

# **Neighborhood Traffic Management Program**

**City of Dixon**

February 2004

# Neighborhood Traffic Management Program

## Engineering Department City of Dixon

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### A. PURPOSE

To provide and maintain liveable residential neighborhoods by reducing noise and air pollution, discouraging pass-through traffic, minimizing traffic accidents, and promoting lower speeds.

### B. INTRODUCTION

Every city experiences neighborhood traffic problems, whether real or perceived. In addressing these neighborhood traffic issues, this proactive Neighborhood Traffic Management Program (Program) outlines standard procedures to be used from the time of the initial request through implementation of traffic calming techniques. The techniques to be considered as part of the Program are primarily those shown in Appendix A. Other measures may be considered and include those compiled by the North Central Section of the Institute of Transportation Engineers (NCITE) as listed in the booklet titled *Neighborhood Traffic Control* published by the institute. The booklet includes a variety of alternatives to creatively address traffic issues in partnership with neighborhood residents. The booklet also contains a description of each alternative's effects on traffic volumes, speed, environment, and safety.

In developing possible solutions, an awareness of steps taken must be maintained. The Program process is summarized as follows:

1. Initiate Neighborhood Traffic Management Study Process
2. Conduct initial neighborhood meeting to identify issues
3. Develop possible solutions:
  - a. Perform Engineering Analysis
  - b. Conduct subsequent neighborhood meeting(s), if necessary
  - c. Present Plan to Traffic Advisory Committee for review and recommendation
4. Present Traffic Advisory Committee recommendations to City Council for consideration
5. Implement plan
6. Analyze impacts

Although generally aimed at motor vehicles, the plan may also affect pedestrians, bicyclists, disabled persons, emergency vehicles, school buses, and utilities. These impacts must be considered as part of the analysis. Traffic calming is a useful tool to encourage efficient use of the street system and discourage infiltration of through traffic on

neighborhood streets. The goal of this Program is to maintain liveable residential areas and useable streets with a minimal impact to all uses and modes of transportation.

## **C. PROCESS**

### **1. Initiate Neighborhood Traffic Management Study Process**

Study may be initiated by any one of the following:

- a. Petition- a study may be implemented upon receipt by the City Clerk's Office of a petition.
- b. Traffic Advisory Committee Request- a study may be initiated at the direction of the Traffic Advisory Committee.
- c. City Council Request- a study may be initiated at the direction of the City Council.
- d. Engineering Department Request- a study may be initiated in existing neighborhoods by the City Engineer. The City Engineer may also recommend new developments be required to implement traffic management improvements by conditioning the development with Planning Commission and City Council approval.

### **2. Conduct Initial Neighborhood Meeting**

A neighborhood meeting is arranged by the Engineering Department to begin the process of communication and identify all neighborhood traffic issues. Experience has shown the initial issue is only a small part of the area's overall traffic issues. A letter is mailed to all affected property owners and residents indicating the time, place, and location of the meeting. Newspapers are also notified of the meeting.

At the meeting, the residents provide their views and concerns. Any issues which can be resolved during the course of the meeting should be addressed. If more data and information is needed, it will be gathered following the meeting. A representative may be selected by the neighborhood to represent the neighborhood and act as the direct contact between the City and the neighborhood.

### **3. Develop Possible Solution(s)**

a. Following the initial neighborhood meeting, an engineering analysis is completed and alternative solutions are developed for discussion with the neighborhood. A plan is developed showing the neighborhood boundaries to consider impacts of specific measures on other areas within the neighborhood. The plan is routed through other City Departments including Police, Fire, Community Development and Public Works Operations and Maintenance for comments.

b. A second meeting is held to present findings of the engineering analysis. A letter is sent to the neighborhood representative(s) and/or affected residents indicating the time, place, and location of the meeting. Newspapers will be notified of the meeting. Subsequent meetings, if necessary, will be scheduled following the same notification process until a satisfactory plan is developed. This plan may be as simple as increased police enforcement or a more formal plan requiring recommendation from the Traffic Advisory Committee and City Council approval.

c. The plan is presented to the Traffic Advisory Committee for consideration. The Committee makes a formal recommendation to the City Council. The recommendation of the Traffic Advisory Committee is presented to the City Council regardless of whether or not the TAC recommendation is supportive of or recommends against specific measures.

#### **4. TAC Recommendation Presented to the City Council**

The City Council can adopt, modify or reject the proposed plan. They can also refer the proposed plan back to TAC for further review and modifications. A funding source must also be approved by City Council unless the measures can be included in the current operating budget (ie. signage, enforcement). The City Council meeting is also the public forum for the neighborhood to appeal a negative recommendation from TAC, if necessary.

#### **5. Implement Plan**

The plan shall be scheduled for implementation by the City Engineer upon identification of a funding source and approval of the City Council. Work order(s) shall be prepared and forwarded to Public Works Operations & Maintenance for installation of signage or striping or a contractor shall be hired by the City for major improvements. Completion of the project shall be subject to work crew schedules, purchasing constraints, contracts and appropriate weather conditions.

#### **6. Analyze/Evaluate Impacts**

City staff shall evaluate the effectiveness of the measures within a one-year period after installation. The evaluation shall include, at a minimum, a review of traffic volumes, vehicle speeds and accidents. Upon finding any negative impacts created by the implemented measures, such impacts shall be corrected through modification or removal of the measures.

### **D. STREET REQUIREMENTS AND DESIGN CRITERIA**

- a. The following criteria must be met in order for a residential neighborhood study to be conducted:
  1. Street type- classified as a minor collector street or local street in the City of Dixon General Plan.
  2. Speed related measures- based on a speed zone survey, at least (30) percent of the traffic is exceeding the speed limit by at least five (5) miles

per hour and it has been determined increasing the speed limit is not acceptable.

3. Lanes of traffic- limited to streets having only one travel lane of in each direction
  4. Sight distance- certain measures should not be used if curves or obstacles would create an unsafe condition for motorists driving at the 85<sup>th</sup> percentile speed under average driving conditions.
  5. Speed limit- the prima facie or posted speed limit may not exceed thirty (30) miles per hour.
  6. Pedestrian/bicycle safety- the measures shall not negatively impact pedestrian or bicycle safety.
  7. Emergency routes- the plan shall not negatively impact fire or rescue equipment as determined by the Fire Department.
  8. Drainage- the measures must not adversely affect street drainage.
- b. Design Criteria and approved Traffic Control Devices- Refer to Appendix A and *Neighborhood Traffic Control* published by the North Central Section of the Institute of Transportation Engineers.

