

Transportation Board

TO: TRANSPORTATION BOARD DATE: MARCH 5, 2025

FROM: PUBLIC WORKS DEPARTMENT WARDS: 1 and 4

SUBJECT: REQUEST FOR SPEED HUMPS ON GREEN ORCHARD PLAVE AND RAMONA

DRIVE

ISSUE:

Consideration of implementation of speed humps along Green Orchard Place between Kingdom Drive and Lone Peak Court and Ramona Drive between Brockton Avenue and Magnolia Avenue.

RECOMMENDATIONS:

That the Transportation Board recommend that the City Council approve the following:

- Proposed speed humps along Green Orchard Place between Kingdom Drive and Lone Peak Court
- 2. Proposed speed humps along Ramona Drive between Brockton Avenue and Magnolia Avenue.

BACKGROUND:

The Neighborhood Traffic Management Program (NTMP) was designed to provide general guidelines for the assessment of traffic issues on local, collector, and arterial roadways throughout the City as well as outline various traffic mitigation measures which may serve as suitable solutions to demonstrated traffic issues.

As part of the Neighborhood Traffic Management Program (NTMP), the city re-instated a formal Speed Hump Policy on May 7, 2024, to effectively address concerns related to speeding on residential streets. The goal of this policy is to enhance neighborhood safety by implementing traffic calming measures, such as speed humps, to reduce vehicle speeds on eligible residential streets. This policy aims to unite neighborhoods and identify appropriate measures to improve travel behavior for the benefit of affected communities. Speed humps are a potential secondary option for residential designated streets. A website outlining details of the Speed Hump Program has been developed – Speed Hump Program | Public Works

A speed hump is an elongated mound in the roadway pavement surface extending across the traveled way designed perpendicular to the traffic flow. The purpose of a speed hump is to regulate traffic speeds by providing minor vertical deflection while driving through it. Speed humps are still considered experimental roadway features; therefore, additions, alterations, or removals of all speed humps may occur at any time.

DISCUSSION:

Green Orchard Place between Kingdom Drive and Lone Peak Court:

The city received a historical petition (dated 9/10/2020) from the residents on Green Orchard Place requesting speed humps to be installed on their street. The petition and roadway conditions on Green Orchard Place between Kingdom Drive and Lone Peak Court (Attachment 1 – Location Map) were reviewed for consistency with the City's Speed Hump Program. The petition received indicates support by 11 of the 12 residents (92%) for speed humps, which meets the minimum requirement of 70% of the residents. There were no signatures from residents opposing the consideration of speed humps. Staff investigated speeds, volumes, and street geometrics. Comparing staff's investigation of Green Orchard Place with the City's set guidelines for speed humps resulted in 6 out of 8 criteria being met. Based on the requirement to meet all 8 criteria, Green Orchard Place does not qualify for speed humps per the City approved policy. A summary of the findings is provided via Attachment 2. However, based on the historical concerns from the community, prior commitments, street's existing traffic calming measures previously implemented, and anticipated speed reduction benefits, the city is recommending approval of the proposed speed humps on Green Orchard Place between Kingdom Drive and Lone Peak Court.

Green Orchard Place is a two-way (one lane in each direction) collector road located between Lone Peak Ct to the south, and Kingdom Dr to the north. It is approximately 1150 feet in length and 40 feet wide, which does not meet the minimum required length of ¼ mile (1,320) and does not exceed the maximum width of 40 feet. The intersections at Kingdom Drive and Lone Peak Court are multi-way stop sign-controlled intersections. There are 12 homes on both sides of the street which does not meet the minimum requirement of sixteen (16) homes for a double loaded street. Attachment 3 illustrates the potential speed hump locations along Green Orchard Place. There are two (2) speed humps that are shown.

The speed survey and traffic counts were conducted on Green Orchard Place as part of staff's investigation. The radar survey measured an 85th percentile speed of 39 mph on Green Orchard Place which meets the 37-mph minimum required by the city program. The corresponding 24-hour two-way volume count indicated a total volume of 1,456 vehicles per day, which exceeds the minimum threshold of 750 vehicles per day and is below the maximum threshold of 1,999 vehicles per day. The estimated vertical grade is 4.5% along Green Orchard Place, which satisfies the maximum eight (8) percent vertical grade threshold. Several photos of Green Orchard Place are included in Attachment 5.

Under the Neighborhood Traffic Management Program (NTMP), the initial traffic calming strategies have already been installed on Green Orchard Place such as centerline striping and red 35 MPH pavement markings. Despite all the previously utilized speed management alternatives, vehicular speeding continues to persist with an 85th percentile speed of 39 MPH.

