**Projects of National and Regional Significance**
**Grant Application**
**for**
# Boulder Avenue Improvements and Bridge Widening
**a component of the**
# Inland Empire Goods Movement Gateway Project
**in the City of Highland, California**

## 1. Statement of Purpose

The City of Highland is one of the main gateway cities within the Inland Empire of San Bernardino County, California, for both commuter and goods movement. SR-210, linking Los Angeles and San Bernardino Counties, runs through the center of the City of Highland. Boulder Avenue (formerly SR-30), the subject of this application, is a regional north-south arterial connecting the cities of Highland, San Bernardino, and Redlands, and runs parallel with and serves as an alternative route to SR-210 (see attached Location map).

A total of $55 million of federal funds have previously been allocated under the "Projects of National and Regional Significance" category in SAFETEA-LU for construction of the Inland Empire Goods Movement Gateway Project, of which $2 million is designated for construction of Boulder Avenue Improvements and Bridge Widening in the City of Highland.

The City of Highland, in cooperation with the California Department of Transportation District 8, and the Federal Highway Administration, has since substantially completed construction of a new 4-lane bridge on Boulder Avenue to replace a 2-lane bridge across City Creek, and widened approximately 1,710 feet of Boulder Avenue from 2 lanes to 4 lanes between Base Line and Eucalyptus Avenue. Construction of the new 4-lane bridge and roadway has eliminated a previous existing 2-lane bottleneck on Boulder Avenue improving north-south connectivity and mobility among the cities of Redlands, Highland, and San Bernardino.

Construction of the new bridge and roadway widening is an essential component of the overall Boulder Avenue Improvements and Bridge Widening Project, and was largely funded through the federal Highway Bridge Program ($12 million). However, certain key components of the overall Boulder Avenue Improvements and Bridge Widening Project remain unfinished.

The improvements proposed herein will complete the overall Boulder Avenue Improvements and Bridge Widening Project. This application is presented at this time to request that the $2 million PNRS funds be made available to the City of Highland to construct the remaining, unfinished improvements of the overall Boulder Avenue Improvements and Bridge Widening Project.

## 2. Project Characteristics

Project Limits: The improvements proposed in this project will be constructed within the existing 110'-wide right-of-way along a 2-mile segment of Boulder Avenue within the City of Highland, bound on the north by San Manuel Village Entrance and on the south by Greenspot Road.


Boulder Avenue Developments

Major Arterial: Boulder Avenue is an existing 4-lane, 2-way Primary Arterial having a 110'-wide right-of-way and a 98'-wide curb-to-curb separation. The majority of this heavily-traveled corridor is divided by a 22'-wide raised center median. The posted speed limit is 50 miles per hour.

Freeway Access: Boulder Avenue is an important link to two State highways, SR-210 and SR-330. There are two accesses from SR-210 to Boulder Avenue, one via the Base Line interchange located 0.5 miles west of Boulder Avenue, and the other via the Greenspot Road interchange, located 1.0 mile west of Boulder Avenue. Access from SR-330 is via the Highland Avenue interchange, located 0.1 mile east of Boulder Avenue.

Development: Boulder Avenue is a Primary Arterial adjoining a large number of existing and proposed development sites within the project limits. Cumulatively, the existing developments are considered significant traffic generators, including the San Manuel Village, the Beaver Medical Center, two middle/elementary schools, a mini-storage facility, the City's main post office, a Wal-Mart Super Store, the Albertson's/WalGreens shopping centers, many retail stores, restaurants, professional services, and two major sand and gravel mining operations and processing plants.

Located immediately west of Boulder Avenue on Greenspot Road, between SR-210 and Boulder Avenue, is the City's Golden Triangle Project Area currently under development. Lowes, In-N-Out, LA Fitness, and Staples among others have opened for business. There are currently 116 acres vacant in the Golden Triangle ready for continued development that will be served by an improved Boulder Avenue.

Traffic Volumes: Average Daily Trips on Boulder Avenue within the project limits, taken from the City of Highland General Plan EIR, shows a sizable increase of traffic volume as the adjacent areas continue to develop.

- Existing (2006) average daily trips is 12,500

- Projected 2030 average daily trips is 21,300.

Traffic Signalization: Boulder Avenue, within the 2-mile project limits, has six signalized intersections, out of which three intersections are also entrances to major shopping and medical centers.

Traffic Accidents: Within the past 5 years there has been 74 traffic accidents reported along Boulder Avenue within the Project limits. Of the 74 traffic accidents, 26 resulted in injury and 1 fatality. 60 of the 74 accidents (81%) were broadside and rear-end type accidents, the kind that could be mitigated by the improvements proposed herein.

Transit Service and Accessibility: Omnitrans, the regional transit service, operates a bus route along Boulder Avenue. Currently, there are nine transit stops located within the project limits.

Truck Route: Boulder Avenue is a designated Truck Route.

Bikeway: Boulder Avenue is a designated Class II bikeway and has existing bike lanes within the project limits.

3. **Project Scope**

The proposed project scope includes street, bridge, sound-wall, pedestrian, lighting, landscaping and signal synchronization improvements. The purpose of this project is to improve transportation safety and efficiency, reduce fuel consumption, reduce vehicle emissions and noise pollution, improve area aesthetics and promote economic development, and to extend the service life of the public infrastructure. The proposed improvements will also help to encourage non-motorized transportation through enhanced visibility and improved accessibility to activity centers and public transit.

## 4. Specific Proposed Improvements and Benefits

The following is an itemized summary of each of the specific improvements proposed herein. Locations of the various improvements are shown on the attached Proposed Improvements Map.

