The City of Santa Barbara Public Works Department

PROJECT PLANS FOR CONSTRUCTION OF THE

U.S. 101 STATE STREET UNDERCROSSING

City of Santa Barbara Bid No. II,####

PROJECT DATA

PROJECT OWNER: CITY OF SANTA BARBARA PUBLIC WORKS DEPARTMENT
PROJECT TEAM: ENGINEER: BENGALENG ARCHITECT: JEFF SHELTON LIGHTING DESIGNER: ANN KALE LANDSCAPE DESIGN: PHIL SUDING
EXISTING USE: CITY RIGHT OF WAY
PROPOSED USE: CITY RIGHT OF WAY
ADDRESS: STATE STREET BETWEEN GUTIERREZ STREET AND YANOANALI STREET
LAND USE: COMMERCIAL
FLOODPLAIN DESIGNATION: ZONE A

IN 2016 CITY COUNCIL ADOPTED VISION ZERO POLICY PRIORITIZING TRANSPORTATION SAFETY AND ELIMINATING COLLISIONS THAT RESULT IN SERIOUS INJURIES AND FATALITIES. THE UNDERCROSSING HAS THE HIGHEST CONCENTRATION OF SERIOUS OR FATAL INJURIES TO PEDESTRIANS AND CYCLISTS IN THE CITY, AND IMPROVING SAFETY FOR ACTIVE TRANSPORTATION USERS THROUGH THE UNDERCROSSING IS A PRIORITY.

THE STATE STREET UNDERCROSSING PROJECT WILL BENEFIT PEDESTRIANS AND BICYCLISTS WITH ENHANCED MOBILITY AND IMPROVED SAFETY. THE PROPOSED ROADWAY WILL REDUCE VEHICLE LANES TO ONE LANE IN EACH DIRECTION PLUS FLUSH (PAINTED) MEDIAN FOR EMERGENCY ACCESS, AND RECONFIGURE THE TURNING LANES TO ACCOMMODATE TRAFFICS TURNING MOVEMENTS AT BOTH YANOANALI AND GUTIERREZ STREETS. THE PROPOSED ROADWAY CONFIGURATION WILL COMPRISE OF A 10 TO 11-FOOT NORTHBOUND AND 10 TO 11-FOOT SOUTHBOUND VEHICLE LANE. 10-FOOT WIDE LEFT TURN LANES WILL BE PROVIDED FOR NORTHBOUND AT GUTIERREZ STREET, SOUTHBOUND AT YANOANALI STREET, AND AN 11-FOOT WIDE RIGHT TURN LANE/ BUS POCKET FOR SOUTHBOUND AT YANOANALI STREET. THE PROPOSED PROJECT WILL ALSO INCREASE THE WIDTH AND BUFFER FOR THE BIKE LANE IN EACH DIRECTION TO A WIDTH OF 7 FEET FOR BIKE LANES AND A 2 TO 3-FOOT BUFFER BETWEEN THE BICYCLES AND THE VEHICLES. SIDEWALKS ON EACH SIDE WILL ALSO BE WIDENED TO 14 TO 15 FEET. THE WIDTHS DESCRIBED ABOVE VARY BY A FOOT AS STATE STREET TRANSITIONS UNDER THE HIGHWAY.

ALL OF THE PROPOSED ROADWAY MODIFICATIONS WILL BE ENCOMPASSED WITHIN THE EXISTING BUILT ENVIRONMENT AND WILL BE ENTIRELY WITHIN CITY RIGHT OF WAY. THE UNDERCROSSING’S “SEAL SLAB” WILL NOT BE BROKEN OR CUT IN ANY WAY FOR PROPOSED IMPROVEMENTS.

SEE ATTACHED PROJECT DESCRIPTION FOR MORE DETAILS.
Railing
2' x 2' Scored Concrete at 45 Deg.
Control Joint at 2.5'
Concrete Border
STATE STREET UNDERCROSSING

RAILING COMPONENTS

16" Dia. Ball
Flood Lights (x2)
10" Dia. Post Cap

Post-Top Accent Lighting
Flood Lights (x2)

BALL LAMP POST  POST  EGG LAMP POST
FLOWER DENSITY ALTERNATES  FLOWER DENSITY ALTERNATES

ENGINEER: BENGAL ENGINEERING
ARCHITECT: JEFF SHELTON
LIGHTING DESIGNER: ANN KALE
LANDSCAPE DESIGN: PHIL SUDING
RAILING DIMENSIONS

12'-0"
5'-6"
3'-6"
10'-0"
10'-0"
13'-6"

