MEMORANDUM - CITY OF PASADENA
DEPARTMENT OF PUBLIC WORKS

DATE: February 3, 2020

TO: Public Safety Committee

FROM: Ara Maloyan, P.E., Director, Department of Public Works

SUBJECT: Colorado Street Bridge – Suicide Mitigation Enhancements Project – Progress Report

Recommendation

Informational Item.

Background

On April 18, 2018, staff presented the Colorado Street Bridge Task Force recommendation to deter suicide attempts on the Colorado Street Bridge through the implementation of a vertical barrier system to the Public Safety Committee, through which the City Council unanimously approved on April 23, 2018. City Council directed staff to further study the recommendation of the Colorado Street Bridge Task Force, and return to Council with a recommended project and appropriate environmental review.

On October 17, 2018, the Department of Public Works issued a request for proposals (RFP) for professional services for environmental review and design development of the Colorado Street Bridge - Suicide Mitigation Enhancements project. On May 15, 2019, the Public Safety Committee was presented the architectural firm chosen for contract award in response to the RFP, and on May 20, 2019, Council awarded the environmental review and design contract to Donald MacDonald Architects (MacDonald Architects).

Project Update

Staff has taken multiple steps in progressing this project following the May 15, 2019 presentation to the Public Safety Committee. As part of the preliminary design phase of the project, the Department of Public Works and MacDonald Architects have completed the following tasks:

(1) Stakeholder Kickoff Meeting - On November 9, 2019, staff and MacDonald Architects met with former members of the Colorado Street Bridge Task Force to review the recommendations that were put forth to City Council and discuss the proposed project schedule

(2) Community Outreach - The first community meeting was held on September 26, 2019 to present the project scope and schedule for the design of a vertical barrier on the Colorado Street Bridge, and gather public input and comments; The second community meeting was held on October 29, 2019 where Donald MacDonald Architects presented multiple concepts in consideration of the public comments received. The community reached the following consensus:

- Keep all alcoves open
- Position the barrier on top of the existing balustrade
- Position the barrier on the bridge side of the lamp poles to increase effectiveness
- Keep the existing lamps but modify the height to maintain visibility on the bridge

(3) Pasadena Heritage – On November 15, 2019, staff and MacDonald Architects met with Pasadena Heritage staff and volunteers to further discussed the concepts proposed at the community meeting, the individual modifications per version and the preservation of the bridge's historic fabric, and their additional recommendations for the vertical barrier.

(4) Commissions - On November 19 and 26 of 2019, the vertical barrier design concepts (Attachment A), which received the most public support during the outreach process, were presented to the Historic Preservation Commission and Design Commission, respectively, for advisory review and comments. As an informational item, no recommendations were proposed.

The following four (4) concepts have been reviewed for general conformance to the Secretary of Interior Standards.

- A2, Vertical Frame, Flexible Mesh (w/o Intermediate Posts)
- A2, Vertical Frame, Rigid Mesh (w/ Intermediate Posts)
- A2, Vertical Frame, Rods/Pickets
- B2, Curved Frame, Rigid Mesh (w/ Intermediate Posts)

The consensus among the Historic Preservation Commission members was that a design that emphasized transparency and minimized modifications to bridge elements/features would be preferred. The Commissioners unanimously favored mesh over rods/pickets and agreed that full-scale mock-ups should be constructed in order to more adequately assess the options.

The members of Design Commission had similar preferences towards mesh over pickets, agreed that all alcoves should remain open, and that full-scale, as well as scale models, should be constructed for better visualization and evaluation. They also suggested that a hybrid of the concepts presented should be considered or developed.

Request for Input

Staff would like to gather additional pertinent feedback and requests the advisory review and input of the Public Safety Committee on the concepts as presented to the Commissions, so as to further refine the concepts.

It should be noted that "A" concepts depict barriers that are vertical from top to bottom; "B" concepts consider a barrier that is curved at the top; and the variability between same-lettered concepts is the material being proposed for use.

Next Steps

Staff met with Pasadena Heritage on December 19, 2019 to review the input of the Commissions, refine the preferred concepts, and conferred on the next tasks for the project. Staff is also coordinating with MacDonald Architects to fabricate and install full-size mock-ups of the preferred concepts on the Colorado Street Bridge for public viewing and assessment. A web survey will be published on the project's website to solicit public opinion on the mock-up design options.

