COUNCIL POLICY
CITY OF CHULA VISTA

SUBJECT: INSTALLATION OF SPEED HUMPS FOR RESIDENTIAL STREETS	POLICY NUMBER	EFFECTIVE DATE	PAGE
	576-18	06/01/96	1 of 5

ADOPTED BY: Resolution No. 18326	DATED: June 11, 1996

BACKGROUND

The desire by the community to control speed of traffic in neighborhoods has created a need to address and resolve this concern other than by constant enforcement. One method being used by many cities is the installation of "Speed Humps" or gentle roadway undulations in the pavement surface that gives discomfort to drivers passing over them at higher than desirable speeds. However, the use of speed humps needs to be applied in accordance with traffic engineering standard policies and criteria. This Speed Hump Policy prescribes the procedures, design standards, criteria, financing and warrants required to justify the installation of Speed Humps.

PURPOSE

The purpose of this policy is to establish minimum criteria for the installation of "SPEED HUMPS" as a means of controlling vehicular speeds on residential streets.

GENERAL PROVISIONS

1. Petition

   a. All requests for Speed Humps shall be made in the form of a formal petition which will be provided by the office of the City Engineer and is made part of this policy (Exhibit A).

   b. If more than one street in a neighborhood is being considered, a separate petition shall be circulated for each street to be included in the request.

   c. The petition must be signed by the property owners of each property having frontage on the street affected. In instances where the owner of the property is not in residence at the property, it shall be the responsibility of the petitioner to obtain the signature of the owner, and signatures of tenants of the property shall not suffice in place of the signature of the owner.

   d. All petitions to be considered under this policy shall contain signatures, indicating a favorable voice for the "Request for the Installation to Speed Humps", and a willingness to pay their share of the costs, of no less than seventy-five percent (75%) of the owners of properties abutting the street to be affected by such installation.

   e. Completed petitions shall be delivered to the office of:

The Office of the City Engineer
City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

f. The office of the City Engineer shall verify the signatures of each of the petitioners. If the petition does not meet the requirements of the policy, the office of the City Engineer will notify the person or persons who initiated the petition. For the purpose of determining who should be notified, the City Engineer shall contact, by letter, the first person/persons whose name(s) appears on the petition, unless other specific requests have been received regarding notification. This letter shall include the reason(s) why the petition was found to be invalid, and why any further studies have been suspended.

2. Safety Commission Hearing Notice

Speed Hump requests which meet all of the requirements of this policy, will be submitted to the Safety Commission for a public hearing to discuss the pros and cons of installing these Speed Humps on a case by case basis. Prior to the Safety Commission meeting, the City Engineer will send a notice of said meeting to the residents and property owners of all homes abutting the subject street and the homes on adjoining streets that might be adversely affected by the proposed Speed Humps.

3. Financing

The cost of constructing, signing and striping a Speed Hump is approximately $4,000 for each hump. Since a minimum array of at least three Speed Humps spaced 200 to 300 feet apart are necessary to effectively reduce speeds, a typical installation will cost at least $12,000 and could increase to $20,000 or more depending on the number of Speed Humps required.

Speed Humps are considered to be add-on roadway features which are offered as an option to other less expensive methods in controlling speeds on residential streets. They are not deemed necessary for the safe design of residential streets and therefore not a part of the street improvements required as a condition of approval for new residential developments.

Since Speed Humps are an elective residential feature which are intended to benefit persons owning property and/or living on the streets where Speed Humps are requested, the cost to construct Speed Humps shall be borne by the property owners, on a per dwelling unit basis, abutting the streets where the Speed Humps are located. Thus requests for Speed Humps will only be considered when property owners representing 75 percent of the fronting properties acknowledge their willingness to pay for the installation, as demonstrated by their signatures on the formal petition, thereby agreeing to share the cost.

