



406 "B" Street • Lemoore, California 93245 • (209) 924-6735 • FAX (209) 924-6708  
Public Works Department

## MEMO

Date: June 26, 1998

To: City Council

From: David Wlaschin,  Public Works Director

RE: Undulation Policy Revision

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### Discussion:

As requested by City Council, Staff has drafted a revised undulation policy (attached). The significant change of this policy over the previous policy is the financial participation requirement of the neighborhood in which undulations are being requested. Currently, we do not require any contribution from the residents benefitting from the undulation. The new policy requires that the residents pay approximately 1/3 the cost of installation of undulations (\$700 for a set and \$400 for a single undulation).

It is quite likely that the change in policy, if approved, will significantly reduce the number of undulation requests received.

### Budget Impact:

The City will save 33% on installation expenses for undulations, leaving additional funds for street improvements.

### Recommendation:

That the Council, by minute action, approve the amended Policy on Speed Control Undulations.

**City of Lemoore**  
**Policy on Speed Control Undulation**  
**July 1998**

**Objective**

The purpose of constructing speed control undulations on City Streets is to reduce vehicle speeds and volume of through traffic on residential streets and those streets adjacent to parks and elementary schools. The construction of undulations shall be limited to streets where a significant number of drivers exceed posted speed limit ans where the geometric configuration of the street is suc that the installation will likely provide a successful control.

The construction of undulations in the pavement is intended to have two direct impacts upon the traffic in a particular street. First, the average vehicle speed will be reduced, and second, the volume of traffic will be reduced. The average speed will be reduced because the driver will slow down while crossing the undulations to avoid discomfort created by excessive speed. A reduction in the volume of traffic will occur because a portion of the drivers will select alternative routes in order to completely avoid the undulations.

**Minimum Eligibility Criteria**

Installation of undulations in pavement for the purpose of controlling traffic may be warranted under the following conditions:

1. *Local Residential Street* – A street fronted by at least 75% residential development and developed to the City's standard for local residential street, along which a two-thirds majority of the households sign a petition in favor of the construction. The street shall have a minimum length of 600 feet between intersections, with a speed limit of 25 miles mph or less, and an 85<sup>th</sup> percentile speed not less than 5 mph above the limit.
2. *Park or School Street* – A street which is adjacent to an elementary school or park will all of the characteristics of a Residential Collector Street as described above. In the evaluation of the petition favoring construction, the school or park area will be counted as being in favor with one vote for each seventy feet of frontage.

**Verification**

Once a petition is received, streets under consideration for installation of pavement undulations shall be investigated by the Police and Public Works Departments for compliance with the minimum criteria listed above. As part of the investigation, the department will perform speed surveys to determine the range and percentage of vehicle speeds. A count of the number of residences fronting the street will be made and the remainder of the frontages on the street will be categorized as park, school, apartments or other.

