OPTION 4
STEEL TIED ARCH BRIDGE

A tied arch bridge that clear spans Stevens Creek Boulevard. Arches provide a classic look for the bridge.

About this design

Construction duration/impact

- Tied arches with hangers to support main deck elements can be fully pre-assembled and erected in one overnight operation.
- Pre-assembly will require 7-10 days of lane closures in Stevens Creek Blvd, leaving one lane open in each direction
- Foundation construction in each cul-de-sac will take 10-15 days
- Deck construction will require 20 days of light equipment access through the cul-de-sacs on each end of Carmen Road
- There will be 3 nights of individual lane closures in Stevens Creek Blvd for deck construction

Aesthetics

- Classic arches with some presence but an elegant shape provide an inherent support for the fence and screen

Cost

- $1.6M - $1.95M*

OPTION 5
STEEL INCLINED ARCH BRIDGE

Inclined arches configured to provide intermediate supports. Elegant arches with a lower profile above the bridge deck.

About this design

Construction duration/impact

- Inclined arches and elements of the deck will be assembled in-place
- In-place assembly will require 5-7 night closures
- Main foundation construction from Stevens Creek Blvd will require 10-14 days of lane closures per side; maintaining one traffic lane in each direction at all times
- Deck construction will require 20 days of light equipment access through the cul-de-sacs on each end of Carmen Road
- There will be 3 nights of individual lane closures in Stevens Creek Blvd for deck construction

Aesthetics

- Inclined arch shape is aesthetically pleasing, adding a signature statement that also creates a more 'open' feel to the structure

Cost

- $1.4M - $1.75M*

CARMEN ROAD PEDESTRIAN BRIDGE
PUBLIC MEETING #2
May 29th, 2019

The City of Cupertino is undertaking a feasibility study for a Carmen Road Pedestrian/Bicycle Bridge to improve safety for pedestrians and cyclists crossing Stevens Creek Boulevard. Using input gathered at Public Meeting #1 in January 2019, concepts for six potential design options were developed. Option 6 was found infeasible (not compliant with ADA or maintenance vehicle access requirements), and therefore the design is not being progressed.

The purpose of this meeting is to gather input on the five feasible options and provide residents an opportunity to vote for their preferred option. Please review key information on each of the 5 options under consideration to aid you in casting your vote. The input gathered at this meeting will help inform the selection of a preferred option. The options include:

- Option 1 – Steel Girder Bridge
- Option 2 – Steel Pratt Truss Bridge
- Option 3 – Steel Howe Truss Bridge
- Option 4 – Steel Tied Arch Bridge
- Option 5 – Steel Inclined Arch Bridge

* Estimated costs are shown in 2019 dollars and exclude right-of-way acquisition, utility relocations and other improvements which are expected to be similar for all options.

Project Schedule

Feasibility Study for the Carmen Road Pedestrian/Bicycle Bridge, City of Cupertino, CA

Description	2018		2019							
	November	December	January	February	March	April	May	June	July	August
Online Survey		■	■							
Community Outreach and Engagement			■ ●				● ■	■		
Preliminary Engineering and Alternatives Analysis			■	■	■	■	■	■		
Feasibility Study Report								■	●	●

● Public Outreach Meetings

● Bicycle Pedestrian Commission Meeting/City Council Meeting

For additional information, please visit www.cupertino.org/carmenbridge. Questions or comments can also be directed to Prashanth Dullu, Assistant Civil Engineer at (408)-777-3190 or PrashanthD@cupertino.org

OPTION 1
STEEL GIRDER BRIDGE

A steel girder bridge with intermediate supports on either side of Stevens Creek Boulevard allows for shorter spans and a relatively shallow deck.

About this design

Construction duration/impact

- Bridge structure is made of three steel girders that can be delivered and erected individually without the need for falsework in Stevens Creek Blvd
- Main foundation construction from Stevens Creek Blvd over 7-10 days per side; maintaining one traffic lane in each direction at all times. Similar periods and impacts for column construction
- Deck construction will require 20 days of light equipment access through the cul-de-sacs on each end of Carmen Road
- There will be 3 nights of individual lane closures in Stevens Creek Blvd for deck construction

Aesthetics

- Shallowest profile and overall height compared to all other design options provides an unassuming, yet elegant bridge that provides opportunities for aesthetic enhancements of the railings and screens

Cost

- $1.25M – $1.5M*

OPTION 2
STEEL PRATT TRUSS BRIDGE

A steel truss that clear spans Stevens Creek Boulevard. A Pratt truss has a general square look to the panels and the diagonals are lighter members.

About this design

Construction duration/impact

- Trusses can be assembled on falsework over Stevens Creek Blvd from individual members or three pre-assembled pieces
- Foundation construction in each cul-de-sac will take 10-15 days
- Truss erection will impact traffic for 10-15 nights in Stevens Creek Blvd
- Deck construction will require 20 days of light equipment access through the cul-de-sacs
- There will be 3 nights of individual lane closures in Stevens Creek Blvd for deck construction

Aesthetics

- A commonly used structure type for medium span pedestrian bridges which has significant presence while providing a feeling of enclosure and safety

Cost

- $1.5M - $1.85M*

OPTION 3
STEEL HOWE TRUSS BRIDGE

A steel truss that clear spans Stevens Creek Boulevard. A Howe truss has a general triangular look to the panels.

About this design

Construction duration/impact

- Trusses can be assembled on falsework over Stevens Creek Blvd from individual members or three pre-assembled pieces
- Foundation construction in each cul-de-sac will take 10-15 days
- Truss erection will impact traffic for 10-15 nights in Stevens Creek Blvd
- Deck construction will require 20 days of light equipment access through the cul-de-sacs
- There will be 3 nights of individual lane closures in Stevens Creek Blvd for deck construction

Aesthetics

- A robust looking structure which is often seen on railway bridges, also provides a feeling of enclosure and safety

Cost

- $1.5M - $1.85M*