The following is the proposed project schedule:

Full-Scale Mock-Up Installation	March 2020
Historic Preservation Commission: Follow-Up	April 2020
Design Commission: Follow-Up	April 2020
Public Safety Committee/City Council: Recommendation	May 2020

FISCAL IMPACT

Staff is currently not at a stage where estimated fiscal impact can be ascertained as we are still in the preliminary conceptual phase of the project. Once a preferred design is chosen, a fiscal impact analysis will be performed and presented to City Council.

Respectfully submitted:

Ara Maloyan, Director
Department of Public Works, Engineering

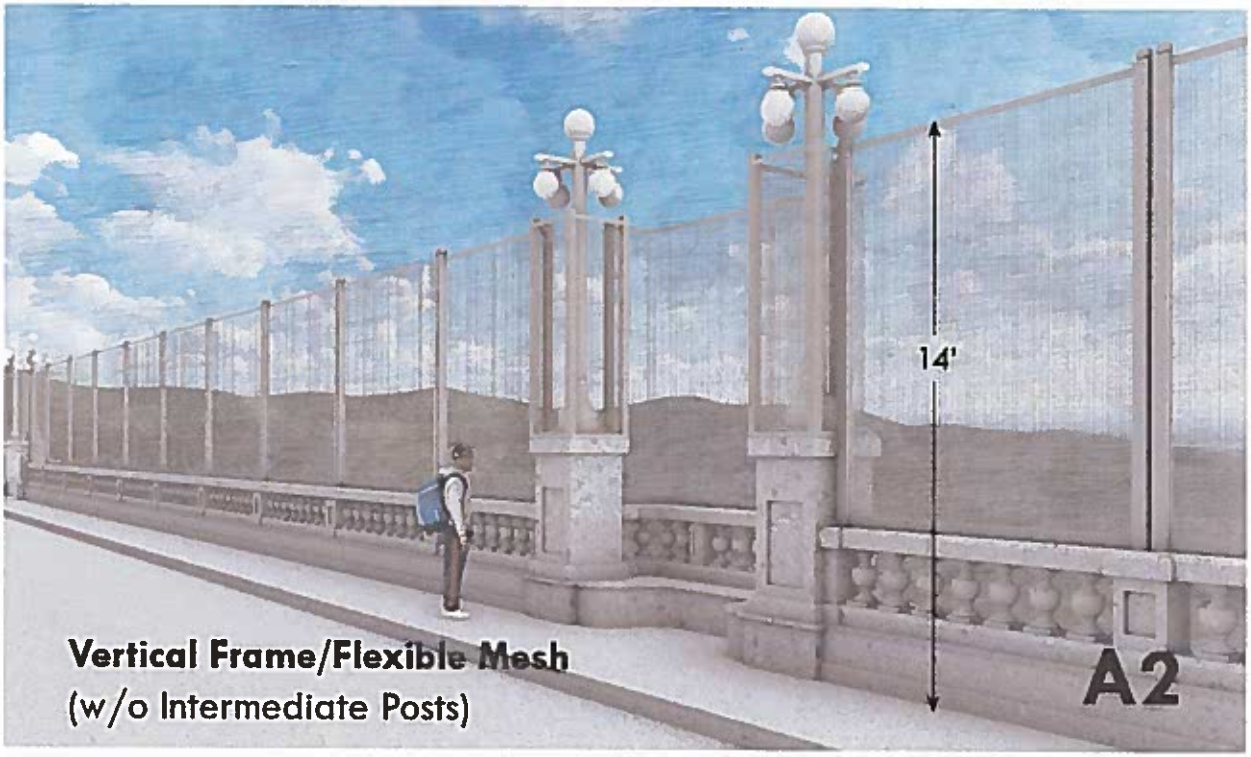
Prepared by:

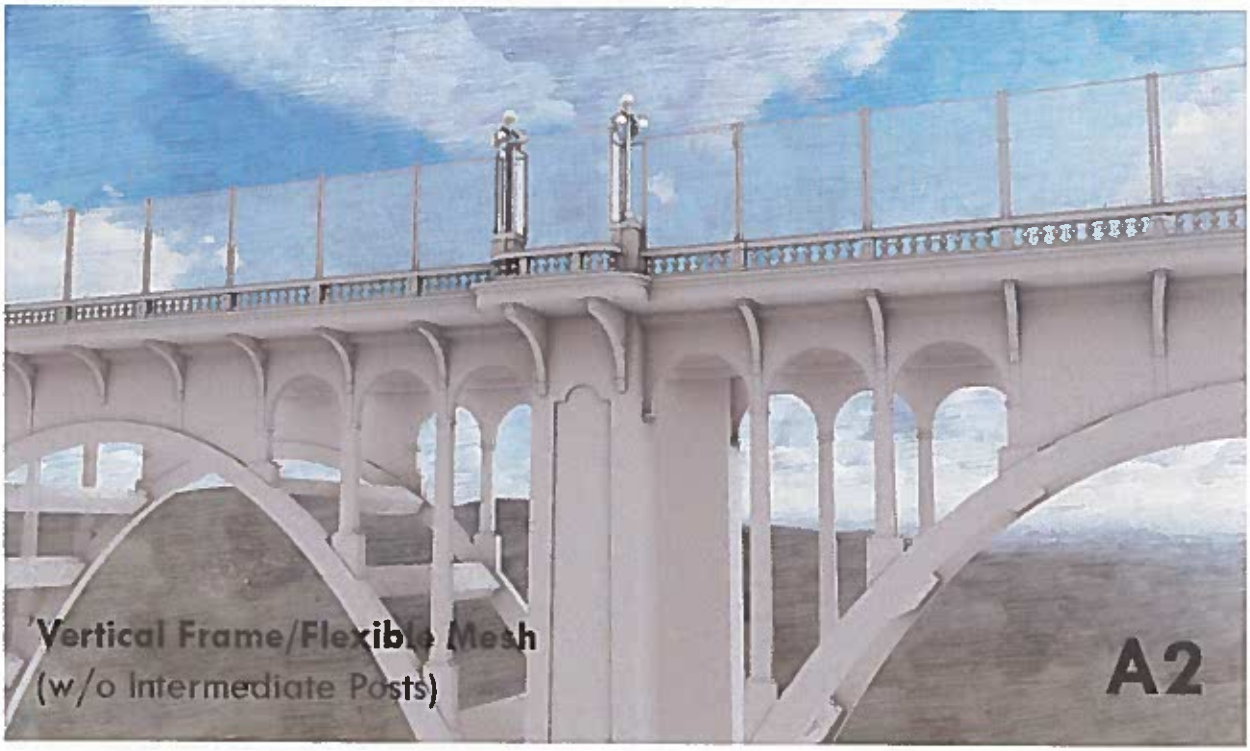
Hayden Melbourn, Principal Engineer
Department of Public Works, Engineering

Attachments:

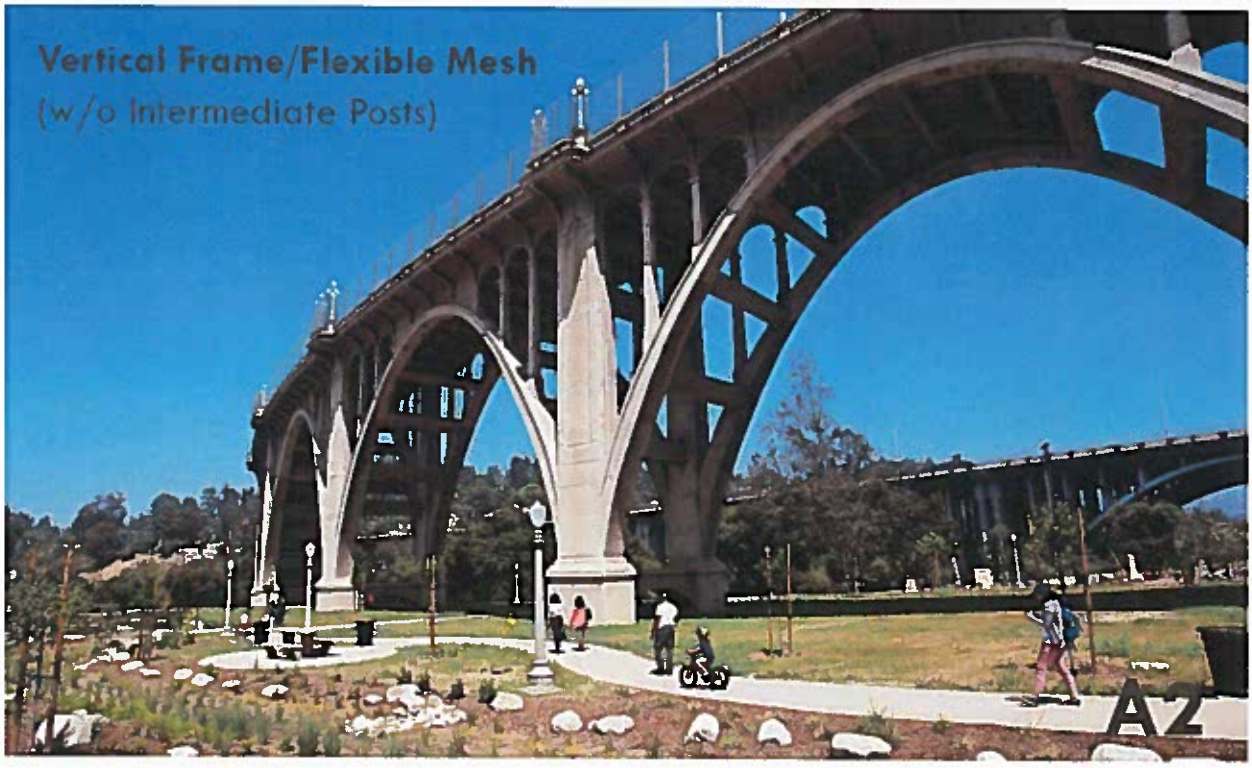
A – Colorado Street Bridge – Suicide Mitigation Concepts