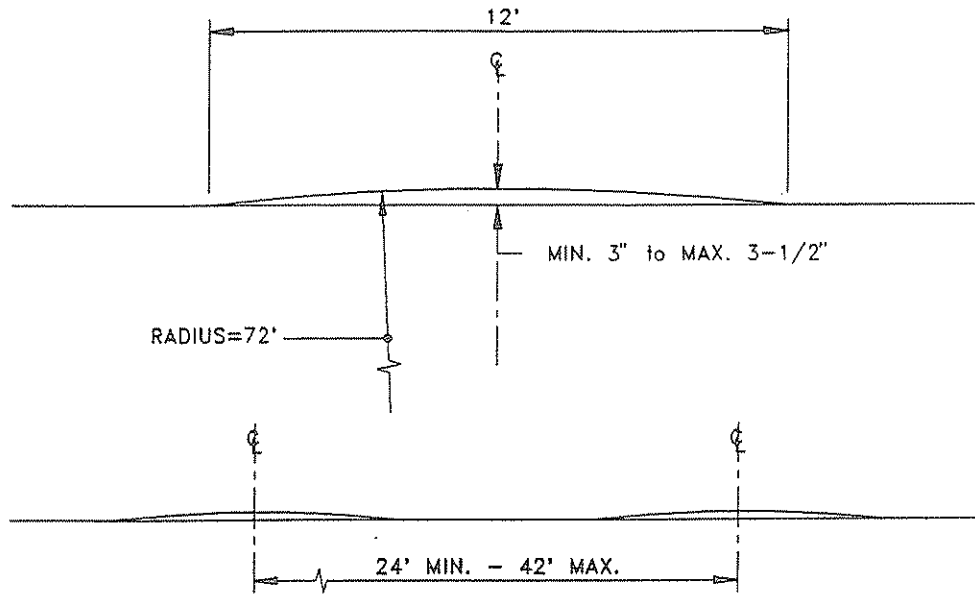
Once undulations are verified to be warranted, the party submitting the petition will be provided with a sketch showing the proposed undulations as well as an amount of neighborhood contributions to be submitted prior to the installation. If undulations are not warranted, the party submitting the petition will be given the reasons why undulations should not be installed. Said residents shall have the opportunity to appeal such a decision to the City Council.

**Funding**

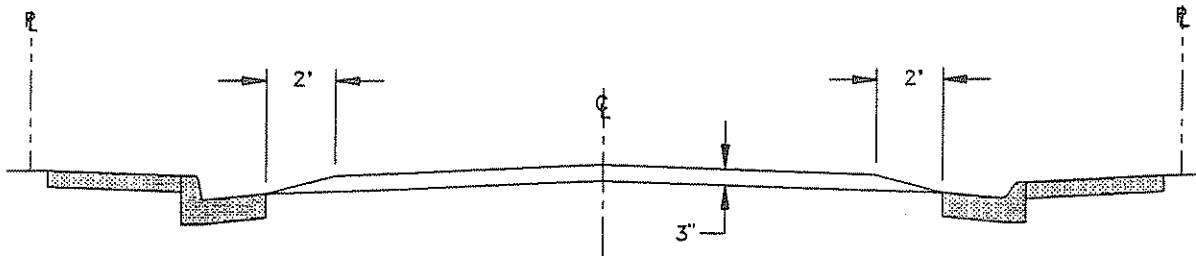
Installation of undulations shall occur after the neighborhood submitting the petition has collected and submitted \$700 per set of undulations or \$400 for one undulation, approximately 1/3 of the installation expense. The City will contribute the remaining 2/3 of the expense (if funds are available) after approval of the City Council. If for any reason funds are submitted to the City and undulations are not installed, the City will refund all submitted money. It is the responsibility of those circulating and signing the petition to collect and submit finds to the City.

In the event that the number of streets which are qualified to have pavement undulations installed exceeds the ability of the City to finance the construction, then the projects shall be prioritized as described below. The street with the highest point rating will be constructed first.

1. One point for every 50 vehicles which travel the street in an average 24 hour period.
2. One point for each percentage point of total vehicles exceeding the posted speed limit, plus one-half point for each mile per hour that the 85th percentile speed exceeds the posted limit.
3. One point for every residential unit fronting directly on the street, plus one point for each 75 feet of school, park, apartments or other frontage.



*Cross Sections of Undulations*



*Street Cross Section at Undulations*

FIGURE ONE

### Construction Specifications for Undulations

Pavement undulations will be constructed of asphaltic concrete. Each undulation shall have an overall length in the direction of travel of twelve feet, a vertical height of three to three and one-half inches, and a radius of vertical curvature of seventy two feet along the upper surface. The distance between the centerlines of a pair of undulations shall be between 24 and 42 feet. Transverse to the centerline of the street, each undulation will extend to the lip of the gutter with a two foot taper from the maximum height to the gutter lip. (See *Figure One*.) Asphaltic concrete and the methods of placement shall comply with the standard specifications of the City of Lemoore.