# **Appendix A**

## **Traffic Management Categories and Implementation Measures**

### **Neighborhood Traffic Management Program**

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To avoid the potential unnecessary expenditure of funds, traffic management implementation measures have been divided into four categories. It is recommended that each Neighborhood Traffic Management Plan begin with Category 1 and proceed sequentially through the various categories until the measures have become effective. In most cases the issues will be resolved using Categories 1, 2 and 3. Only in the most severe situations would Category 4 measures be considered. The following is a summary of typical measures for each of the Categories:

Category 1 Education and Enforcement

1. Neighborhood Watch Meetings
2. Neighborhood Flyers
3. Police Enforcement
4. Radar Trailer
5. School Meetings (if applicable)

Category 2 Operational Improvements

1. Stop Signs
2. School/ Pedestrian Crossing Signs (High Intensity)
3. High Visibility Crosswalk Striping
4. No Parking Signs/ Red Curbs
5. Speed Limit Signs/ Speed Limit Pavement Marking
6. Centerline Striping
7. Bike Lane Striping
8. Rumble Strips
9. Channelizers
10. Turn Restriction Signs

Category 3 Minor Construction Improvements

1. Speed Humps/ Undulations
2. Raised Crosswalks
3. Center Island Narrowing
4. Forced Turn Restrictions – Small Medians
5. Lighted Crosswalks

Category 4 Major Construction Improvements

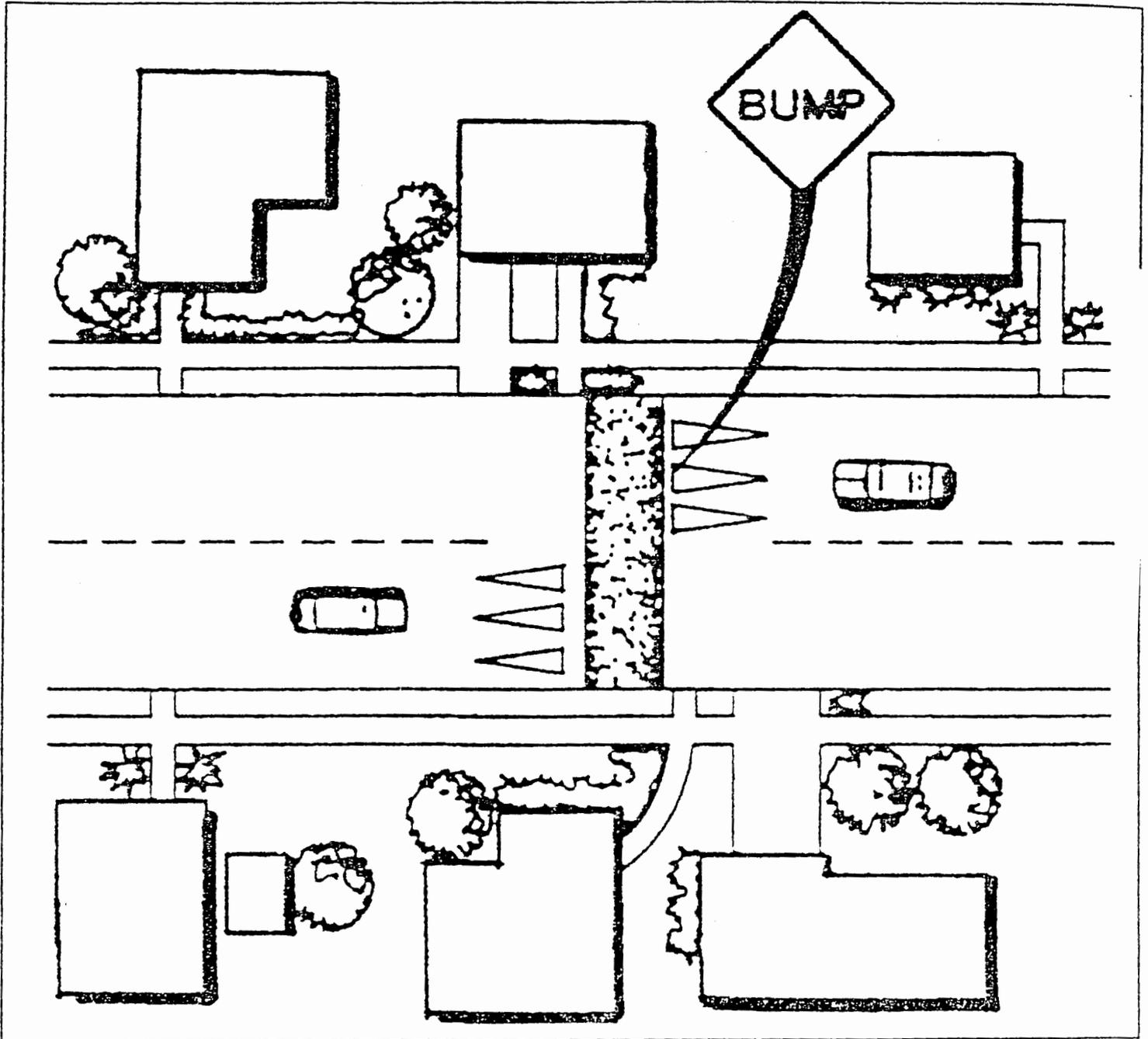
1. Traffic Signals
2. One-Way Streets
3. Diverters
4. Chokers
5. Median Barriers
6. Traffic Circles/ Roundabouts
7. Neckdowns
8. Textured Pavement

