

## City of Bloomington Common Council

## Legislative Packet

Regular Session 03 October 2007

Office of the Common Council P.O. Box 100 401 North Morton Street Bloomington, Indiana 47402

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Office of the Common Council (812) 349-3409 Fax: (812) 349-3570 email: <u>council@bloomington.in.gov</u> To:Council MembersFrom:Council OfficeRe:Weekly Packet MemoDate:September 28, 2007

## Packet Related Material

Memo Agenda Calendar <u>Notices and Agendas</u>: *None* <u>Legislation for Final Action</u>: *None* 

## **Legislation and Background Material for First Reading:**

- <u>Ord 07-24</u> To Amend Title 15 of the Bloomington Municipal Code Entitled "Vehicles And Traffic" – Re: To Amend Chapter 15.26 Entitled "Neighborhood Traffic Safety Program" to Approve Installation of Traffic Calming Devices in the Arden Place Neighborhood
  - Map of Area;
  - Memo from Justin Wykoff, Manager of Engineering Services;
  - Exh. A Application for Traffic Calming Devices in 2000 and Letter Reinitiating the Process in 2005;
  - Exh. B Ballot, Ballot Area, and Ballot Results;
  - Exh. C Traffic Counts Before and After Installation of the Devices;
  - Exh. D Proposed Traffic Calming Devices Map Followed by Depictions of Each Device;
  - Exh. E Responses from Emergency Services (Forthcoming);
  - Exh. F Neighborhood Traffic Safety Program Procedures;
  - Exh. G Annotated Version of BMC 15.26 (Neighborhood Traffic Safety Program;
  - Amendment 1- Submitted by Justin Wykoff and Removing One Intersection Realignment from Project and Sending that Component Back to Step 5 of the NTSP.

Contact: Justin Wykoff at 349-3593 or wykoffj@bloomington.in.gov

## Minutes from Regular Session:

None

## Memo

## One Item Ready for First Reading at the Regular Session on October 3, 2007

There are no items ready for final action and only one item ready for first reading at the Regular Session next week. That item as well as the summary and background material are in this packet.

## Item One – <u>Ord 07-24</u> - Amending Chapter 15.26 of the BMC Entitled "Neighborhood Traffic Safety Program" (NTSP) by Authorizing the Installation of Traffic Calming Devices in the Arden Place Neighborhood

Ord 07-24 amends of Chapter 15.26 of the Bloomington Municipal Code to authorize traffic calming devices in the Arden Place Neighborhood. More specifically, it amends Schedule J-1 to authorize four 22-foot long speed tables and the realignment of two intersections in the following locations as indicated in the enclosed map:

Type of Devices	Street	From	То
Speed Table (22')	East Arden Drive	South Oxford Drive	South Wilton Drive
	East Arden Drive South Oxford Drive East Windsor Drive	South Wilton Drive East Thornton Road South Oxford Drive	East Windsor Drive East Arden Drive South Wilton Drive
Intersection Re- Alignment	South Wilton Drive	East Windsor Drive	Northern and Southern Intersections

This proposal has come forward under the procedures set forth in the Neighborhood Traffic Safety Program (NTSP) (See Exh. F), which was adopted in 1999 (Ord 99-16) and is incorporated into Chapter 15.26 of the BMC. The NTSP is intended to promote safe, livable, and engaged neighborhoods as well as assure the efficient use of public resources. It sets forth procedures for the permanent installation of devices to control the speed of motor vehicles.

## Amendment

Please note that the City Engineering Department has submitted an amendment to the ordinance which would remove one of the proposed realigned intersections – the southernmost one at South Wilton and East Windsor - because it failed to significantly reduce traffic speeds. The amendment also says that the Engineering Department will take advantage of a NTSP provision which allows the department to redesign ineffective proposals and resubmit them to the directly-affected households in the form of another ballot. (Step 6) In this case, the new proposal may involve a traffic circle.

## NTSP Procedures

The following paragraphs briefly describes the steps taken in the interest of the Arden Place Neighborhood Association request, as indicated in the memo and material provided by Justin Wykoff, Manager of Engineering Services.

## Step One - Application

The NTSP requires that persons or neighborhood associations file an application for traffic-calming devices which is signed by at least 50% of the affected residents and endorsed by a council member. This proposal represents the second effort by the Arden Place Neighborhood Association to obtain traffic calming devices for their streets. The first application was started in September 2000 with the endorsement of former Councilmember Willsey, but failed to receive sufficient support (44%) in the ballot collected in July 2003. The second effort was initiated in November 2005 using the original application, a new cover letter, and the endorsement of the current Council member for that district, Dave Rollo. (See Exh. A)

The application in 2000 noted a problem with traffic cutting-through the neighborhood at high speeds and without stopping at stop signs in order to get from High Street and Hillside Drive (or vise versa). It also noted the presence of children in the street and the absence of sidewalks (due to storm water gutters lying on both sides of many streets). With this in mind, the application sought to reduce the amount of cut-through traffic and reduce the speed of vehicles in the neighborhood from 30 mph to 20 mph and recommended the following measures:

- Better enforcement;
- More signage;
- A road closing barrier (40%); and

• More sidewalks (Please note that the City has installed a sidewalk on Arden this year as a result of a recommendation from the Council Sidewalk Committee.)

After a series of proposed traffic islands and traffic circles was defeated in 2003, the neighborhood sought to reinitiate the process with a letter submitted in November 2005. That letter was a result of a meeting in the neighborhood and raised concerns about efficacy and obtrusiveness of the traffic islands and circles and wanted reconsideration of speed humps, rumble strips, and realignment of intersections.

## Step Two - Verify the Petition, Assess the Problem, and Consult with Safety Services – June, 2004

Under Step Two, the Engineering Department collects preliminary information about the conditions in the area, verifies the sufficiency of the petition, and consults with safety services. Here, the Department accepted the initial petition and called upon the traffic studies in 2001 to ascertain the traffic conditions. Those studies indicated that approximately 15% of the traffic was cutting-through the neighborhood. That data also indicated that the 85% speed <sup>1</sup> was between 31-32 mph on South Wilton Drive, 24 mph on E. Arden Drive just west of High Street, and between 26-28 mph elsewhere in the neighborhood. Please note that the safety services have been notified of the latest proposal but have not formally responded.

## Step Three - Bicycle and Pedestrian Safety Commission - June, 2004

In Step Three, the Bicycle and Pedestrian Safety Commission considered the renewed petition and staff data on February 20, 2006, and voted to "validate" the petition which, under the guidelines, constitutes "a commitment to do *something* about the problem."

## Step Four - Public Meeting - April, 2006

Step Four calls for the Department to bring residents and emergency service providers together to "help exchange ideas, address concerns and discuss possible traffic safety." In the event the proposal is placed on a neighborhood collector – which is not true in this case - the NTSP also requires the department to notify a

<sup>&</sup>lt;sup>1</sup> 85% Speed or eighty-fifth percentile speed means the speed of the 85<sup>th</sup> out of a 100 cars, when the speed of each car is ordered from the lowest to the highest.

larger area of residents. Staff met with 25 residents in the Council Chambers in April 2006.

## Step Five - Preparation of Alternative Designs and Selection of Proposed Plan

Step Five calls for the Bicycle and Pedestrian Safety Commission, staff, and any interested residents to evaluate the proposal according to a set of seven criteria including: overall costs and benefits; effectiveness; access for pedestrians, bicycles and transit; community-wide benefits to bicycles and pedestrians; overall public safety; effects on traffic diversion; and access for emergency and service vehicles. This resulted in a proposal for four speed tables and the realignment of two intersections with the goal of reducing speeds and cut-through traffic in the neighborhood.

## Step Six - Project Ballot

Step Six requires staff to ballot the directly affected-households (see Exh. B - Ballot Area - for the map those households) and bring the project to the Council only when at least 50% vote in favor of the proposal. In this case, residents returned 56 of the 70 ballots distributed and 48 of those ballots were in favor of the proposal, which constituted a 68% level of approval.

## Step Seven - Testing and Evaluation of Device

Step Seven may take place if the staff chooses to test devices in order to determine their effectiveness. In the event the test devices do not produce adequate outcomes, the proposal may be returned to Step 5 for additional alternatives and neighborhood ballot.