1) Traffic Signal Interconnect System. A new hard-wired traffic signal interconnect system will be installed to coordinate signal operations at 6 signalized intersections along Boulder Avenue to improve system performance. The proposed new interconnect system will result in reduced travel times which will in-turn result in reduced fuel consumption, reduced vehicle emissions, and improved safety along this important corridor.

2) Sidewalks, Handicap Ramps and Bus Stop Access. New sidewalks will be constructed to provide continuity in the City's existing sidewalk network along Boulder Avenue, and a new handicap ramp will be constructed at the northeast corner of the Greenspot Road/Boulder Avenue intersection. Thirty existing handicap ramps within the project limits will be improved to meet with current ADA standards, including installation of truncated domes. Modifications to existing bus stops, in accordance with the Regional Transit Authority's current standards for handicap accessibility, will be constructed at 9 existing bus stops within the project limits for improved ADA accessibility to transit. These proposed sidewalk, ramp, and bus stop improvements will improve user safety and provide better accessibility throughout the project limits, including accessibility to transit services for all pedestrians. The new sidewalks will be constructed to meander along the existing 20'-wide parkways, and will not only provide continuity for pedestrians, but will improve area aesthetics which will in-turn encourage economic development in one of the City's most important districts.

3) Raised Center Median. This project will construct 0.45 miles of raised center median at three locations between Pacific Street and Greenspot Road to improve safety by completing separation of the 2-way traffic along Boulder Avenue within the 2-mile project limits.

   The medians will give the appearance of a narrower roadway and thereby further improve traffic safety through slower travel speeds as a result of the narrower roadway.

4) Landscaping and Irrigation. Drought tolerant landscaping will be planted in the existing and new raised center medians and in parkway areas. The new landscaping will serve as a water-quality Best Management Practice to filter roadway surface runoff, reduce air pollution, enhance aesthetics, and encourage economic development in the surrounding areas.

5) Non-Motorized Access Enhancements. This project will construct handicap accessibility and lighting improvements at the intersection of the non-motorized-use pathway located on both sides of Boulder Avenue at the City Creek crossing, providing safer and more convenient accessibility for non-motorized travelers to access the public amenities located on Boulder Avenue, including transit stops.

6) Street Lighting. This project will install new energy-efficient decorative LED street lights on the new Boulder Avenue Bridge. It will install new cobra-head style LED street light fixtures on both sides of Boulder Avenue between City Creek and Eucalpytus Avenue, and convert existing cobra-head style High Pressure Sodium Vapor street light

fixtures to cobra-head style LED street light fixtures on Boulder Avenue between Greenspot Road and Base Line. The new LED lighting system will result in lower energy consumption and is a much-needed safety improvement along this highly-traveled corridor.

7) Sound Wall and Bridge Structure Enhancements. This project will apply an anti-graffiti coating on portions of the newly-constructed bridge structure that are constructed with architecture features, and will construct cobblestone veneers and caps on the existing concrete sound wall pilasters.

8) Pavement Rehabilitation and Slurry Seal. This project will construct pavement rehabilitation on Boulder Avenue from the north end of the new bridge improvements to Base Line (including the area within the Base Line intersection) where existing pavement conditions are poor. Pavement rehabilitation will consist of cold milling the existing pavement to a depth of 0.15', and constructing an asphalt pavement inlay of the same thickness, removal and replacement of traffic signal loops, and adjusting utility covers to the new finish grades.

   Slurry seal will be constructed from the south end of the new bridge improvements to Greenspot Road as necessary to keep the existing roadway in a state of good repair and to extend service life.

## 5. Project Schedule

Assuming PNRS Application is approved by FHWA on June 1, 2014, and E-76 for PE is issued by Caltrans on September 1, 2014:

- Begin Environmental: November 1, 2014
- Complete Environmental: September 1, 2015
- Begin PS&E: September 1, 2015
- Complete PS&E: February 1, 2016
- Begin Advertise: December 1, 2015
- Award Construction Contract: March 1, 2016
- Begin Construction: May 1, 2016
- Complete Construction: October 1, 2016

## 6. Compliance with Regional Transportation Planning Goals

The proposed improvements will complete the Boulder Avenue Improvement and Bridge Widening Project. It will significantly improve operational safety and efficiency along this critical link in the transportation network that has long been recognized and documented in the following transportation documents:

- Southern California Association of Governments Regional Transportation Plan
- Federal Transportation Improvement Program
- County of San Bernardino Non-Motorized Transportation Plan
- City of Highland General Plan Circulation Element
- "Projects of National and Regional Significance" category in SAFETEA-LU

This project accommodates all modes of transportation in accordance with the legislative requirements under AB 1358 to plan for a balanced, multi-modal transportation system that meets the needs of all users of the streets, roads, and highways for safe and convenient travel.

This project supports an environmentally sustainable transportation system. It reduces congestion and delay, improves efficiency and safety, reduces energy consumption, reduces greenhouse gas emissions, improves air quality, improves area aesthetics, supports and promotes public transportation, and improves quality of life. All of the above benefits resulting from construction of the project that meets regional transportation, air quality and land use planning goals.

This project is included in the 2013 Federal Transportation Improvement Program as Project No. 20131501, and is fiscally constrained for construction obligation in Federal FY 2015/2016.

