

# Grant Road and Sleeper Avenue Intersection Study

## Council Transportation Committee (CTC) Meeting

April 20, 2021

### Presented by

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# Overview

- Project Goals
- Study Intersection
- Comparison of Alternatives
- Public Feedback



# Project Goals and Presentation Purpose

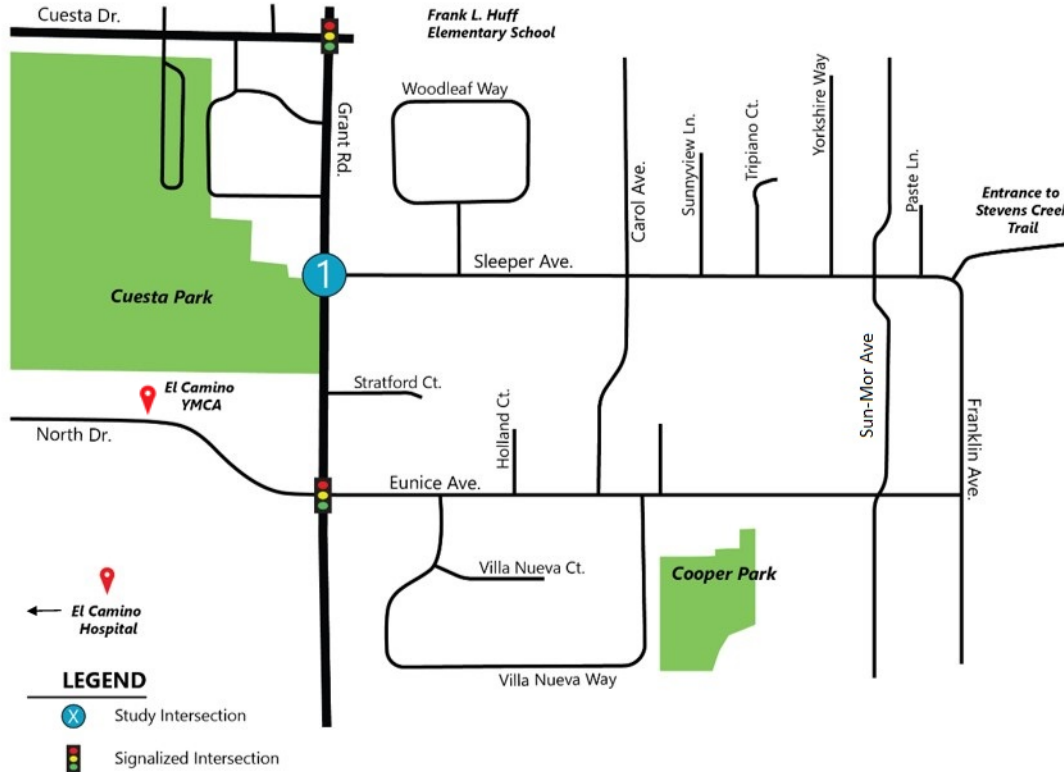
- Project Goals

- Develop and evaluate conceptual alternatives
- Facilitate safe movement of pedestrian and bicyclists