Attachment A – Colorado Street Bridge – Suicide Mitigation Concepts

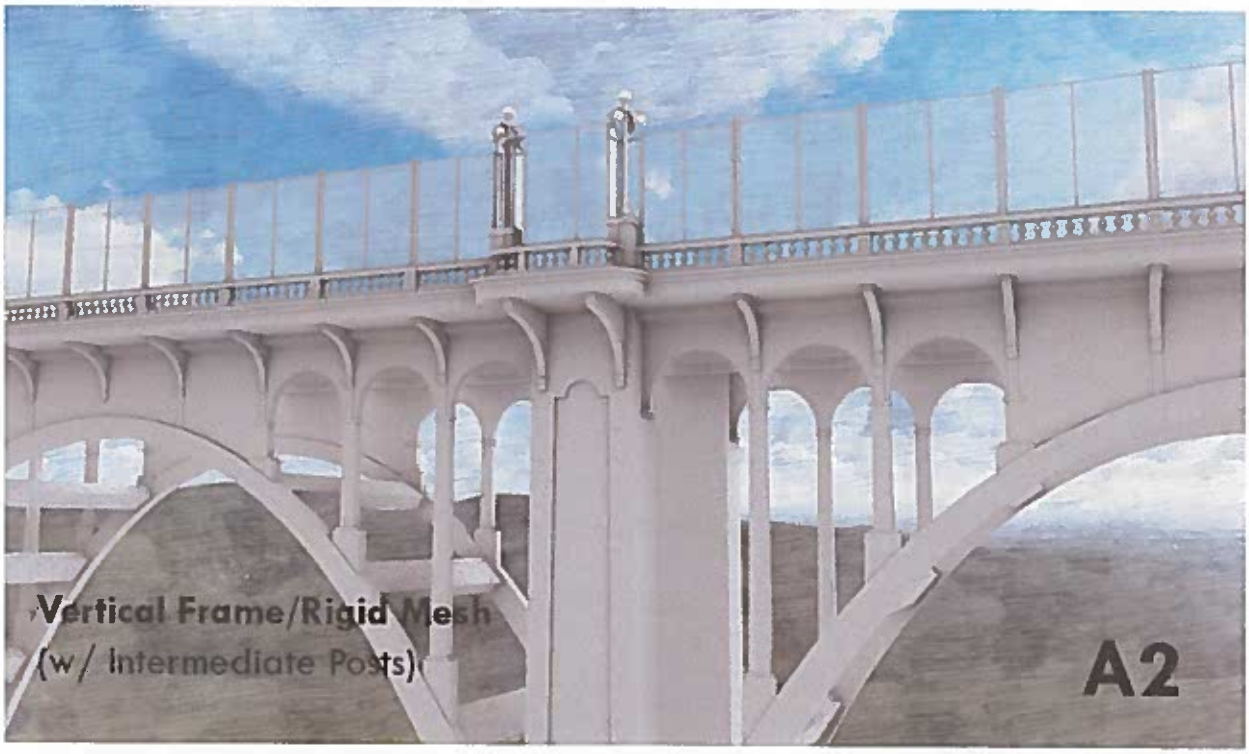

14'
Vertical Frame/Flexible Mesh
(w/o Intermediate Posts)
A2


Vertical Frame/Flexible Mesh
(w/o Intermediate Posts)
A2


Vertical Frame/Flexible Mesh
(w/o Intermediate Posts)
A2

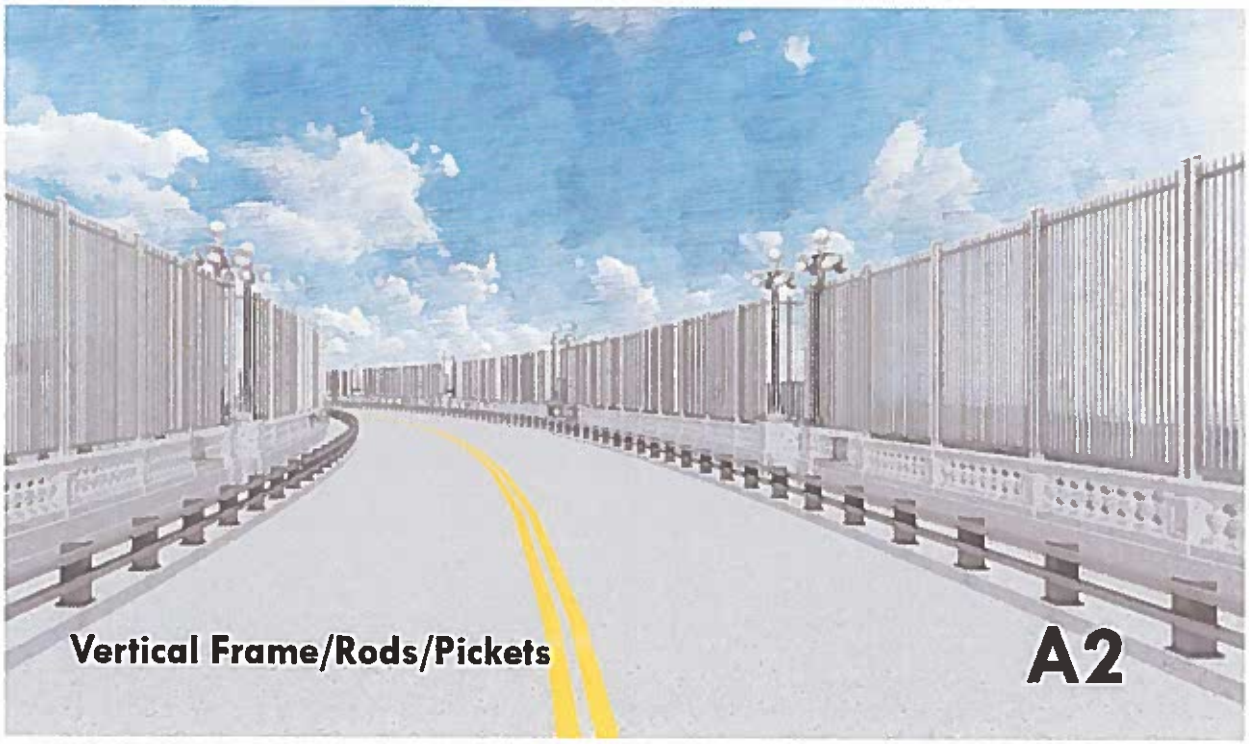

Vertical Frame/Flexible Mesh
(w/o Intermediate Posts)
A2

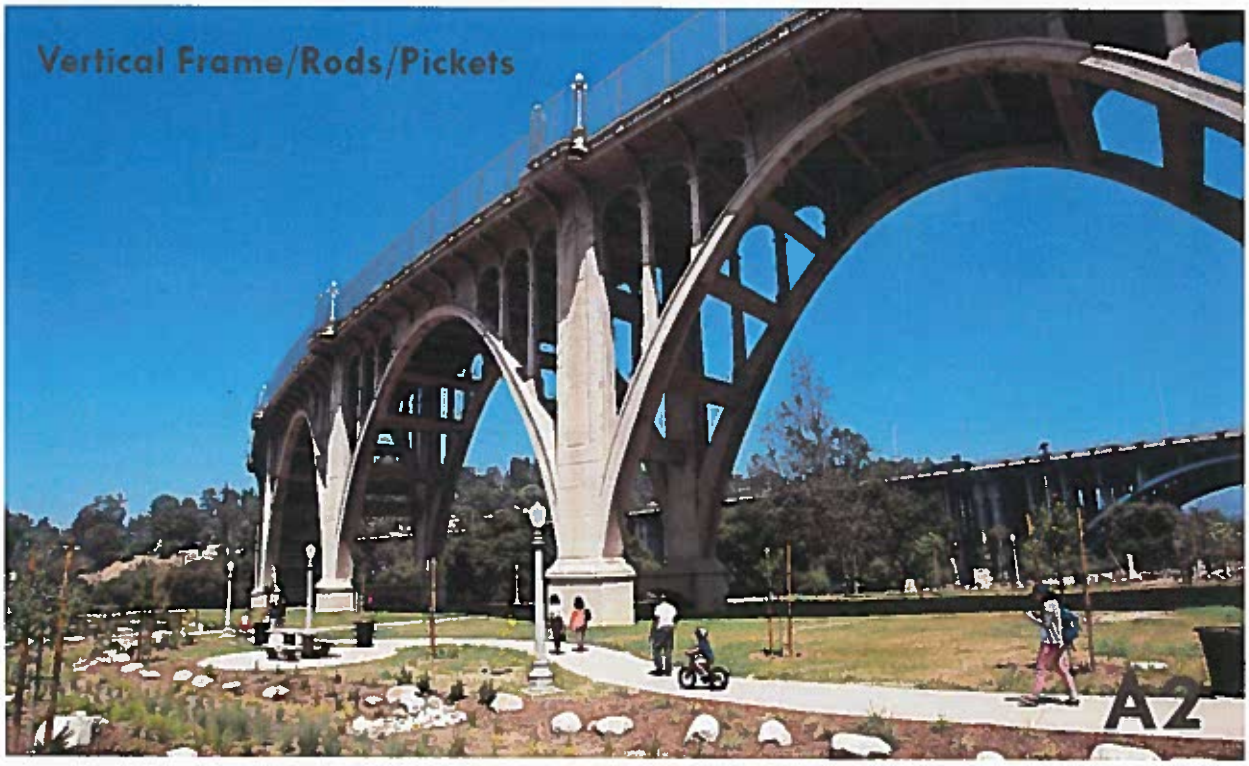

Vertical Frame/Rigid Mesh
(w/ Intermediate Posts)
A2

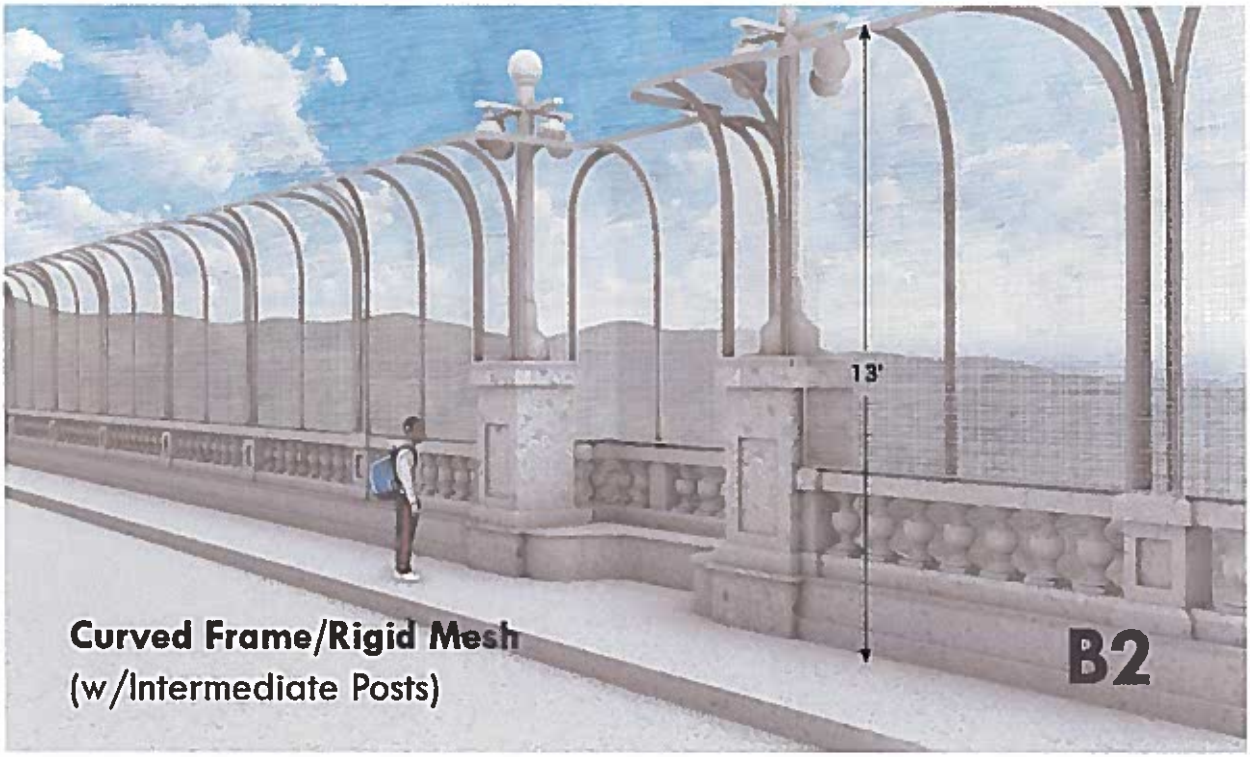

Vertical Frame/Rigid Mesh
(w/ Intermediate Posts)
A2


15'