**7. Request for PNRS Funds**

Total project construction cost is estimated to be $2,500,000. PNRS funds requested is $2,000,000. PNRS funds will be used in the project's preliminary engineering, PS&E and construction phases. This project is fully eligible for federal PNRS funds under Title 23 of the United States Code.

| | |
|---|---|
| PNRS Funds Requested (80%): | $2,000,000 |
| Local Funds Committed (20%): | $500,000 |
| Total Project Cost: | $2,500,000 |

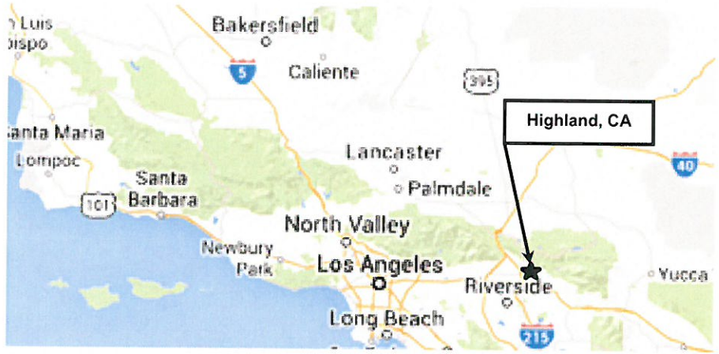
Refer to the Detailed Cost Estimate attached to this application.

**8. Applicant Contact**

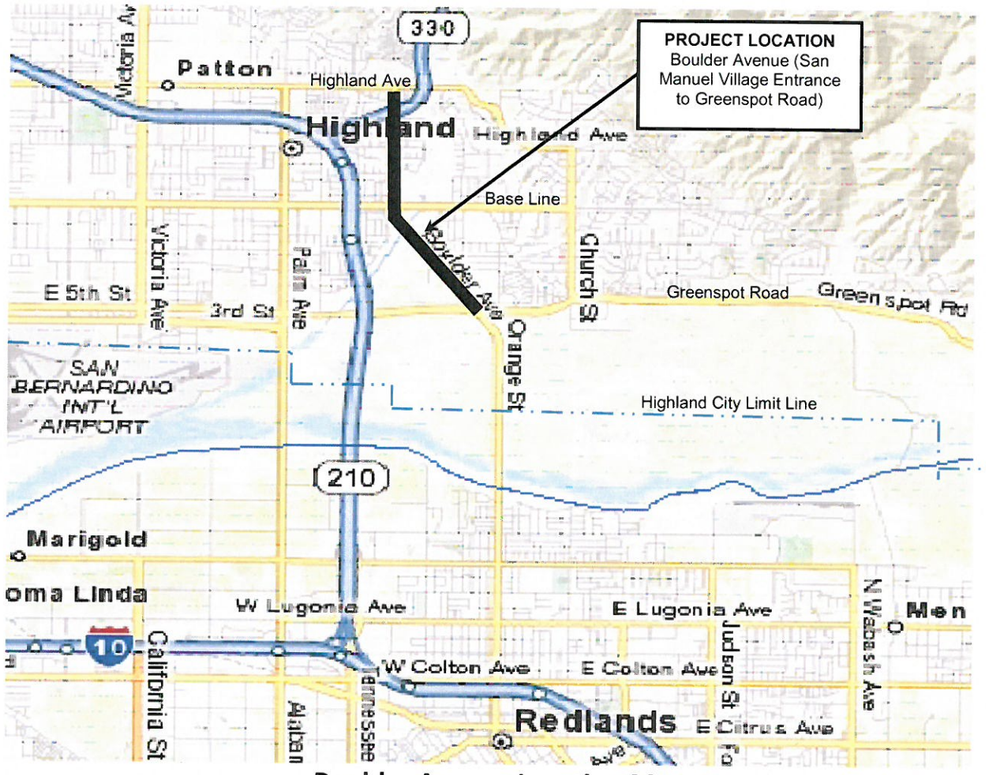
The primary point of contact for the project applicant is:

Ernest Wong
Public Works Director/City Engineer
City of Highland
27215 Base Line
Highland, CA 92346
Phone: (909) 864-8732, ext. 212
Fax: (909) 862-3180
Email: ewong@cityofhighland.org

# Project Maps and Photos




**Regional Map**




**Boulder Avenue Location Map**

Proposed Improvements include construction of a raised center median and landscaping to prevent illegal and unsafe turning movements and improve area aesthetics.

Proposed improvements include construction of sidewalks, handicap accessibility pathways, and a new traffic signal synchronization system.


Proposed improvements include slurry seal and restoration of pavement markings to like new conditions, and construction of meandering sidewalks in existing 20'wide parkway areas.

Proposed improvements include street lighting, landscaping, meandering sidewalks, handicap accessibility pathways and enhancements for non-motorized transportation access at the City Creek Trail Crossing.


Proposed improvements include sound wall modifications. The existing sound wall pilasters will be decorated with architectural stone. This project will also construct sidewalks, landscaping, and pavement slurry seals.

Proposed improvements include anti-graffiti coating on the newly constructed bridge and railing over City Creek, and installation of decorative LED lights on the bridge pilasters.


Proposed improvements include non-motorized access enhancements connection the City Creek Trail to pedestrian pathways on Boulder Avenue.