- Presentation Purpose

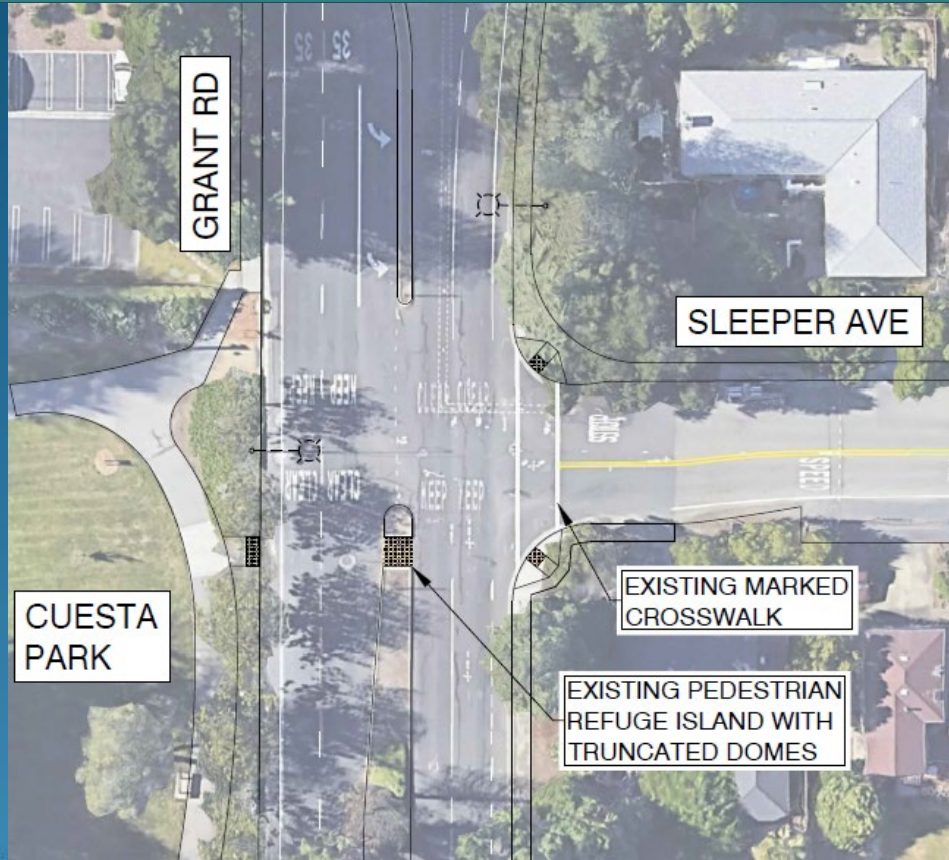
- Present improvement alternatives
- Recommendation to CTC:
  - Recommend that the City Council approve Alternative # 2

# Study Location





# Existing Conditions



# Proposed Intersection Improvements

## Pedestrian Hybrid Beacon (PHB)



Mountain View - El Camino Real and Distel Cir

### Drivers

.. will see this	.. will do this
	Proceed with Caution
	Slow Down (Pedestrian has activated the push button)
	Prepare to Stop
	STOP! (Pedestrian in Crosswalk)
	STOP! Proceed with Caution if Clear
	Proceed if Clear