Upon approval of the Speed Hump installation, 75 percent of the fronting property owners must agree to be assessed for their share of the cost to construct the Speed Humps, in which case all affected property owners will be assessed based, on the number of dwelling units that they own. The cost to the property owner will be based on an equal percentage of the total cost depending number of properties abutting the street where the Speed Humps are placed. The method of payment can be through direct payment utilizing an arrangement mutually agreed upon by the benefiting property owners and the City Council.

4. Design Standards

Speed Humps shall be constructed in conformance with the design standards and specifications shown on Exhibit B and made part of this policy.

5. Removal

The City retains the option of modifying or removing any or all of the Speed Humps after giving proper notice to affected and interested parties if; a) studies determine that Speed Humps are a detriment to safety or, b) said studies reveal that the Speed Humps no longer meet the provisions of this policy or, c) the Speed Humps are considered a general nuisance. There will be no refund of any monies to the property owners.

If, after Speed Humps are installed, residents wish to have the Speed Humps removed, each petition requesting removal of the Speed Humps shall contain at least 75% of the residents that face directly on the street block where Speed Humps are to be placed and will include all residences that access the street block. A separate petition shall be provided for each block. The petition for removal will be presented to the City Engineer for his consideration. There will be an additional charge made to residents to cover the cost of removing the humps, unless there are other unusual circumstances which require the removal, in which case the City may choose not to charge for the removal.

WARRANTS

The installation of Speed Humps on public streets will be considered only if all of the following conditions are met over the entire proposed street segment as determined by the City Engineer:

1. The average daily traffic volume shall be less than 3500 through vehicles per day. Speed Humps shall not be permitted on collector, arterial, or major streets.
2. The street shall not be over 40 feet wide and have no more than 2 through traffic lanes. It shall also have 1/4 mile of length that is uninterrupted by stop signs or traffic signals.
3. The curb adjacent to the road Speed Hump locations must be of the raised six inch standard barrier curb type and not roll-over curb.
4. The street shall have a posted speed limit of 25 or be unposted with a prima facia limit of 25 MPH.
5. More than 50% of the surveyed motorists must exceed the posted or if not posted then the prima facia speed limit for a residential street of 25 mph, and the 85th Percentile speed must exceed 35 mph.
6. Residential district as defined in the Chula Vista Municipal Code, Section 10.52.090(B) shall mean any block in which over *fifty* percent of the ground level buildings fronting on said block are dwellings. Said dwellings may be single-unit structures or multi-unit structures.

7. To avoid approach speeds of greater than 40 mph, the location of the first proposed Speed Hump shall be such that the approach speed in advance of the first Speed Hump can be effectively controlled via a physical design feature such as a curve or controlled intersection.

8. Installation of a road Speed Hump will not be permitted where substantial diversion of traffic to other local streets will occur as determined by the City Engineer.

9. Speed Humps shall not be considered for streets that serve as bus routes or are commonly used by emergency vehicles as an access corridor.

10. Street lighting must exist on the street blocks where Speed Humps are proposed to be installed.

11. The installation of Speed Humps shall not result in unacceptable delays to emergency vehicles as determined by the Police Department and the Fire Department.

12. The street shall have good vertical sight distance, pavement surface quality, horizontal sight distance, drainage and street lighting. It must be free of usual features which might affect the safe operation of Speed Humps.

INSTALLATION

A. Construction

1. All Speed Humps should be constructed in accordance with Chula Vista Design Standards (Exhibit B).

2. The Speed Humps shall be installed across the entire roadway to the lip of the gutter with the last one foot tapered flush with the pavement to minimize gutter running and to preserve gutter flows.

B. Warning Devices

1. Signs and markings shall be installed with Speed Hump construction in accordance with the Chula Vista Design Standards (Exhibit B).

Placement of Speed Humps

Speed Humps should be placed according to the following guidelines:

1. Speed Humps should be placed from 200 to 300 feet away from intersections, stop signs or short radius curves (curve of less than 300' radius). This ensures that sufficient driver reaction time is provided.