## Step Eight - Council Action

The guidelines and code require the Council to approve the project before it may be permanently installed. As mentioned above, the ordinance amends Chapter 15.26 of the BMC regarding Neighborhood Traffic Safety Program by adding the devices and location to this Schedule J-1. (See Exh. G).

## Subsequent Steps Nine Through Eleven

Once the Council has acted in favor of the project, the Engineering Department submits detailed plans and specifications to the Board of Public Works for approval (Step Nine). Then, upon approval, the City will install the devices (Step Ten). The devices will be maintained by the Public Works Department, the trees will be maintained by the Parks and Recreation Department, and the other landscaping will be maintained by the neighborhood association (Step Eleven). And, after the devices have been installed for six months, the City may choose to reevaluate their effectiveness (Step Twelve).

### NOTICE AND AGENDA BLOOMINGTON COMMON COUNCIL REGULAR SESSION 7:30 P.M., WEDNESDAY, OCTOBER 3, 2007 COUNCIL CHAMBERS SHOWERS BUILDING, 401 N. MORTON ST.

#### I. ROLL CALL

#### **II. AGENDA SUMMATION**

### III. APPROVAL OF MINUTES FOR: None

#### **IV. REPORTS FROM:**

- 1. Councilmembers
- 2. The Mayor and City Offices
- **3.** Council Committees
- 4. Public

### V. APPOINTMENTS TO BOARDS AND COMMISSIONS

### VI. LEGISLATION FOR SECOND READING AND RESOLUTIONS

None

### VII. LEGISLATION FOR FIRST READING

1. <u>Ordinance 07-24</u> To Amend Title 15 of the Bloomington Municipal Code Entitled "Vehicles and Traffic" - Re: To Amend Chapter 15.26 Entitled "Neighborhood Traffic Safety Program" to Approve Installation of Traffic Calming Devices in the Arden Drive Area

**VIII. PRIVILEGE OF THE FLOOR** (This section of the agenda will be limited to 25 minutes maximum, with each speaker limited to 5 minutes)

#### IX. ADJOURNMENT

City of	City Hall
Bloomington	401 N. Morton St.
Indiana	Post Office Box 100
mutana	Bloomington, Indiana 47402



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Office of the Common Council (p:) 812.349.3409 (f:) 812. 349.3570 council@bloomington.in.gov www.bloomington.in.gov/council

To:	Council Members
From:	Council Office
Re:	Calendar for the Week of October 1-6, 2007

#### October is Adopt a Shelter Dog Month!

October 1 2007

Monda	y,	October 1, 2007
1:00 5:00 5:00 5:00 5:30	pm pm pm pm pm	Safe Routes to School, McCloskey Redevelopment Commission, McCloskey Utilities Service Board, Board Room, 600 E. Miller Dr. Henderson Street Public Meeting, Council Chambers Bicycle & Pedestrian Safety Commission Work Session, Hooker Room
<u>Tuesda</u>	l <b>y</b> ,	October 2, 2007
1:30	pm	Development Review Committee, McCloskey
5:00	pm	Solid Waste Advisory Council, Hooker Room
5:30	pm	Bloomington Public Transportation Corporation, Transportation Center, 130 W. Grimes Lane
5:30	pm	Board of Public Works, Council Chambers
6:00	pm	Neighborhood Improvement Grant Meeting, McCloskey
7.30	nm	Telecommunications Council Council Chambers

7:30 pm Telecommunications Council, Council Chambers

#### Wednesday, October 3, 2007

12:00	pm	Bloomington Urban Enterprise Association, McCloskey
2:00	pm	Hearing Officer, Kelly
7:30	pm	Common Council Regular Session, Council Chambers

#### Thursday, October 4, 2007

11:30amSolid Waste Management District Board, Monroe County Courthouse, Judge Nat U. Hill, III Room4:00pmBloomington Digital Underground, McCloskey5:30pmCommission on the Status of Women, McCloskey

#### Friday, October 5, 2007

No meetings are scheduled for this date.

 Saturday.
 October 6, 2007

 8:30
 am
 Breast Cancer Awareness Walk – Bring friends, family, and well-behaved pets to help stimulate awareness of breast cancer and its impact on the community. Participation is free, donations accepted. Walk Starts at the Showers Common.

 9:00
 am
 Bloomington Community Farmers' Market, Showers Common

 11:00
 am
 Pumpkins in the Park – Visit the pumpkin patch to find your own pumpkin or enjoy an obstacle course, concessions, live entertainment and children's crafts, \$1/ticket, discounts for multiple ticket purchases, Bryan Park, 1001 S. Henderson St.

#### **ORDINANCE 07-24**

#### TO AMEND TITLE 15 OF THE BLOOMINGTON MUNICIPAL CODE ENTITLED "VEHICLES AND TRAFFIC" -

### Re: To Amend Chapter 15.26 Entitled "Neighborhood Traffic Safety Program" to Approve Installation of Traffic Calming Devices in the Arden Place Neighborhood

WHEREAS,	Indiana Code 9-21-4-3 authorizes cities to install traffic calming devices on
	public streets as long as their design and use conform to generally accepted
	engineering principles of road design; and

- WHEREAS, Ordinance 99-16 established the Neighborhood Traffic Safety Program (NTSP) and set forth Schedule J-1, which identifies the type and location of traffic calming devices within the City; and
- WHEREAS, the Arden Place Neighborhood Association has petitioned the City for the installation of traffic calming devices on portions of East Arden Drive, South Oxford Drive, East Windsor Drive, and South Wilton Drive pursuant to the NTSP guidelines and procedures; and
- WHEREAS, in accordance with the NTSP guidelines and procedures, a proposal favored by the directly affected households and Bicycle and Pedestrian Safety Commission has come forward which recommends the installation of a series of four speed tables along East Arden Drive, South Oxford Drive, East Windsor Drive, and intersection re-alignments at East Windsor Drive and South Wilton Drive;

NOW, THEREFORE, BE IT HEREBY ORDAINED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

SECTION I. The Common Council hereby authorizes the following traffic calming devices at the following locations, and hereby amends Schedule J-1 (Traffic Calming Locations) of Chapter 15.26 of the Bloomington municipal code (Neighborhood Traffic Safety Program) to insert said traffic calming devices and locations in the schedule in alphabetical order:

#### TRAFFIC CALMING LOCATIONS Street From To **Type of Devices** Arden Drive, East Oxford Drive, South Wilton Drive, South Speed Table (22') Speed Table (22') Arden Drive, East Wilton Drive, South Windsor Drive, East Oxford Drive, South Thornton Road, East Arden Drive. East Speed Table (22') Wilton Drive, South Windsor Drive, East Northern and Intersection Re-Southern intersections Alignment Speed Table (22') Windsor Drive, East Oxford Drive, South Wilton Drive, South

## SCHEDULE J-1

SECTION II. If any sections, sentence or provision of this ordinance, or the application thereof to any person or circumstances shall be declared invalid, such invalidity shall not affect any of the other sections, sentences, provisions, or applications of this ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are declared to be severable.

SECTION III. This ordinance shall be in full force and effect from and after its passage by the Common Council of the City of Bloomington and approval of the Mayor.

PASSED AND ADOPTED by the Common Council of the City of Bloomington, Monroe County, Indiana, upon this \_\_\_\_\_ day of \_\_\_\_\_, 2007.

DAVE ROLLO, President Bloomington Common Council

ATTEST:

REGINA MOORE, Clerk City of Bloomington

PRESENTED by me to the Mayor of the City of Bloomington, Monroe County, Indiana, upon this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 2007.

REGINA MOORE, Clerk City of Bloomington

SIGNED and APPROVED by me upon this \_\_\_\_\_ day of \_\_\_\_\_, 2007.

MARK KRUZAN, Mayor City of Bloomington

#### SYNOPSIS

This ordinance authorizes the permanent installation of a series of traffic calming devices (speed tables and intersection re-alignments) in the Arden Place neighborhood and amends Schedule J-1 of the Chapter 15.26 of the Bloomington Municipal Code to list the type and location of these devices.