Vertical Frame/Rods/Pickets
A2


Vertical Frame/Rods/Pickets
A2

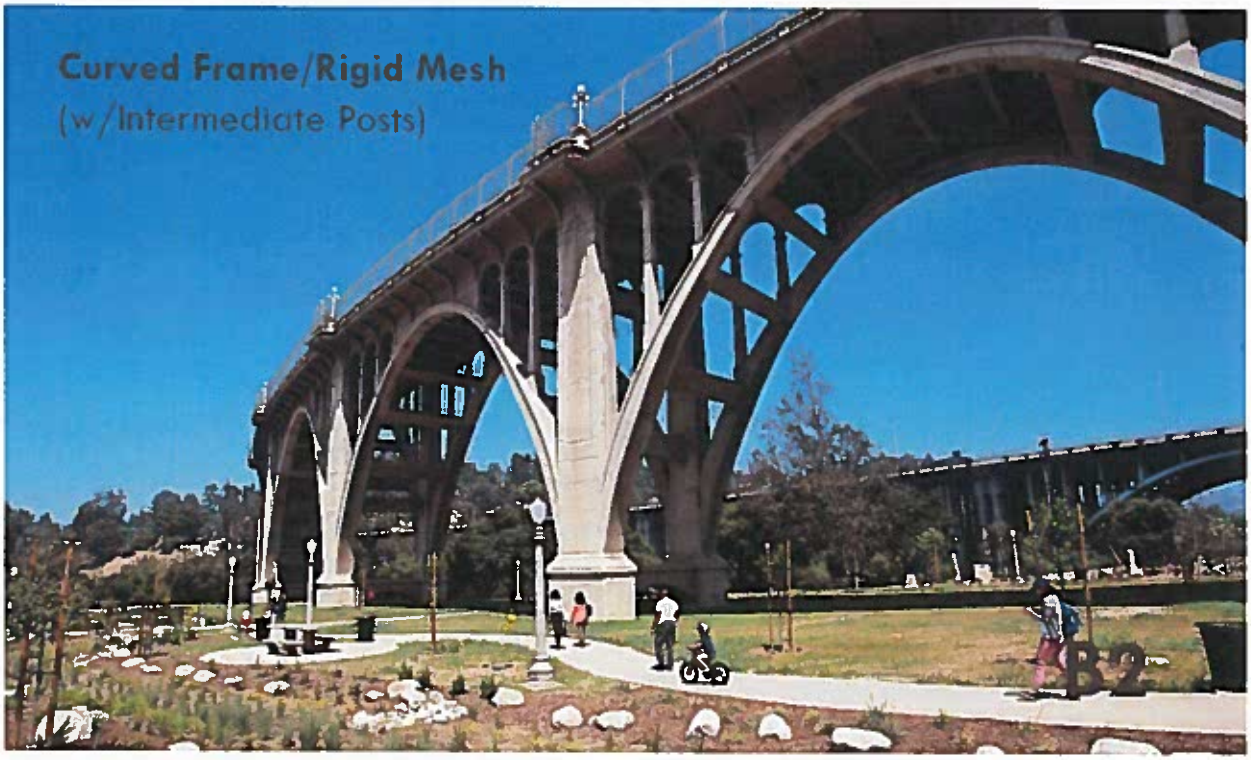

Vertical Frame/Rods/Pickets
A2


Vertical Frame/Rods/Pickets
A2


13'
Curved Frame/Rigid Mesh
(w/Intermediate Posts)
B2


Curved Frame/Rigid Mesh
(w/Intermediate Posts)
B2

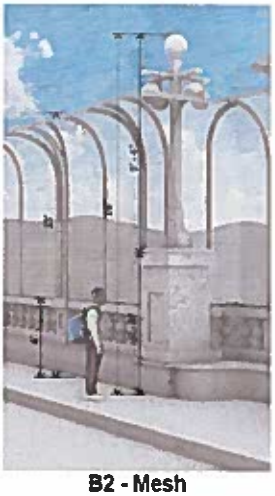

Curved Frame/Rigid Mesh
(w/Intermediate Posts)
B2


Curved Frame/Rigid Mesh
(w/Intermediate Posts)
B2

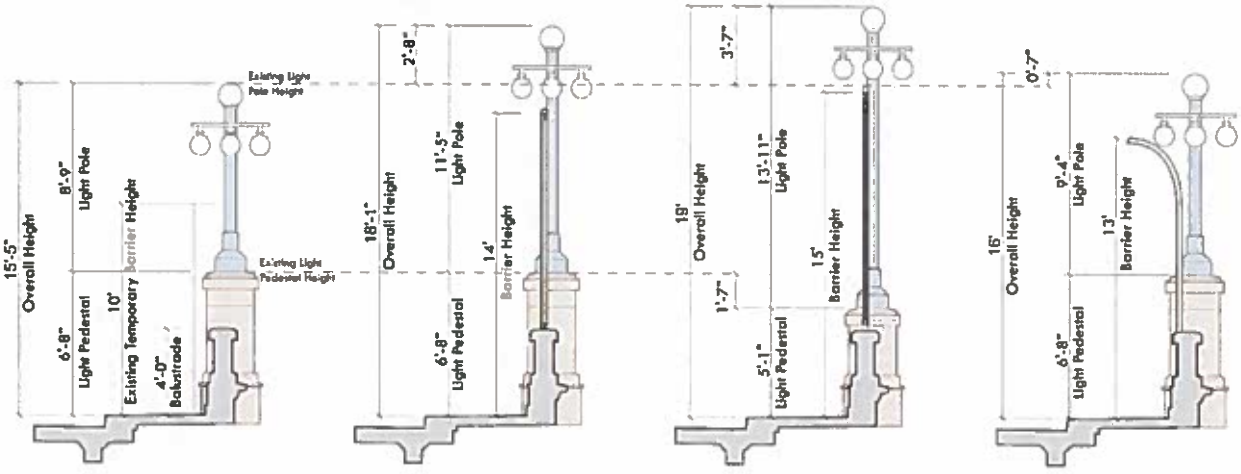
Existing

A2 – Mesh
(flex & rigid)

A2 - Rods



B2 - Mesh



Existing Condition

A2 Flexible Mesh
Rigid Mesh

A2 Rods
