

CHAPTER 2.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

2.1 Project Objectives

The proposed Project includes the following objectives for the North Coast Highway 101 Streetscape Improvements between A Street and La Costa Avenue (“Project corridor”) in the City’s community of Leucadia:

- Increase walkability through expanded sidewalks, pedestrian facilities, and safe pedestrian crossings;
- Increase the bicycle facilities available along the corridor with added and enhanced bike lanes and shared vehicle/bicycle lanes;
- Preserve and restore the tree canopy by replacing trees posing a safety hazard with new trees, adding hundreds of new trees, and focusing on a native and drought-tolerant landscape palette;
- Provide street beautification measures with enhanced pavement treatments, street furniture, and opportunities for public art;
- Respect and enhance the community character along the corridor;
- Construct appropriate traffic controls and traffic calming measures, such as roundabouts;
- Implement road diet measures by decreasing travel lane number/width;
- Reduce traffic speeds to 30 miles per hour;
- Minimize cut-through traffic on North Coast Highway 101;
- Implement measures to improve vehicular, bike, and pedestrian safety at side street intersections;
- Provide additional parking spaces, including more efficient reverse angle on-street parking and parking at designated improved areas in North County Transit District (NCTD) right-of-way;
- Provide for appropriately-located and accessibly-designed bus stops and bus pull-outs to maximize ridership;
- Improve existing drainage and storm water quality by implementing low-impact design measures and sustainable Green Streets concepts including infiltration, biofiltration, and water storage areas;
- Relocate selected existing utility lines to improve connections and services; and
- Encourage greater business opportunities for shopping and entertainment and provide more gathering destinations for local residents.

2.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

2.2 Project Location

The Project corridor is a 2.5-mile segment of North Coast Highway 101 located in the northwest section of the City of Encinitas (“City”), between La Costa Avenue at the north end and A Street at the south end, as shown on Figure 2-1, Regional Map, and Figure 2-2, Local Vicinity Map.

2.3 Project Background

The City initiated preliminary planning for the proposed Project (CIP #CS04D) in 2008. This involved the preparation of alternative design plans, traffic analyses, and a public outreach program. The design scope involved preparation of conceptual plans for the entire Project corridor. The public outreach program involved informational kick-off presentations to City Council and Planning Commission; four community participation workshops; stakeholder meetings; an educational session/ informational open house at the Encinitas Community and Senior Center; and another informational open house at Encinitas Library. Throughout the public outreach program, plans and cross-sections were available for viewing on the City’s website and during normal business hours in the City Planning & Building Department and at City Hall. Themes, traffic calming concepts, and traffic analyses for up to six design alternatives were presented at these forums, and public surveys were disseminated and received, documenting community feedback. The results were presented to Planning Commission and City Council in 2008, 2009, and 2010. A chronology of the public outreach program is provided in Appendix C, Documentation of Agency Coordination/Consultation.

2.4 Project Description

This section describes the main components of the proposed Project. The graphic details of the proposed access/circulation improvements are illustrated in plan view, Figures 2-3a through 2-3g, Proposed Project Design, and in cross-section, Figures 2-4a to 2-4e, Typical Roadway Cross Sections. Appendix I of this EIR identifies the areas affected by the proposed improvements located outside of the roadway right-of-way.

2.4.1 Walkability Improvements

Along the west side of the Project corridor, wider sidewalks and pedestrian curb ramps (ADA compliant) are proposed to encourage more walkability, provide more space for additional street furniture (e.g., benches, seating/resting areas), and more public gathering areas for community events.

Along the east side of the Project corridor, either a stabilized decomposed granite (DG) trail or concrete sidewalk or both would extend continuously between Encinitas Boulevard and La Costa Avenue. Currently, sections of paved and unimproved dirt trails extend discontinuously along the east side.

Two new signalized pedestrian crossings would be provided at North Court and Diana Street. In addition, crosswalks are proposed at A St., Marcheta St., Basil St., Daphne St., Leucadia Blvd., and Phoebe St. Crosswalks are also provided at roundabout locations at El Portal St., Jupiter St., Grandview St., Bishop’s Gate Rd., New Road, and La Costa Avenue. All proposed crossing treatments would include a high visibility crosswalk striping, a median refuge area for pedestrians who wish to cross each direction of vehicular travel at a time, curb ramps on either side of the crossing, and street/crosswalk lighting. Signs would be installed on posts alongside the roadway, or on overhead mast arms, in both directions prior to

2.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

each crossing, warning motorists of the existence of the pedestrian crossing zones. Some existing streetlights may need to be relocated with implementation of these new signalized pedestrian crossings.