### Guidelines for Locating Undulations Within Selected Streets

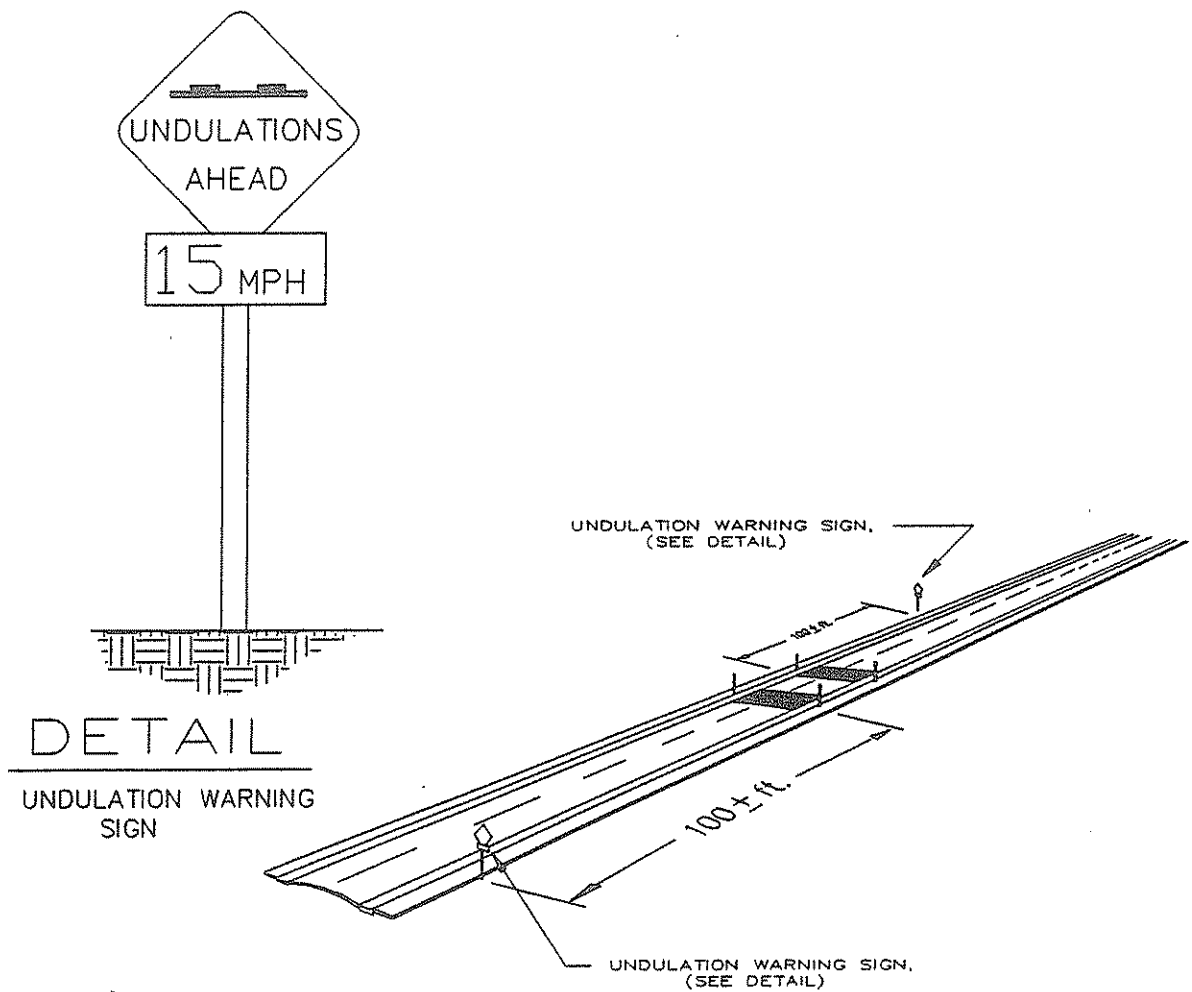
The precise location in which the undulations will be constructed in the street will be selected by the Department of Public Works, generally in compliance with the following guidelines:

1. No less than two sets of undulations should be constructed on a given street. The maximum number of sets will be determined by the Public Works Department.
2. The minimum spacing between sets of undulations should be 500 feet and the maximum should be 1000 feet. No undulations should be placed within 250 feet of a traffic control device or a four-way intersection.
3. Whenever possible, undulations should not be located within 150 feet of any corner.
4. Undulations should not be located so as to cover any manhole, water valve, street monument or within twenty-five feet of any fire hydrant.
5. Undulations should not be located within ten feet of any portion of a driveway.
6. Undulations should be located as near to property lines as is practicable.
7. Undulations should be located near existing street lights when possible.

These standards may be modified to meet the requirements of particular projects, and shall not be construed as absolutes.

### Warning Signs and Striping

Both street sign and pavement markings will be installed to alert motorists to the presence of the undulations. The signing shall be as indicated in *Figure Two* with a thirty inch sign stating "UNDULATIONS" in four inch (4") series "C" letters, above which shall be a pictorial representation of a pair of undulations. A second sign recommending a 15 MPH speed will be placed directly below the warning sign. The warning signs shall be located 100 feet from the centerline of the undulation in that traffic lane. (See *Figure Two*.)

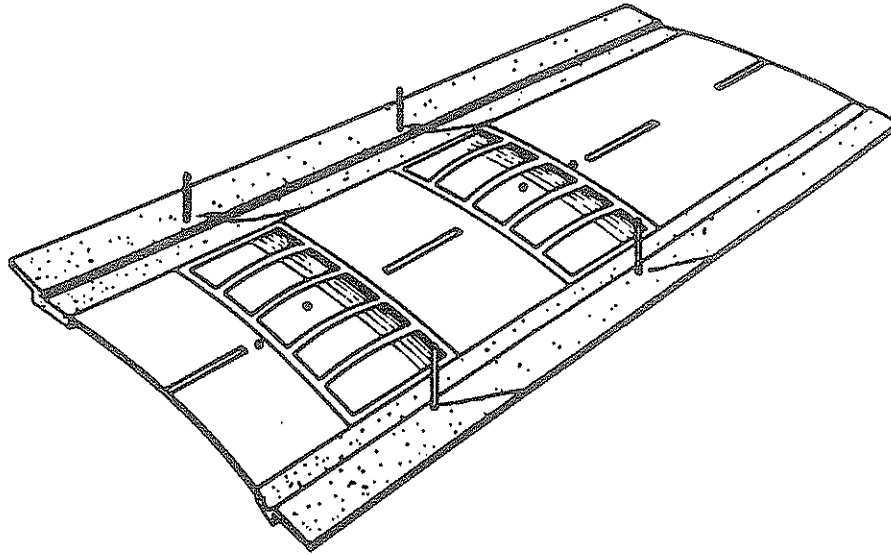


Installation of Warning Signs

FIGURE TWO

Pavement markings shall include 12-inch longitudinal ladder markings at four feet on center, which will be painted across each undulation. In addition, raised reflectorized pavement markers shall be installed on the centerline, positioned on the crest and in front of the undulation from the approach directions. (See Figure Three.)

All warning devices shall be installed in such a manner that they will be easily visible from the approaches to the undulations.



Pavement Markings

FIGURE THREE

#### Removal of Undulations

Removal of undulations which have been installed for less than two years will only be considered if the City is compensated for the full cost of the original installation by those requesting removal.