## Radars Speed Trailer



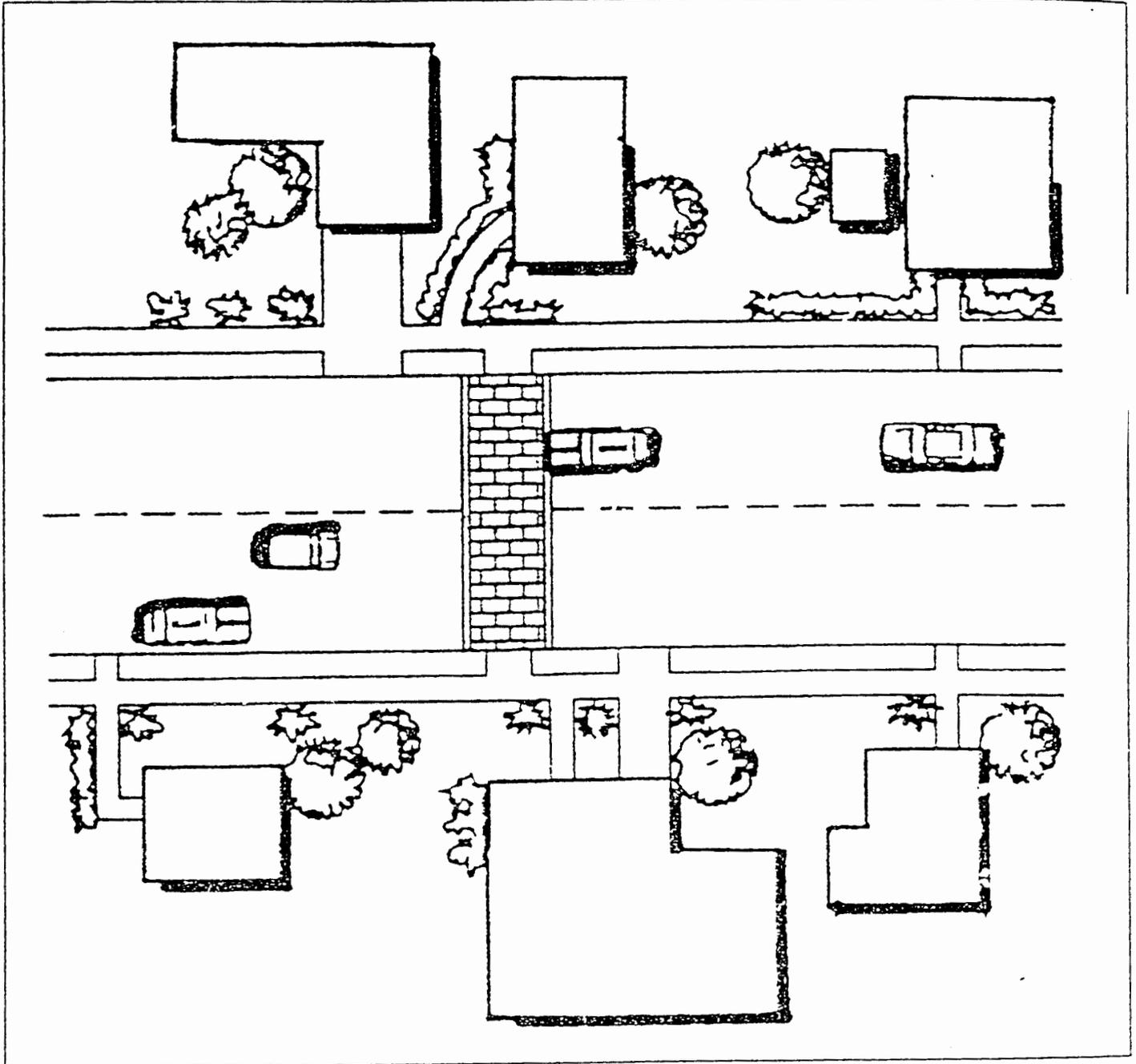
(Picture above) Shows Dixon's Radar Speed Trailer in the field.

