting of Champaign, the University of Illinois and the Champaign-Urbana Mass Transit District met with Clark Dietz staff to consider how the cost for the additional engineering analysis should be paid. The TAC subcommittee made several recommendations and findings:

1. The City of Urbana should not be asked to pay any portion of the extra cost because all of the extra work concerned circulation and transit operations on streets west of Wright Street in Champaign's Campustown. However, Urbana may be asked to share in future additional costs that might occur on the remainder of the project.
2. The Illinois Department of Transportation is unwilling to consider providing additional grant funds to pay a portion of the additional project expense.
3. It was determined there are no apparent opportunities for cost savings on the remaining uncompleted work items in CDI's contract. The TAC will continue to look for opportunities to save funds on future work, but will be sensitive to cutting future work that would jeopardize successful CATS II project completion.
4. The TAC subcommittee believes the most equitable method for splitting the additional cost is to divide it evenly among the City of Champaign, University of Illinois and the Champaign-Urbana Mass Transit District with each paying one third, estimated to be an additional \$20,000 each.
5. The TAC subcommittee agreed to re-evaluate the cost problem at the 75% completion point because it will be closer to project completion making it possible to better estimate the amount of work necessary to bring the project to completion. An addendum should be made to the existing intergovernmental agreement to add necessary funds to complete the project.

