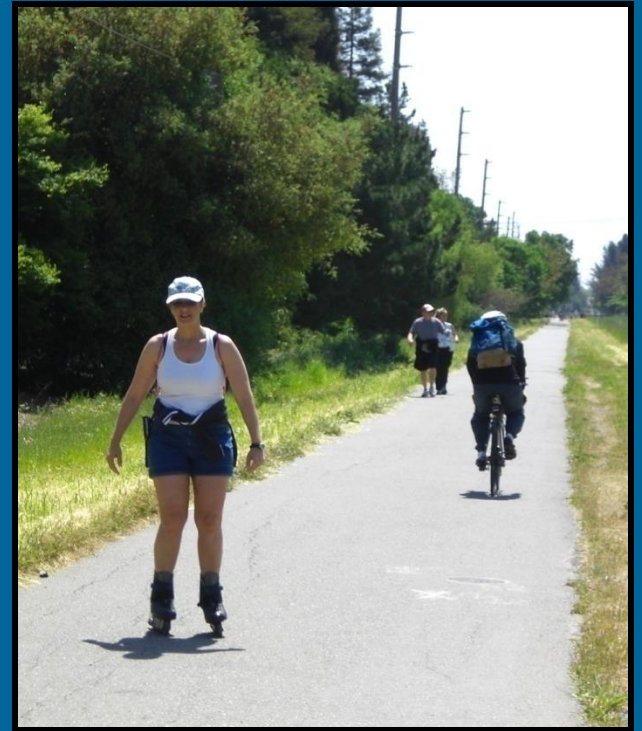


# IRON HORSE TRAIL

## Pedestrian and Bicycle Corridor Concept Plan



**Contra Costa  
County**

**March 2, 2015**

# **San Ramon Iron Horse Trail Bike/Ped Overcrossing**

- Purpose
  1. Improve safety by eliminating conflicts between pedestrians, bicyclists and motorists;
  2. Improve motor vehicle circulation by removing the at-grade crossings;
  3. Reduce and eliminate unsafe crossing maneuvers by pedestrians and bicyclists;
  4. Enhance safety by providing an environment that encourages walking and bicycling along the Iron Horse Trail; and
  5. Increase trail usage by improving the comfort at the Bollinger Canyon and Crow Canyon Road crossings.

# Background

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## Phase One

### San Ramon Valley Iron Horse Trail Corridor Concept Plan – Completed 2009

- Evaluated the feasibility of constructing bike/Ped overcrossings to improve access and safety for bicyclists and pedestrians along the Iron Horse Trail and to create a bike/pedestrian-friendly environment at Sycamore Valley, Crow Canyon & Bollinger Canyon Roads
- Developed concepts, evaluated the feasibility, identified costs and future funding sources

**IRON HORSE TRAIL**

**Pedestrian and Bicycle Corridor Concept Plan**



# Background

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## Phase Two

Community Engagement/Outreach and  
Preliminary Design – In progress

City of San Ramon (Transportation/Engineering)  
Contra Costa County  
Contra Costa Transportation Authority  
East Bay Regional Park District  
Consultant Team (Biggs Cardosa Associate, Alta  
Planning and HNTB)

Design Charrettes – Spring 2014

On-Line Survey - Fall 2014

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**IRON HORSE TRAIL**

**Pedestrian and Bicycle Corridor Concept Plan**



# HOW IS THE PROJECT FUNDED?

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- **Phase One** - Contra Costa Transportation Authority (CCTA) approved the allocation of Transportation Planning and Land Use funds (T-PLUS) to implement the SRV Corridor Concept Plan - Study completed in 2009 (full report is available upon request)
- **Phase Two** - The CCTA approved the allocation of Measure J - *Transportation for Livable Communities* (TLC) funding
  - Initiated Community Engagement/Outreach and Preliminary Design

# Project Status Update – Funding

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Contra Costa Transportation Authority approved Measure J *Transportation for Livable Communities* (TLC) grant totaling \$620,000 AND a Priority Development Area Grant for \$150,000

|           |                                 |
|-----------|---------------------------------|
| \$200,700 | Phase Two – In progress         |
| \$419,300 | Phase Three – Environmental     |
| \$150,000 | PDA Grant Approved-October 2014 |