Pickets

B2 Curved Mesh

	A2			B2
	Flexible Mesh	**Rigid Mesh**	**Rods / Pickets**	**Curved Mesh**
Effectiveness	- Top of barrier 14' above sidewalk - Climb resistant mesh - Barrier in-front of light poles - Minimum toehold/handhold span 10'	- Top of barrier14' above sidewalk - Climb resistant mesh - Barrier in-front of light poles - Minimum toehold/handhold span 10'	- Top of barrier15' above sidewalk - Rods more prone to climbing - Barrier in-front of light poles - Minimum toehold/handhold span 9' * * Top of rods, no horizontal element	- Top of barrier13' above sidewalk - Climb resistant mesh - Barrier in-front of light poles - Minimum toehold/handhold span 10' - Overhang increases difficulty of climbing barrier
Historic Preservation - (Character Defining Features)	- Light pedestals existing height - Height of light 18'-1" from sidewalk - Light poles lengthend 2'-8"	- Light pedestals existing height - Height of light 18'-1" from sidewalk - Light poles lengthend 2'-8"	- Light pedestals lowered 1'-7" - Height of light 19' from sidewalk - Light poles lengthend 3'-7"	- Light pedestals existing height - Height of light 16' from sidewalk - Light poles lengthend 7"
Aesthetics	- Stainless steel flexible mesh - 67% transparency - Vertical posts line up with corbels	- Stainless steel rigid mesh - 67% transparency - Vertical posts line up with corbels with intermediate posts	- Stainless steel rods / painted pickets - 67% transparency * - Vertical posts line up with corbels * viewing straight, and significantly increased by viewing angle	- Stainless steel rigid mesh with intermediate posts - 67% transparency - Curved top picks up the Beaux Art language of the bridge arches and the corbels - Vertical posts line up with corbels with intermediate posts