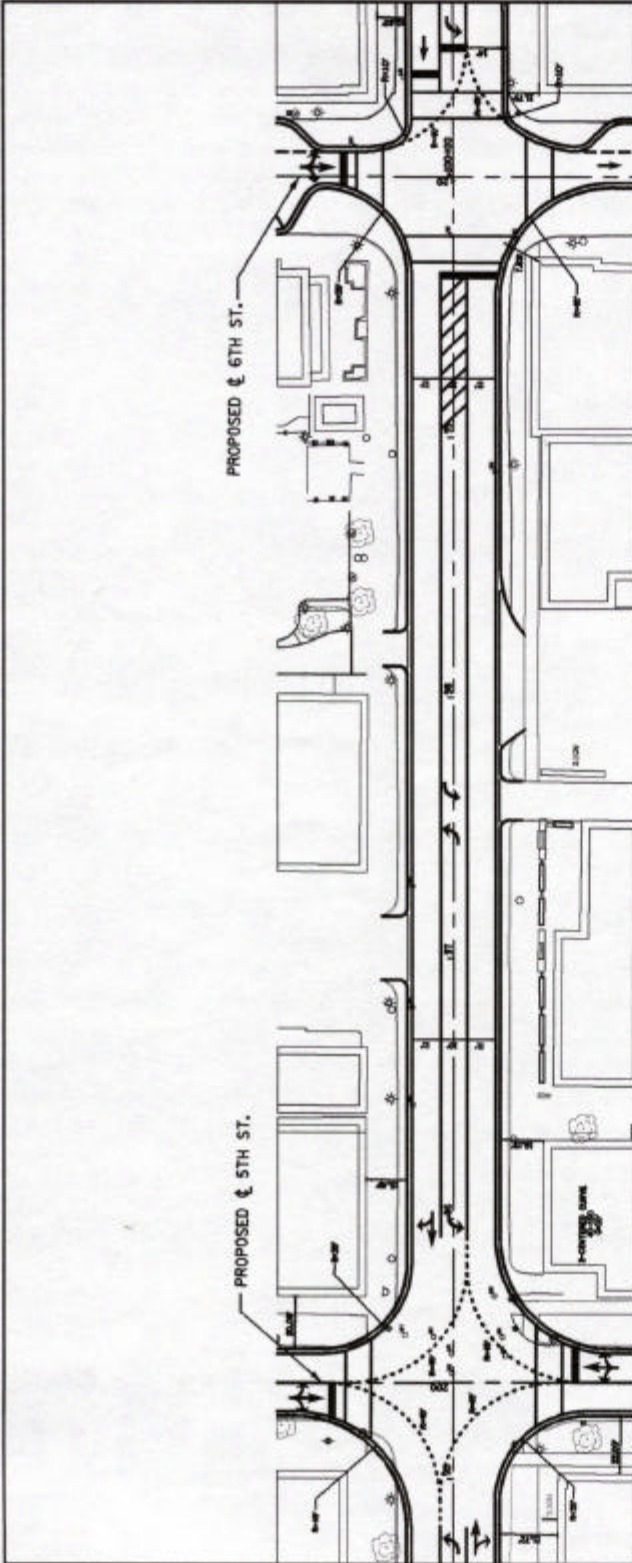




**GREEN STREET**  
FOURTH TO FIFTH



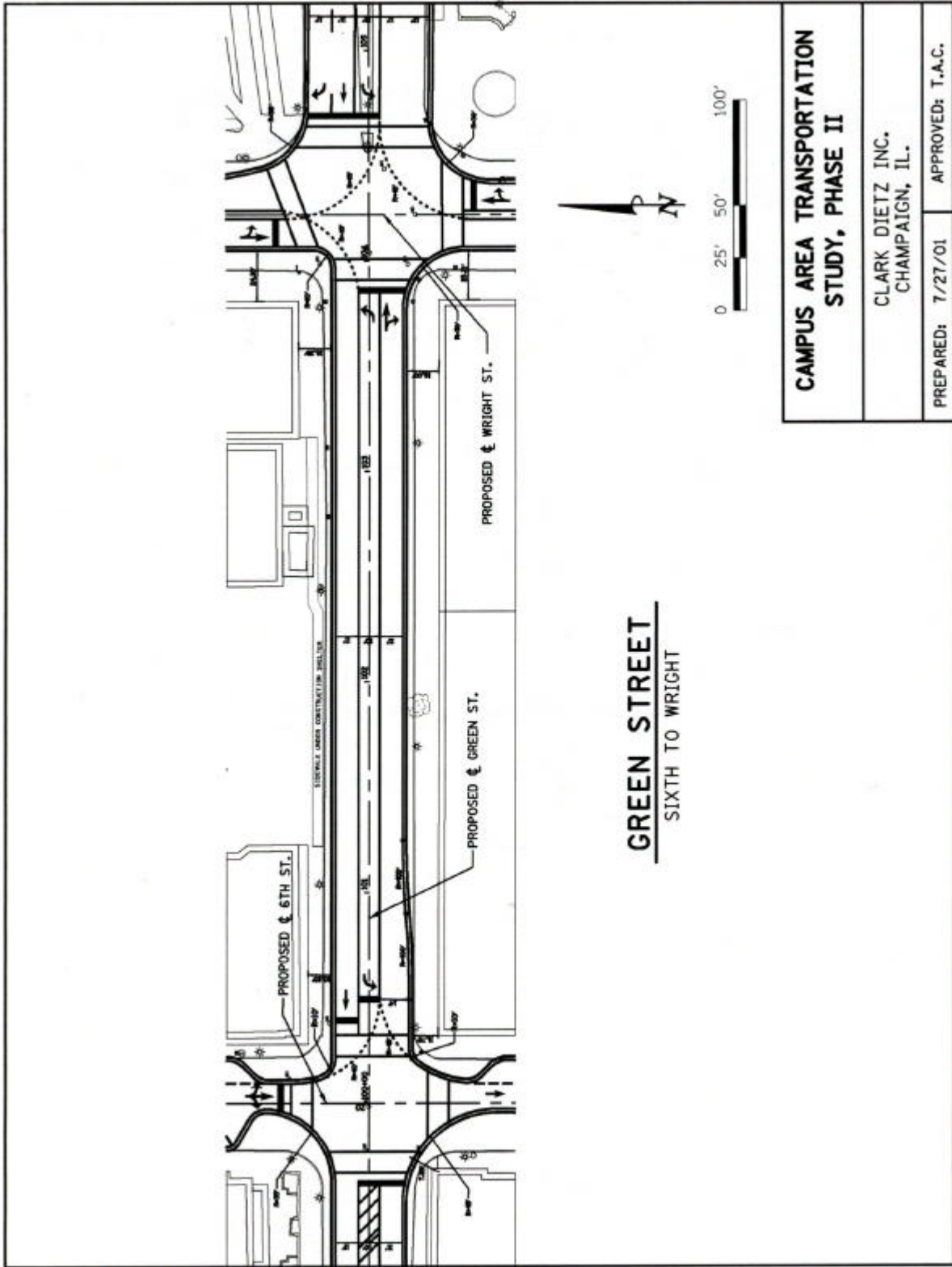
<b>CAMPUS AREA TRANSPORTATION STUDY, PHASE II</b>	
CLARK DIETZ INC. CHAMPAIGN, IL.	
PREPARED: 7/27/01	APPROVED: T.A.C.