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**Pedestrian and Bicycle Corridor Concept Plan**



# Community Engagement/Outreach

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- San Ramon City Council – October 17, 2014
  - Presented Findings from the Design Charrettes held Spring 2014
  - Prepared and provided Technical Memo to Council
  - Presented “Open Government” on-line survey (21 bridge renderings)
- On-Line Survey “live” October 30 through December 31, 2014
  - Installed signage along IHT directing public to on-line survey
  - San Ramon website
  - Press Release

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**Pedestrian and Bicycle Corridor Concept Plan**



# Community Engagement/Outreach

## Bring Your Ideas!

The Iron Horse Trail Overcrossings Project is looking for new ideas for overcrossing designs for Bollinger Canyon and Crow Canyon Roads in San Ramon. These new bicycle and pedestrian overcrossings will help improve overall safety and reduce delay for trail users and roadway users alike. We want your input – come give us your ideas!

### Activities will include:

- Brainstorming
- Collaborative Map-Making
- Virtual Site Tour
- Visual Preference Survey



NOTE: This meeting is being held in a wheelchair-accessible location. To request accessibility accommodation(s) to participate in the meeting, please contact the City Clerk 24 hours in advance of the meeting at 925-973-2539.

May 20, 2014, 6:00-8:00pm  
Fountain Room  
San Ramon Community Center  
12501 Alcosta Boulevard  
San Ramon, CA 94583  
For more information, visit  
[www.ci.san-ramon.ca.us](http://www.ci.san-ramon.ca.us)

The Ironhorse Trail Overcrossings Project is a collaborative effort between the City of San Ramon, Contra Costa County, and the East Bay Regional Park District (which owns and maintains the Iron Horse Trail), and this phase is funded by Measure J sales tax revenue approved by voters in 2004. This project phase follows a 2009 study that identified conceptual improvement options for these locations, and will include a number of public outreach and design activities throughout 2014 and into early 2015. Once completed, the City anticipates seeking additional grant funding for final design, environmental approval, and construction of the overcrossings.



## IRON HORSE TRAIL

### Pedestrian and Bicycle Corridor Concept Plan



# Community Engagement/Outreach

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- Design Charrette Activities
  - Virtual Site Tour
  - Brainstorming
  - Collaborative Map Making
  - Visual Preference Survey

**IRON HORSE TRAIL**

**Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey

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- Press Release Issued – October 30, 2014
  - City Website
  - San Ramon/Danville Express
  - San Ramon Observer
  - San Ramon Patch
  - Contra Costa Times
  - Tri-Valley Times
  - Bishop Ranch
  - San Ramon Valley Unified School District
  - HOA's – 26, representing 82 HOA's

Press Release Issued December 7, 2014

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# On-Line Survey - Signage Installed

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- Iron Horse Trail at Alcosta – Walmart
- Iron Horse Trail at Pine Valley Road
- Iron Horse Trail at Montevideo
- Iron Horse Trail at Norris Canyon Road
- Iron Horse Trail at San Ramon Transit Center
- Iron Horse Trail at Bollinger Canyon Road
- Iron Horse Trail at Crow Canyon Road

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey

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- Iron Horse Trail Advisory Committee
  - October 29, 2014
  - Presentation to Committee
  - Encouraged members to complete on-line survey and encourage local jurisdiction