TO: BLOOMINGTON CITY COUNCIL
FROM: JUSTIN D. WYKOFF, MANAGER OF ENGINEERING
RE: ARDEN NEIGHBORHOOD TRAFFIC CALMING
CC: SUSIE JOHNSON, DIRECTOR OF PUBLIC WORKS
J.D. BORUFF, ENGINEERING FIELD SPECIALIST

#### Dear Council Members,

The following is a history of the Arden Neighborhood Traffic Calming process following the guidelines as set forth in the Neighborhood Traffic Safety Program (NTSP). This neighborhood has worked very closely with us to reach this point in the NTSP and found solutions that satisfy a high percentage of the neighboring residents which is indicated by the 68.6% approval rating achieved in Step 6 of the Ballot Step.

#### History

The City of Bloomington originally received the Participation Application for traffic calming on September 18, 2000 from the Arden Place Neighborhood Association. Councilman Jeff Willsey endorsed this application and signed petitions from the neighboring area were attached. The project failed on the original ballot in July of 2003 with 44% of eligible households in favor.

#### Step 1 – Apply to Participate

In November of 2005 the Arden Place Neighborhood Association requested that the traffic calming process be started again. This request was endorsed by City Councilman David Rollo. It was determined that the original application, along with a current endorsement by City Councilman Rollo, was sufficient to restart the process at Step 4. (See Exhibit "A")

#### Step 2 - Engineering Staff Review and Preliminary Data Collection

The Engineering department had performed traffic studies in 2001 as part of the original NTSP request. These studies were used as a basis for the most recent NTSP request. These studies showed cut through traffic accounted for 15.25% of the traffic in the neighborhood. The 85<sup>th</sup> percentile speeds were 28 mph and 27 mph for S. Oxford Dr., 27 mph and 26 mph for E. Arden Dr. between Oxford and Wilton, 28 mph in both directions on E. Arden Dr. between Wilton and Windsor, 24 mph in both directions along E. Arden Dr. between Windsor and High, and 32 mph and 31 mph on S. Wilton Dr. Attached is a copy of a data sheet that shows collected count information before and after the installation of the proposed traffic calming devices and is labeled as Exhibit "D".

#### Step 3 – BPSC Review of Engineering Studies and Petitions

The BPSC reviewed the N.T.S.P. petition along with additional Engineering information at their February 20, 2006 meeting. BPSC voted in 4-0 in favor of the petition for traffic calming for this neighborhood.

#### Step 4 – Public Meeting

The public meeting for this project was held on April 6, 2006 at 6 p.m. in the Bloomington City Council Chambers. Twenty-five neighborhood residents attended the public meeting.

#### Step 5 – Preparation of Alternative Designs and Selection of Proposed Plan

Engineering, with consultation of neighborhood residents and the neighborhood association, designed a plan that reduced cut through traffic as well as speeds along S. Wilton Dr. This plan proposed four 22-foot long speed tables and the realignment of two intersections. Please see the attached map in Exhibit "C" for the type and location of these devices.

**Step 6 – Project Ballot** – A ballot was sent out to the petition area with the foregoing traffic calming proposals. A total of 70 ballots were sent out. 56 ballots, or 80%, of the ballots were returned with the results as follows: 48 yes, and 8 no. 68.6% of the total ballots sent out were in favor. The number of responses and percentage of favorable votes were sufficient to move the process to the next step.

#### Step 7 – Testing and Evaluation of Traffic Calming Devices

This step in Neighborhood Traffic Safety Program may be used to test selected traffic calming measures on a temporary, simulated basis. This phase has been completed and confirms the size and location of the traffic calming devices as shown on the project ballot.

The before and after traffic counts taken as part of the testing process were favorable, with the exception of the intersection of S. Wilton Dr. and E. Windsor Dr. as indicated in Exhibit "D". The simulated re-alignment of this intersection failed to produce the desired speed reductions. In consultation with the board of the Arden Place Neighborhood Association and the Bicycle and Pedestrian Safety Commission it is recommended that a new plan for this intersection be developed by the City Engineer in consultation with the neighborhood association and neighborhood residents. We will recommend that the Council approve the project without including the Southern intersection of South Wilton Drive and East Windsor Drive and allow the directly affected households to continue with the NTSP process for this intersection at Step 5 of the NTSP. (See Am 1)

#### Step 8 – Common Council Action

Current status of the Traffic Calming Process

#### Step 9 – Board of Public Works

If approved by the Council, Board of Public Works approval will be required for the funding and plan for the construction of the traffic calming devices.

#### Step 10 – Construct permanent Traffic Calming Device(s)

If the Board of Public Works approves the funding and plan for the construction of the traffic calming devices, the permanent traffic calming measures will be constructed.

If you have any questions regarding the traffic calming proposal, or if I can help in any way please let me know.

# Exhibit A – Application

Cover Letter

Petition

Statement of the Problem

Request to Reinitiate the Process at Step 4

October 24, 2000

Justin Wykoff City Engineering Public Works City of Bloomington Bloomington, IN 47404

Dear Justin:

Enclosed please find the Arden Place Neighborhood Association's application to the Neighborhood Traffic Safety Program. Our application is sponsored by Jeffrey Willsey, and Jeff asks that he please be kept informed of the progress on our application.

Thanks for your time and consideration. We look forward to hearing from you soon.

Sincerely

Mark D. Menefee Secretary, Arden Place Neighborhood Association Home phone: 334-0395 Work phone: 855-7248 E-mail: mmenefee@indiana.edu

September 18, 2000

Neighborhood Traffic Safety Program City of Bloomington Showers Complex Bloomington, IN 47401

Attached please find our application for the Neighborhood Traffic Safety Program. Our neighborhood is the Arden Place subdivision. We feel that the livability of our neighborhood has been negatively affected by vehicular traffic on our streets. There are 58 households in our neighborhood with 44 children currently growing up here. We request the assistance of the NTSP in resolving our cut-through traffic problems.

Below you will find the signatures of our Common Council representative and Arden Place households who support this application. We have also included recent survey responses. Thank you for your consideration of our application. If there are questions regarding our application please contact Mark Menefee at 334-0395.

Arden Place Neighborhood Association Executive Committee

Dave Ebling, President 1724 Windsor Drive Bob Fox, Vice President 1900 Windsor Drive

Susan Eastman, Treasurer 2005 Arden Drive

Mark Menefee, Secretary 1719 Windsor Drive

City Councilman Jeff Willsey sponsors this application:

Arden Place residents who support this application:

Household Name(s) Address E. Windsor Dr. 1701 191

Neighborhood Traffic Safety Program Arden Place Neighborhood Association

Household Name(s) Address Arden DE . de 2 Lone rden Q Ò Det /L 9 PO wilten FY 1805-5 10 Windson anto-11. Re 30 12 0 1500 Arden Pr é 12. Bin Oonald K. 1700 Arden Pr 13. 1810 WY. Arden 14 Pla muni Lee 2001 & arden he 15. stine 1900 E. Arden 1 innimeti 16 1 r. 4 Dus 2020 Anden Du. ta zA. Widde a 800 C. Windor p. 211 18. aun lection V-727 en 19 U 1808 20. rord Vindsor L D 21 a U 22. 12 indsor anda awax 716 23. OR 24

Page 2

Neighborhood Traffic Safety Program Arden Place Neighborhood Association

Address Household Name(s) 0 Naom 4 LANS ALA 706 25 51 700 + Sac Ion Pr L Tarragachi 1708 26. ~4 Won Dr. mds glin 11 14 4 27 en fr 1801 28 0 arden Drive 1908 29. W 1909 30. V 31.\_\_\_ 32. 33. 34. 35.\_ 36.\_\_\_ 37.\_\_\_ 38. 39. 40.\_\_ 41.\_\_\_\_ 42.

#### Neighborhood Traffic Safety Program Application to Participate from the Arden Place Neighborhood Association

#### **Description of the Problem**

Arden Place neighborhood has significant cut-through traffic. In a recent survey of Arden Place residents, 85 percent of the survey respondents agreed or strongly agreed that our neighborhood has public safety concerns due to automobile traffic.