# SPEED HUMPS (road humps, undulations)



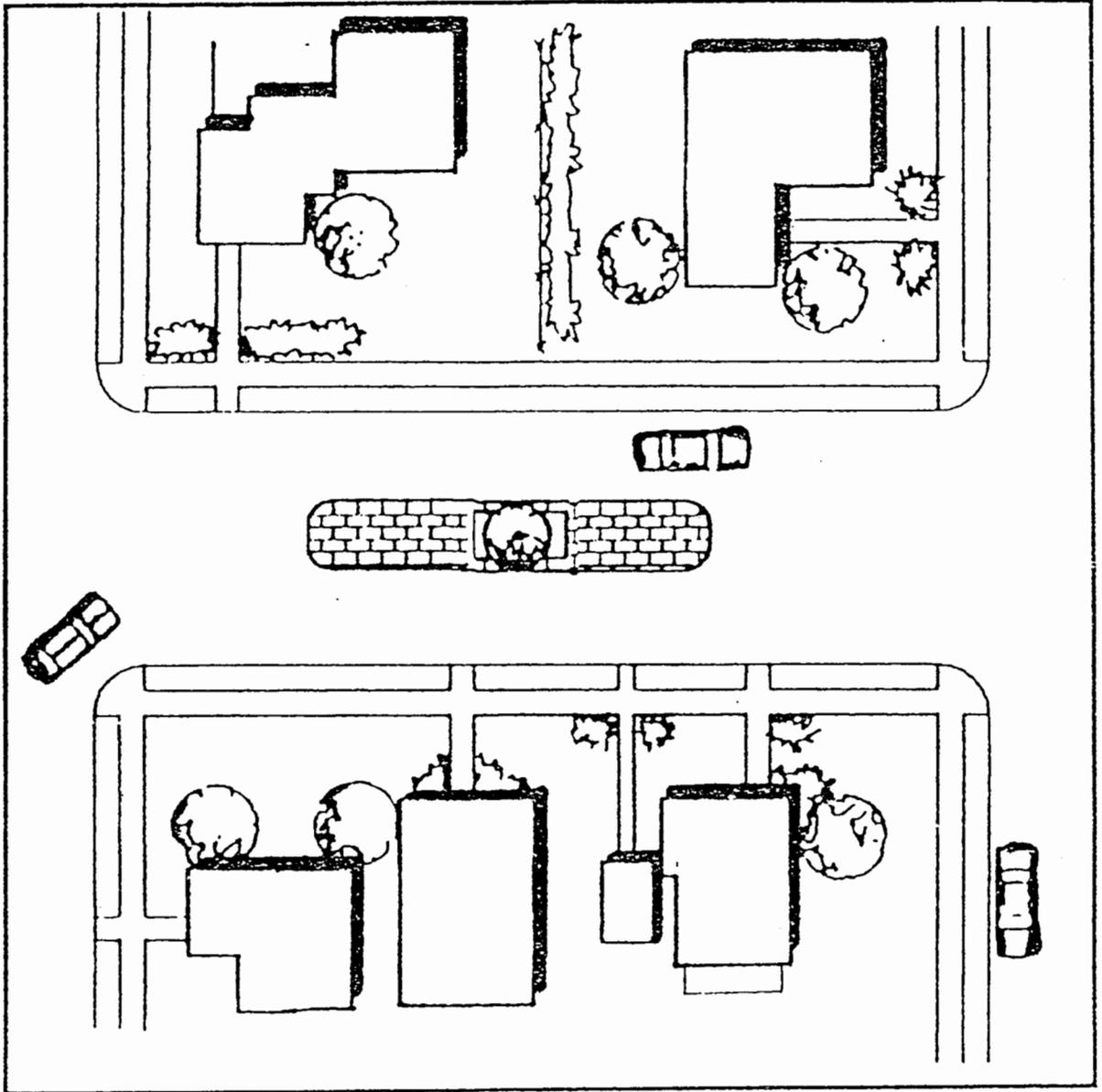
# RAISED CROSSWALKS

raised crossings, sidewalk extensions



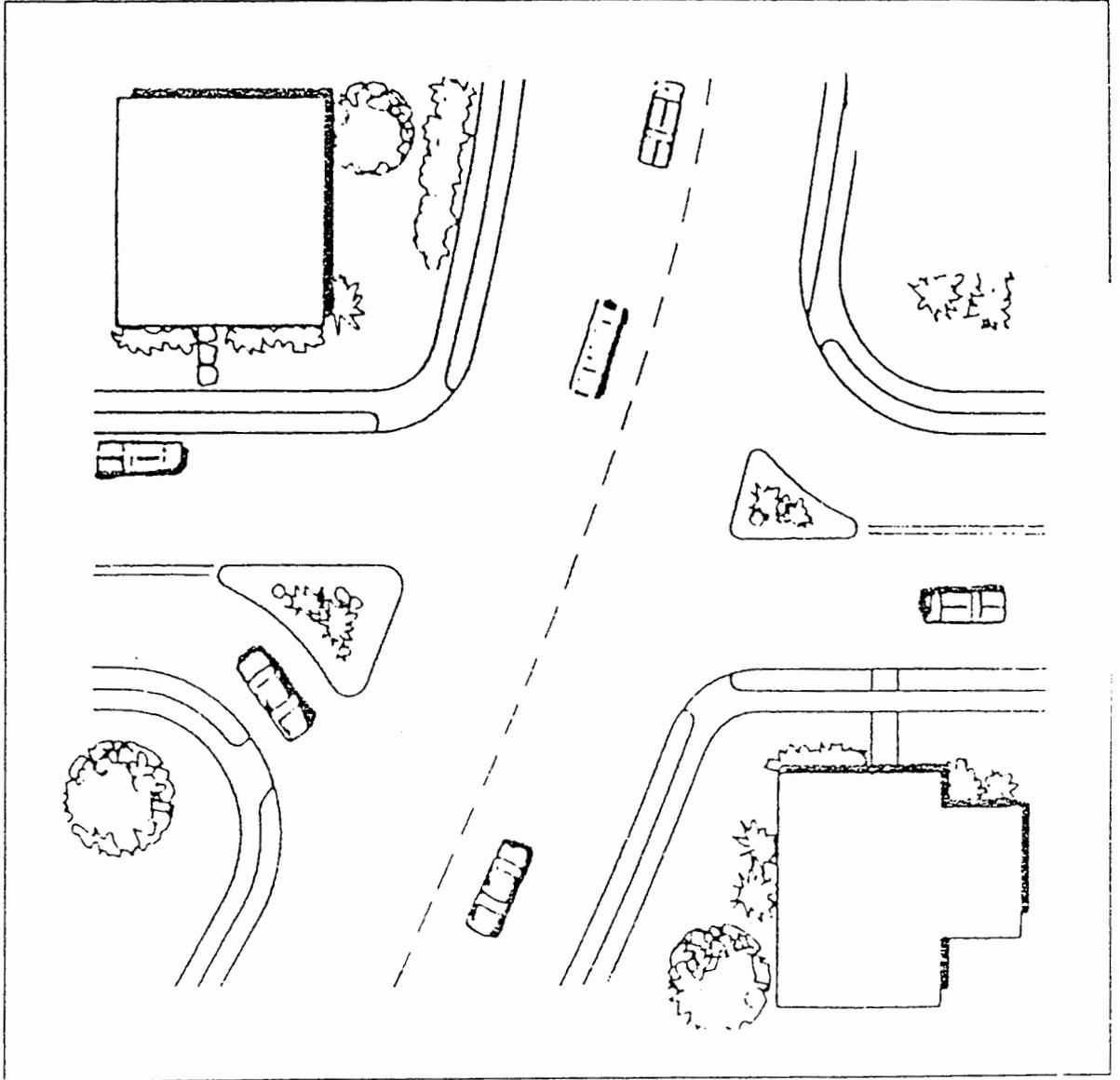
# CENTER ISLAND NARROWINGS

(midblock medians, median slowpoints, median chokers)