**IRON HORSE TRAIL**

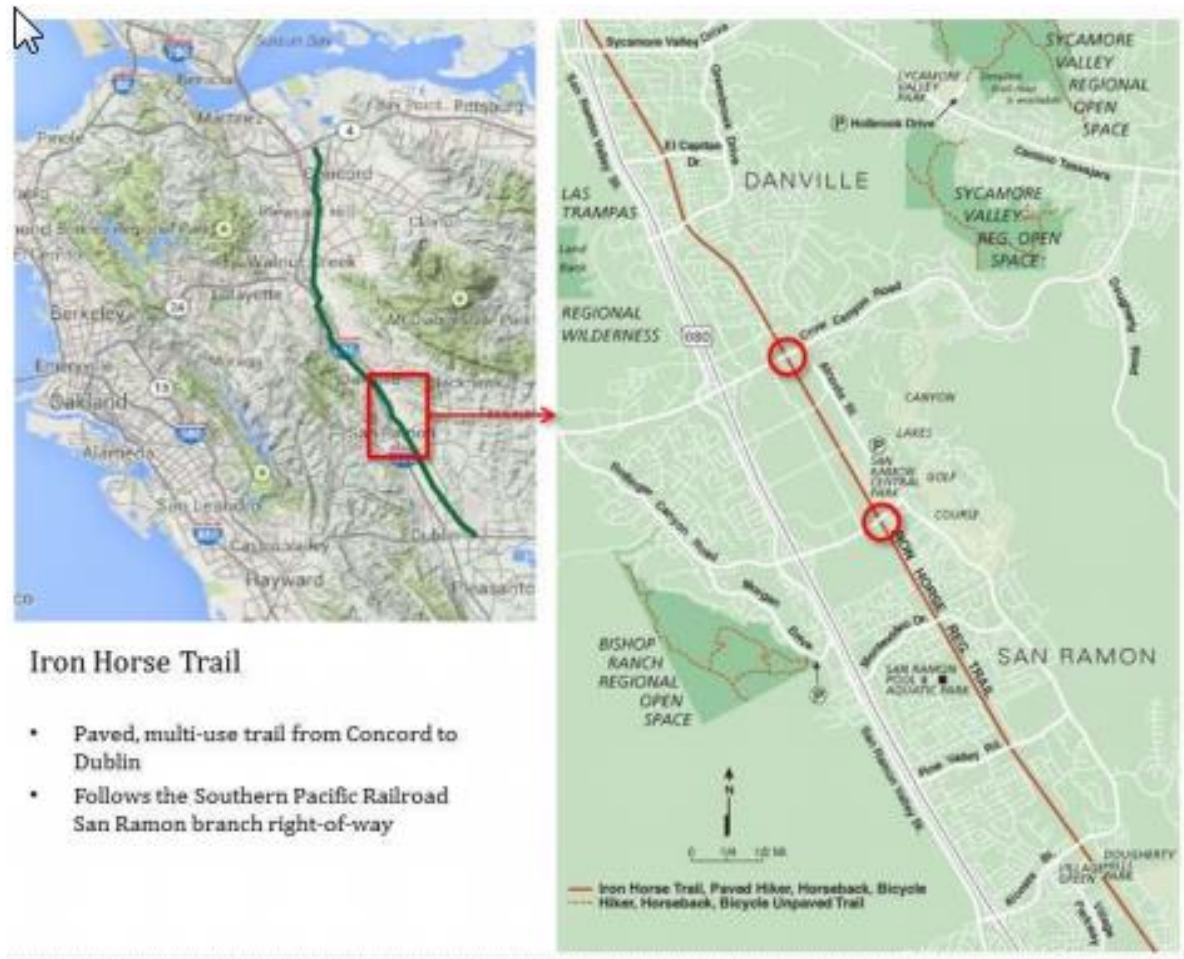
**Pedestrian and Bicycle Corridor Concept Plan**



# Online Survey

## Introduction:

The City of San Ramon is currently studying a proposed bicycle and pedestrian overcrossing along the Iron Horse Trail at Bollinger Canyon Road. A feasibility study conducted in 2009 identified this overcrossing as an important connection to improve accessibility, safety, and traffic operations.



## IRON HORSE TRAIL

### Pedestrian and Bicycle Corridor Concept Plan



# Online Survey

---

The purpose of the project is to:

1. Improve safety by eliminating conflicts between pedestrians, bicyclists, and motorists;
2. Improve motor vehicle circulation by removing the at-grade crossings;
3. Reduce and eliminate unsafe crossing maneuvers by pedestrians and bicyclists;
4. Enhance safety by providing an environment that encourages walking and bicycling along the Iron Horse Regional Trail; and
5. Increase trail usage by improving the comfort at the Bollinger Canyon Road crossing

**IRON HORSE TRAIL**

**Pedestrian and Bicycle Corridor Concept Plan**



# Online Survey

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The existing Iron Horse Regional Trail crossing at Bollinger Canyon Road aligns with a cross street at a T intersection. The crossing makes use of the signalized intersection, with bicyclists and pedestrians on the Iron Horse Regional Trail pushing a button at the signal and then proceeding in the crosswalk during the WALK phase.