Traffic cutting through our neighborhood between Hillside and High Streets increases noticeably during after-school and business commute hours. This traffic routinely travels at speeds over the posted limit. Drivers cutting through our streets also ignore stop signs in the area. Please see attached map for markings of problem areas as indicated on survey responses from our residents.

We are especially concerned about these cut-through traffic issues because of the growing number of young children in our neighborhood. Arden Place is located approximately one mile from Childs Elementary School, and yet the cut-through traffic, combined with a lack of sidewalks in our neighborhood, at times makes walking to the school and/or school bus stops, unsafe.

#### Infrastructure Changes Supported

Based on our survey of Arden Place neighborhood residents, a variety of actions to reduce or eliminate cut-through traffic would be acceptable. A majority of residents who responded favored:

- Lowering the speed limit from 30 mph to 20 mph
- Significantly increased traffic enforcement (speed limits and stop signs)
- New vertical signage (such as "Children at Play")
- New horizontal signage painted on the streets

In addition, more than 40 percent of respondents supported or strongly supported a road closing barrier to eliminate cut-through traffic. The addition of sidewalks would also add to the safety of our streets. Our streets have high pedestrian use, yet because there are storm water gutters on each side of the road, the only realistic walking surface is the road.

We look forward to working with you on deciding how to manage traffic in our neighborhood.

#### Arden Place Neighborhood Association ' Bloomington, Indiana

November 3, 2005

Mr. J. D. Boruff Engineering Field Specialist City of Bloomington Engineering Department Bloomington, Indiana

Dear J. D.,

At our neighborhood meeting October 15, the households present agreed to request that your office schedule a public meeting in keeping with Step 4 of the Traffic Calming process.

Board Member Susan Eastman prepared a poster-sized copy of the traffic calming proposal that was created the last time your office worked with Arden Place. She held a neighborhood meeting where this poster was reviewed and discussed. For your consideration as we continue in the process, here are some of the questions and ideas that people expressed at the meeting:

- · Can school buses and large vehicles get around Arden/Wilton island?
- If current 2 stop signs and 2 right angles don't calm traffic at Arden/Wilton, will island?
- Strong objections to circles/islands that require industrial strength poles and garish yellow paint to alert drivers of their presence. Tall bushes or trees make islands/circles more visible than plantless ones.
- How will traffic flow around Greenbriar/Wilton/Windsor circle?
- Will realignment at Greenbriar/Wilton/Windsor simply transfer traffic to Arden?
- Do we need all 5 suggested calmers? Where is speed greatest? Could we reduce speeding with fewer calmers?
- Primary goal is to limit traffic cutting through neighborhood. Reduce traffic by making cutting-through less convenient. Will that also slow traffic?
- Speed humps: viewed as less visually obtrusive, more effective by some, especially at two places on Arden.
- Would rumble strips be a possibility at any location?
- Intersection alignments should extend property owner's lots, not be a chicane stuck on separately, which is harder to maintain. Need sufficient depth of soil over road base at intersection alignments.

J. D. Boruff City of Bloomington November 3, 2005 Page 2

Clarification needed regarding size, shape, height and traffic flow of all islands/circles

Straw votes on all proposed calming locations were positive.

The Arden Place Board also wanted to let you know that City Councilman David Rollo arrived near the end of the discussion. After being briefed on the questions and concerns above, he informed those present of the following:

City council members compete for limited city funds (\$120,000/year) for sidewalks. Recognizing impact of Renwick, Rollo's colleagues have been generous in voting to fund sidewalks in affected area. May be generous with Arden Place, too.

Most cost-effective to piggyback storm water improvements with sidewalks, then CBU funds can be used for sidewalks.

The neighbors then also raised these questions and concerns:

Would sidewalks ease traffic speeding concerns? Is this an either/or issue? Do we want to facilitate traffic by substituting sidewalks for calming? Some said that sidewalks on just one side of streets would probably not affect speeding traffic.
 Stormwater control has long been a big concern as most households in Arden Place are dealing with some sort of water problems.

Please let us know when the meeting will be scheduled. We would be happy to meet with you in person to clarify any questions you have. Thank you for your help.

Yours truly,

Arden Place Neighborhood Association by:

Derek Voskuil Kathy Berry Susan Eastman Libby DeVoe

# Exhibit B – Ballot Materials

Ballot

Ballot Area

**Ballot Results** 

## Arden Place Neighborhood Traffic Calming Survey

Please print your name and address so we can verify the eligibility of your response to this survey. Your response below will be separated from this information — your name will not be associated with your vote on this issue.

Resident Name: \_\_\_\_\_

Resident Address:

This ballot will be separated by City Engineering Department staff. Please do not cut before sending.

## Arden Place Neighborhood Traffic Calming Survey

*Please check only one answer.* The traffic calming proposed for this area will be designed to accommodate all emergency services and allow for adequate snow removal. It will consist of the realignment of the intersection of S. Wilton Dr. and S. Windsor Dr., the realignment of the intersection of S. Wilton Dr. and E. Windsor Dr., and the installation of speed tables on S. Oxford Dr., 2 locations on E. Arden Dr. (one east of S. Wilton Dr. and one west of S. Wilton Dr.), and E. Windsor Dr. between S. Oxford Dr. and S. Wilton Dr. Drawings of the proposed traffic calming measures, and their location, have been included with this ballot. No special comments will be considered on this form. If a given response is not marked, the ballot will be considered a non-response, and the Engineering Department may send you a second ballot. The deadline for returning this ballot is July 12, 2006 If the ballot is postmarked later than July 12, 2006, it will not be included in the final tally. If you have a question or concern, please call **J. D. Boruff** at (812) 349-3417.

 $\square$  YES: As a resident in the Arden Place neighborhood, I AM in favor of permanent placement of the traffic calming devices currently proposed in this area. (See attached map).

 $\square$  No: As a resident in the Arden Place neighborhood, *I* AM NOT in favor of permanent placement of the traffic calming devices currently proposed in this area. (See attached map).



## Arden Place Traffic Calming Ballot Results

Voting Results: Yes 48 No 8 Non Votes 14 Total number of ballots 70 Total number of ballots returned 56 Percentage of ballots returned 80% Percentage of entire ballot in favor 68.6 % Percentage of entire ballot against 11.4 %

# Exhibit C – Traffic Calming Proposal

Map of All Devices

Speed Table on Oxford

Speed Table on East Winsor

Speed Table on East Arden - #1

Speed Table on East Arden - #2

Intersection Realignment on Wilton – North

Intersection Realignment on Wilton - South



1

## Proposed Traffic Calming Locations









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# Exhibit D – Traffic Studies

Map With Counts Before and After Installation Devices

## Speed Data by Location


# Exhibit E – Responses from Safety Services (forthcoming)

# Exhibit F – Neighborhood Traffic Safety Program Guidelines and Procedures

# NEIGHBORHOOD TRAFFIC SAFETY PROGRAM

Tabl	le (	of C	Con	tents

INTRODUCTION	2
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Procedure/Process	3
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Step 2. Engineering Staff Review and Preliminary Data Collection	4
Step 3. BPSC Review of Engineering Studies and Petitions	4
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# **INTRODUCTION:**

The City of Bloomington places a high value on neighborhood livability. Although livability can have several definitions, it can be generally thought of as encompassing the following characteristics:

- The ability of residents to feel safe and secure in their neighborhood.
- The opportunity to interact socially with neighbors without distraction or threats.
- The ability to experience a sense of home and privacy.
- A sense of community and neighborhood identity.
- The ability to conveniently, safely and enjoyably walk, bike and take transit.
- The ability of parents to feel that their children's safety is not at risk by playing in the neighborhood.
- A balanced relationship between multiple uses and needs of a neighborhood.

Neighborhood traffic conditions can have a significant impact on these characteristics.

As population and employment in the City of Bloomington and Monroe County continue to grow, Bloomington streets can be expected to experience increased pressure from traffic. One of several goals of the City of Bloomington is to manage this growth to balance our economic, social and environmental health and to maintain a sustainable City. Quality neighborhoods are the fundamental building blocks of a sustainable city, and to maintain this quality, Bloomington neighborhoods should be protected from the negative impacts of traffic.