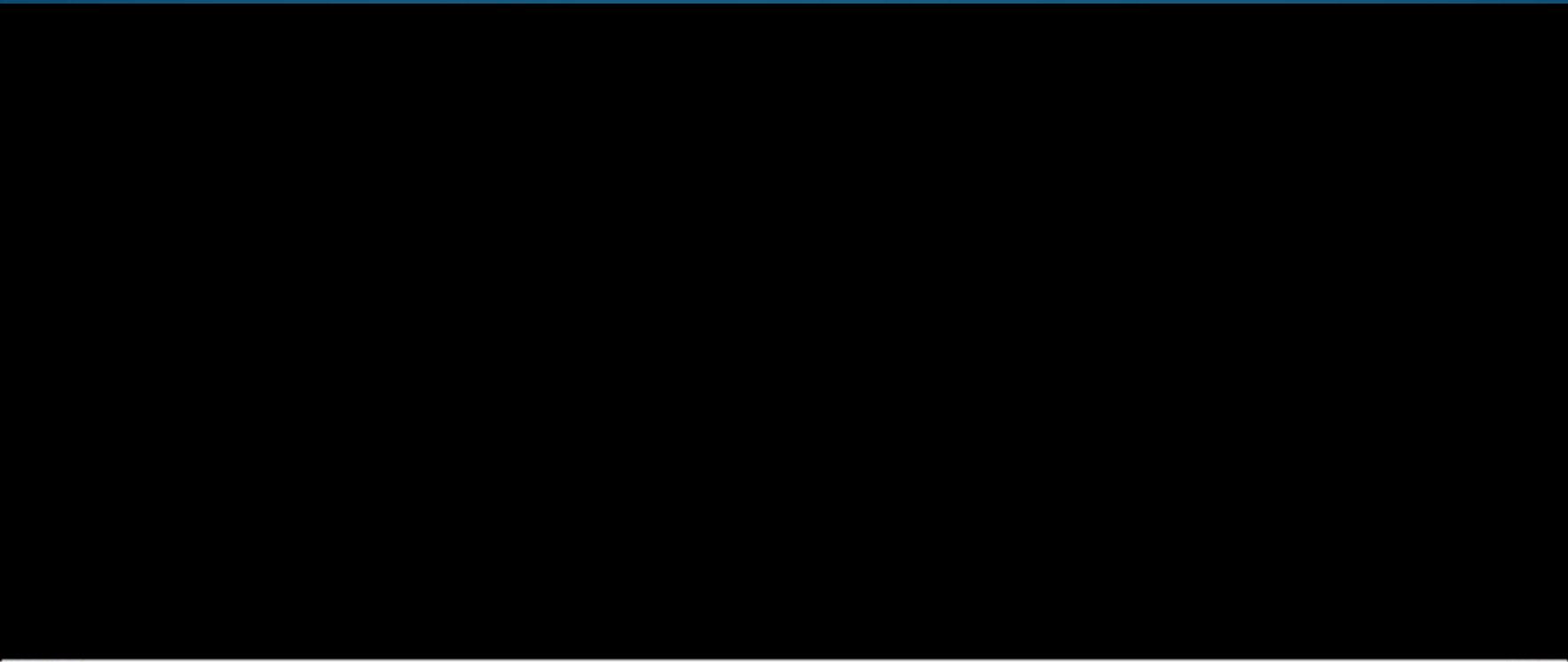
### Pedestrians

.. will see this	.. will do this
	Push the Button to Cross
	Wait
	Continue to Wait
	Start Crossing
	Continue Crossing (Countdown Signal)
	Push the Button to Cross





# Proposed Intersection Improvements





# PHB Advantages

- Yield Rate exceeds 90%
- Beacons are off when there are no pedestrians
- Can be coordinated with nearby traffic signals
- Less traffic delay than a traffic signal
- Lower installation costs than traffic signal