ENGINEER: BENGAL ENGINEERING
ARCHITECT: JEFF SHELTON
LIGHTING DESIGNER: ANN KALE
LANDSCAPE DESIGN: PHIL SUDING
STATE STREET UNDERCROSSING

ENGINEER: BENGAL ENGINEERING
ARCHITECT: JEFF SHELTON
LIGHTING DESIGNER: ANN KALE
LANDSCAPE DESIGN: PHIL SUDING

BALL LAMP POST

RISE F080
SINGLE ROUND FLOOD
2700K
DARK SKY COMPLIANT
2700K 55W LED

OPAL ACRYLIC
EGG-SHAPED GLOBE

RISE F080
SINGLE ROUND FLOOD
2700K

ENGINEER: BENGAL ENGINEERING
ARCHITECT: JEFF SHELTON
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LANDSCAPE DESIGN: PHIL SUDING
STATE STREET UNDERCROSSING

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LARGE COLUMN W/ ROUND CAPITAL

LOCATED AT EXTERIOR OF BRIDGES

14" DIA.

17" DIA.

19" DIA.

LED DOWNLIGHT
Q-TRAN
KURVE - SW
2700K
LOCATED WITHIN INTERIOR OF BRIDGES

SMALL COLUMN W/ SQUARE CAPITAL

13" DIA.
15" DIA.
17" DIA.

LED DOWNLIGHT
Q-TRAN KURVE - SW 2700K

STATE STREET UNDERCROSSING
ENGINEER: BENGAL ENGINEERING
ARCHITECT: JEFF SHELTON
LIGHTING DESIGNER: ANN KALE
LANDSCAPE DESIGN: PHIL SUDING
TILE COLOR SAMPLES

STATE STREET UNDERCROSSING

ENGINEER: BENGAL ENGINEERING
ARCHITECT: JEFF SHELTON
LIGHTING DESIGNER: ANN KALE
LANDSCAPE DESIGN: PHIL SUDING

PALLATE
Ecosense - Rise - Medium Output (7w - 429lm) - 70 degree beam angle
30 tilt from nadar - LLF 0.85
Ave 1.20fc
Reflectance (CWF): N/A / 0.5 / 0.2
Calculations at Floor

Looking from road

Looking from beach

Photometric Plan

Rendered Plan - Grey scale

SIDEWALK LIGHTING PHOTOMETRIC ANALYSIS
DOME VS FLAT LENS STUDY

SIDEWALK COMPARISON

ROADWAY COMPARISON

CONCLUSION: DOME LENS HAS SUPERIOR LIGHT SPREAD

RETAIN EXISTING DOMED LENS
TO BE REFURBISHED, CLEANED AND RETROFIT
**PROPOSED WALL + SOFFIT LAMPS**

**Terralux - TLM - D12A**

**2700K**

**ENGINEER: BENGAL ENGINEERING**

**ARCHITECT: JEFF SHELTON**

**LIGHTING DESIGNER: ANN KALE**

**LANDSCAPE DESIGN: PHIL SUDING**

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**STATE STREET UNDERCROSSING**

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**LIGHTING COLOR TEMPERATURE COMPARISON**

- **Existing 1000 K**
- **Proposed 2700 K**

**FLAT / DOME LENS COMPARISON**

- **Existing Wall Lamp**
  - Metal Halide 1000K
  - Shown with Domed Lens

- **Proposed Wall Lamp**
  - Terralux - TLM - D12A
  - LED 2700K
  - Shown with Flat Lens
IRRIGATION SYMBOL KEY

EXISTING SLEEVE. VERIFY LOCATION, INTEGRITY and SIZE.

EXISTING LATERAL. VERIFY LOCATION, INTEGRITY and SIZE.

EXISTING AUTO VALVE. VERIFY OPERATIONAL STATUS, CONNECTION TO CONTROLLER and INTEGRITY OF VALVE BOX.

NEW IRRIGATION LATERAL. BURY 4" DEEP IN WALLED PLANTERS TO MINIMIZE ROOT DISTURBANCE. PLACE AS CLOSE TO WALLS AS POSSIBLE. BURY 12" DEEP OUTSIDE OF WALLED PLANTERS.

CONNECTION TO EXISTING INTACT LATERAL WITH NEW LATERAL. VERIFY INTACT.

IRRIGATION NOTES

INFORMATION AND DESIGN SHOWN ON THESE PAGES ARE BASED ON AVAILABLE INFORMATION PROVIDED BY THE CITY OF SANTA BARBARA. VERIFICATION WILL BE REQUIRED BEFORE INSTALLATION.

REMOVE AND LEGALLY DISPOSE OF ALL EXISTING DRIP TUBING AND EMISSORS.