Neighborhood groups across Bloomington have become increasingly concerned about the effects of traffic on their streets. Restraining traffic has become a common goal of concerned residents. A vision now being promoted for local streets is that motorists should be guests and behave accordingly. Many City streets used to be multi-purpose places which not only provided physical access but also encouraged social links within a community. Now, the balance has changed so that the main function of many streets has become the accommodation of traffic--some of it unrelated to the residents themselves.

At the same time, traditional Traffic Engineering means of controlling traffic--speed zoning, stop signs, traffic signals--have less and less effect in the management of driver behavior. Police enforcement is and will remain an effective tool to reinforce motorist behavior. However, it is recognized that providing an enforcement level that is effective in modifying driver behavior will require a significant commitment of Police resources.

The City of Bloomington is committed to developing an effective approach to managing neighborhood traffic. Neighborhood involvement will be an important component of this approach.

To maximize neighborhood involvement in improving local traffic conditions, the City of Bloomington Bicycle and Pedestrian Safety Committee (BPSC) with assistance from the Public Works, Engineering and Planning Departments has developed a Neighborhood Traffic Safety Program (NTSP) for Bloomington neighborhoods.

# Objectives

The following objectives of the NTSP are derived from existing City policies and the mission of the BPSC:

1. Improve neighborhood livability by mitigating the negative impact of vehicular traffic on residential neighborhoods.

- 2. Promote safe, reasonably convenient, accessible and pleasant conditions for bicyclists, pedestrians, motorists, transit riders and residents on neighborhood streets.
- 3. Encourage citizen involvement in all phases of Neighborhood Traffic Safety activities.
- 4. Make efficient use of City and citizen resources and energy.

# Policies

The following policies are established as part of the NTSP:

- 1. Through traffic should be encouraged to use higher classification arterials, as designated in the *Master Thoroughfare Plan* for the *City of Bloomington Comprehensive Plan*.
- 2. A combination of education, enforcement and engineering methods should be employed. Traffic calming devices should be planned and designed in keeping with sound engineering and planning practices. The City Engineer shall direct the installation of traffic control devices (signs, signals, and pavement markings) as needed to accomplish the project, in compliance with the Bloomington Municipal Code. (Refer to Appendix C for a detailed description of traffic calming devices.)
- 3. Application of the NTSP shall be limited to local streets and to those neighborhood collector streets that are primarily residential (at least 75 percent of the properties with frontage on the street must be in residential zoning). Traffic safety projects on neighborhood collector streets shall not divert traffic off the project street through the use of traffic diversion devices. As a result of a project on a neighborhood collector, the amount of traffic increase acceptable on a parallel local service street shall not exceed 150 vehicles per day.
- 4. Reasonable emergency and service vehicle access and circulation should be preserved.
- 5. NTSP projects should encourage and enhance pedestrian and bicycle mobility and access within and through the neighborhood and enhance access to transit from the neighborhood. Reasonable automobile access should also be maintained.
- 6. Some traffic may be rerouted from one local service street to another as a result of an NTSP project. The amount of rerouted traffic that is acceptable should be defined on a project-by-project basis by the BPSC and City Engineering staff.
- 7. To implement the NTSP, certain procedures shall be followed by the Engineering Department in processing traffic safety requests in accordance with applicable codes and related policies and within the limits of available and budgeted resources. At a minimum, the procedures shall provide for submittal of project proposals, citizen participation in plan development and evaluation; communication of any test results and specific findings to area residents, businesses, emergency services and affected neighborhood organizations before installation of permanent traffic calming devices; and appropriate Common Council review.

# **Procedure/Process**

The NTSP provides a mechanism for groups to work with the City to make decisions about how traffic safety techniques might be used to manage traffic in their neighborhood. This section describes in detail the steps involved in participating in the program from the initial application for involvement, to

developing a traffic safety plan, to installing one or more traffic calming devices, to a follow-up evaluation of the plan's success.

The NTSP process is intended to ensure that all neighborhood stakeholders are provided the opportunity to be involved. This ensures that consideration of traffic problems on the study street do not result in the exacerbation of traffic problems on adjacent neighborhood streets and does not eclipse the needs and quality of the neighborhood as a whole. This includes a consideration of the impacts of traffic diversion onto collector and arterial streets.

# Step. 1. Apply to Participate

NTSP projects can be requested by neighborhood associations or groups, Common Council members representing a neighborhood, neighborhood business associations or individuals from the neighborhood. It should be noted that although individuals are eligible to apply they are encouraged to work with or form a neighborhood association. Requests for participation in NTSP will be made through the BPSC (application form will be provided by and returned to City Engineering staff).

The petition from a problem street or area must describe the problem (i.e., speeding, inappropriate cutthrough, ignoring stop signs, etc.) and request some infrastructure change to reduce the problem. The specific form of the infrastructure change may not be known at this point. The petition must also include signatures from at least 51% of the affected street or area households or businesses. This must include any other street that must use the problem street as its primary access (for example, a dead end street or cul-desac off the problem street). Each household or business is entitled to one signature.

Finally, any Common Council member must sign the petition as a sponsor.

# Step 2. Engineering Staff Review and Preliminary Data Collection

City Engineering staff will collect preliminary information about current conditions. This will include location, description of the problem and <u>may</u> include preliminary collection of traffic accident data, bicycle volume, pedestrian activity, traffic speed and through traffic. The Engineering Department will verify the percentage of households and businesses on the petition and if the percentage is sufficient, they shall notify the affected safety and emergency services of the initiative. The affected safety and emergency services shall include, but not be limited to, the City Police and Fire Departments and the local ambulance service. This information will be relayed to the BPSC for consideration to decide whether the request will be prioritized for inclusion in the NTSP. Requests are also reviewed for possible solutions. If the preliminary review shows that a hazard to the public exists, the City may address the problem separately from the NTSP.

# Step 3. BPSC Review of Engineering Studies and Petitions

The BPSC will review the petition submitted as well as the preliminary data collected by the Engineering Department. At this point, the BPSC will either validate or reject the petition. They will also prioritize the petition with respect to other petitions and available resources within the current funding cycle (detailed in Appendix B). Petition validation is a commitment to try to do <u>something</u> about the problem.

Petitions with the highest priority ranking will continue to the next step.

#### Step 4. Public Meeting

The BPSC will send notices to all households and businesses within a defined project area to provide background information about the proposed project. The project area depends on the specific project, but

generally includes all properties on the project street, on cross streets up to the next parallel local street (or up to 300 feet from the project street) and on any other street that must use the project street as its primary access. For neighborhood collector streets, the next parallel local street (if one exists within 500 feet of the problem street) will also be included in the notification area. Representatives of the emergency service providers will also receive notification of the meeting. This notice will include an invitation to participate in a public meeting to help exchange ideas, address concerns and discuss possible traffic safety alternatives.

In addition to considering traffic calming and traffic control devices, plans developed in the NTSP will also consider the positive effects of education and enforcement.

#### Step 5. Preparation of Alternative Designs and Selection of Proposed Plan

The Engineering Department and the BPSC will hold an informal work session to prepare alternatives that address the neighborhood problem. The neighborhood is welcome to participate in this workshop to provide input.

The BPSC will assess the problems and needs of the neighborhood and propose solutions based on citizen input and sound engineering principles. Possible solutions and their impacts will be evaluated with consideration given to:

- Estimated costs vs. potential gain
- Effectiveness
- Pedestrian, bicycle and transit access
- Community wide benefit to bicycles and pedestrians
- Overall public safety
- Positive and negative consequences of traffic division
- Emergency and service vehicle access

The BPSC will identify the preferred alternative and City staff shall prepare a ballot for neighborhood approval.

If it is determined from both the public meeting and an informal work session of the BPSC that traffic safety techniques other than traffic calming devices are the preferred alternative, the proposal <u>may</u> not need to proceed through the additional steps as designated in the NTSP. The City Engineering Department will continue to work with the neighborhood on alternative neighborhood traffic safety techniques.

#### Step 6. Project Ballot

#### Local Service Streets:

All of the properties on the project street and on any other street that must use the project street as their primary access are sent notification that a proposed alternative has been selected. This notification will consist of a description of the proposal as well as a confidential mail ballot asking if they are in support of the project. Each household and business is entitled to one response.