## Challenge

- Motorists have less familiarity



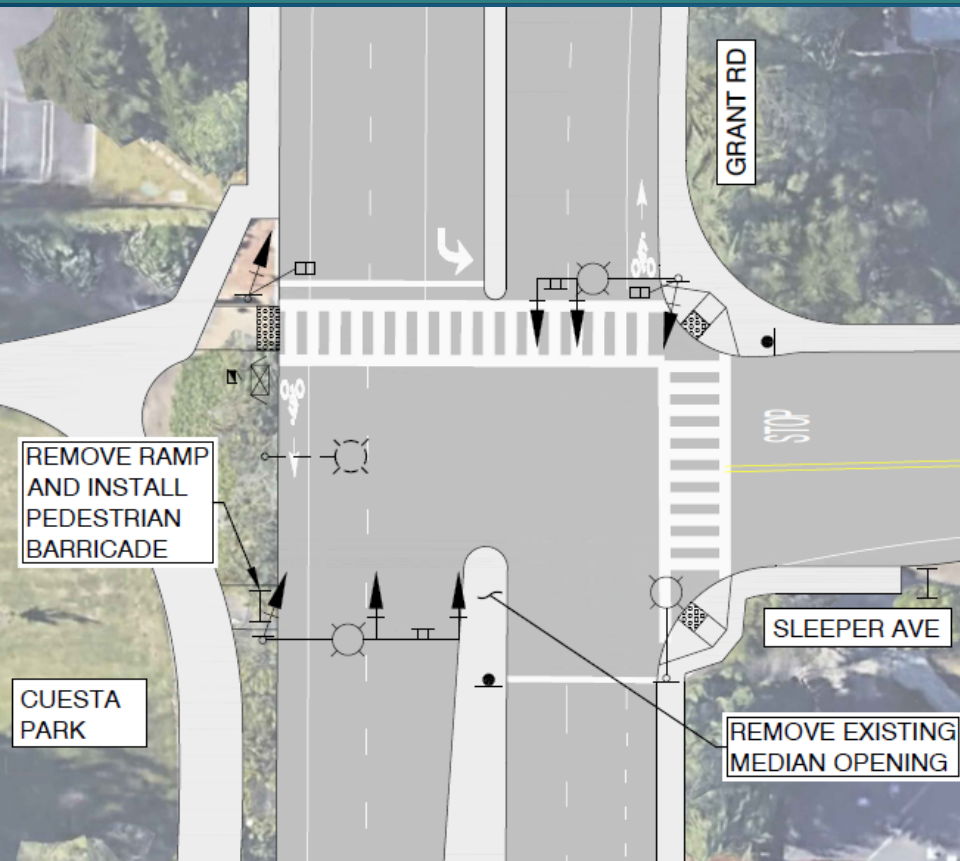


# Project Alternatives

1. Pedestrian Hybrid Beacon (PHB) with a northern crosswalk
2. Pedestrian Hybrid Beacon (PHB) with a southern crosswalk and left-turn restriction from Sleeper Avenue
3. Traffic signal with a northern crosswalk
4. Keep existing condition as-is

# Comparison of Alternatives

## Alternative 1 – PHB with a Northern Crosswalk



### Pros

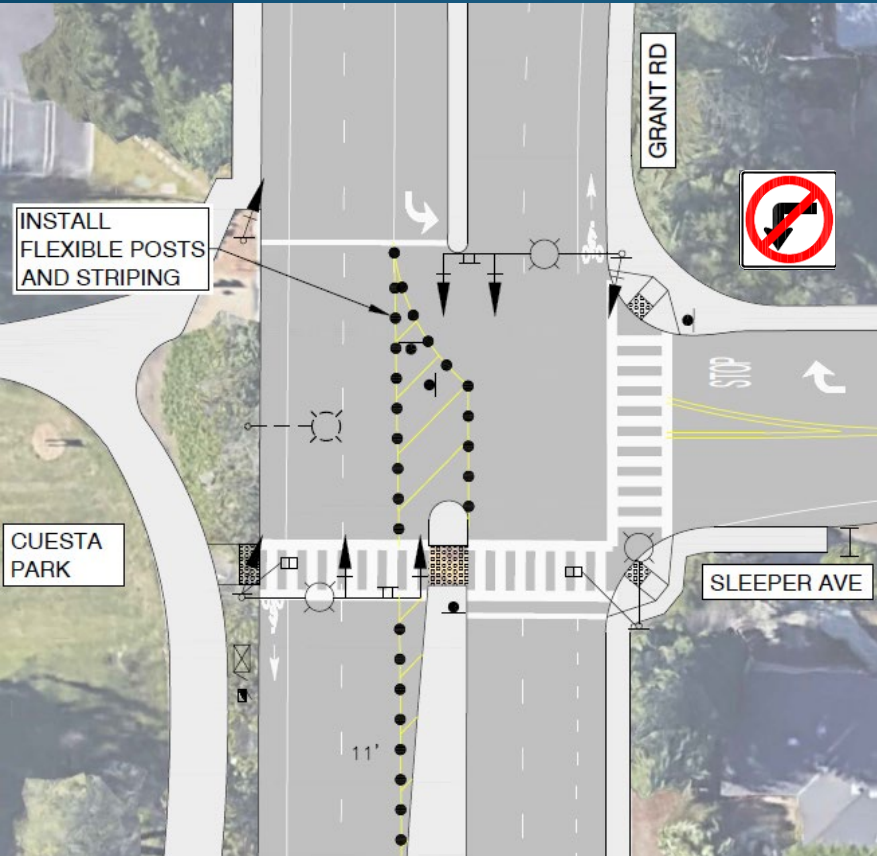
- No left turn conflict for pedestrians crossing