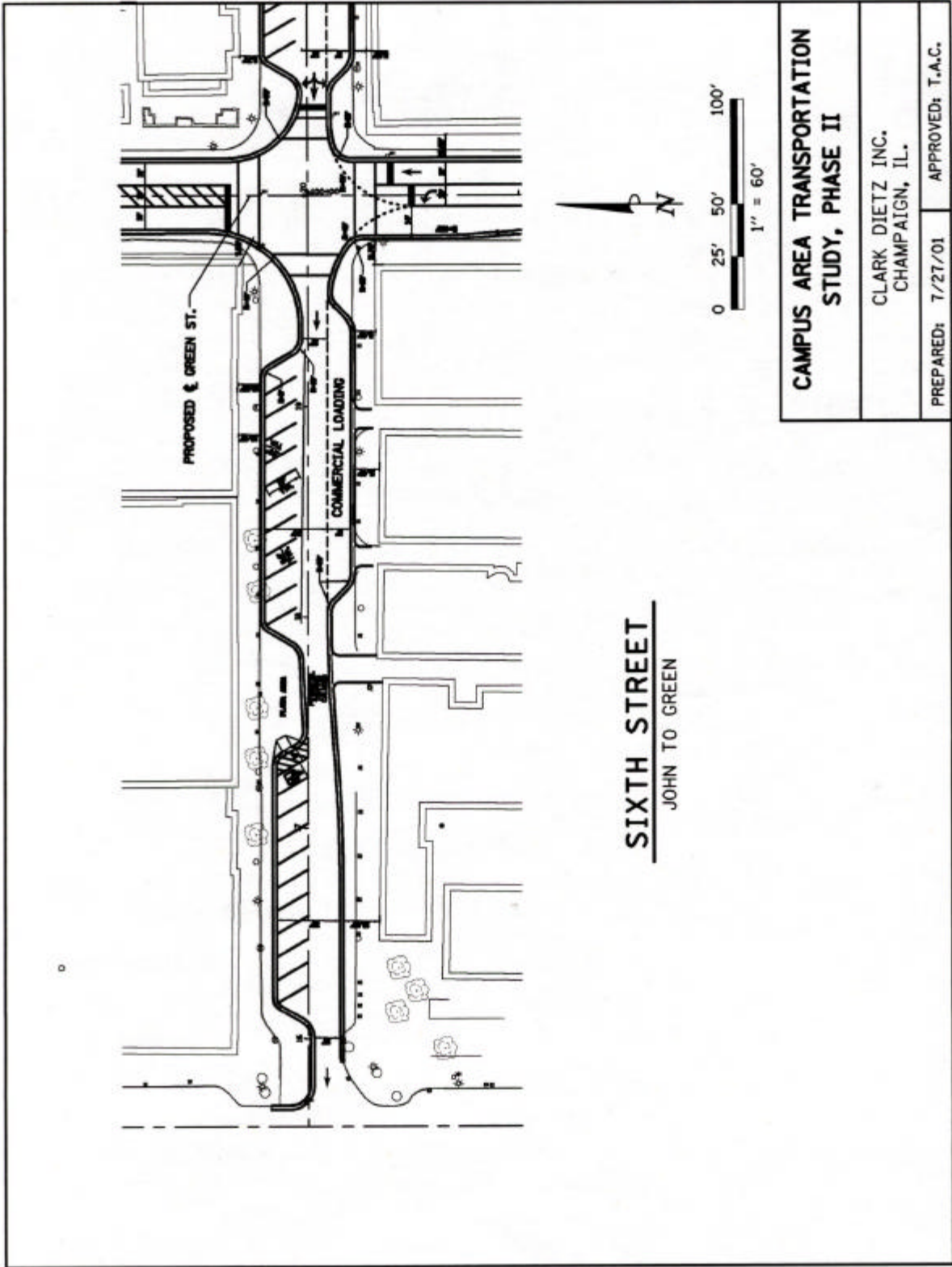
**GREEN STREET**  
FIFTH TO SIXTH



<b>CAMPUS AREA TRANSPORTATION STUDY, PHASE II</b>	
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## Appendix A