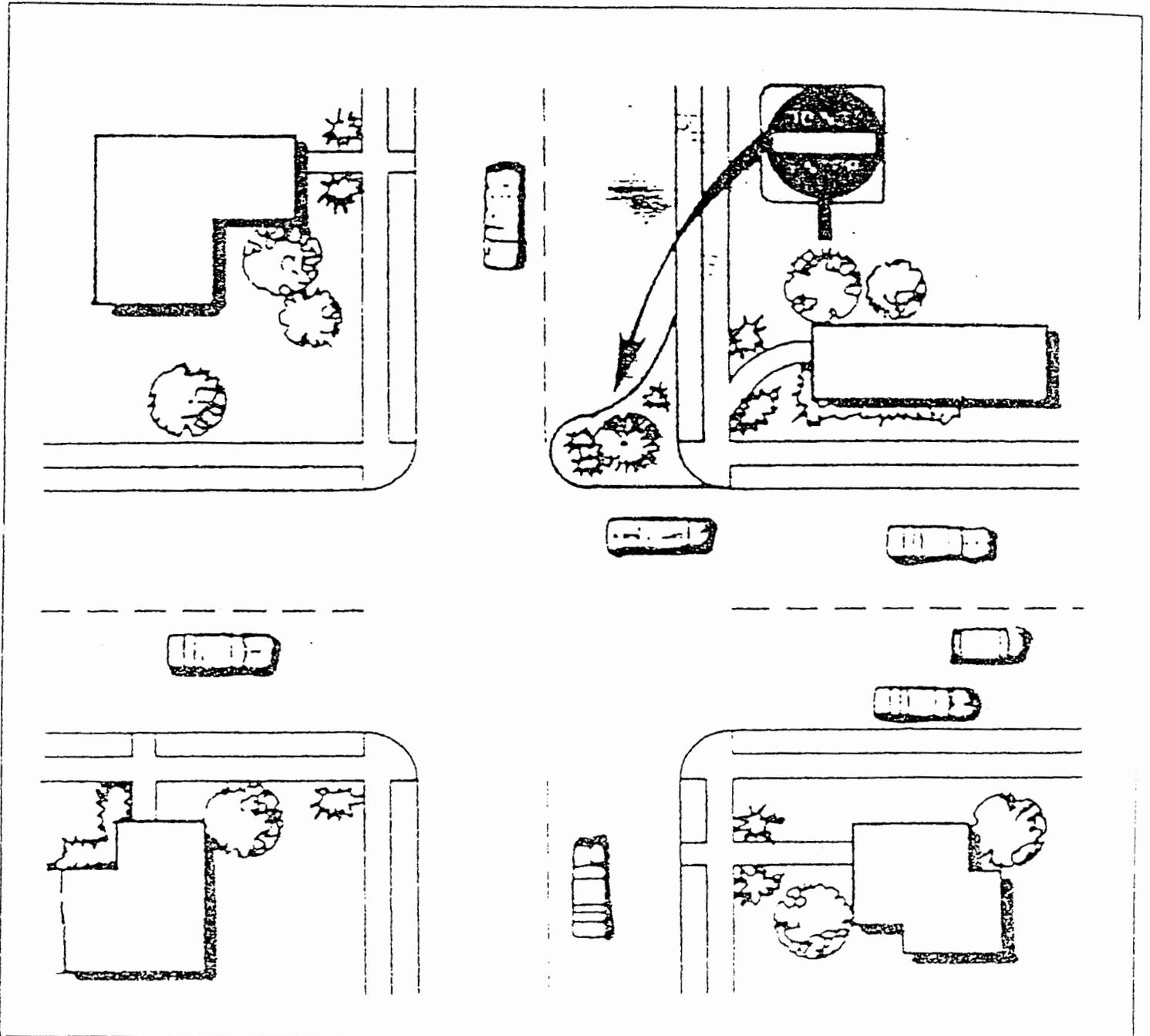
# FORCED TURN ISLANDS

(forced turn channelizations, pork chops, right turn islands)

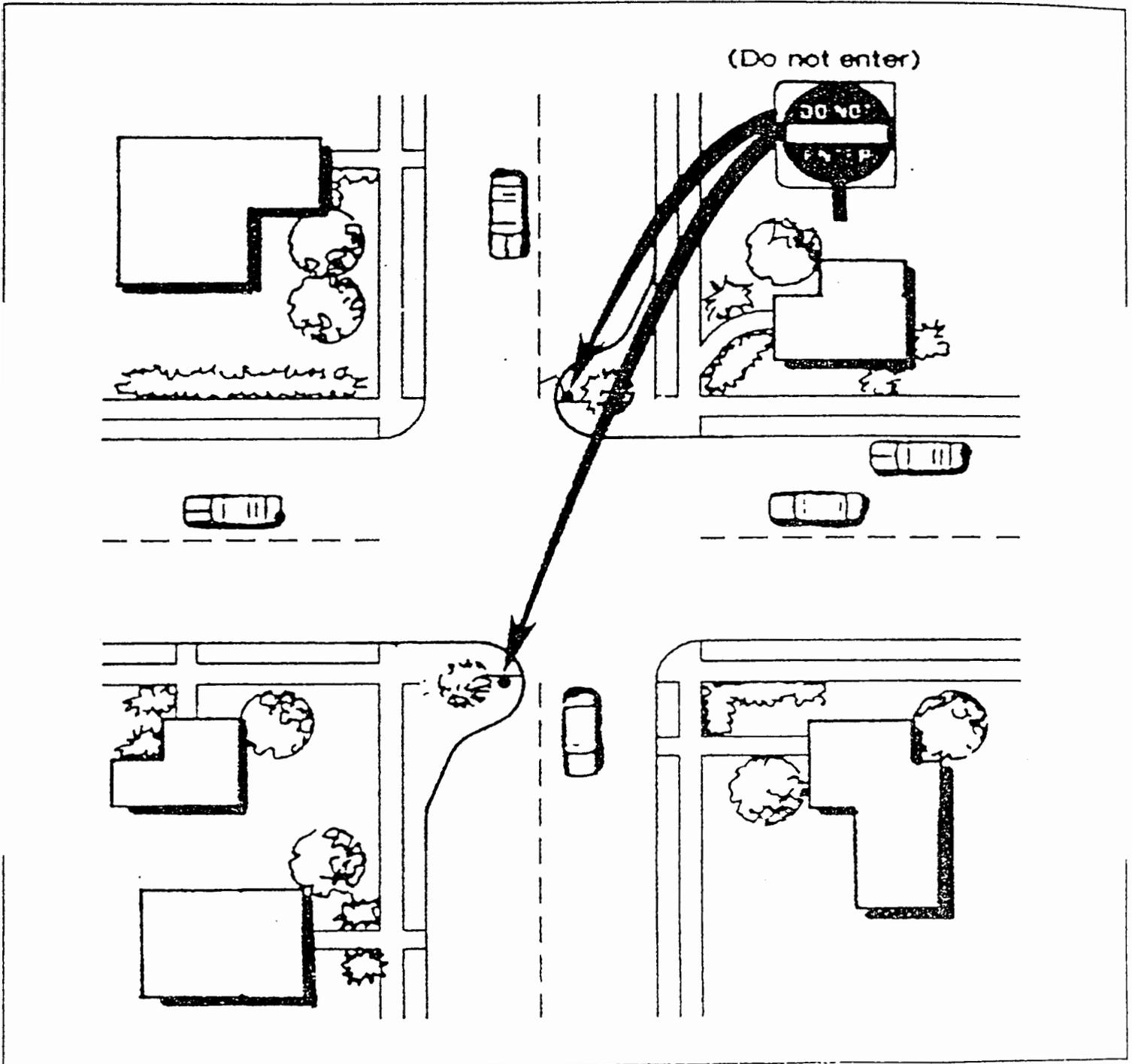


# HALF CLOSURES

(partial closures, one-way closures)

