Transit Oriented Development
Packing House District

Streetscape Master Plan

NUVIS Landscape Architecture
for the City of Placentia
Proposed future gateway arch signage
Deciduous parkway tree with tree guard in grate
Enhanced pervious interlocking paver at crosswalk
Dedicated bike path

Site Amenities Legend
- Tree Grates
- Backed Benches
- Trash/Recycle Receptacles
- Bike Rack
- Bollards
- Street/Pedestrian Lights with Banners
- Cantilever Gateway Signage

Crowther Avenue Preliminary Plan
TOD PACKING HOUSE DISTRICT
Placentia, CA
Enhanced pervious interlocking paver at crosswalk

Street tree with tree guard in grate

Dedicated bike path

Crowther Avenue Preliminary Plan
TOD PACKING HOUSE DISTRICT
Placentia, CA
Metal bench with back

Median with drought tolerant planting

Chinese Elm tree with tree guard in metal grate

4.5'x4.5' Natural gray concrete with top-cast finish 'Acid Etch'

Metal trash and recycle receptacle

Australian Willow median tree

Median with drought tolerant planting

Duel street & pedestrian lighting with banners

4'x4' Natural gray concrete with top-cast finish 'Acid Etch'

Crowther Avenue - Enlargement Plan
TOD PACKING HOUSE DISTRICT
Placentia, CA
Pervious Interlocking Olsen Paving 'Antique Cobble' mixed color blend of charcoal, brown and limestone

4.5'x4.5' Natural gray concrete with top-cast finish 'Acid Etch'

PRIVATE DRIVEWAY

CROWTHER AVE.

Pervious Interlocking Olsen Paving 'Antique Cobble' mixed color blend of charcoal, brown and limestone

4'x4' Natural gray concrete with top-cast finish 'Acid Etch'

Bike lane striping per traffic engineering standards, painted green 15' before and after intersections and driveways

Crowther Avenue - Enlargement Plan
TOD PACKING HOUSE DISTRICT
Placentia, CA
Crowther Ave. Simulation
TOD PACKING HOUSE DISTRICT
Placentia, CA
Section A-A with Median and Bulb-Out
TOD PACKING HOUSE DISTRICT
Placentia, CA
Section B-B with 5 Traffic Lanes
TOD PACKING HOUSE DISTRICT
Placentia, CA

SCALE: 1"=8'-0"
Section C-C With 4 Traffic Lanes
TOD PACKING HOUSE DISTRICT
Placentia, CA

SCALE: 1"=8'-0"
Section D-D with 3 Traffic Lanes
TOD PACKING HOUSE DISTRICT
Placentia, CA

SCALE: 1"=8'-0"
CBF-10
DUCTILE-IRON CASTING
RECYCLED SOLID STEEL BAR

4' LENGTHS - STANDARD
6' AND 8' LENGTHS WITH INTERMEDIATE ARMREST

COLOR BLACK

BENCHED
TOD PACKING HOUSE DISTRICT
City of Placentia, CA
LITTER RECEPTACLES
TOD PACKING HOUSE DISTRICT
City of Placentia, CA

SD-242
SIDE DOOR OPENING
RECYCLED SOLID STEEL BAR
‘RECYCLE’ TOP STEEL BAND
TWO 36 GAL LINERS
DOME LIDS
COLOR BLACK
SUNRISE MODEL 48” SQUARE TREE GRATES
TREE OPENINGS TO BE 24” WITH OPTION FOR EXPANSION TO 35”
2 UP-LIGHTWELLS FLUSH OR BELOW GRADE
PLUMBED WITH CONDUIT TO ACCOMODATE APPROX. 4 PLUGS
COLOR TO BLACK POWDERED
Jig welded from hot rolled steel.

- Guards are constructed in halves and bolt together
- 60” height and 16” tree opening standard
  other dimensions available for additional cost
- Alternate attachment methods available
- All hardware provided by IRONSMITH
- Black powder coat standard finish
  other finish options available

M6 TREE GUARD
BLACK POWDER
COAT FINISH
SALEM - 9023
35" HIGH / 15" BASE
FIXED OR REMOVABLE
BLACK POWDER COAT FINISH

FIXED INSTALL

REMOVABLE INSTALL

Receiver for removable cast bollards.
9020, 9022, 9023, 9024
GRAVEL BASE IS SUGGESTED FOR DRAINAGE. RECEIVER IS OPEN AT THE BOTTOM.
CONCRETE PROFILE AND SUMP DEPTH TO BE DETERMINE BY INSTALLER BASED ON SITE CONDITIONS.
LOCK TAB OPENING MUST BE KEPT CLEAR. PROTECT WITH TAPE DURING CONCRETE POUR.
THE SUPPLIED CAP IS FOR TEMPORARY SHORT TERM COVERAGE ADN NOT FOR HIGH SPEED VEHICLE TRAFFIC. AN OPTIONAL LONG TERM CAP MAY BE ORDERED.