Staff has prepared an exhibit showing potential locations for the installation of speed humps. The locations are selected based on having adequate spacing between curves and intersections and adequate sight distance to allow for proper signing on each approach. Utility covers and driveways in the street are also avoided. Staff selected locations where signs may be placed on existing poles or streetlights to minimize the impacts of the signs on the neighborhood. A total of two (2) potential locations were found for speed humps. Each speed hump installed would potentially add an additional delay of ten (10) seconds. However, the usage of the Type II Speed Bumps would significantly minimize if not eliminate delays for emergency vehicles.

A review of our traffic accident records for the past five years on Green Orchard PI from 2020 through 2024 shows one reported traffic collision. The traffic collision was an unsafe speed related collision.

Ramona Drive between Brockton Avenue and Magnolia Avenue:

The City received a petition from the residents on Ramona Drive requesting speed hump installation on this street. The petition and roadway conditions on Ramona Drive between Brockton Avenue and Magnolia Avenue (Attachment 1 – Location Map) were reviewed for consistency with the City's Speed Hump Program. The petition received indicates support by 14 of the 20 residents (70%) for speed humps, which meets the minimum requirement of 70% of the residents. There were no signatures from residents opposing the consideration of speed humps. Staff investigated speeds, volumes, and street geometrics. Comparing staff's investigation of Ramona Drive with the City's set guidelines for speed humps resulted in 6 out of 8 criteria being met. Based on the requirement to meet all 8 criteria, Ramona Drive does not qualify for speed humps per the City approved policy. A summary of the findings is provided via Attachment 2. However, based on the street's existing traffic calming measures previously implemented, and anticipated speed reduction benefits, the city is recommending approval of the proposed speed humps on Ramona Drive between Brockton Avenue and Magnolia Avenue.

Ramona Drive is a two-way (one lane in each direction) collector road located between Magnolia Avenue to the south, and Brockton Avenue to the north. It is approximately 1580 feet in length and 28 feet wide, which meets the minimum required length of ¼ mile (1,320) and does not exceed the maximum width of 40 feet. The intersections at Brockton Avenue and Magnolia Avenue are traffic signalized intersections. There are 20 homes on the west side of the street which meets the minimum requirement of thirteen (13) homes for a single loaded street. Attachment 3 illustrates the potential speed hump locations along Ramona Drive. There are three (3) speed humps that are shown.

The speed survey and traffic counts were conducted on Ramona Drive as part of staff's investigation. The radar survey measured an 85th percentile speed of 35 mph on Ramona Drive which does not meet the 37-mph minimum required by the city program. The corresponding 24-hour two-way volume count indicated a total volume of 1785 vehicles per day, which exceeds the minimum threshold of 750 vehicles per day and is below the maximum threshold of 1,999 vehicles per day. The estimated vertical grade is 1.15% along Ramona Drive, which is below the maximum eight (8) percent vertical grade threshold. Several photos of Ramona Drive are included in Attachment 5.

Under the Neighborhood Traffic Management Program (NTMP), the initial traffic calming strategies have already been installed on Ramona Drive such as centerline striping and school pavement markings and signage. Despite all the previously utilized speed management alternatives, vehicular speeding continues to persist with an 85th percentile speed of 35 MPH (10 MPH over the posted speed limit of 25 MPH).

Staff has prepared an exhibit showing potential locations for the installation of speed humps. The locations are selected based on having adequate spacing between curves and intersections and adequate sight distance to allow for proper signing on each approach. Utility covers and driveways in the street are also avoided. Staff selected locations where signs may be placed on existing poles or streetlights to minimize the impacts of the signs on the neighborhood. A total of three (3) potential locations were found for speed humps. Each speed hump installed would potentially add an additional delay of ten (10) seconds. However, the usage of the Type II Speed Bumps would

significantly minimize if not eliminate delays for emergency vehicles.

A review of our traffic accident records for the past five years on Ramona Drive from 2020 through 2024 shows seven reported traffic collisions. Six of the traffic collisions occurred at the intersection of Magnolia Avenue and Ramona Drive. The lone mid-block traffic collision involved a pedestrian crossing the roadway (pedestrian-vehicle related).

Speed Hump Program Additional Information:

The City's Speed Hump Policies, Guidelines, and Procedures are included in Attachment 6.