To forward a project to Common Council for action, a majority of the eligible households and businesses must respond favorably by ballot. If over 50% of all eligible ballots respond in favor of the project, then it will be forwarded to the Common Council. If, however, less than 50% of all eligible ballots respond in favor of the project, but at least 60% of those returned ballots are in favor of the project, then a second

ballot shall be mailed to those addresses that did not respond to the first ballot. Ballots will be tallied for a period of four weeks from the time of distribution; ballots postmarked after the expiration date of the four-week period will not be tallied.

#### Neighborhood Collector Streets:

All of the properties on the project street, on cross streets up to the next parallel street (or up to 300 feet from the project street) and on any other street that must use the project street as their primary access are sent notification that a proposed alternative has been selected. This notification will consist of a description of the proposal as well as a confidential mail ballot asking if they are in support of the project. Each household and business is entitled to one response.

To forward a project to Common Council for action, a majority of the eligible households and businesses must respond favorably by ballot. If over 50% of all eligible ballots respond in favor of the project, then it will be forwarded to the Common Council. If, however, less than 50% of all eligible ballots respond in favor of the project, but at least 60% of those returned ballots are in favor of the project, then a second ballot shall be mailed to those addresses that did not respond to the first ballot. Ballots will be tallied for a period of four weeks from the time of distribution; ballots postmarked after the expiration date of the fourweek period will not be tallied.

# Step 7. Testing and Evaluation of Traffic Calming Device

A test of the traffic calming plan may occasionally be required to determine its effectiveness. If the Engineering Department and BPSC determine that testing is necessary, temporary traffic calming devices shall be installed for a period of at least one month.

Following the test period, data will be collected to evaluate how well the test device has performed in terms of the previously defined problems and objectives. The evaluation includes the project street and other streets impacted by the project and is based on before-and-after speeds and volumes, impacts on emergency and service vehicles or commercial uses, and other evaluation criteria determined by the BPSC. If the evaluation criteria are not met to the satisfaction of the BPSC and City Engineering staff, the traffic plan may be modified and additional testing conducted. If the test installation does not meet the project objectives, the request will need to go back to Step 5 for additional alternatives and neighborhood ballot.

If the City Engineer finds that an unforeseen hazard exists, the test may at any time be revised or discontinued. City Engineering staff will inform the BPSC and the neighborhood of any actions taken to modify or terminate a test.

When testing of traffic calming or traffic control devices is not possible or necessary, the plan will proceed to Step 8.

### Step 8. Common Council Action

Based on the project evaluation and a positive ballot, City staff members prepare a report and recommendations for the Bicycle and Pedestrian Safety Commission to forward to the Common Council for action. The report outlines the process followed, includes the project findings, and states the reasons for the recommendations.

If a project does not obtain the required ballot approval, it is not forwarded to the Common Council.

#### Step 9. Board of Public Works

After the project has been approved by the Common Council, detailed project plans, specifications and estimates will be prepared by City Engineering staff.

Before the project(s) can be constructed by the City's Street Department or let for bidding by construction companies, the project plans and construction fund expenditures must be approved by the Board of Public Works.

If a project is not approved, it will be referred back to the Engineering staff to address the Board's concerns.

#### Step 10. Construct Permanent Traffic Calming Device(s)

Construction is administered by the City and is generally completed during the following construction season.

#### Step 11. Maintenance

The City of Bloomington Engineering and Street Departments are responsible for the construction and maintenance of any traffic calming device implemented as part of this program. The Traffic Division is responsible for any traffic signing and pavement marking or delineation. Any trees planted within the right-of-way are the responsibility of the Parks and Recreation Department and any landscaping (not including trees) is the responsibility of the neighborhood association.

#### **Step 12. Follow-up Evaluation**

Within six months to one year after construction of an NTSP project, the City may conduct a follow-up evaluation to determine if the project's goals and objectives continue to be met. This evaluation may entail traffic studies of volumes, speeds and accidents as well as public opinion surveys.

# APPENDIX A

# VISION AND MISSION STATEMENT OF THE CITY OF BLOOMINGTON

## THE MISSION OF CITY GOVERNMENT

# • QUALITY DELIVERY OF BASIC SERVICES AND PROGRAMS

Do well those things that municipal government is uniquely expected and able to do - public safety, streets and roads, parks, etc.

#### CONTINUOUS GOVERNMENT IMPROVEMENT

Develop and implement the management and information systems that allow the determination and evaluation of the best practices and methods for the delivery of services and programs.

# • PRESERVE AND ENHANCE COMMUNITY CHARACTER

Maintain, develop and implement policies that foster those aspects of our community spirit and our civic life that, combined, constitute the cherished quality of life that is uniquely Bloomington's.

# A VISION OF COMMUNITY

•	A SAFE AND CIVIL CITY	NEIGHBORHOODS AS VILLAGES, CONNECTED TO EACH OTHER AND		
•	A PLACE OF BEAUTY	COMMUNITY		
•	A CAPITAL OF KNOWLEDGE	THE FRIENDLIEST TOWN AROUND		
•	A CULTURAL OASIS	DIFFERENT FOLKS, DIFFERENT STROKES		
•	BIG CITY ADVANTAGES, SMALL TOWN FEEL			
	CIVIC VALUES			

- ABOVE ALL, NO VIOLENCE DISCOURSE SHOULD BE CIVIL
  KIDS FIRST AESTHETICS MATTER
  COMPASSION FOR CITIZENS IN CRISIS
  HEARTS AND SOULS NEED NOURISHED TOO
- CHARACTER THROUGH DIVERSITY

# **APPENDIX B**

# POINT ASSIGNMENT FOR RANKING NTSP REQUESTS

	Point a	ssigned
1) Percent of vehicles traveling over the posted speed limit		
low = 33%		1
medium = 33 - 67%		2 3
high = 68 + %		3
<ul> <li>A) Cut through traffic versus within (intra?) neighborhood speeding: Further study?</li> <li>Yes/no</li> </ul>	,	
2) Average daily traffic volumes		
2) Average daily daile volumes		
Local Service Streets Neighborhood Collector Streets		
low = 1 - 599 $low = 500 - 1,499$		1
medium = 600 - 1,499 $medium = 1,500 - 3,499$		2
high = $1,500+$ high = $3,500+$		3
3) Number of accidents along proposed calming area in 3 year period		
low = 1 - 2		1
medium = 3 - 4		2
high = 5+		3
	Yes	No
4) Creation of pedestrian and bicycle networks		
	1	0
	0	0
designated bicycle route	1	0
route in or to pedestrian area (e.g., park, shopping, etc.)	1	0
proposed calming street has NO sidewalks	1	0
proposed calming area has NO bike lanes	1	0
within walking distance to transit	1	0
5) Scheduled road construction/reconstruction in proposed calming area	2	0
TOTAL POINTS:		
Priority rank:		
Comments and recommendations:		

Calculated points are summed and competing projects' point totals are compared. The project with the greater point total moves ahead of those projects with less total points.

#### APPENDIX C

### TRAFFIC CALMING DEVICES

Traffic calming relies upon physical changes to streets to slow motor vehicles or to reduce traffic volumes. These changes are designed to affect drivers' perceptions of the street and to influence driver behavior in a manner that is self-enforcing. Unlike traditional methods of traffic management, traffic calming does not rely primarily upon the threat of police enforcement for its effectiveness. Items which may be considered as traffic calming devices and which may be applied in a NTSP project are shown in Table 2.

# 1. Street and Lane Narrowing

Motorists tend to drive at speeds they consider safe and reasonable and tend to drive more slowly on narrower roads and traffic lanes than wider ones. Reducing road widths by widening boulevards or sidewalks intermittently or introducing medians can reduce traffic speeds. The judicious placement of parking (protected by curbs and made more visible by landscaping) can achieve the same effect. Road narrowing has the added advantage of reducing the expanse of road to be crossed by pedestrians, thus reducing pedestrian crossing time.