2. Speed Humps should be spaced approximately 300 feet apart.

3. The final position of the Speed Humps should take into consideration the following which should be field verified prior to installation:

   a. All Speed Humps shall not be located over manholes or within 30 feet of hydrants.

b. Speed Humps should be located downstream of storm drains.

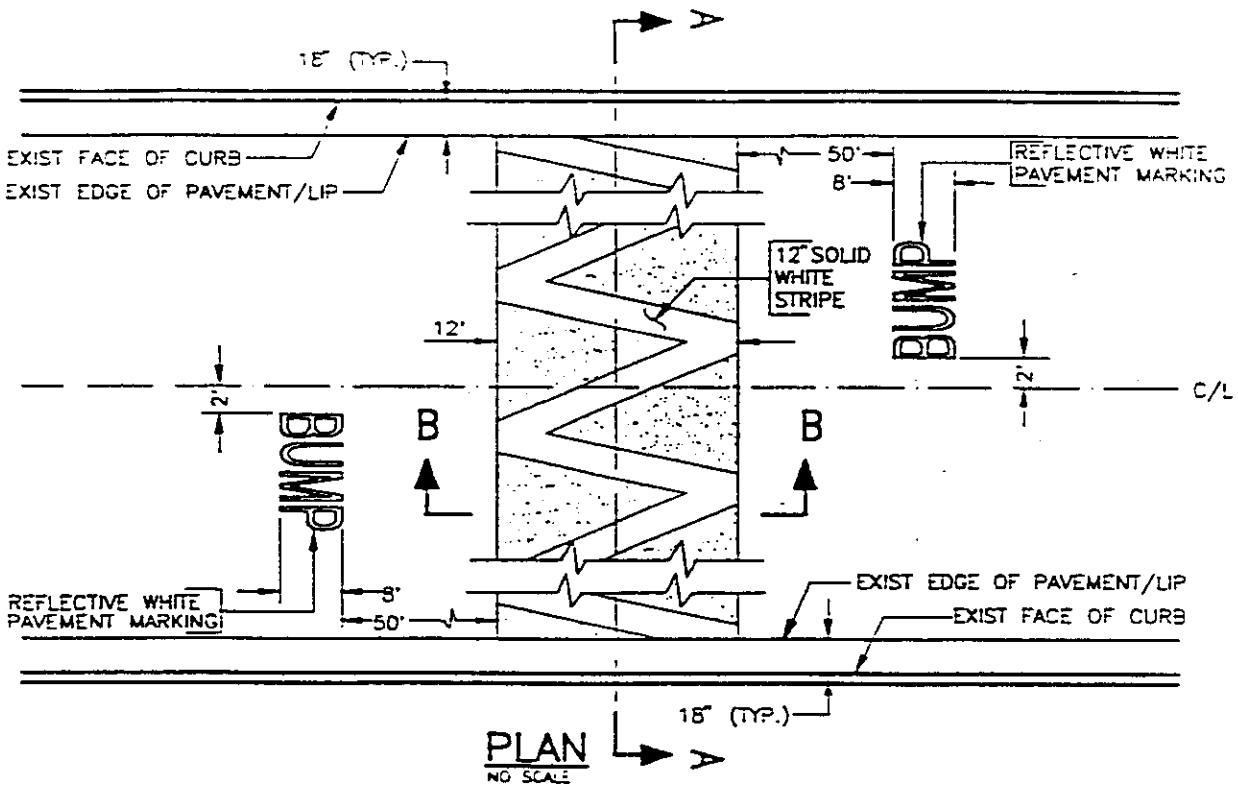
c. Speed Humps should be located at adjacent property lines between abutting properties when possible.

d. Speed Humps should be 10 feet away from driveways.