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IRONSMITH
41-761 Dynasty Way #3
Palm Desert, CA 92260
(800) 338-4766
(760) 776-5080 Fax

BOLLARDS
TOD PACKING HOUSE DISTRICT
City of Placentia, CA
BRHS-101
CUSTOM ‘ORANGE’ CONCEPT
CIRCULAR BIKE RACK
60 MM (OD) TUBULAR STEEL
POWDER COATED
IN-GROUND MOUNT
RACK COLOR RAL 2000 YELLOW ORANGE

CUSTOM METAL ‘LEAVES’
WITH VS CUSTOM BOLTED BRACKET
LEAVES COLOR RAL 6010 GRASS GREEN

LEAVES & STEM
BRACKET CONNECTION
'Star-Shaped' Quarter Round Bracket
Bolted onto Frame

CUSTOM BIKE RACK
TOD PACKING HOUSE DISTRICT
City of Placentia, CA
CRPR-4 SEAT
RECYCLED SOLID STEEL BAR MATERIAL
IN-GROUND OR SURFACE MOUNT
COLOR BLACK

CRPR-3 SEAT
RECYCLED SOLID STEEL BAR MATERIAL
IN-GROUND OR SURFACE MOUNT
COLOR BLACK

TABLES
TOD PACKING HOUSE DISTRICT
City of Placentia, CA
INTERLOCKING PERVIOUS PAVERS & CONCRETE PAVING
TOD PACKING HOUSE DISTRICT
City of Placentia, CA

OLSEN PAVINGSTONE
ANTIQUE COBBLE (FLAT TOP) PAVERS
80 MM THICKNESS
RECTANGLES ONLY 8.25" X 5.5" SIZE
HERRINGBONE PATTERN
SET ON COMPACTED AGGREGATE BASE
NO GROUT FOR PERMEABILITY

COLOR MIX:
20% LIMESTONE
30% CHARCOAL
50% BROWN

STANDARD GREY CONCRETE PAVING
FINISH TO BE GRACE TOP CAST ACID ETCH 03
(SEE PLANS FOR SCORE LINES & EXPANSION JOINT PATTERNS)

GRACE
STREET LIGHTING
TOD PACKING HOUSE DISTRICT
City of Placentia, CA

OMEGA
LED LUMINAIRE FAMILY

FLAG MOUNTS
STREET SIDE OF POLE

REC EPTAC LES
GFI IN BASE WITH COVER

SPEAKER HUBS
AUDIO CAPABILITY

BANNER ARMS
BUILDING SIDE OF POLE

WREATH HOOKS
BOTH SIDES OF POLE
### LED Ornamental Bollards

**Model**: 7701LED-BIRMINGHAM

**Description**: Cast aluminum, decorative, quick release type street lamp.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Model</th>
<th>Finish</th>
<th>Source</th>
<th>Lamp Type</th>
<th>Color</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>7701LED-QR</td>
<td>7701LED-BIRMINGHAM</td>
<td>Verde Green</td>
<td><strong>3S45TLCA</strong></td>
<td><strong>4S60TLCA</strong></td>
<td><strong>3S35TLCA</strong></td>
<td><strong>3S60TLCA</strong></td>
</tr>
</tbody>
</table>

**General Information**

- Cast Aluminum, Decorative
- Quick Release Type Street Lamp
- Dual Fuses and overload protection
- Base shall be supplied with electrical surge protection in accordance with THD<20%

**Electrical/Lamp**

- L70 rated expected life of 70,000 hours
- LED lighted bollard shall have an L70 expected life of 70,000 hours
- LED boards with 6 each high brightness LEDs and a sealed acrylic tube.

**Finish**

- Verde Green Finish and Swedish Iron finish are hand brushed using a 3-step process.
- Turned-out finish compliant with the LED life ratings determined in accordance with IESNA LM-80.
- Finish coating shall be electrostatically applied semi-gloss, super durable polyester powder baked at 400 degrees Fahrenheit for a durable and superior, color retentive finish.

**Options**

- Optional chain loop
- Quick release mounting

**Warranty**

- Seven (7) year limited warranty

**Notes**

- *Smooth Finishes are available upon request
- Single and multi-lamp models are available.

### Accessories

- Chain Loop: Specify total length of chain required.
- Two Tone: Two-tone finish.
- Custom Finishes: Custom finishes are also available.