Other criteria to be applied and considered prior to street narrowing include:

- Bicycle Accommodations: On local streets designated as a bike route or serving a significant volume of bicycle traffic, a sufficiently wide bicycle lane should be provided through the narrowed area. Where traffic and/or bicycle volumes are sufficiently low, exclusive bicycle lanes may not be required.
- Snow Removal: The pavement width of streets shall not be narrowed to a point where it becomes an impediment to snow removal.
- Parking Restrictions: In most cases on local access streets, street narrowing will require the prohibition of parking at all times along the street curb the full length of the *narrowed section* plus 20 feet.
- Landscaping: Median landscaping can be selected by neighborhood associations from an approved landscaping materials list provided by the City. Landscaping will be provided and installed by the City and will be maintained by the neighborhood association or landscape volunteer. If the landscaping is not maintained, the median will be topped with concrete or asphalt pavement.
- Median Width/Lane Width: Where medians are used to narrow streets, the medians shall not be constructed at less than four feet in width. Travel lanes shall not be narrowed to a width less than nine feet, exclusive of gutter. Bicycle lanes where required shall be four feet wide exclusive of gutter, unless the gutter is poured integral to the bicycle lane, in which case the bicycle lane will be five feet wide. If parking is allowed, the parking and bicycle lane combination shall be a minimum of 13 feet.

#### 2. Bicycle Lanes

Lane widths available to motorists can be reduced on some streets by the installation of bicycle lanes, either next to the curb (preventing stopping or parking by motor vehicles) or adjacent to parking. The space needed for bicycle lanes introduced on an existing street may reduce the width or number of general traffic lanes or the amount of parking. Bicycle lanes shall be constructed to the standard specifications of the Bloomington Public Works Department

#### 3. Raised Street Sections or Speed Humps

Raised street sections or speed humps can reduce vehicle speeds on local streets. The hump is a raised area, no greater than 3 inches high, extending transversely across the street. For local streets, speed humps typically are constructed with a longitudinal length of 12 feet. If speed humps are determined to be appropriate for neighborhood collector streets, they shall be constructed with a longitudinal length of 22 feet. These longer speed humps may also be considered on local service streets that serve as primary emergency response routes.

Other criteria to be applied prior to installation of speed humps include:

- Signing/Marking: Speed humps are required to be signed with a combination of signs and pavement marking to warn motorists and bicyclists of their presence.
- Traffic Safety and Diversion: Any use of speed humps must take into consideration the impact the installation will have on long-wheel-based vehicles (fire apparatus, ambulances, snow plows and garbage trucks) and the potential to divert traffic to other adjacent streets. Speed humps should only be installed to address documented safety problems or traffic concerns supported by traffic engineering studies.
- Street Width: Speed humps should be used on streets with no more than two travel lanes and less than or equal to 40 feet in width. In addition, the pavement should have good surface and drainage qualities.
- Street Grade: Speed humps should only be considered on streets with grades of 8% or less approaching the hump.
- Street Alignment: Speed humps should not be placed within severe horizontal or vertical curves that might result in substantial horizontal or vertical forces on a vehicle traversing the hump. Humps should be avoided within horizontal curves of less than 300 feet centerline radius and on vertical curves with less than the minimum safe stopping sight distance. If possible, humps should be located on tangent rather than curve sections.
- Sight Distance: Speed humps should generally be installed only where the minimum safe stopping sight distance (as defined in AASHTO's *A Policy on Geometric Design of Streets*) can be provided.
- Traffic Speeds: Speed humps should generally be installed only on streets where the posted or prima facie speed limit is 30 mph or less. Speed humps should be carefully considered on streets where the 85th percentile speed is in excess of 40 mph.
- Traffic Volumes: Speed humps should typically be installed only on streets with 3,000 vehicles per day or less. If considered for streets with higher volume, their use should receive special evaluation.
- Emergency Vehicle Access: Speed humps should not be installed on streets that are defined or used as primary emergency vehicle access routes. If humps are considered on these routes, special care must be taken to ensure reasonable access is provided.
- Transit Routes: Speed humps should generally not be installed along streets with established transit routes. If humps are installed on transit routes, their design should consider the special operational characteristics of these vehicles.

#### 4. Full or Partial Road Closures (Semi-Diverters/Diverters/Cul-de-sac)

Roads can be closed to motor vehicles at intersections, preventing through movement and requiring access to be gained from other streets. Closure should be undertaken in such a way as to avoid simple displacement of traffic to adjacent residential streets. It will usually be possible and desirable to retain pedestrian and bicycle access.

- Partial intersection closures can be achieved by narrowing a street to one lane at an intersection and instituting an entry restriction. Another technique is to introduce a "diagonal diverter" or barrier diagonally across an intersection which forces traffic off a favored short-cut. Gaps can be left to allow access by pedestrians and bicyclists.
- Partial Closures: Partial roadway closures at intersections will require consideration of pedestrian and bicycle access and lane width requirements similar to those defined under Street and Lane Narrowing.

#### 5. Chicanes

Chicanes are a form of curb extension which alternate from one side of the street to the other. The road is in effect narrowed first from one side then the other and finally from the first side again in relatively short succession. Chicanes break up the typically long sight lines along streets and thus combine physical and psychological techniques to reduce speeds.

- Lane Width: Where chicanes are used, the travel lanes shall not be narrowed to a width less than nine feet, exclusive of gutter. Bicycle lanes where required shall be four feet wide exclusive of gutter, unless the gutter is poured integral to the bicycle lane, in which case the bicycle lane will be five feet wide.
- Snow Removal: Chicanes shall be designed to minimize the accumulation of snow piles and trash in the gutter interface between existing curb and gutter and chicane.
- Landscaping: Landscaping will typically consist of grass. Other landscaping may be selected from an approved landscaping list provided by the City. Landscaping may be provided and installed by the City and will be maintained by the Neighborhood Association or landscaping volunteer. Landscaping will not be approved which will obstruct the driver's vision of approaching traffic, pedestrians or bicyclists.

#### 6. Traffic Circles

Traffic circles are circles of varying diameter formed by curbs. Motorists must drive around the circle, or in the case of longer vehicles, drivers may drive slowly onto and over a mountable concrete curb forming the circle. Traffic circles reduce motor vehicle speeds through the intersections, depending on current intersection controls in place.

Other criteria to be applied and considered prior to installation include:

- Design Considerations: For each intersection the size of the circle will vary depending on the circumstances for that specific intersection. In general, the size of the circle will be determined by the geometry of the intersection.
- Where intersecting streets differ significantly in width, it may be more appropriate to design an

elongated "circle" using half circles with tangent sections between them. Smaller circles will be constructed on a case-by-case basis. Normally the circle will be located as close to the middle of the intersection as practical. Under special circumstances, such as being on a Fire Department response route, bus route or due to snow removal accommodations, the size and/or location of the circle will be adjusted to more appropriately meet these special circumstances.

- Design Considerations for "T" Intersections: For "T" type intersections, all of the above design considerations apply. In addition, curb extensions (or curb bulbs) may be included along the top of the "T" at the entrance and exit to the intersection.
- Signage: Appropriate signage for traffic circles will be determined by the City Engineer and may vary based on the location of the circle.
- Channelization: Where curbs do not exist on the corner radii, painted barrier lines, defining the corners, should be installed.

Yellow retro-reflective lane line markers shall be placed on top of the circle at its outer edge.

- Parking Removal: Normally, parking will not be prohibited in the vicinity of the circle beyond that which is prohibited by the City of Bloomington, ie, "within the intersection" or "within 20 feet of a crosswalk area". However, where special circumstances dictate, such as where the circle is on a response route for the Fire Department or to accommodate snow removal, or in an area where there is an unusually high use by trucks, additional parking may be prohibited as needed.
- Sign Removal: At intersections where circles are to be installed, any previous right-of-way controls may be removed at the time of circle construction completion. However, where special circumstances dictate, the existing traffic control may remain in place or be otherwise modified at the direction of the City Engineer.
- Landscaping: Landscaping will be selected by the neighborhood association or the City Parks and Recreation Department from an approved landscaping materials list provided by the City. Landscaping will be provided and installed by the City and will be maintained by the neighborhood association. If the landscaping is not maintained, the traffic circle will be topped with concrete or asphalt pavement.