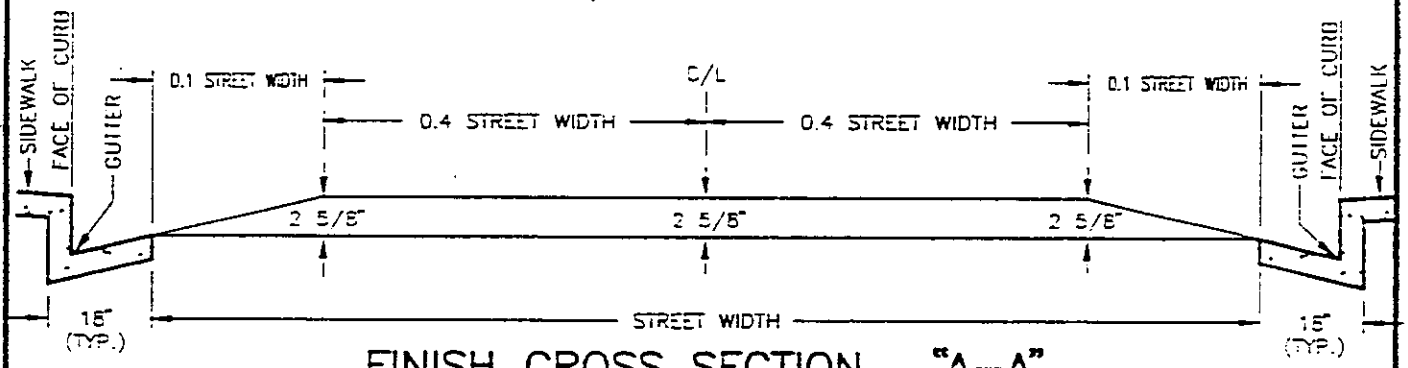
e. Vertical curves and grades should be evaluated with respect to advance visibility of Speed Humps. Typically, all Speed Humps should be placed at least 200 feet away from sharp horizontal curves and be readily visible from at least 200 feet away if placed near vertical curves.

f. Speed Humps should not be placed on horizontal curves.

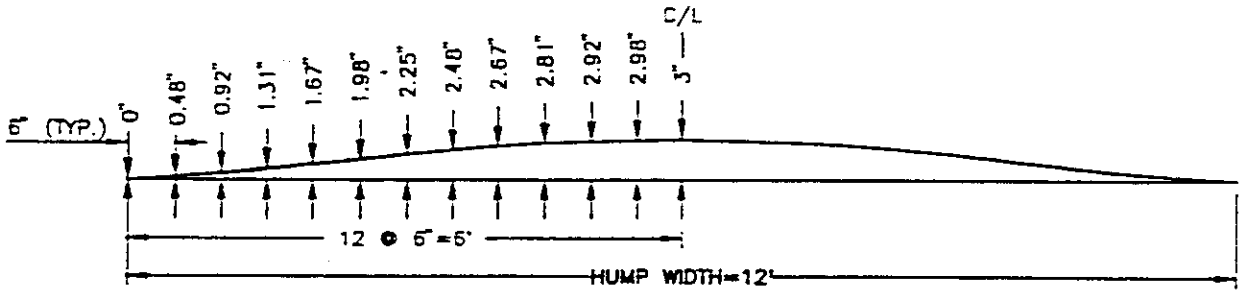
4. Speed Humps should not be placed on streets with grades greater than 6% or in a location that is not clearly visible for at least 200 feet.