# BOULDER AVENUE BRIDGE
## AT CITY CREEK

DEDICATED TO THE COMMUNITY OF HIGHLAND

**FEBRUARY, 2013**

**CITY COUNCIL**

LARRY McCALLON – MAYOR
PENNY LILBURN – MAYOR PRO-TEM
SAM J. RACADIO – COUNCIL MEMBER
JODY SCOTT – COUNCIL MEMBER
JOHN P. TIMMER – COUNCIL MEMBER

**PROJECT TEAM**

JOSEPH A. HUGHES – CITY MANAGER
ERNEST WONG – PUBLIC WORKS DIRECTOR/CITY ENGINEER
CARLOS ZAMANO – ASSISTANT PUBLIC WORKS DIRECTOR
AECOM TECHNICAL SERVICES, INC. – BRIDGE DESIGN
HARRIS & ASSOCIATES – CONSTRUCTION MANAGER
GRIFFITH COMPANY – CONTRACTOR

THIS BRIDGE REPLACES THE ORIGINAL BRIDGE
CONSTRUCTED IN 1949

BOULDER AVENUE PNRS PROJECT
COST ESTIMATE

5/7/2014 6:26 PM

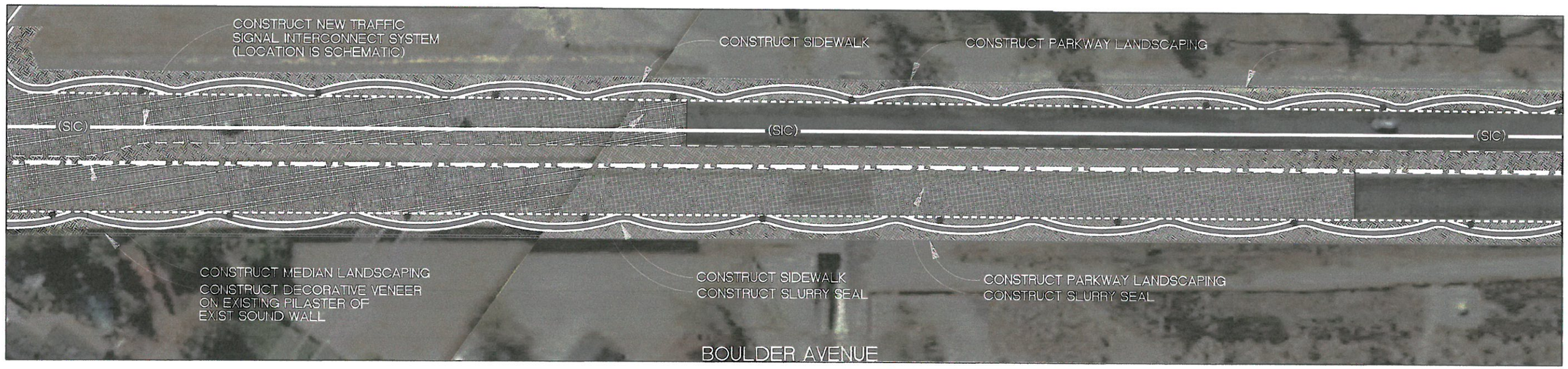
| No. | Description | Qty | Unit | Unit Price | Cost |
|---|---|---|---|---|---|
| 1 | **Pavement Rehabilitation and Striping** | | | | **$167,610.00** |
| 1a | 0.15' Cold Plane (Base Line incl intersection to south BCR KFC Dwy) | 57000 | SF | $0.25 | $14,250.00 |
| | 0.15' AC Inlay (Base Line to north bridge line) | 57000 | SF | $1.00 | $57,000.00 |
| | Pavement Markings | 4500 | LF | $0.60 | $2,700.00 |
| | 1% Pavement R&R Contingency (.58'AC/1.0'AB) | 570 | SF | $7.50 | $4,275.00 |
| | Subtotal | | | | $78,225.00 |
| 1b | Slurry Seal (Eucalyptus to 975' north) | 56000 | SF | $0.25 | $14,000.00 |
| | 0.15' AC Inlay (Eucalyptus to 975' north) | 0 | SF | $1.00 | $0.00 |
| | Pavement Markings | 5850 | LF | $0.60 | $3,510.00 |
| | 1% Pavement R&R Contingency (.58'AC/1.0'AB) | 560 | AF | $7.50 | $4,200.00 |
| | Subtotal | | | | $21,710.00 |
| 1c | Slurry Seal (Eucalyptus to Greenspot) | 175000 | SF | $0.25 | $43,750.00 |
| | 0.15' AC Inlay (Eucalyptus to Greenspot) | 0 | SF | $1.00 | $0.00 |
| | Pavement Markings | 14100 | LF | $0.60 | $8,460.00 |
| | 1% Pavement R&R Contingency (.58'AC/1.0'AB) | 1750 | AF | $7.50 | $13,125.00 |
| | Subtotal | | | | $65,335.00 |
| 1d | 0.15' Cold Plane (Greenspot to N. line Elder Creek) | 0 | SF | $0.30 | $0.00 |
| | 0.15' AC Inlay (Greenspot to N. line Elder Creek) | 0 | SF | $1.00 | $0.00 |
| | Pavement Markings | 3900 | LF | $0.60 | $2,340.00 |
| | 5% Pavement R&R Contingency (.58'AC/1.0'AB) | 0 | AF | $7.50 | $0.00 |
| | Subtotal | | | | $2,340.00 |
| 2 | **Street Lighting** | | | | **$180,500.00** |
| 2a | Street Lighting Conduit | 1 | LS | $25,000.00 | $25,000.00 |
| 2b | Street Lighting (Decorative LED on Bridge) | 10 | EA | $7,500.00 | $75,000.00 |
| 2c | Street Lighting (New LED N/O Eucalyptus) | 2 | EA | $2,000.00 | $4,000.00 |
| 2d | Convert existing from HPSV to LED (N/O Eucalyptus) | 14 | EA | $1,000.00 | $14,000.00 |
| 2e | Convert existing from HPSV to LED (Eucalyptus to Greenspot Rd) | 22 | EA | $1,000.00 | $22,000.00 |
| 2f | Non-Motorized Access Connection and Lighting | 1 | LS | $40,500.00 | $40,500.00 |
| 3 | **Sidewalk and Bus Stop Access** | | | | **$155,500.00** |
| 3a | Sidewalk (S. BCR KFC Dwy to Eucalyptus-both sides) | 27410 | SF | $3.00 | $82,230.00 |
| 3b | Sidewalk (Eucalyptus to Webster-east side only) | 3420 | SF | $3.00 | $10,260.00 |
| 3c | Sidewalk (Webster to 247' south-east side only) | 988 | SF | $3.00 | $2,964.00 |
| 3d | Sidewalk (Webster to Greenspot -west side only) | 2300 | SF | $3.00 | $6,900.00 |
| 3e | Bus Stop Access Modifications | 9 | EA | $1,000.00 | $9,000.00 |
| 4 | **Sidewalk Ramp ADA Modifications** | | | | **$15,000.00** |
| 4a | Install Truncated Domes at Existing Ramp | 30 | EA | $400.00 | $12,000.00 |
| 4b | ADA Compliant Sidewalk Ramp Modifications at SWC Base Line | 1 | EA | $1,000.00 | $1,000.00 |
| 4c | NEW Sidewalk Ramp (NEC Greenspot/Boulder) | 1 | EA | $2,000.00 | $2,000.00 |
| 5 | **Signal Intercnnect** | | | | **$177,600.00** |