Volunteer Required: Plant material will only be installed at traffic circles where a local resident or neighborhood association has volunteered to maintain the plant material. This maintenance will include watering, weeding and litter pick-up, as needed. All volunteers will be provided with information on maintenance of the plant material and common problems.

Points at which volunteers will be required: During initial contact, the person or neighborhood association requesting participation in the NTSP will be informed of the need for a volunteer for landscaping. In the notice of the neighborhood meeting, before construction, all residents will be informed of the need for a maintenance volunteer. This will be reiterated at the meeting if no one has volunteered. If no one has volunteered by the time that the circle is constructed, a special letter will be distributed to all residents informing them of the need for a volunteer (Figure 4). A final notice to residents will be included in the cover letter for the "after" survey of the residents.

Plant Replacement: Where the Public Works Department has had installed plant material in a traffic circle, the Department will replace any plant material which is damaged by traffic or vandalism or which dies due to planting, for a period of one year after the initial planting. If such damage is a

persistent problem, the Department may decide to cover the circle with a concrete or asphalt topping rather than continue to replace plant materials.

# **Stop Signs**

In some instances stop signs can be used as an effective traffic management and safety device. However, stop signs are not used as a traffic calming device within the NTSP.

Stop signs are used to assign right-of-way at an intersection. They are installed at intersections where an accident problem is identified, where unremovable visibility restrictions exist (such as buildings or topography), and/or where volumes are high enough that the normal right-of-way rule is potentially hazardous.

Stop signs are generally not installed to divert traffic or reduce speeding. Studies from other jurisdictions show that such use of stop signs seldom has the desired effect. In fact, the use of stop signs solely to regulate speed typically causes negative traffic safety impacts (non-compliance with the signs and increased accidents as well as mid-block speeding).

# Exhibit G – BMC 15.26 With Changes in Bold Text

# TITLE 15, CHAPTER 26 OF THE BLOOMINGTON MUNICIPAL CODE ENTITLED "NEIGHBORHOOD TRAFFIC SAFETY PROGRAM"

# AS AMENDED BY ORDINANCE 07-24

Section 1 of <u>Ord 07-24</u> amends Schedule J-1 (Traffic Calming Locations) of Chapter 15.26 by adding five traffic-calming devices in the Arden Place neighborhood.

# Chapter 15.26

# NEIGHBORHOOD TRAFFIC SAFETY PROGRAM

Sections:

15.26.010	Definitions.
15.26.020	Neighborhood traffic safety program.
15.26.030	Utilization of neighborhood traffic safety program locations.
15.26.040	Traffic calming locations.

15.26.010 Definitions.

When appearing in this chapter the following phrases shall have the following meanings: "Traffic calming device" has the meaning set forth at Indiana Code 9-21-4-3(a).(Ord. 99-16 § 2 (part), 1999).

15.26.020 Neighborhood traffic safety program.

The neighborhood traffic safety program developed by the city engineering department and the bicycle and pedestrian safety commission shall be incorporated by reference into this chapter and includes any amendments to the program, as approved by the common council by ordinance. Pursuant to Indiana Code 36-1-5-4, two copies of the neighborhood traffic safety program shall be available in the city clerk's office for public inspection. (Ord. 99-16 § 2 (part), 1999).

15.26.030 Utilization of neighborhood traffic safety program locations.

The city shall follow the policies and procedures set forth in the neighborhood traffic safety program to determine the appropriate location and construction of traffic calming devices and related traffic control devices in neighborhoods. (Ord. 99-16 § 2 (part), 1999).

15.26.040 Traffic calming locations.

The locations described in Schedule J-1 shall have devices installed for the purpose of neighborhood traffic calming. (Ord. 00-22 § 2, 2000; Ord. 99-16 § 2 (part), 1999).

# SCHEDULE J-1

# TRAFFIC CALMING LOCATIONS

Street	From	То	Type of Device
<ul> <li>Arden Drive, East</li> </ul>	Oxford Drive, South	Wilton Drive, South	Speed Table (22')
<ul> <li>Arden Drive, East</li> </ul>	Wilton Drive, South	Windsor Drive, East	Speed Table (22')
Azalea Lane, East	Summerwood Court	Erin Court	Speed Hump (14')
Azalea Lane, East	Wylie Farm Road	Highland Avenue	Traffic Islands
Covenanter Drive	High Street	College Mall Road	Speed Humps (22')
First Street	Sheridan Drive	High Street	Speed Humps (12')
Glenwood Avenue West	Morningside Drive	Longview Avenue	Speed Humps (14')
Longview Avenue	Glenwood Avenue West	Glenwood Avenue East	Speed Humps (14')
Morningside Drive	Third Street	Smith Road	Speed Humps (12')
► Oxford Drive, South	Thornton Road, East	Arden Drive, East	Speed Table (22')
Sixth Street	Intersection at Oak Street		Traffic Circle
Sixth Street	West of the intersection at		Street Narrowing
	Rogers Street		
Sixth Street	Intersection at Waldron		Traffic Circle
	Street		
Third Street	West of the intersection at		Street Narrowing
	Rogers Street		
West Third Street	Jackson Street	Walker Street	Street Narrowing
			Bump Outs
► Wilton Drive, South	Windsor Drive, East	Northern and	Intersection
		Southern	<b>Re-Alignment</b>
		intersections	
► Windsor Drive, East	<b>Oxford Drive, South</b>	Wilton Drive, South	Speed Table (22')

(Ord. 05-25 § 1, 2005; Ord. 05-14 § 2, 2005; Ord. 03-18 § 2, 2003; Ord. 02-05 § 1, 2002; Ord. 02-04 § 11, 2002).

# Amendment 1

# \*\*\* Amendment Form \*\*\*

Ordinance #:	07-24
Amendment #:	01
Submitted By:	Justin Wykoff, Manager of Engineering Services
Date:	September 24, 2007

# **Proposed Amendment:**

- 1. The last Whereas clause shall be stricken and replaced with the following two clauses:
- WHEREAS, in accordance with the NTSP guidelines and procedures, a proposal favored by the directly affected households and Bicycle and Pedestrian Safety Commission has come forward which recommends the installation of a series of four speed tables along East Arden Drive, South Oxford Drive, East Windsor Drive, and an intersection re-alignment at the northern intersection of East Windsor Drive and South Wilton Drive; and
- WHEREAS also in accordance with the NTSP guidelines and procedures, there is a pending traffic calming measure at the southern intersection of East Windsor Drive and South Wilton Drive which, after testing, is being redesigned and will be resubmitted for a further ballot under Step 6 of the NTSP to determine the consensus of the directly affected households;
- 2. Section 1 of the ordinance shall be deleted and replaced with the following:

SECTION I. The Common Council hereby authorizes the following traffic calming devices at the following locations, and hereby amends Schedule J-1 (Traffic Calming Locations) of Chapter 15.26 of the Bloomington municipal code (Neighborhood Traffic Safety Program) to insert said traffic calming devices and locations in the schedule in alphabetical order:

# SCHEDULE J-1 TRAFFIC CALMING LOCATIONS

Street	From	То	Type of Devices
Arden Drive, East	Oxford Drive, South	Wilton Drive, South	Speed Table (22')
Arden Drive, East	Wilton Drive, South	Windsor Drive, South	Speed Table (22')
Oxford Drive, South	Thornton Road, East	Arden Drive, East	Speed Table (22')
Wilton Drive, South	Windsor Drive, East	Northern	Intersection Re-
		Intersection	Alignment
Windsor Drive, East	Oxford Drive, South	Wilton Drive, South	Speed Table (22')

# **Synopsis**

This amendment is intended to correct problems with one of the intersection realignments in the Arden Place Traffic Calming Project. That Project calls for four speed tables and two intersection realignments and was approved by a ballot of the affected residents. The testing showed that the plan for the southern intersection of South Wilton Drive and East Windsor Drive did not produce the desired reduction in speeds. This amendment will allow the area neighbors to proceed with corrections to this intersection beginning at Step 5 of the Neighborhood Traffic Safety Program "Preparation of Alternative Designs and Selection of Proposed Plan".