PLAN
NO SCALE



FINISH CROSS SECTION "A–A"
NO SCALE TRANSVERSE TO STREET C/L

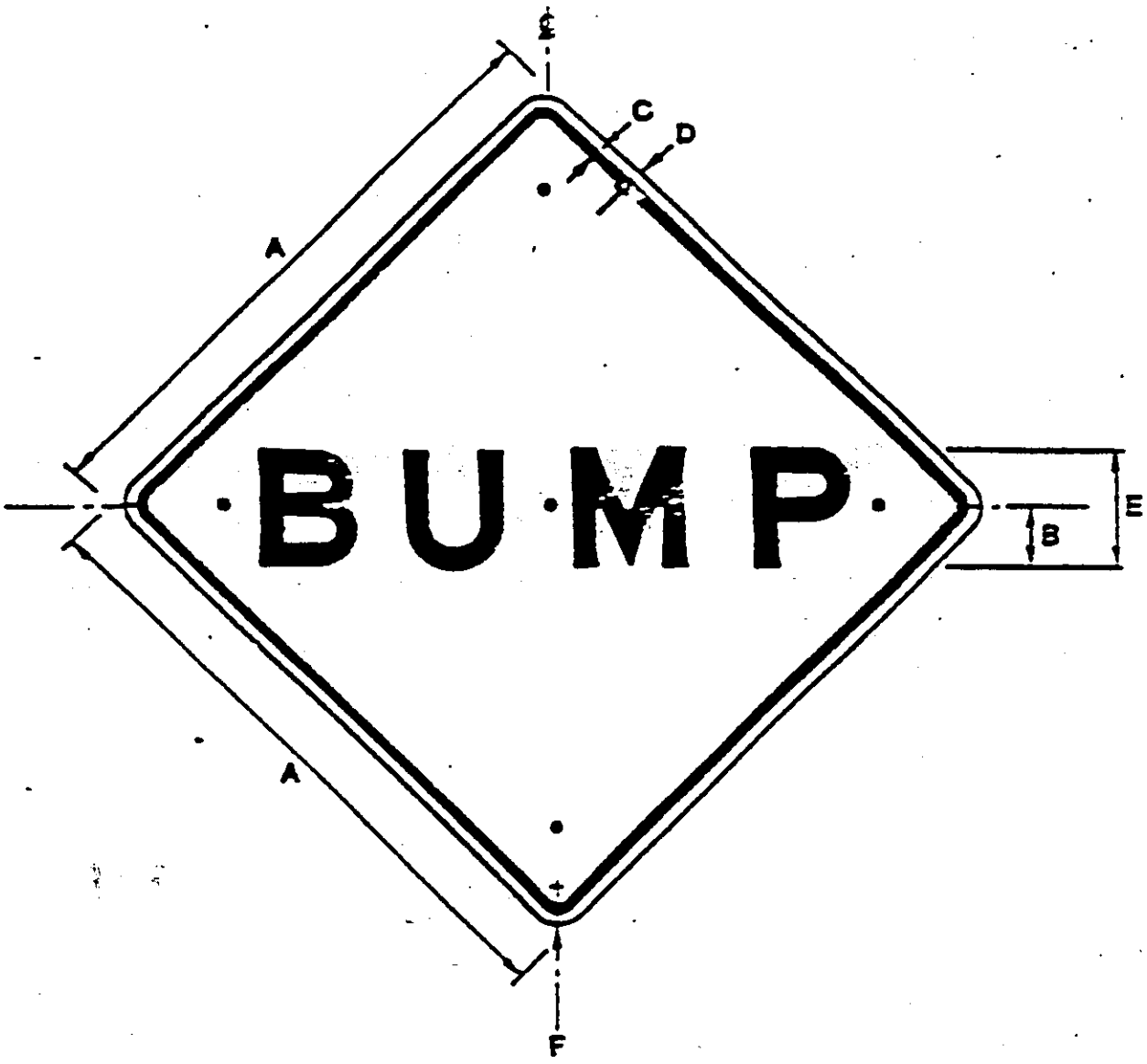


TEMPLATE CROSS SECTION "B–B"
NO SCALE LONGITUDINAL TO STREET C/L

Revised:	Drawn: DMW/AR Date: 4/30/96	CITY OF CHULA VISTA
	Approved: Date:	PUBLIC WORKS DEPARTMENT
	Clifford Swanson	SPEED HUMPS CVDS 34
	CITY ENGINEER	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