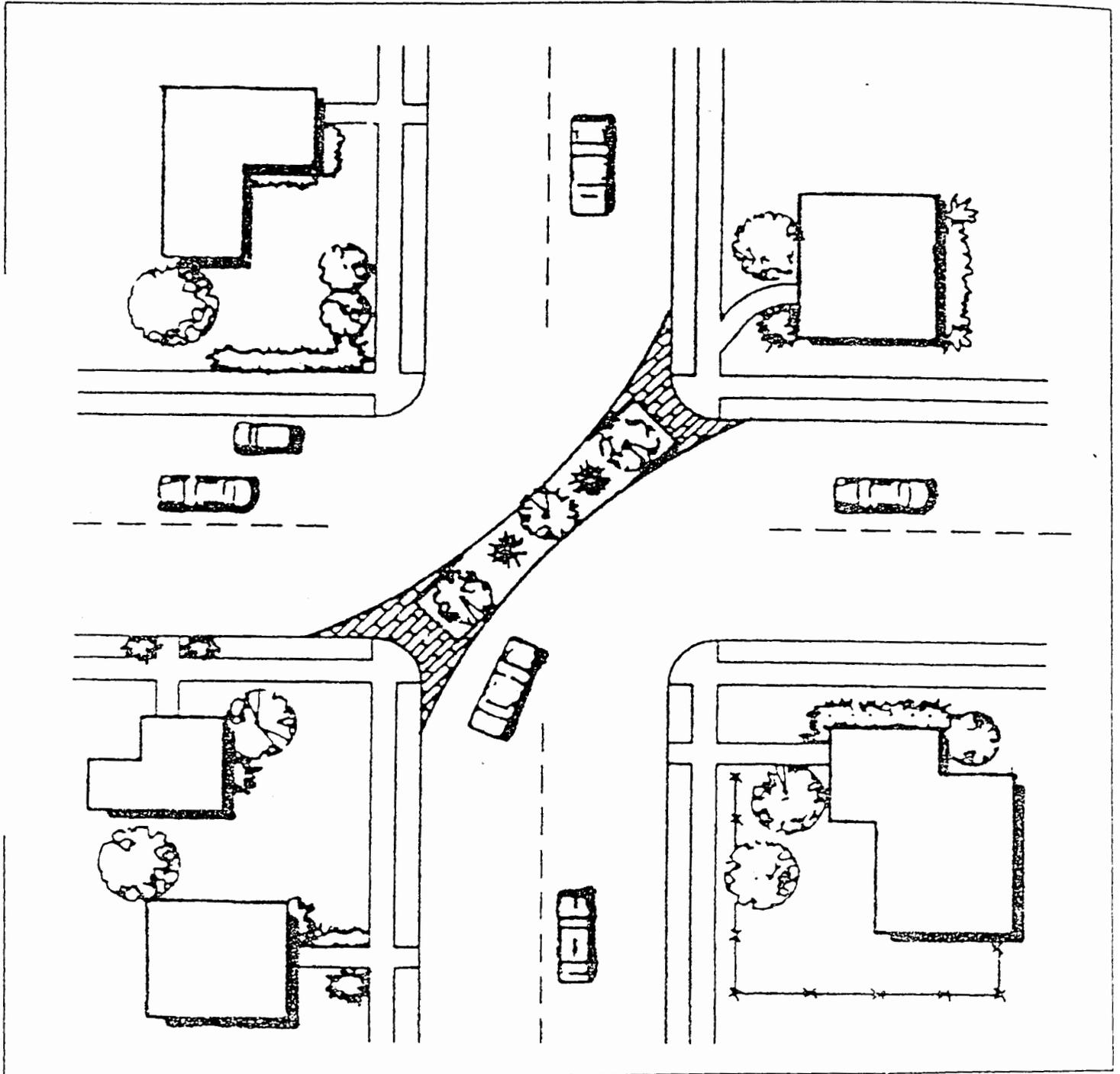


# SEMI-DIVERTERS



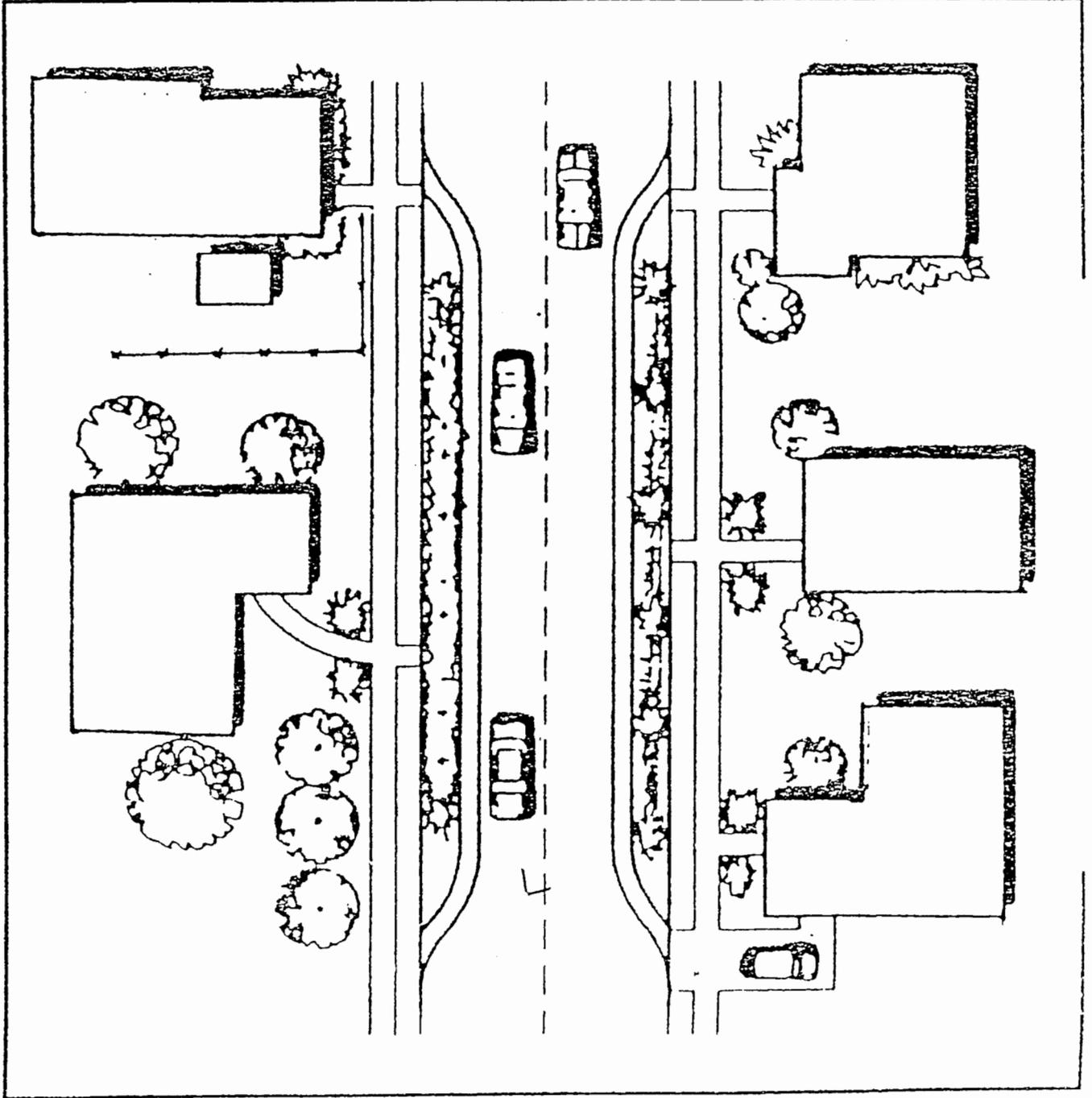
# DIAGONAL DIVERTERS

(full diverters, diagonal road closures)