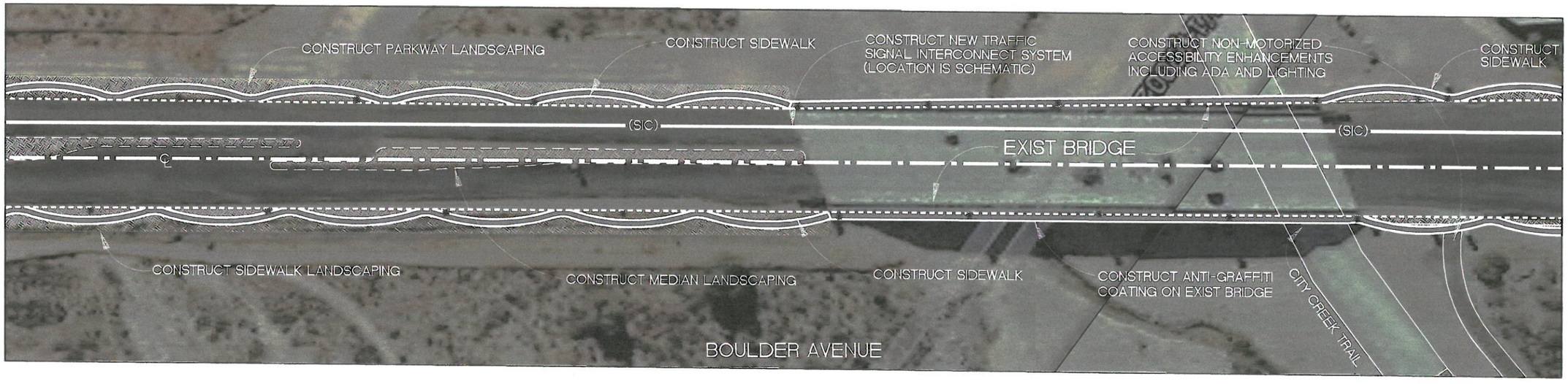
BOULDER AVENUE PNRS PROJECT
COST ESTIMATE

5/7/2014 6:26 PM

| No. | Description | Qty | Unit | Unit Price | Cost |
|---|---|---|---|---|---|
| 5a | Signal Interconnect (Hampton Inn Entrance to BCR KFC Entrance) | 4320 | LF | $25.00 | $108,000.00 |
| 5b | Signal Interconnect (BCR KFC to Eucalyptus) | 2320 | LF | $10.00 | $23,200.00 |
| 5c | Signal Interconnect (Eucalyptus to Greenspot) | 2320 | LF | $20.00 | $46,400.00 |
| 5d | Signal Interconnect (Greenspot to S. city limit) | 0 | LF | $0.00 | $0.00 |
| 6 | **Median Curb and Match-up Pavement** | | | | **$167,650.00** |
| 6a | Median Curb incl match-up pavement section (between SR330 and Pacific) | 2390 | LF | $35.00 | $83,650.00 |
| 6b | Median Curb incl match-up pavement section (between S. side bridge to Eucalyptus) | 0 | LF | $35.00 | $0.00 |
| 6c | Median Curb incl match-up pavement section (between Eucalyptus and Webster) | 1600 | LF | $35.00 | $56,000.00 |
| 6d | Median Curb incl match-up pavement section (between Webster and Greenspot) | 800 | LF | $35.00 | $28,000.00 |
| 7 | **Landscape and Irrigation** | | | | **$1,029,668.00** |
| 7a | Irrigation Meter Connection Charge | 3 | EA | $15,700.00 | $47,100.00 |
| 7b | 1-1/2" Irrigation Meter | 3 | EA | $2,400.00 | $7,200.00 |
| 7c | 1-1/2" Master Valve | 3 | EA | $600.00 | $1,800.00 |
| 7d | 1-1/2" Backflow Preventer | 3 | EA | $1,800.00 | $5,400.00 |
| 7e | Irrigation Controllers | 3 | EA | $11,000.00 | $33,000.00 |
| 7f | Median Landscape and Irrigation (SR330 to Pacific) | 25000 | SF | $5.62 | $140,500.00 |
| 7g | Median and Parkway Landscape and Irrigation (S. side bridge to Eucalyptus) | 104000 | SF | $5.62 | $584,480.00 |
| 7h | Median Landscape and Irrigation (Eucalyptus to Webster) | 27200 | SF | $5.62 | $152,864.00 |
| 7i | Median Landscape and Irrigation (Webster to Greenspot) | 10200 | SF | $5.62 | $57,324.00 |
| 8 | **Bridge and Soundwall Modifications** | | | | **$75,240.00** |
| 8a | Anti-Graffiti Clear Coating (Bridge) | 11480 | SF | $5.00 | $57,400.00 |
| 8b | Anti-Graffiti Clear Coating (Sound Wall) | 5000 | SF | $0.00 | $0.00 |
| 8c | Sound Wall Pillaster Veneer | 192 | SF | $20.00 | $3,840.00 |
| 8c | Barrier Rail Architectural Treatment | 1 | LS | $10,000.00 | $10,000.00 |
| 8e | Identification Plaque on Bridge | 2 | EA | $2,000.00 | $4,000.00 |