In the current phase of the overcrossing study, the City and their consultant team are gathering input from community members and trail users on potential alignments and configurations for the Bollinger Canyon overcrossing and whether to maintain the at-grade crossing facility, and the design aesthetic for the location.

Please download the technical memo for a visual tour of the project and click on the POST button below to share your thoughts with the City.

**IRON HORSE TRAIL**

**Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey – Bridge I

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## Bridge Type:

Concrete deck on steel members supported by steel arches

## Colors:

White-painted steel, galvanized (grey) barriers and fences

---

## **IRON HORSE TRAIL**

**Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey – Bridge 2

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## Bridge Type:

Concrete deck on steel members supported by combination of three overlapping steel arches

## Special Feature:

Partial coverage by stretched fabric architectural roof

## Colors:

Grey-painted steel (arches and barriers), white roof

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey Bridge 3

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## Bridge Type:

Steel single tower cable-stayed main and secondary spans, supporting concrete deck on steel members

## Special Feature:

Architectural lighting of cables and tower

## Colors:

White-painted steel (tower, deck frame, safety barriers), grey concrete support elements and steel cables

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# Online Survey – Bridge 4

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## Bridge Type:

Concrete deck on steel members supported by steel prefabricated truss

## Colors:

Brown-painted steel truss, white-painted handrails

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## IRON HORSE TRAIL

### Pedestrian and Bicycle Corridor Concept Plan



# Online Survey – Bridge 5

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## Bridge Type:

Concrete box girder below concrete deck

## Special Feature:

Partial coverage by steel roof structure

## Colors:

Cream-painted concrete (girder, deck, supporting columns), red-painted steel (railings, roof structure)

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey – Bridge 6

---



## Bridge Type:

Concrete deck on steel members supported by steel Vierendeel truss, supported on concrete piers

## Special Feature:

Ornate architectural detailing

## Colors:

Teal-painted truss and ancillary architectural details, tan-colored concrete surfaces

**IRON HORSE TRAIL**

**Pedestrian and Bicycle Corridor Concept Plan**



# Online Survey – Bridge 7

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## Bridge Type:

Concrete deck on steel members  
supported by circular steel tied arches

## Special Feature:

Glass curtain walls integrated with deck  
support cables

## Colors:

Light blue-painted steel (arches and deck  
frame)

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey – Bridge 8

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## Bridge Type:

Concrete box girders below concrete deck, supported on concrete piers

## Special Feature:

Applied arch-shaped panels, ornate architectural details

## Colors:

Tan-colored concrete (pier structure), rubble stone-finished concrete (bridge spans)

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# Online Survey- Bridge 9

---



## Bridge Type:

Concrete box girders below concrete deck, supported on concrete piers

## Special Feature:

Partial coverage by steel and glass roof structure

## Colors:

Tan-colored concrete (bridge girders and piers), blue-painted steel (roof structure)

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey – Bridge 10

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## Bridge Type:

Concrete deck on steel members supported by tubular steel tied butterfly arches

## Special Feature:

Architectural all-glass elevator

## Colors:

Orange-painted arches, white-painted deck and railings, green-tinted glass elevator, grey concrete (structural supports, stairs)

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# Online Survey- Bridge 11

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## Bridge Type:

Concrete deck supported by concrete arch-shaped box girder

## Colors:

Grey-colored girder and railing supports, tan-colored deck, rubble stone-finished abutment piers

## **IRON HORSE TRAIL**

**Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey – Bridge 12

---



## Bridge Type:

Concrete deck on steel members supported by prefabricated steel arch-shaped truss

## Colors:

Salmon-painted steel (truss and deck frame), galvanized (grey) railings and fences