### Cons

- Right turn movement conflicts with pedestrians

# Comparison of Alternatives

## Alternative 2 - PHB With a Southern Crosswalk and Left-turn Restriction



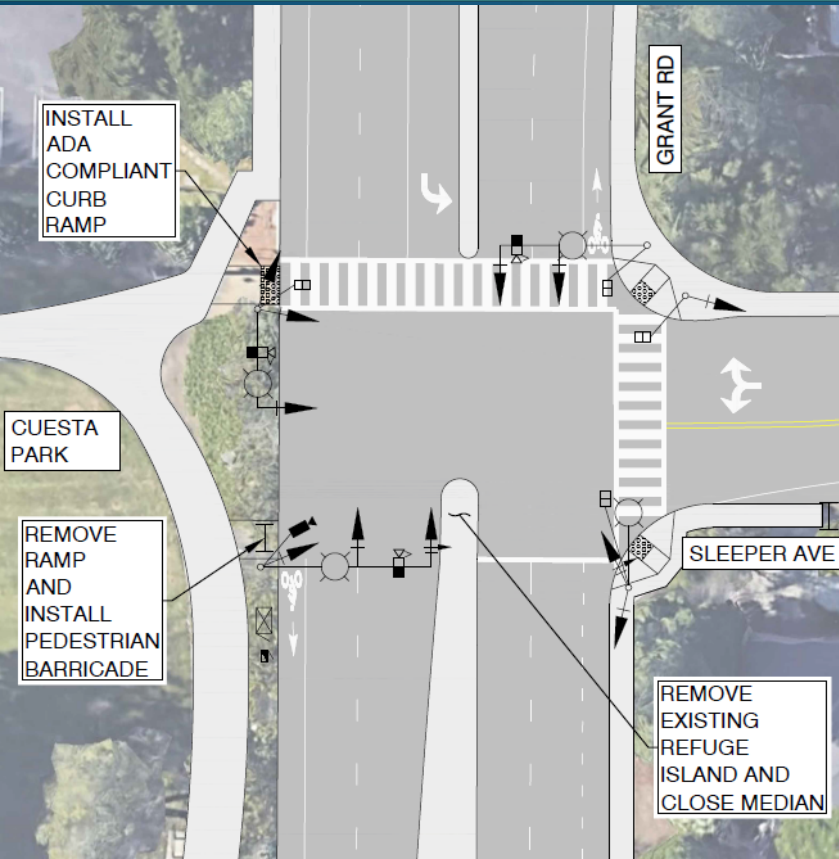
- Peak Hour Left Turns from Sleeper Avenue - April 2019 (Pre-COVID):
  - 7:30 A.M. – 8:30 A.M.: 3 Vehicles
  - 11:30 A.M. – 12:30 P.M.: 2 Vehicles
  - 4:30 P.M. – 5:30 P.M.: 0 Vehicles

### Pros

- No left turn conflict for pedestrians crossing
- No right turn movement conflicts with pedestrians

# Comparison of Alternatives

## Alternative 3 – Traffic Signal with a Northern Crosswalk



### Pros

- Familiarity
- Highest rate of driver compliance
- Phases to reduce turning conflicts