| | |
|---|---|
| Total Construction Items: | $1,968,768.00 |
| 5% Contengencies: | $98,438.40 |
| Construction Engineering: | $227,392.70 |
| Design Engineering: | $155,040.48 |
| Environmental: | $50,000.00 |
| Total: | $2,499,639.58 |
| **SAY** | **$2,500,000.00** |
| PNRS | $2,000,000.00 |
| Local Match | $500,000.00 |




**LEGEND:**

- CENTERLINE
- (SIC) EXISTING CURB
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- PROPOSED MEDIAN/PARKWAY LANDSCAPING
- DECORATIVE LED
- NEW COBRA-STYLE LED LIGHTS
- REPLACE HPSV LIGHTS WITH LED

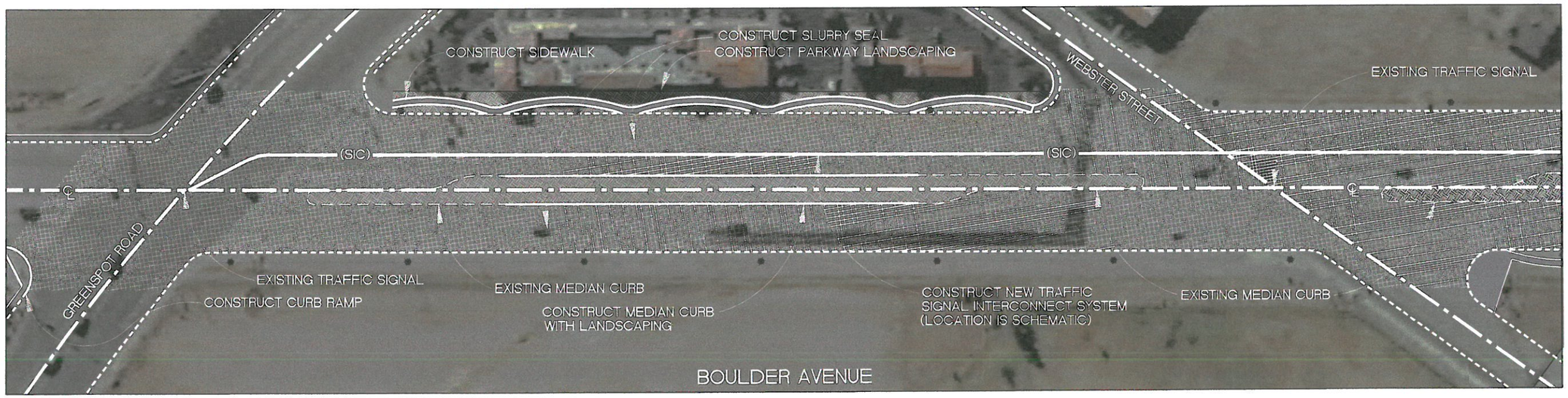
N

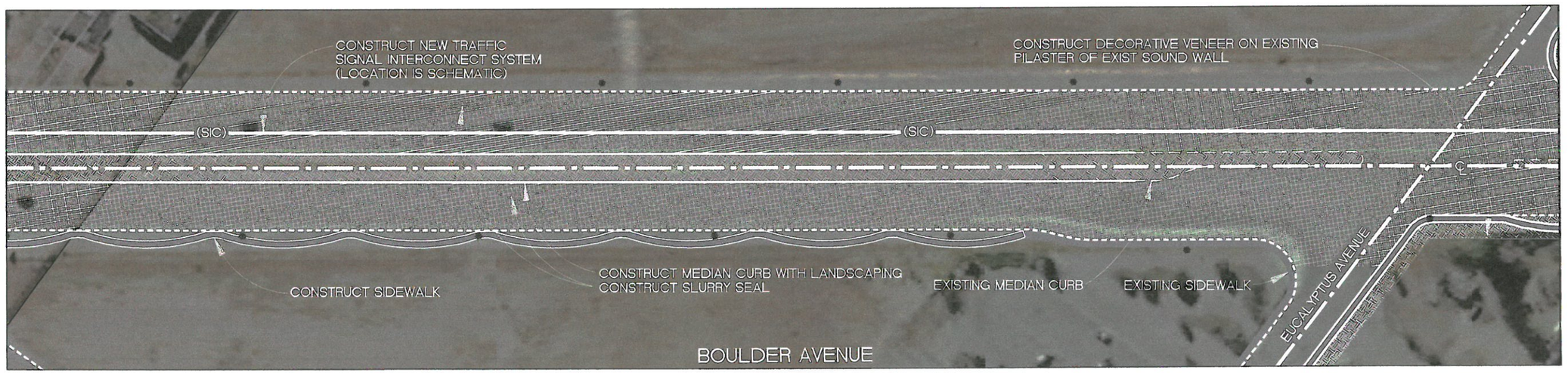
SCALE: 1" = 40'