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey – Bridge 13

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## Bridge Type:

Wooden deck on supporting structure

## Special Features:

Sinuous deck, curvilinear aluminum cladding, bridge as “sculpture”

## Colors:

Brown-stained wood deck, grey-silver colored steel panels, brushed aluminum “shingles”

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# Online Survey- Bridge 14

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## Bridge Type:

Deck supported by shallow steel continuous through-girder, supported on triangulated steel struts

## Special Features:

Glass deck with views to water through circular openings in steel through-girder

## Colors:

Blue-painted steel (through-girder, struts), transparent glass deck

---

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# Online Survey- Bridge 15

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## Bridge Type:

Steel deck supported by steel triangular-shaped truss girders

## Special Features:

Architecture shaped to resemble a grasshopper

## Colors:

Light red-painted steel (truss girders), grey-painted (or galvanized) steel (barrier frames, railings, added architectural features)

---

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey – Bridge 16

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## Bridge Type:

Concrete deck supported on concrete box girders, supported by concrete piers

## Special Features:

Chain-link screen roof shaped with peaks to resemble mountain range

## Colors:

Grey-colored concrete (deck, girders, piers), grey (or galvanized) fencing and screen roof

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# Online Survey- Bridge 17

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Bridge Type:

Steel girder bridge with concrete deck

Special Features:

Water drop shaped railing

Colors:

Salmon color paint

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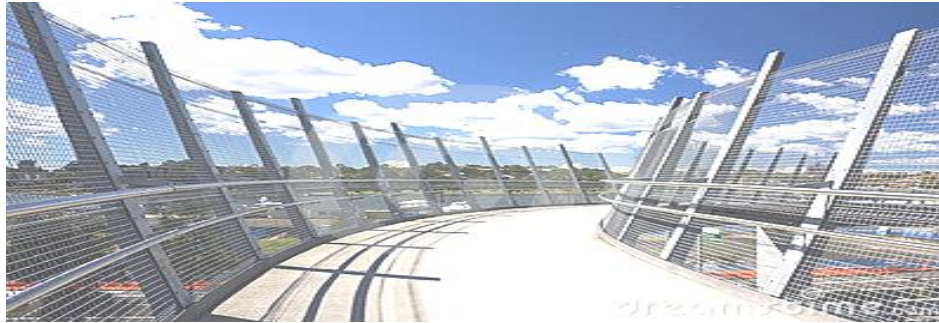
## IRON HORSE TRAIL

**Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey – Bridge 18

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## Bridge Type:

Integral concrete deck on curved steel box girder, supported by concrete piers

## Special Features:

Deck lighting features integrated in steel railing supports

## Colors:

Grey-colored steel (girder, railing frames and infill), grey-colored deck surface

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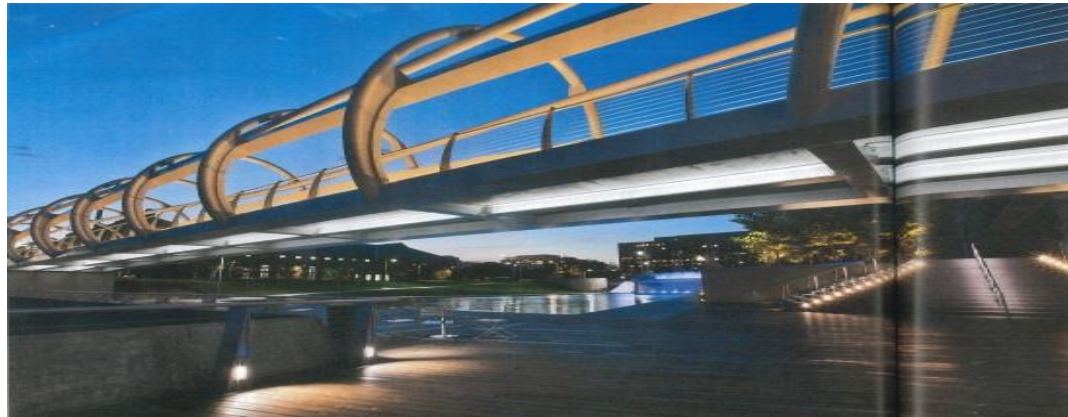
## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# Online Survey- Bridge 19