ALTERNATE: INSTALL NEW CONTROLLER WIRE FROM (N) VALUES TO THE CONTROLLER IN CONDUIT.
Irrigation Notes

- Information and design shown on these pages are based on available information provided by the City of Santa Barbara. Verification will be required before installation.
- Remove and legally dispose of all existing drip tubing and emitters.
- Alternately: Install new controller wire from (N) valves to the controller in conduit.

Irrigation Plan

- Irrigation Controller located in Southwest corner of parking lot 12. Verify capacity and compliance with current ordinance.
- Irrigation Valve. See Key Below. Typ.
- Irrigation Lateral. See Key Below. Typ.
- Irrigation Sleeves. See Key Below. Typ.
- Irrigation Lateral Integrity and Size.
- Irrigation Valve Integrity and Size.
- Irrigation Lateral Verify Location, Status, Connection to Controller and Integrity of Valve Box.
- New Irrigation Lateral: Bury 4' deep in walled planters to minimize root disturbance. Place as close to walls as possible. Bury 12' deep outside of walled planters.
- Connection to existing lateral with new lateral: Verify in field.

Key:
- Irrigation Symbol Key
- Irrigation Plan
- Irrigation Notes

Legend:
- Irrigation Notes
  - Rainbird 1404 Pressure Compensating Bubbler Full-Circle Umbrella Pattern
  - Rainbird 1812-15ST, 12" Pop-Up, Center Side Spray
  - Rainbird 1812-15LCS, 12" Pop-Up, Left Spray
  - Rainbird 1812-15RCS, 12" Pop-Up, Right Spray

Scale: 1" = 10'
PLANT LEGEND

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>QTY</th>
<th>BOTANICAL NAME</th>
<th>COMMON NAME</th>
<th>SIZE</th>
<th>WUCOLS</th>
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<tr>
<td>X</td>
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<td>Aloe arborescens 'Spineless'</td>
<td>Toothless Torch Aloe</td>
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<td>Cassia leptophylla</td>
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<td>36&quot;p</td>
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<tr>
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<td>Lantana m. 'Purple and White Mix'</td>
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<tr>
<td>X</td>
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<td>Senecio mandraliscae</td>
<td>Blue Chalk Sticks</td>
<td>4&quot;p</td>
<td>LOW</td>
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<tr>
<td>X</td>
<td></td>
<td>Strelitzia reginae</td>
<td>Bird Of Paradise</td>
<td>15g</td>
<td>LOW</td>
</tr>
</tbody>
</table>

PLANTING NOTES

- Amend soil in planters per recommendations listed on page 2 in soils report dated April 15, 2020, prepared by Wallace Laboratories, LLC. See Sheet L-7. Also see note below.

- Minimize disturbance to (E) tree roots. Use long tines/spikes to penetrate soil as much as possible to integrate amendments into existing soil following recommendations in soils report. Do not use mechanical equipment - use hand tools only.

MATCH LINE OTHER SIDE OF BRIDGES
SEE SHEET L-5

STATE STREET

- Protect and retain (E) Boston Ivy on bridge wall face.

GUTIERREZ STREET

REMOVE UNDERSTORY PLANTING.
DISPOSE LEGALLY. MINIMIZE (E) TREE ROOT DISTURBANCE, TYPICAL.

PLANTING PLAN
**PLANT LEGEND**

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**PLANTING NOTES**

Remove Understory Planting, Dispose Legally, Minimize (E) Tree Root Disturbance, Typical.

**RECOMMENDATIONS**

- Minimize Disturbance to (E) Tree Roots. Use Long Tines/Spike to Penetrate Soil as Much as Possible to Integrate Amendments Into Existing Soil Profile Following April 15, 2020, Prepared by Wallace Laboratories, LLC - See Sheet L-7. Also See Note Below.

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- Alternate: Install new controller wire from (N) valves to the controller in conduit.

**Irrigation Legend**

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<th>Symbol</th>
<th>Description</th>
<th>PSI</th>
<th>GPM</th>
<th>Notes</th>
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<td>20 to 90</td>
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<td>Runoff Reduction</td>
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<td>Compensating Bubbler Full-Circle Umbrella Pattern</td>
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<td>1.21</td>
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<td>Pop-Up, Center Side Spray</td>
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<td>Pop-Up, Left Spray</td>
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**Irrigation Symbol Key**

- Existing sleeve: Verify location, integrity and size.
- Existing lateral: Verify location, integrity and size.
- Existing auto valve: Verify operational status, connection to controller and integrity of valve box.
- New irrigation lateral: Bury 4" deep in walled planters to minimize root disturbance, place as close to walls as possible, bury 12" deep outside of walled planters.
- Connection to existing intact lateral with new lateral: Verify in field.