Attachment 7 illustrates the City's Standard Plan Detail No. 251 – Speed Bump. The Riverside Fire Department (RFD) has provided a general comment regarding proposed speed humps in consideration of potential impacts to emergency response times, if any. The RFD has requested the city to consider installing a Speed Bump (Type II) of Standard Plan 257 for new speed hump installations. The Type II Speed Bumps have gaps in the middle to allow emergency vehicles to bypass speed humps on the roadway during an urgent emergency call. Golden Avenue between Pierce Street and Cypress Avenue currently has existing Type II Speed Bumps installed and there have not been any concerns with its utilization.

Conclusion:

Green Orchard Place meets 6 of the 8 criteria of the City's adopted policy for speed humps. It exceeds the legal speed limit of 25 mph, having a posted speed of 35 mph. Green Orchard Place does not meet the minimum length requirement being under ¼ mile in length as well as not having 13 or more buildings. Based on the requirement to meet all 8 criteria, Green Orchard Place does not qualify for speed humps per the City approved policy. A summary of the findings is provided via Attachment 2. However, based on the historical resident's request for speed humps, existing traffic calming measures implemented, and anticipated speed reduction benefits, the city is recommending approval of two (2) proposed speed humps on Green Orchard Place between Kingdom Drive and Lone Peak Court as shown in Attachment 3.

Ramona Drive meets 6 of the 8 criteria of the City's adopted policy for speed humps. It does not meet the residential street classification and is designated as a Collector Street in the General Plan. The 85th percentile of the speed survey was 35 MPH which is below the minimum 37 MPH technical criteria requirement. Ramona Drive meets the minimum length requirement of ¼ mile in length, has 20 properties on the west side, does not exceed the 40 feet street width, meets the minimum street length, traffic volume thresholds and vertical grade thresholds. Based on the requirement to meet all 8 criteria, Ramona Drive does not qualify for speed humps per the City approved policy. A summary of the findings is provided via Attachment 2. However, based on the street's proximity to schools, existing traffic calming measures implemented, and anticipated speed reduction benefits, the city is recommending approval of three (3) proposed speed humps on Ramona Drive between Brockton Avenue and Magnolia Avenue as shown in Attachment 3.

STRATEGIC PLAN ALIGNMENT:

The proposed speed humps on Green Orchard Place align with **Strategic Priority 2 – Community Well-Being** and **Goal 2.4** - Support programs and innovations that enhance community safety, encourage neighborhood engagement, and build public trust.

This item aligns with each of the five Cross Cutting Threads as follows:

- Community Trust As part of the Neighborhood Traffic Management Program (NTMP), the Speed Hump Program establishes community Trust through the transparent methodology and public process set forth at multiple public meetings. The proposed speed humps are based on engineering judgement, cited benefits, and public interest.
- Equity The Speed Hump Program provides safe usage of the public right of way for all roadway users including vehicles, bicycles, and pedestrians. Proposed restoration of the use of speed humps as a secondary mitigation measure option under the NTMP for local 25 MPH streets and the qualifying criteria apply to all eligible neighborhoods and street segments.
- 3. **Fiscal Responsibility** The proposed speed humps technical qualifying criteria will aid in reducing potential annual project costs by targeting 25 MPH local streets experiencing both high traffic volumes and substantial speeding to provide a traffic calming and increase safety at the most impacted locations.
- 4. **Innovation** The proposed Speed Bump (Type II) design will create gaps on each speed hump which minimizes, if not eliminate, impacts to emergency response times for emergency vehicles.
- 5. **Sustainability & Resiliency** The use of speed humps as part of the NTMP will provide another potential traffic calming tool to reduce speeding and increase safety in residential neighborhoods. Speed humps serve as a sustainable, lasting, and physical deterrent to vehicle speeding.

FISCAL IMPACT:

The total combined fiscal impact of this action for the cost of installation of speed humps, signage and pavement markings is estimated at \$35,800.

The total estimated installation cost for Green Orchard is \$21,480 and the total estimated construction cost for Ramona Drive is \$14,320.

Funding is available in the Public Works Department, Traffic Engineering budget, Speed Hump Traffic Calming account number 9927230-440313, to cover this cost.

Prepared by: Philip Nitollama, City Traffic Engineer
Approved by: Gilbert Hernandez, Public Works Director

Certified as to

availability of funds: Kristie Thomas, Finance Director/Assistant Chief Financial Officer

Approved by: Kris Martinez, Assistant City Manager

Approved as to form: Jack Liu, Interim City Attorney

Attachments:

- 1. Location Map
- 2. Speed Hump Criteria Checklist
- 3. Potential Locations
- 4. Traffic Count Data
- 5. Street View Photos

- 6. Speed Hump Program Policies, Procedures, and Guidelines
 7. Standard Plan No. 251 Speed Bump (Type II)
 8. Presentation