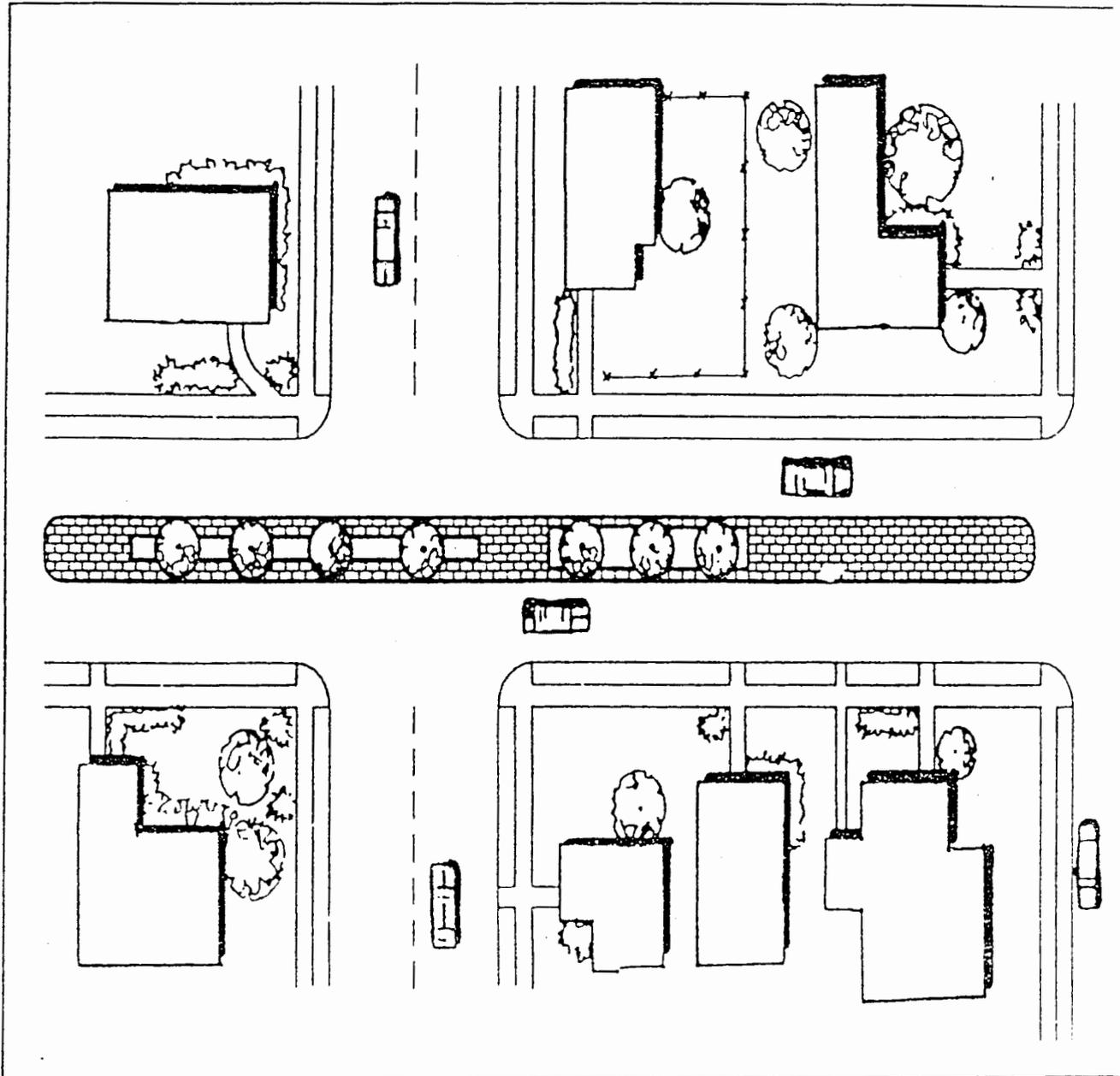


# CHOK\_RS

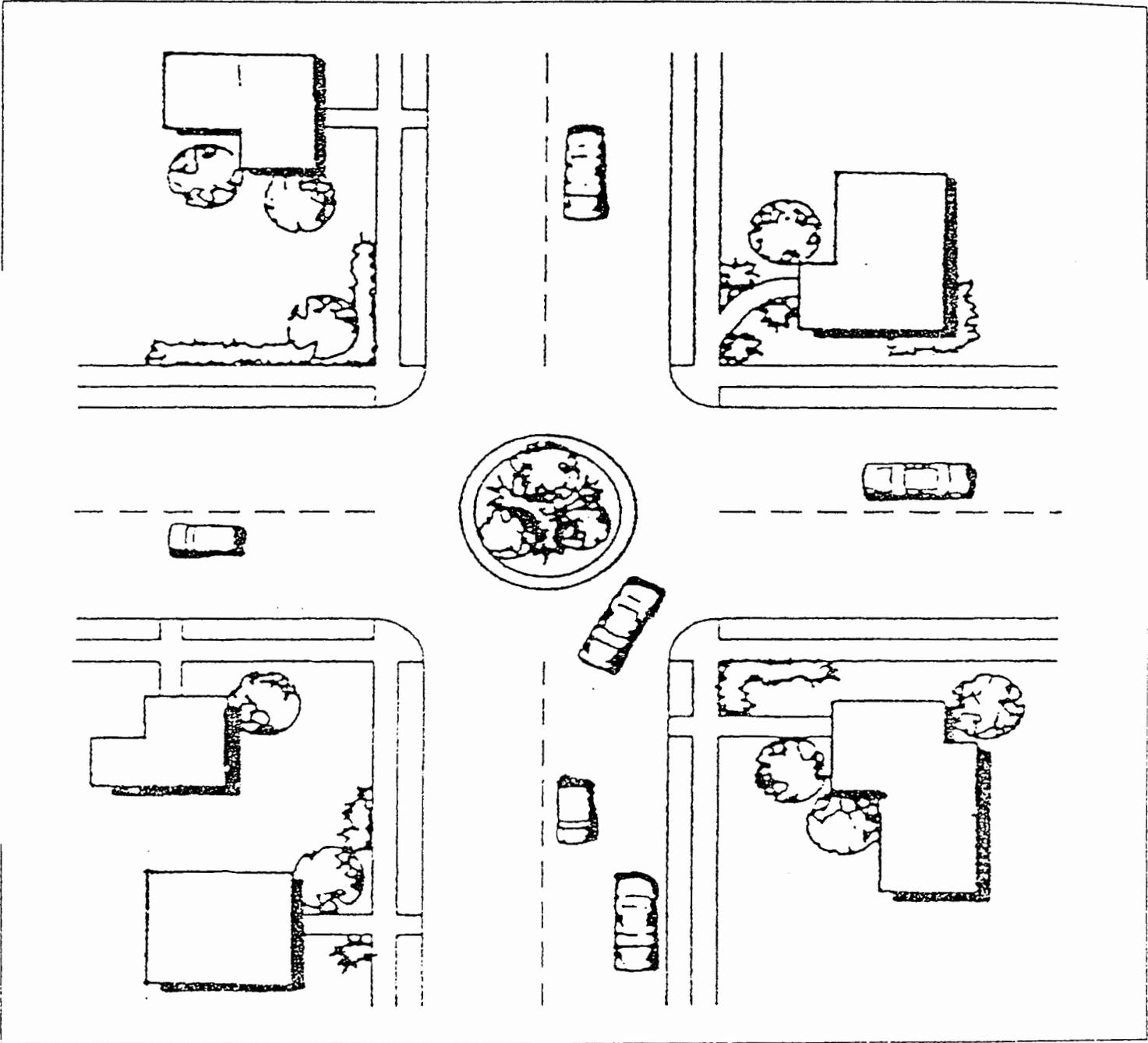
(pinch points, midblock narrowings, midblock yield points, constrictions)



# MEDIAN BARRIERS (median diverters, forced turn islands, island