Part of the CATS II scope of work included a matrix analysis of pedestrian, bicycle, transit and traffic impacts resulting from circulation changes. To do this, Clark Dietz first prepared a decision-making toolbox consisting of measurable, objective evaluation criteria for pedestrian, bicycle, transit and vehicle operations. The evaluation criteria were discussed and approved by the Technical Advisory Committee in February 2000. The next step consisted identifying feasible circulation concepts, resulting in 27 different circulation concepts for Campustown. In each of the circulation concepts, two design elements remained unchanged: the sidewalks were widened along Green Street from Wright to Fourth by removing one traffic lane, and a transit plaza would be designated on Wright Street from John to Daniel. Traffic on the transit plaza would be limited to C-U MTD buses and a limited number of authorized vehicles such as emergency vehicles or City and University maintenance vehicles.

Each of the 27 circulation concept plans was evaluated using the approved evaluation criteria. Surprisingly, the top five circulation concepts were all variations of a Fifth/Sixth Street one-way couple. This outcome was judged to lack diversity and was unacceptable to the TAC, causing additional work to reconsider the evaluation criteria. It was thought that the unacceptable outcome was produced by flawed evaluation criteria. This problem also caused the TAC to realize that the creation of a new traffic circulation plan for Campustown would be a complex task taking more effort and resources than originally thought.

Work continued on finding a preferred circulation plan. The evaluation criteria were modified and applied to the circulation plans twice, each time yielding similar results. Eventually, a different approach was taken in which all 27-circulation concepts were grouped into five major themes. Each of the concepts was considered to be a variation on one of the five major themes. Pluses and minuses were identified for each of the major themes:

1. Existing circulation plan.
2. Two-way Sixth Street
3. Fifth/Sixth 2-lane one-way couple
4. Fifth/Sixth 1-lane one-way couple
5. Two-way Transit on Wright Street.

The five major themes were presented for public comment at the CATS II workshop held on April 4, 2001. This workshop was attended by more than 100 interested people. The workshop format provided for people to meet in small groups (less than 12) to discuss their perceptions of advantages and disadvantages of each of the major themes.

Building on the comments received from the workshop, the TAC resumed work to reach a recommended circulation plan. A breakthrough occurred when the concept of building the Fifth/Sixth one-lane one-way couple in phases was developed. The TAC recognized the inherent safety of one-lane, one-way traffic flow, and was willing to recommend making the necessary physical changes on Sixth Street. However, a significant portion of the TAC was uncomfortable with the idea of making a similar investment to change traffic flow on Fifth Street. The TAC felt that no northbound couple will be needed for Sixth because Fifth and Fourth Streets would provide adequate northbound capacity. Staff wanted to avoid the need for a traffic signal at Fifth Street and Green Street. Some members of the TAC did not believe that an un-balanced one-way street configuration would be acceptable. The breakthrough idea was further confirmed by the



recognition that an un-balanced one-way street configuration was already operating successfully on Sixth Street from University to Springfield. Therefore, it made sense to recommend changing only Sixth Street to one-lane, one-way traffic flow in a southbound direction. Drivers wishing to travel in a northbound direction would be directed to Fourth Street, out of the core area of Campus. If deemed necessary in the future to meet future travel demands, Fifth Street could be converted to a one-way northbound street. However, this would require a traffic signal at Fifth & Green.

The concept of designating Sixth Street as a one-way, one-lane street has significant impacts on transit operations. Frequent bus stops and possible heavy traffic flow on Sixth Street would reduce the level of service for both transit and vehicle traffic to unacceptable low levels. Moving all transit off Sixth Street by permitting two-way transit operations on Wright Street is a solution to the problem. The proposal to establish two-way transit on Wright Street needed detailed engineering feasibility analysis. After significant concept development and geometric design, the TAC approved the proposal for two-way transit on Wright Street in concept.

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