TKE ENGINEERING, INC.
2305 CHICAGO AVENUE
RIVERSIDE, CA 92507
(951) 680-0440
FAX: (951) 680-0490

CITY OF HIGHLAND

BOULDER BRIDGE
PNRS EXHIBIT
SHEET 2 OF 5




**LEGEND:**

- ℄ CENTERLINE
- (SIC) EXISTING CURB
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- PROPOSED MEDIAN/PARKWAY LANDSCAPING
- DECORATIVE LED
- NEW COBRA-STYLE LED LIGHTS
- REPLACE HPSV LIGHTS WITH LED

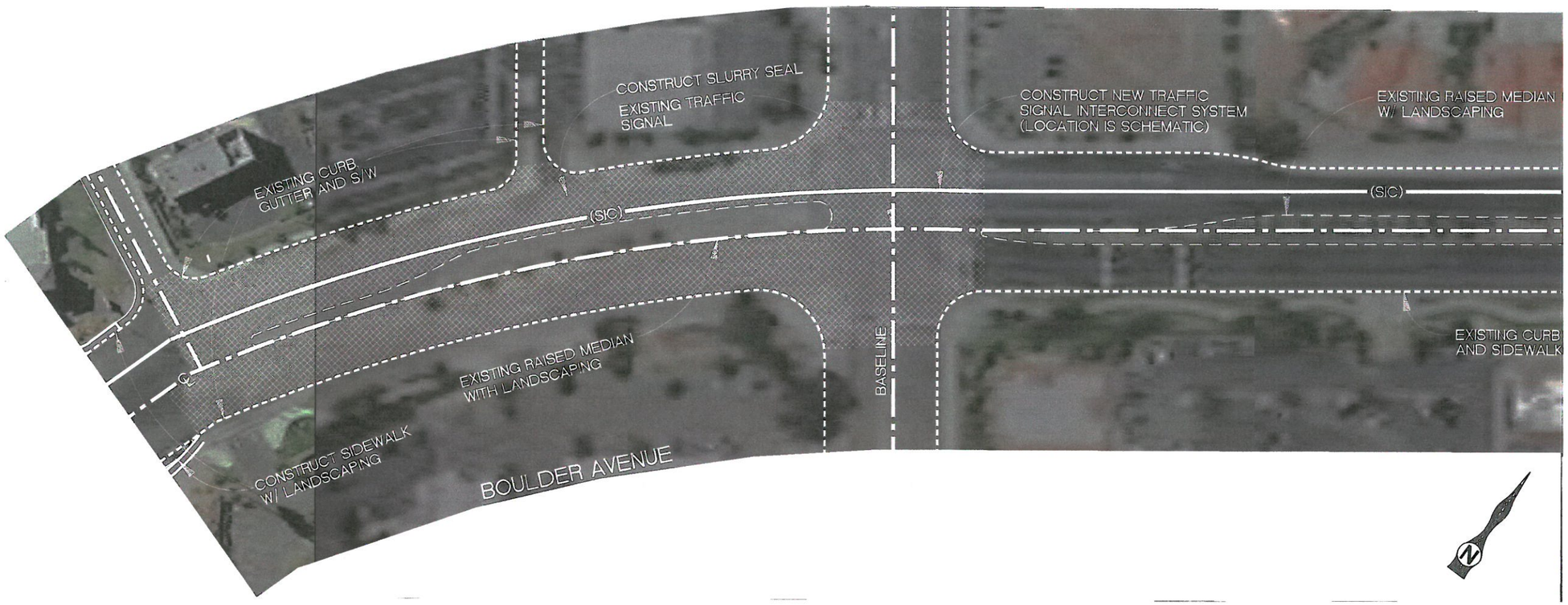
SCALE: 1" = 40'

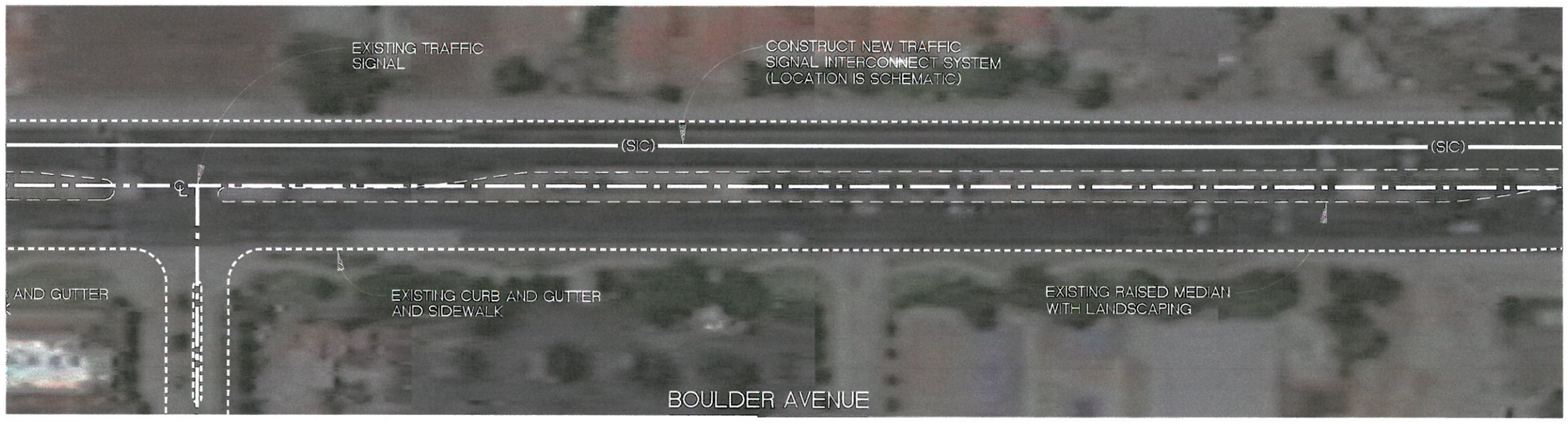
TKE ENGINEERING, INC.
2305 CHICAGO AVENUE
RIVERSIDE, CA 92507
(951) 680-0440
FAX: (951) 680-0490