diverters)

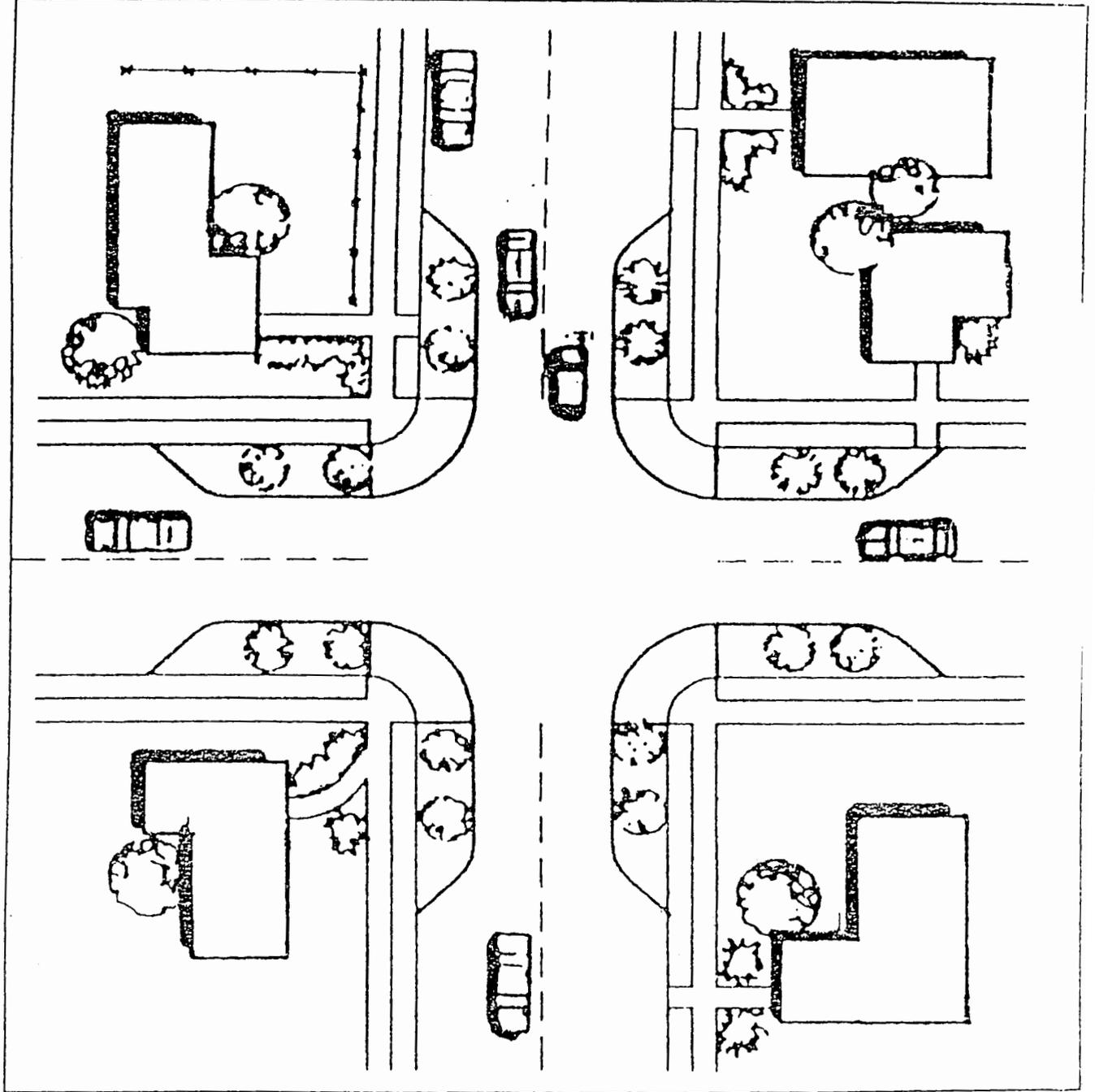


# NEIGHBORHOOD TRAFFIC CIRCLES *(intersection islands)*



# NECKDOWN

(nubs, bulbouts, knuckles, intersection narrowings, corner bulges, corner bulges, safe crosses)



# TEXTURED PAVEMENTS