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## Bridge Type:

Steel girder bridge

## Special Features:

Open tube look with low railing

## Colors:

Light brown

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# On-Line Survey – Bridge 20

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## Bridge Type:

Concrete deck supported by concrete box girders, supported by concrete piers

## Special Features:

Covered by colored wave-form screen roof

## Colors:

Tan-colored concrete (deck, girders, piers), red-painted steel (screen roof), grey-painted (or galvanized) steel (roof support frames, barrier infill)

## **IRON HORSE TRAIL**

### **Pedestrian and Bicycle Corridor Concept Plan**



# Online Survey- Bridge 21

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## Bridge Type:

Concrete deck, supported by concrete precast beams, supported by concrete piers

## Special Features:

Architectural railing shapes and light fixtures

## Colors:

Tan-colored concrete (deck, beams, piers)

## **IRON HORSE TRAIL**

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# On-Line Survey Results- Farmers Market

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- Thursday, November 20
  - Bishop Ranch 3
- Saturday, November 8
- Saturday, November 15
  - Bishop Ranch 1

(approximately 60 inquiries)

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# On-Line Survey Results

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- San Ramon Open Government

483 Viewed on-line Survey for Bollinger

298 Viewed on-line Survey for Crow

**781 TOTAL Viewed on-line survey**

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# On-Line Survey Results

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- Bollinger Canyon Road
  - 483 Views
  - 71 Completed Survey AND Registered
  - 78 Completed Survey NO Registration
- Crow Canyon Road
  - 298 Views
  - 41 Completed Survey AND Registered
  - 78 Completed Survey NO Registration

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# On-Line Survey Results

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- 112 Total Responses – Registered on-line
- 23 Total Responses – Design Charrettes
- 135 Responses

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# On-Line Survey Results

## Bollinger Canyon Results



## Bridge 1, 3, and 4

- Complement new City Center
- Simple, modern, clean lines
- Open look and feel that preserves open views to hills

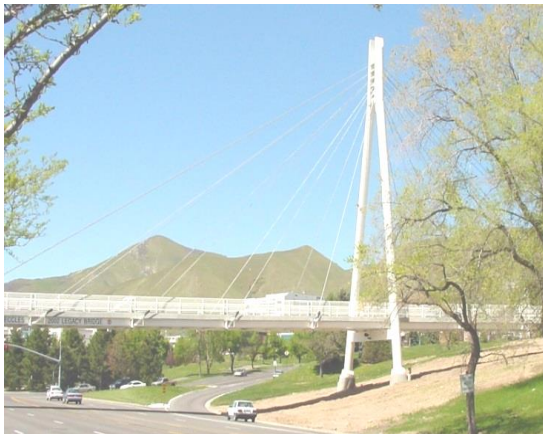
# On-line Survey Results

## Crow Canyon Road



## Bridge 1, 3 and 11

- Minimal treatment
- Simple, safe overcrossing
- Warm stone and other natural elements preferred



# Design Charrette and On-Line Survey Results

## Overall Results: Online and Charrette



## Feedback for Both Locations

- The same three bridge concepts for Crow Canyon Road scored highest, when on-line feedback and design charrette were considered together

# Next Steps

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- Seek Additional Input from Community
  - Parks Commission
  - Planning Commission
  - Transportation Advisory Committee
  - Transportation Demand Management Committee
  - Senior Advisory Committee
  - Teen Council
  - Economic Development Advisory committee
  - Open Space Committee
  - ARB
  - Sunset Development
  - San Ramon Chamber of Commerce
  - San Ramon Valley Unified School District Liaison
  - Mayors Breakfast

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# Next Steps

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- City Council Presentation – April
  - Results from Community Outreach
  - Council - **Select Three Concepts**
- Consultant Team Refine Cost Estimates for Three Concepts (April – May)
- City Council select **One-Final Concept** – June
- Implement Environmental Phase – PDA Grant Awarded to City to begin summer, 2015

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