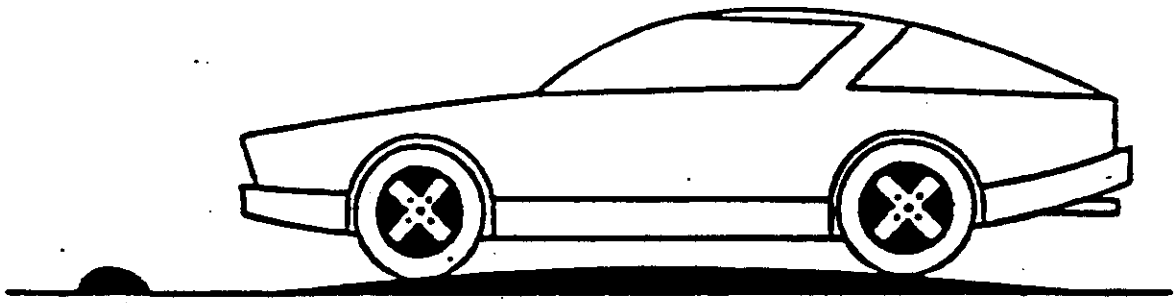
MUTCD NUMBER W8-1 CODE W37



SIGN	DIMENSIONS (INCHES)					
	A	B	C	D	E	F
MINIMUM	30	3	3/4	1/2	6E	1 7/8
~~STANDARD~~	~~6C~~	~~4~~	~~7/8~~	~~5/8~~	~~8C~~	~~2-1/4~~
~~SPECIAL~~	~~48~~	~~5~~	~~1-1/4~~	~~3/4~~	~~10C~~	~~3~~

COLORS
BORDER & LEGEND - BLACK
BACKGROUND - YELLOW (REFL)

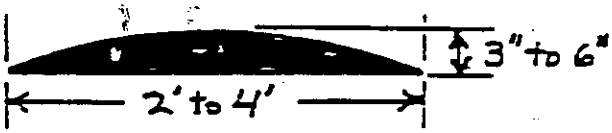
CalTrans Approved Signs



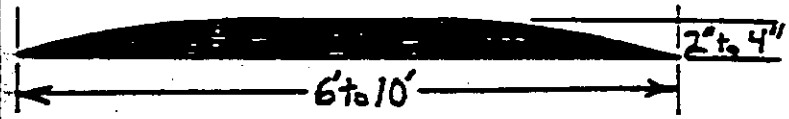
SPEED BUMP SPEED HUMP

In Designing Speed Humps, The Height And Width Determine The Speed At Which A Vehicle May Comfortably Pass Over The Hump. Both The Height And Width Affect The Comfortable Speed. Consequently, The Longer The Width, And The Shorter The Height, The Higher The Speed. Maintaining The Desired Speed Is Accomplished By Spacing. 250'-300' Spacing Should Maintain A Speed Of 25 M.P.H.

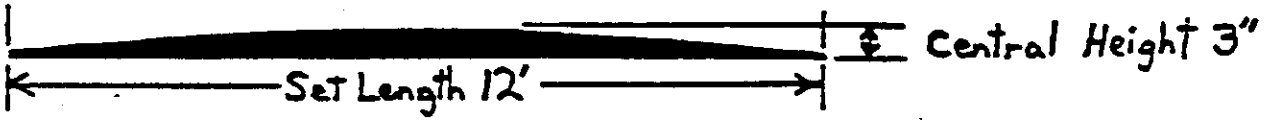
Speed Bump, Typically Found In Parking Lots, Requires Stop or Near Stop For Passage From Most Vehicles



Speed Bump, Typically Found In Parking Lots, Sometimes Used On Driveways or Private Streets Where Speeds Of Less Than 15 M.P.H. Are Required, Passage From Most Vehicles 0-10 M.P.H.