In general, undulations will be removed only in cases where they prove to be ineffective in accomplishing the intended purpose of improving traffic safety. Prior to recommending the removal of undulations, the Public Works Department will prepare an evaluation of the undulations including:

1. New traffic volume count.
2. New speed surveys.
3. Report comparing existing traffic conditions with those prior to the installation of the undulations.
4. Survey of that portion of the area adjacent to the street in which the undulations are located to determine the opinion of residents qualified to vote on the question.

If the Public Works Department determines that a recommendation to remove existing undulations is appropriate, then such recommendation will be made to the Council in writing. If the recommendation is approved by action of the Council, the removal will proceed.

**ITEM # 3-A**

**Minutes of the Study Session of the  
LEMOORE CITY COUNCIL  
July 7, 1998**

**ATTENDANCE:**

Mayor Martin; Councilmembers Lahodny, Lee, Luis, Silviera; City Manager Froberg; City Attorney Bacigalupi; Public Works Director Wlaschin; Interim Finance Director Merrill; City Clerk Murray; Police Chief Stull; Admin. Analyst Britz; Econ. Dev. Coordinator Burlew.

**RDA MEETING:** At 5:30 p.m., Council adjourned to sit as the Redevelopment Agency of the City of Lemoore and reconvened at 6:30 p.m.

**ADJOURNMENT:** At 6:35 p.m., Council adjourned to Executive Session and returned to Regular Session at 6:48 p.m. At 6:49 p.m., Council adjourned to the Regular Meeting at 7:30 p.m.

**Minutes of the Regular Meeting of the  
LEMOORE CITY COUNCIL  
July 7, 1998**

**ATTENDANCE:**

Mayor Martin; Councilmembers Lahodny, Lee, Luis, Silviera; City Manager Froberg; City Attorney Bacigalupi; Public Works Director Wlaschin; Interim Finance Director Merrill; Community Development Director Verma; City Clerk Murray; Recreation Director Hernandez; Police Chief Stull; Admin. Analyst Britz;; Econ. Dev. Coordinator Burlew; Police Commanders Morrell and Laws.

(1.2290)

**PUBLIC COMMENT:**

Tom Davis, 947 Avocado Drive, spoke against the Vehicle License Fee repeal. He noted that the impact on Lemoore would be significant with respect to public safety and quality of life. and the \$700,000 decrement to the City's budget would be difficult to deal with.

(1.2506)

**SWEARING-IN – POLICE OFFICER DWIGHT YOUNG:**

Police Chief Stull conducted the swearing-in for the City's new Police Officer, Dwight Young.

(1.2755)

**EMPLOYEE OF THE QUARTER:**

Mayor Martin presented a Plaque, City of Lemoore shirt and \$100 to Fred Jimenez as the City's Employee of the Quarter.

(1.2870)

**CONSENT CALENDAR:**

Councilmember Lee pulled Item B (Approval – Warrant Register) from the Warrant Register for separate consideration.

It was moved by Councilmember Luis, seconded by Councilmember Lahodny and carried that the Council approve the following Consent Calendar:

- A. Approval – Minutes – June 16, 1998
- B. Approval – Notice of Completion – Tract No. 567 – Husted Ranch, Phases I and 2 (Valley Vanguard)
- C. Approval – Amendment – Audit Contract
- D. Approval – Resolution No. 9827 Re. Selective Service Registration Prior to City employment
- E. Approval – City Response to 1998 Grand Jury Report

AYES: Luis, Lahodny, Silviera, Lee, Martin  
ABSTAIN: None

NOES: None  
ABSENT: None

**ITEM B – WARRANT REGISTER:**

It was moved by Councilmember Lahodny, seconded by Councilmember Luis, and carried that the Council approve the Warrant Register.

AYES: Lahodny, Luis, Silviera, Martin  
ABSTAIN: None

NOES: Lee  
ABSENT: None

(1.3170)

**PUBLIC HEARING – ADOPTION OF 1998-99 OPERATING BUDGET AND 1998-2000 CAPITAL BUDGET:**

City Manger Froberg again reviewed those budget pages amended by the Council during the Budget process.