**Ordering Information**

- TO ORDER CHAIN:
  - Specify total length
  - Loops 180°

**Contact Information**

- 555 Lawrence Ave., Roselle, IL 60172
- 847-588-3400 • Fax 847-588-3440
- www.sternberglighting.com • Email: info@sternberglighting.com
TRAFFIC SIGNAL ELEMENTS TO INCLUDE:

POLES
MAST ARMS
PUSH BUTTON
SIGN
PEDESTRIAN COUNTDOWN MODULE
LUMINAIRE
COLOR TO BE BLACK

REFLECTORIZED STREET NAME SIGN

TRAFFIC SIGNAL POLES
TOD PACKING HOUSE DISTRICT
City of Placentia, CA
Part Name: Acorn Finial
Identification Number: FN-0103
Height: 6½"
Application: Fits 3" diameter post
Finish: Powder coat finish (standard gloss black)
Hardware Requirements: 3) 1/4-20 x 1/4" stainless set screws

Part Name: Classic Base
Identification Number: BS-04D
Height: 35"
Application: Fits 4" diameter post
Finish: Powder coat finish (standard gloss black)
Hardware Requirements: 3) 1/4-20 x 1/4" stainless set screws
TREE PALETTE NOTES

These trees have been selected for their ability to meet the criteria of the TOD Packing House District Public Realm Guidelines including contributing to the creation of a walkable pedestrian environments as well as to the continuity and project identity within the district.

Consideration was also given for the overall long-term performance of the tree species with special regard to low maintenance and commercial trade availability. The trees have similar, compatible, water use requirements as the shrubs and groundcover palette and will compliment each other with respect to hydrozone compatibility and appearance.

Where possible, existing mature trees (deemed healthy and safe by the City’s arborists) should remain and be protected.

Location of trees should serve to establish and maintain a consistent and well-coordinated planting scheme within the district. A formal planting scheme, using a single, regularly spaced dominant species is appropriate for the district. Accent species should be used to highlight intersections, special features, or interspersed with the primary species.

Refer to site plans and enlargements for tree locations.

*Water use information was determined by consulting UC Davis’ Water Use Classification of Landscape Species (WUCOLS IV)
http://ucanr.edu/sites/WUCOLS/
**SHRUBS, GROUNDCOVERS & ACCENTS**

The plant palette was developed using tools such as UC Davis’ Water Use Classification of Landscape Species (*WUCOLS IV*), [http://ucanr.edu/sites/WUCOLS/](http://ucanr.edu/sites/WUCOLS/) to select plants that have low or very low water use for the City of Placentia bioregion and are durable, longer-lived, and require low levels of maintenance. For example, Callistemon, Hesperaloe, Lantana, Myoporum, and Rosmarinus all have low or very low water use and are evergreen, durable, commercially available, low-maintenance shrub species which are appropriate for street medians and right-of-ways. Alternatively, Agave, Dasylirion, Sedum, Senecio, and Yucca hybrids are low and very low water use succulents and accents which can create bold striking landscapes when paired with cobble and rock blankets.

Efficient and minimal water use for public landscapes is now a State-wide requirement due to multiple years of low annual rainfall levels in California. Successful landscape solutions are those which combine low and very low water use plants with non-living landscape materials like stabilized decomposed granite, rock and cobble blanket (both loose and stabilized with concrete), wood mulch, concrete pavers, permeable concrete, and other innovative sustainable materials.

This palette was specifically selected for medians and right-of-ways to create water-efficient landscape solutions which provide visual interest for both pedestrian and motorists.