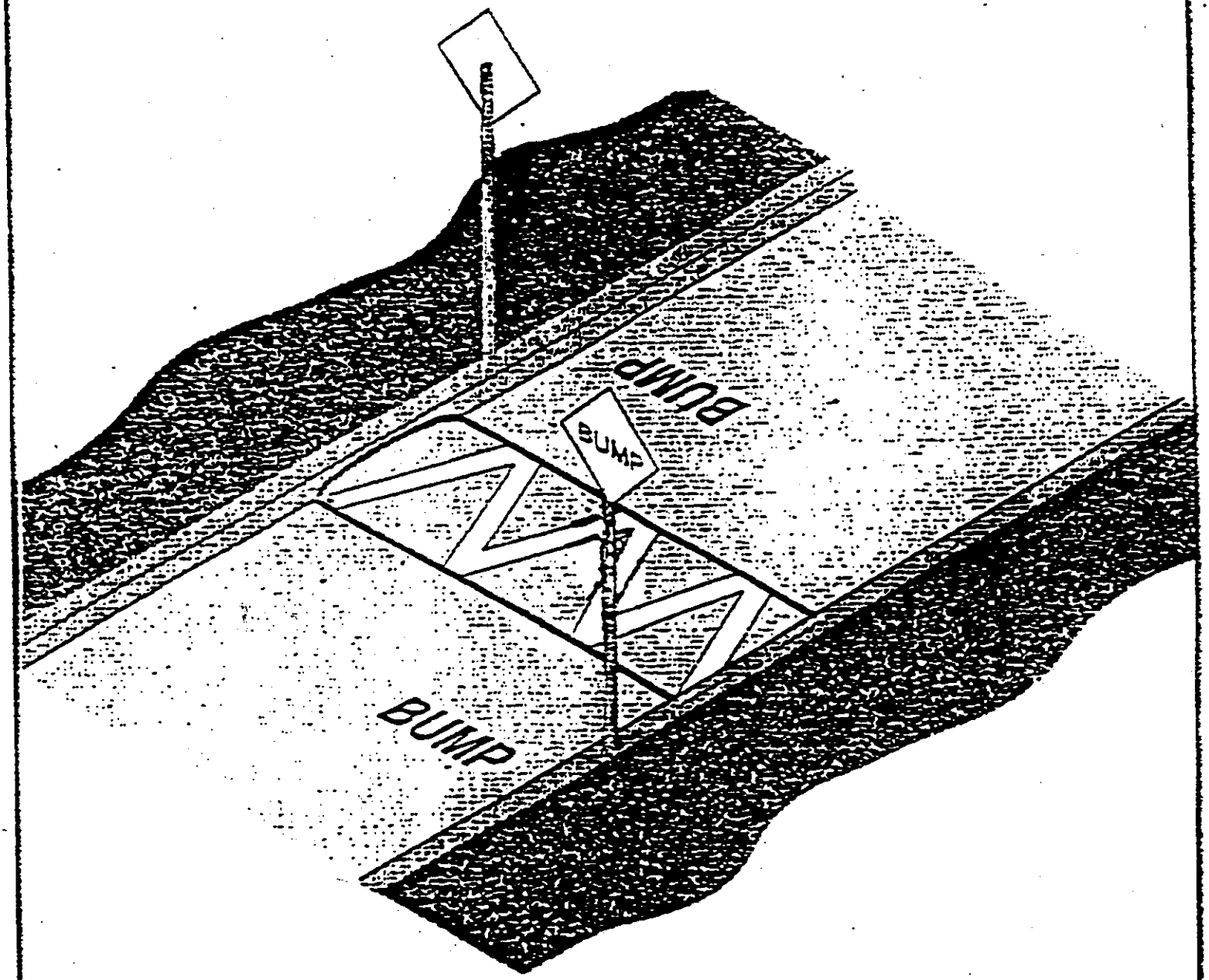


Private Street Speed Hump, Recommended For Use On Private Streets Where Speed Of 15 M.P.H. Is Expected, Can Be Safely Passed Over By Most Vehicles At 10-15 M.P.H., Some Discomfort May Be Expected



Public Street "Speed Hump" or Pavement Undulation, Designed To Be Comfortably Driven Over At Speeds Of 15-25 M.P.H. In Most Vehicles, At Speeds Of 25 M.P.H. or Greater Drivers Should Experience Some Degree Of Discomfort While Not Sensing Any Loss Of Control. In This Method Of Speed Control, Most Drivers Will Drive At Speeds At Which They Feel Comfortable And Safe. Range Of 20-30 M.P.H.