CITY OF HIGHLAND

BOULDER BRIDGE
PNRS EXHIBIT
SHEET 1 OF 5

S:\CADD\139-19 Boulder Bridge brg04004\139-19 Boulder Bridge PNRS Exhibit.dwg




**LEGEND:**

- CENTERLINE
- (SIC) EXISTING CURB
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- PROPOSED MEDIAN/PARKWAY LANDSCAPING
- DECORATIVE LED
- NEW COBRA-STYLE LED LIGHTS
- REPLACE HPSV LIGHTS WITH LED

SCALE: 1" = 40'

TKE ENGINEERING, INC.
2305 CHICAGO AVENUE
RIVERSIDE, CA 92507
(951) 680-0440
FAX: (951) 680-0490

CITY OF HIGHLAND

BOULDER BRIDGE
PNRS EXHIBIT
SHEET 3 OF 5


**LEGEND:**

- ℄ CENTERLINE
- (SIC) EXISTING CURB
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- PROPOSED MEDIAN/PARKWAY LANDSCAPING
- DECORATIVE LED
- NEW COBRA-STYLE LED LIGHTS
- REPLACE HPSV LIGHTS WITH LED

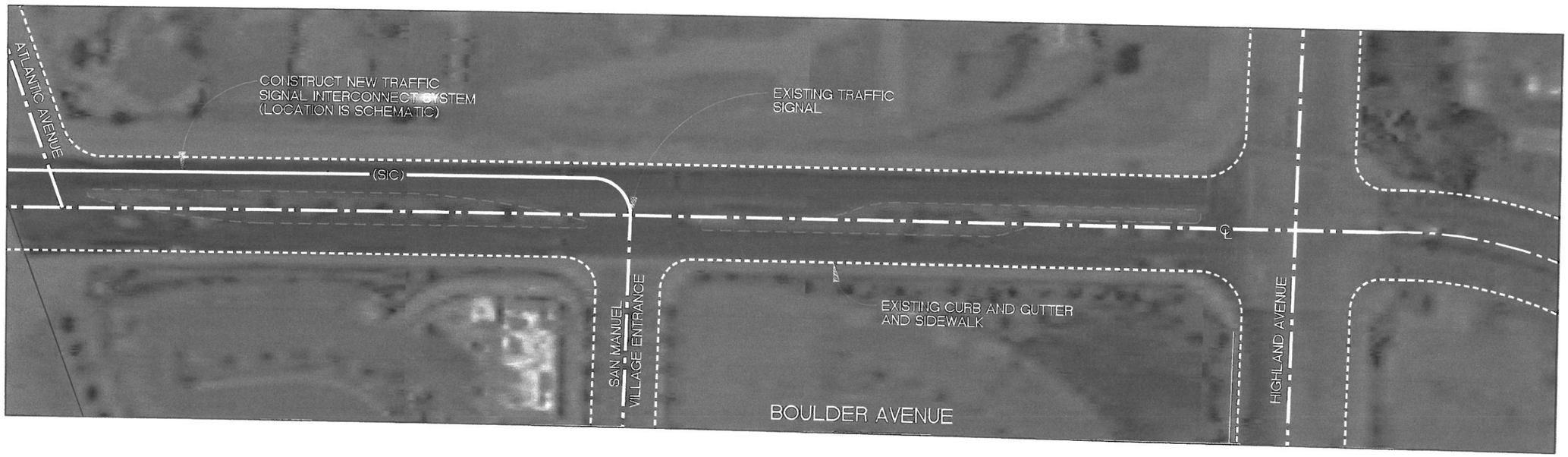
N

SCALE: 1" = 40'

TKE ENGINEERING, INC.
2305 CHICAGO AVENUE
RIVERSIDE, CA 92507
(951) 680-0440
FAX: (951) 680-0490

**CITY OF HIGHLAND**

BOULDER BRIDGE
PNRS EXHIBIT
SHEET 4 OF 5




**LEGEND:**

- CENTERLINE
- (SIC) EXISTING CURB
- PROPOSED SIDEWALK
- EXISTING SIDEWALK
- PROPOSED MEDIAN/PARKWAY LANDSCAPING
- DECORATIVE LED
- NEW COBRA-STYLE LED LIGHTS
- REPLACE HPSV LIGHTS WITH LED

SCALE: 1" = 40'

TKE ENGINEERING, INC.
2305 CHICAGO AVENUE
RIVERSIDE, CA 92507
(951) 680-0440
FAX: (951) 680-0490

**CITY OF HIGHLAND**

BOULDER BRIDGE
PNRS EXHIBIT
SHEET 5 OF 5