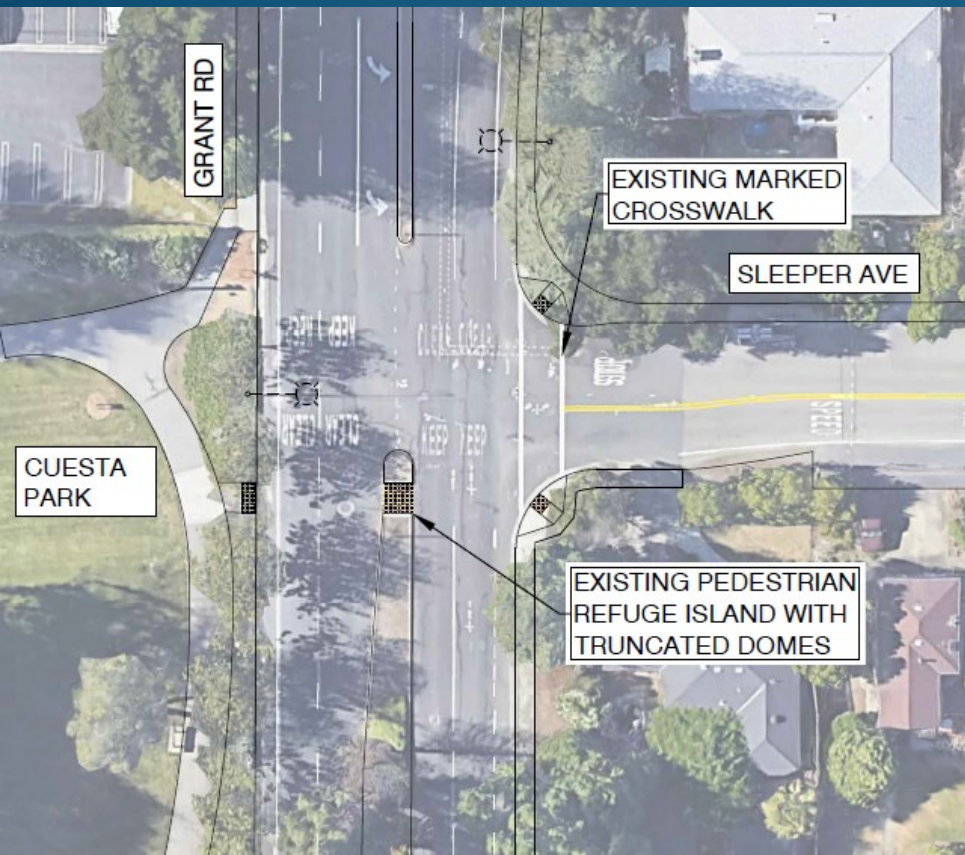
### Cons

- Highest Cost
- Highest increase in vehicular congestion and delay



# Comparison of Alternatives

## Alternative 4 – Keep Existing Condition as-is



### Pros

- No associated cost
- Pedestrians and bicyclists tend to be more cautious crossing Grant Road

### Cons

- Absence of marked crosswalk
- Distance to next crossing is far



# Community Meeting

- Held on October 22, 2020 with 28 total attendees
- Community Feedback
  - Concerns with existing intersection
    - Ped/Bike/Vehicle Safety and Vehicle Speeds
  - Supported: Left Turn Restriction and Pedestrian Hybrid Beacons
  - Least supported: traffic signals and existing conditions





# B/PAC Meeting

- Held on February 24, 2021 with all members of the committee and approximately 16 members of the public.
- Committee supported alternative:
  - Alternative 2 – PHB with a southern crosswalk and left-turn restriction from Sleeper Avenue
    - 4 members in favor, 1 member abstained



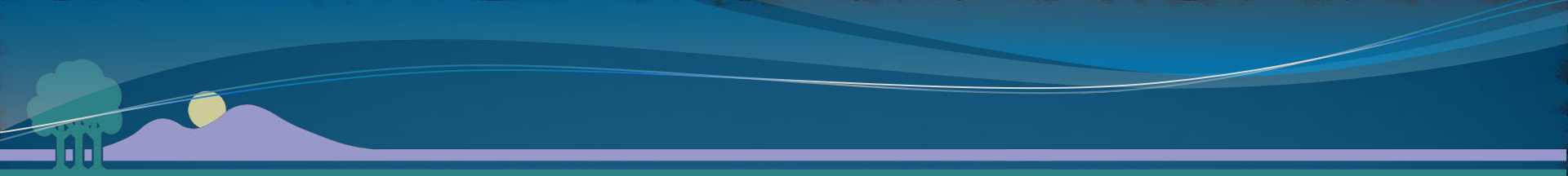
# Project Schedule

- Staff to take recommended alternative to Council as a consent item in May 2021
- Complete study by Spring/Summer 2021
- Design and Construction funding from CIP



# Recommendation

- Recommend that the City Council approve Alternative #2 - Pedestrian hybrid beacon (PHB) with a southern crosswalk and left-turn restriction from Sleeper Avenue as the preferred alternative for the Grant Road and Sleeper Avenue Intersection Study.



# Questions?

For more information/Para mas informacion:

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