Mayor Martin opened the Public Hearing at 7:55 p.m. There was no testimony and the Hearing was closed immediately.

RES. 9828:

It was moved by Councilmember Lahodny, seconded by Councilmember Silviera and carried that the Council adopt Resolution no. 9828 approving the 1998-99 Budget.

AYES: Lahodny, Silviera, Lee, Martin  
ABSTAIN: None

NOES: Luis  
ABSENT: None

(2.0079)

**PUBLIC HEARING – ABATEMENT OF PUBLIC NUISANCE:**

Demolition of the structure at 128 "G" is complete and a final statement to the property owner has been submitted in the amount of \$4,345. After approval of the abatement cost by the Council, the owner is given 30 days to make payment.

The Public Hearing was opened at 8:00 p.m. There was no testimony and the hearing was closed immediately.

It was moved by Councilmember Lahodny, seconded by Councilmember Silviera and carried unanimously that the Council approve Resolution No. 9830 confirming the abatement cost for the public nuisance at 128 "G" Street and ordering levy of the assessment.

AYES: Lahodny, Silviera, Luis, Lee, Martin  
ABSTAIN: None

NOES: None  
ABSENT: None

(2.0159)

**QUARTERLY INVESTMENT REPORT:**

It was moved by Councilmember Luis, seconded by Councilmember Silviera and carried unanimously that the Council accept the Quarterly Investment Report.

(2.0575)

**UNDULATION POLICY REVISION:**

Council reviewed a revised Undulation Policy. The significant change over the previous policy is the financial participation proposed from the neighborhood requesting the undulations. The proposal calls for the residents to pay 1/3 of the cost, either \$700 for a set or \$400 for a singly undulation.

There followed considerable Council discussion, with consensus being that the residents pay half the cost of the undulations.

It was moved by Councilmember Lee, seconded by Councilmember Lahodny and carried that the Council approve the revised Policy on Speed Control Undulations with the condition that residents pay half the cost, either \$1,050 for a set of undulations or \$550 for a single undulation.

AYES: Lee, Lahodny, Luis, Lee, Martin  
ABSTAIN: None

NOES: None  
ABSENT: None

(2.1208)

**REPEAL – VEHICLE LICENSE FEES:**

Council reviewed a Staff Memo and accompanying documentation from the League of California Cities regarding the negative impacts of the proposed Vehicle License Fee repeal.

Councilmember Lee stated that taxes should be cut any way possible, and City Government will find the money somewhere. Council consensus was not to support the opposition to the repeal. There was no support for a motion to approve the Resolution in opposition.

(2.1958)

**DEPT. REPORTS:**

Analyst Britz reported that the City received a \$15,000 grant for installation of bike lanes.

Chief Stull reported on the status of the problem solving with regard to the 18-wheelers parked at Bush and "D" Streets. He also reported on complaints received on a residence in the 100 Block of "F" Street. The Department has an action plan to correct the problem.

Community Development Director Verma reported that Growth Management will be on the Council agenda on August 4<sup>th</sup>.

City Manager Froberg reported that the Lighting and Landscape Maintenance Districts will be discussed at the Study Session on July 21. In addition, the Citizens Academy Graduation will be held at the Study Session.

City Manager Froberg stated that Ronney Wong has been chosen as the City's new Finance Director.

(2.2115)

**COUNCIL REPORTS:**

Councilmember Luis thanked those involved in the effort on "G" and "F" Street, and thanked Jeff Britz for his work on the Bike Lane Grant just received.

Councilmember Silviera asked Staff to consider preparing a quarterly report on sales tax for the Council. Silviera also felt that a sign pointing out the downtown should be considered.

Councilmember Lee asked for a report on the water rates to see that citizens are not over-taxed.

**ADJOURNMENT:** The meeting adjourned at 9:15 p.m.