DRAWN BY	D.M.W.	TITLE	INFORMATION
DATE	5/22/95		"Speed Bumps vs Speed Humps"



DRAWN BY D.M.W.	TITLE Typical Installation For "SPEED HUMPS"
DATE 5/22/95	

FORMAL PETITION

FOR THE INSTALLATION OF "Speed Humps"

Date of Petition_____

SEGMENT BEING EVALUATED

Street_____

From_____To_____

We, the undersigned, do by signature on this petition, wish to formally request the City of Chula Vista to install "Speed Humps" on the segment of street described above. It is understood that by signing this petition we acknowledge that we, as the property owners to benefit from this installation agree to pay our fair share of the cost for installing these roadway features.

We understand that the policy for such petition process, limits the requesting parties to the "Property Owners" of properties having frontage on the street named in this petition and we do by signature on this petition acclaim to be said property owners.

We further understand that in accepting this petition, the City is in no way obligated to install the "Speed Humps" being requested. The petition serves simply as a request and that the segment described above will be evaluated in accordance with City Council Policy only if 75% of the property owners concur.

A copy of said policy is available from the office of the City Engineer of the City of Chula Vista, and establishes a method of payment for the installation of Speed Humps being requested. This policy further provides that if at any time after the Speed Humps are installed, we as property owners desire to have said "Speed Humps" removed, we will be assessed the costs involved with such removal.

Prior to signing on the Petition that follows, it is recommended that the property owner read and understand the advantages and disadvantages of installing "Speed Humps" on residential streets.

1. <u>Advantages</u>

   In general, studies of "Speed Humps" installed in cities throughout southern California have revealed that:

a. Speed Humps effectively reduce speeds on residential streets when designed and installed in a series developed to maintain set speeds over a set distance.

b. Speed Humps may tend to divert vehicles that are using local streets to avoid arterial congestion (reduce short-cutting), back to the arterial system provided.

2. Disadvantages

In general, studies of "Speed Humps" installed in cities throughout southern California have revealed that:

a. Speed Humps are not aesthetically pleasing. They require special signing and pavement markings which are often considered to be unsightly by the same residents that requested the installation of the Speed Humps. Residents, when asked, have reportedly sensed a perception of reduced property value.

b. The discomfort of driving over the "Speed Humps" may divert the undesirable traffic conditions to adjacent residential streets in the neighborhood.

c. Can be uncomfortable for those who drive over them, especially those who may live with medical conditions such as lower back or neck pain.

d. May slow down response time for Fire Department and other emergency vehicles in gaining access to homes in the area affected by "Speed Humps".

e. Residents living adjacent to the "Speed Humps" may experience increased noise levels both from the movement of vehicles traversing the hump (Suspension or Scraping noise) and from the deceleration and acceleration of vehicles arriving at and departing from the hump. (Braking and Exhaust noise)

f. Since by design, the "Speed Hump" is tapered at each end and does not extend into the gutter, so as not to block the flow of water, vehicles may swerve toward the curbline as they approach the "Speed Hump" in an attempt to lessen the impact on the suspension of their vehicle. This manuever thus, reduces the effectiveness of the "Speed Hump" installation, and may increase accidents involving vehicles which are legally parked along the curb.

Having read and understood the conditions contained herein, we the undersigned, do attest to being qualified property owners of the property at the address listed on the petition, and do hereby formally request that our street be given all due consideration.

Owners that do not reside at the subject property must list separately their address of residence for notification purposes. (Such owners use two (2) lines. One signature per property only.)

Neighborhood Representatives/Contact Person(s)

1. _____

2. _____

3. _____

NAME OF OWNER	ADDRESS OF PROPERTY	SIGNATURE

Petition for "Speed Humps" (Cont.) Additional Sheets Available

NAME OF OWNER	ADDRESS OF PROPERTY	SIGNATURE