<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Common Name</th>
<th>Water Use*</th>
<th>Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SHRUBS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bougainvillea ‘Rosenka’</td>
<td>Dwarf Bougainvillea</td>
<td>Low</td>
<td>36”</td>
</tr>
<tr>
<td>Callistemon ‘Little John’</td>
<td>Dwarf Bottlebrush</td>
<td>Low</td>
<td>24”</td>
</tr>
<tr>
<td>Leucophyllum frutescens ‘Green Cloud’</td>
<td>Green Cloud Texas Ranger</td>
<td>Low</td>
<td>30”</td>
</tr>
<tr>
<td>Nandina domestica ‘Nana’</td>
<td>Dwarf Heavenly Bamboo</td>
<td>Low</td>
<td>12”</td>
</tr>
<tr>
<td>Punica granatum ‘Nana’</td>
<td>Dwarf Pomegranate</td>
<td>Low</td>
<td>24”</td>
</tr>
<tr>
<td>Rhaphiolepis indica ‘Ballerina’</td>
<td>Dwarf Indian Hawthorne</td>
<td>Low</td>
<td>30”</td>
</tr>
<tr>
<td>Teucrium chamaedrys</td>
<td>Germander</td>
<td>Low</td>
<td>18”</td>
</tr>
<tr>
<td>Westringia frutecosa</td>
<td>Coast Rosemary</td>
<td>Low</td>
<td>36”</td>
</tr>
<tr>
<td>Xylosma congestum</td>
<td>Shiny Xylosma</td>
<td>Low</td>
<td>48”</td>
</tr>
<tr>
<td><strong>GROUNDCOVERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arctostaphylos ‘Pacific Mist’</td>
<td>Pacific Mist Manzanita</td>
<td>Low</td>
<td>36”</td>
</tr>
<tr>
<td>Carissa macrocarpa ‘Tomlinson’</td>
<td>Dwarf Natal Plum</td>
<td>Low</td>
<td>36”</td>
</tr>
<tr>
<td>Ceanothus ‘Diamond Heights’</td>
<td>Diamond Heights Ceanothus</td>
<td>Low</td>
<td>30”</td>
</tr>
<tr>
<td>Cotoneaster dammeri ‘Lowfast’</td>
<td>Bearberry Cotoneaster</td>
<td>Low</td>
<td>48”</td>
</tr>
<tr>
<td>Gazania rigens ‘Sun Gold’</td>
<td>Sun Gold Gazania</td>
<td>Low</td>
<td>18”</td>
</tr>
<tr>
<td>Myoporum parvifolium</td>
<td>Myoporum</td>
<td>Low</td>
<td>48”</td>
</tr>
<tr>
<td>Rosmarinus o. ‘Huntington Carpet’</td>
<td>Rosemary</td>
<td>Low</td>
<td>42”</td>
</tr>
<tr>
<td><strong>SUCCULENT ACCENTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agave desmettiana</td>
<td>Variegated Smooth Agave</td>
<td>Very Low</td>
<td>42”</td>
</tr>
<tr>
<td>Agave amer. v. medio-picta ‘Alba’</td>
<td>White-Striped Century Plant</td>
<td>Very Low</td>
<td>48”</td>
</tr>
<tr>
<td>Agave ‘Blue Glow’</td>
<td>Blue Glow Agave</td>
<td>Very Low</td>
<td>42”</td>
</tr>
<tr>
<td>Aloe ‘Blue Elf’</td>
<td>Blue Elf Aloe</td>
<td>Low</td>
<td>12”</td>
</tr>
<tr>
<td>Crassula argentea ‘Crosby’s Compact’</td>
<td>Compact Jade</td>
<td>Low</td>
<td>30”</td>
</tr>
<tr>
<td>Dasyliroon wheeleri</td>
<td>Spoon Yucca</td>
<td>Very Low</td>
<td>30”</td>
</tr>
<tr>
<td>Hesperaloe parviflora</td>
<td>Red/Yellow Yucca</td>
<td>Very Low</td>
<td>18”</td>
</tr>
<tr>
<td>Portulacaria afra ‘Prostrate Form’</td>
<td>Dwarf Elephant’s Food</td>
<td>Very Low</td>
<td>36”</td>
</tr>
<tr>
<td>Sedum ‘Verde Yellow’</td>
<td>Verde Yellow Sedum</td>
<td>Low</td>
<td>24”</td>
</tr>
<tr>
<td>Sedum adolphii ‘Firestorm’</td>
<td>Golden Sedum</td>
<td>Low</td>
<td>18”</td>
</tr>
<tr>
<td>Senecio mandraliscae</td>
<td>Blue Dicks</td>
<td>Low</td>
<td>18”</td>
</tr>
<tr>
<td>Senecio serpens</td>
<td>Blue Chalksticks</td>
<td>Low</td>
<td>12”</td>
</tr>
<tr>
<td>Yucca filamentosa ‘Bright Star’</td>
<td>Adam’s Needle</td>
<td>Very Low</td>
<td>24”</td>
</tr>
</tbody>
</table>

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Coast Rosemary

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Shiny Xylosma

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Arctostaphylos ‘Pacific Mist’
Pacific Mist Manzanita

Ceanothus ‘Diamond Heights’
Diamond Heights Lilac

Gazania lin. ‘Colorado Gold’
Sun Gold Gazania

Myoporum parvifolium
Myoporum

Rosmarinus off. ‘Hunt. Carpet’
Trailing Rosemary

SUCCELENTS

Agave desmettiana
Variegated Smooth Agave

Aloe rudikoppe ‘Little Gem’
Little Gem Aloe

Dasyliion wheeleri
Spoon Yucca

Sedum adolphii ‘Firestorm’
Golden Sedum

Senecio serpens
Punk Pickle

SHRUB PALETTE IMAGERY
TOD PACKING HOUSE DISTRICT
Placentia, CA