City of Redding
Public Works Department
Traffic Operations

# Engineering and Traffic Survey of Lake Boulevard

| | |
|---|---|
| Survey Date: | 4/13/2016 |
| 7-year Expiration: | 4/13/2023 |

For the determination of safe and reasonable speed zoning as required by Sections 22358 and 40802 of the California Vehicle Code (CVC), as defined by Section 627 of the CVC and in accordance with Section 2B.13 of the California Manual on Uniform Traffic Control Devices, this Engineering and Traffic Survey (E&TS) was initiated to verify or modify speed zones on Lake Boulevard.

Based on the results of this E&TS and adoption of Ordinance Number 2548 by the City Council of the City of Redding, amending Redding Municipal Code Section 11.12.010, the following speed zone(s) on Lake Boulevard is / are established:

- 40 mph from State Route 273 to 500 feet west of Clay Street
- 45 mph from 500 feet west of Clay Street to the City Limit

In accordance with Redding Municipal Code 11.08.010, appropriate signs giving notice of the above speed zoning shall be placed and the stated speed limit(s) shall be effective upon the placement of such signs.

REGISTERED PROFESSIONAL ENGINEER JOHN C. ABSHIER No. C63895 CIVIL STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER JOHN C. ABSHIER TR 2251 TRAFFIC STATE OF CALIFORNIA

6-13-16
John C. Abshier, P.E. Date
Traffic Operations Manager

6/13/2016
Brian Crane, P. E. Date
Director of Public Works

ATTEST:

PAMELA MIZE, City Clerk

City of Redding
Public Works Department
Traffic Operations

Engineering & Traffic Survey

# Lake Boulevard

| SPEED ZONE BOUNDARY | SR 273 to 500 ft west of Clay St | 500 ft west of Clay St to St. Nicholas Ave | St. Nicholas Ave to Oasis Rd | Oasis Rd to City Limit |
|---|---|---|---|---|

## ROADSIDE CONDITIONS

| | | | | |
|---|---|---|---|---|
| Land Use District | Business/Residential | Business/Residential | Business/Residential | Business/Residential |
| Pedestrian Use | Numerous | Moderate | Few | Few |
| Percent Sidewalks | 95% | 100% | 85% | 65% |
| Bike Lane or Bike Route | Yes | Yes | Yes | Yes |
| Driveways Present | Numerous | Several | Several | Several |

## ROADWAY GEOMETRY

| | | | | |
|---|---|---|---|---|
| Roadway Segment Length, Ft | 3,060 | 2,020 | 5,755 | 2,940 |
| Number of Thru Lanes | 4 | 4 | 3 (1 NB, 2 SB) | 4 |
| Width, Ft | 64 | 64 | 64 | 64 |
| Median Type | Concr Island/Turn Lane | Dble Yellow/Ctr Turn Lane | Center Turn Lane | Dble Yellow/Ctr Turn Lane |
| Horizontal Alignment | Curvilinear | Curvilinear | Gradual Curves | Straight |
| Vertical Alignment | Flat | Vertical Curves | Flat | Flat |

## TRAFFIC CONDITIONS

| | | | | |
|---|---|---|---|---|
| Average Daily Traffic (ADT) | 21,757 | 13,721 | 8,720 | 6,220 |
| Collisions in the Last 2 Years | 35 | 10 | 14 | 3 |
| Collision Rate | 3.8 Coll/MVM | 1 Coll/MV | 2.02 Coll/MVM | 1.19 Coll/MVM |
| City-Wide Average Rate | 1.86 Coll/MVM | 1.64 Coll/MV | 1.86 Coll/MVM | 1.86 Coll/MVM |
| 10 mph Pace Range , mph | 35-45 | 42-52 | 42-52 | 41-51 |
| Vehicles Within Pace, % | 79% | 76% | 73% | 78% |
| Median Speed (50%) , mph | 38 | 45 | 45 | 44 |
| Existing Posted Speed, mph | 35 | 40 | 45 | 45 |
| Prevailing Speed (85%) , mph | 43 | 49 | 50 | 49 |
| Nearest 5-mph Increment, mph | 45 | 50 | 50 | 50 |

## 5-MPH REDUCTION OPTION
per CA-MUTCD 2B.13 Option 1

Conditions that justify a 5-mph reduction below the nearest 5-mph increment of the prevailing speed:

| | | | | |
|---|---|---|---|---|
| Traffic Safety | Yes | - | Yes | - |
| Safety of Pedestrians | Yes | - | - | - |
| Safety of Cyclists | Yes | Yes | Yes | Yes |
| Residential Density | - | - | - | - |
| 5-mph Reduction Recommended | Yes | No | Yes | No |

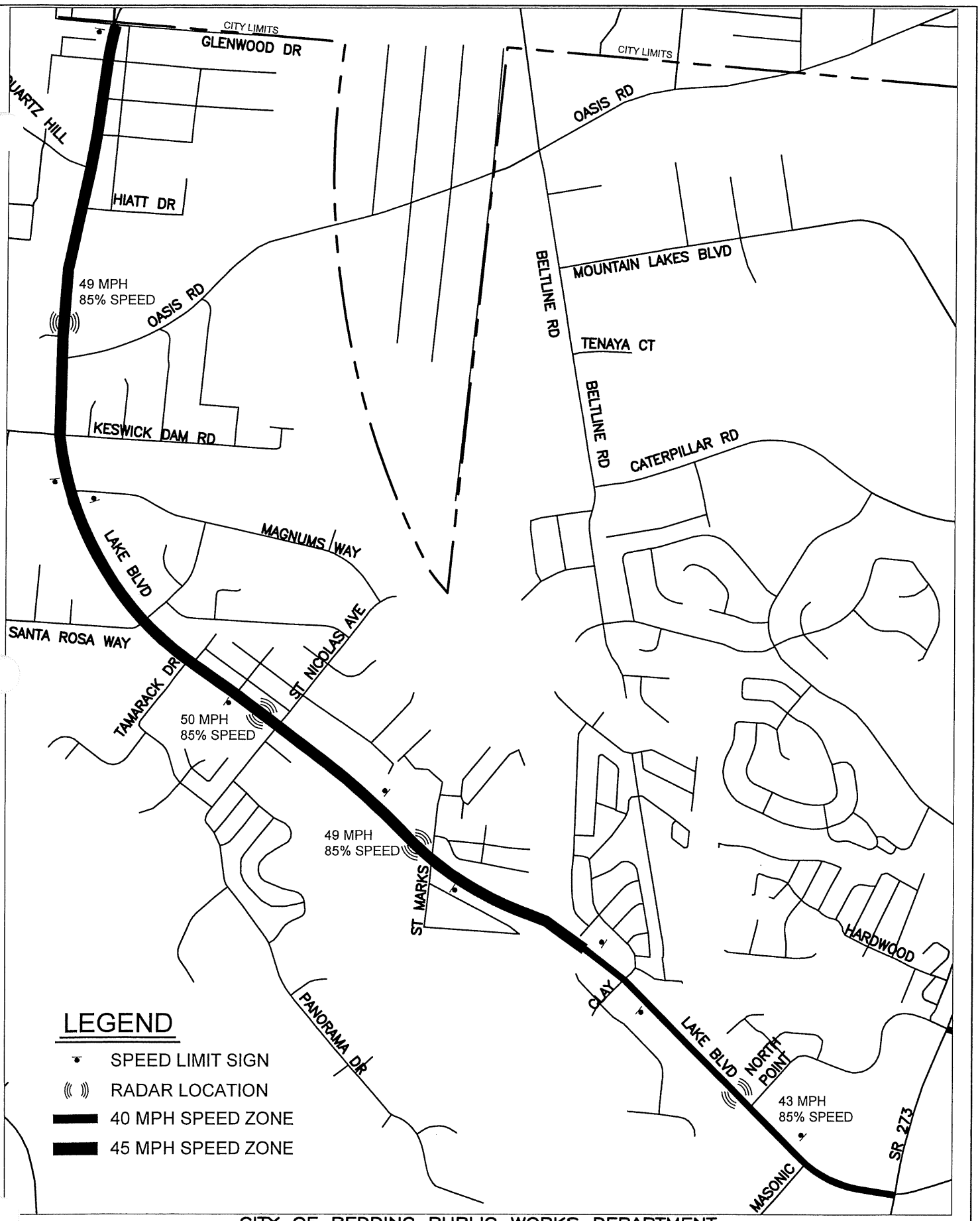
## ROUNDING DOWN OPTION
per CVC 21400 (b)

Where the nearest 5 mph increment would require rounding *up* from the prevailing speed, the posted speed limit may be rounded *down* from the prevailing speed, with no further reduction for any reason.

| | | | | |
|---|---|---|---|---|
| Rounding Down Recommended | No | Yes | No | Yes |

## RECOMMENDATION

| | | | | |
|---|---|---|---|---|
| POST SPEED LIMIT | **40 mph** | **45 mph** | **45 mph** | **45 mph** |




CITY OF REDDING PUBLIC WORKS DEPARTMENT

# LAKE BLVD
# ENGINEERING & TRAFFIC SURVEY
## SR 273 TO CITY LIMITS

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