2.4.2 Bicycle Improvements

Currently, one combination vehicular/bicycle “sharrow” lane (5-7 feet wide) extends in each travel direction through sections of the Project corridor. With the proposed Project, dedicated bike lanes are proposed in each direction in the widths indicated in Table 2-1 below:

TABLE 2-1. PROJECT BICYCLE LANES

From	To	Direction	Width of Dedicated Bike Lane (feet)
A Street	Captain Keno’s	NB	7.5
Captain Keno’s	Harris Auto Repair	NB	7
Harris Auto Repair	La Costa Avenue	NB	8
A Street	Europa Street	SB	8
Europa Street	Phoebe Street	SB	7
Phoebe Street	La Costa Avenue	SB	8

Roundabouts are proposed in six locations within the project corridor. At these locations, bicycle ramps will allow cyclists to enter the sidewalk to avoid navigating the roundabout with the vehicular traffic. Additional bicycle ramps on the exit side of the proposed roundabouts will allow the cyclists to safely re-enter the street.

2.4.3 Landscaping

A variety of tree, shrub, and groundcover species would be planted within the proposed roundabouts, the raised street median, and along the pedestrian areas. The Project landscaping plan is illustrated in Figures 2-3a to 2-3g and Appendix D. As indicated in the plant species list below, the majority of new plantings would comprise native endemic species and drought-tolerant non-native species that are appropriate for “Mediterranean Climes” as occur in Southern California. As such, proposed landscaping would reduce overall irrigation demand by introducing vegetation that is sustained by much less water demand than is typical for non-native, exotic ornamental species. Furthermore, the Project would replace existing trees that pose a safety hazard. Therefore, the Project would preserve and restore the tree canopy along the corridor by adding hundreds of new trees, and focusing on a native and drought-tolerant landscape palette. The Project landscape palette is presented in Table 2-2 below.

An important element of the Project is the North Coast Highway 101/La Costa Avenue intersection. This EIR considers two different design alternatives for the intersection: a signalized intersection and a roundabout. Signalization would not substantially alter the existing visual condition; tree and other landscape plantings would be made within the existing right-of-way. However, significant additional landscaping would be planted if a roundabout is constructed at the intersection. A privately-owned property abuts the west side of North Coast Highway 101 at the La Costa Avenue intersection, with a tall existing slope that has been graded and modified a number of times over the last 50 years. To accommodate the proposed roundabout at this intersection, the existing slope would be re-graded to create an approximate 30-foot-high cut at a maximum ratio of 2:1, with slope undulation and contour grading

2.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

utilized to blend it into the adjacent topography and surrounding landscape. To further reduce its visibility, the re-graded slope would be landscaped with varying plant types, heights, and densities, consistent with City landscaping requirements (refer to the conceptual landscape plan on Figure 2-3 and in Appendix D). Figure 4.1-9 also provides a landscape simulation at initial planting and at 5-year maturity.

Table 2-2 presents the landscape palette for trees and shrubs/groundcover. The proposed minimum tree program for the Project corridor is presented in Table 2-3. However, the Project may ultimately result in the planting of a greater number of trees (but not fewer than).

TABLE 2-2. MASTER PLANT PALETTE

Common Name	Botanical Name	Common Name	Botanical Name
TREES		SHRUBS	
Arbutus	Arbutus 'Marina'	Manzanita	Arctostaphylos Edmundii
Orchid Tree	Bauhinia Purpurea	Sandhill Sage	Artemesia Pycnocephala
Flame Tree	Brachychiton Acerifolius	Pigeon Point Coyote Brush	Baccharis Pilularis
Gold Medallion Tree	Cassia Leptophylla	Bougainvillea	Bougainvillea spp
Western Redbud	Cercis Occidentalis	Butterfly Bush	Buddleja Davidii 'Blue Chip'
Dragon Tree	Dracaena Draco	Dwarf Bottlebrush	Callistemon 'Little John'
Bronze Loquat	Eriobotry A Deflexa	Natal Plum	Carissa Macrocarpa CVRS
Coral Gum	Eucalyptus Torquata	Rockrose	Cistus spp
Maidenhair Tree	Ginkgo Biloba 'Saratoga'	Ceanothus	Ceanothus spp
Sea Urchin Tree	Hakea Laurina	Kirkii's Coprosma	Coprosma Kirkii
Jacaranda	Jacaranda Mimosifolia	Bush Poppy	Dendromecon Rigida
Chinese Flame Tree	Koelreuteria Bipinnata	San Miguel Island Buckwheat	Eriogonum Grande Rubescens
Sweet Bay Tree	Laurus Nobilis	Beach Strawberry	Fragaria Chiloensis
Brisbane Box	Lophostemon Confertus	Flannel Bush	Fremontodendron spp.
Magnolia	Magnolia Grandiflora var.	Island Bush Snapdragon	Galvesia Speciosa
Cajeput Tree	Melaleuca Quinquenervia	Gaura	Gaura Lindheimeri
New Zealand Christmas Tree	Metrosideros Excelsus	Toyon	Heteromoles Arbutifolia
Fruitless Olive	Olia Europaea	Lantana	Lantana spp
Sweet Olive	Osmanthus Fragrans	Spanish Lavender	Lavandula Stoeches
Canary Island Pine	Pinus Canariensis	Island Shrub Mallow	Lavatera Assurgentiflora
Torrey Pine	Pinus Torreyana	Compact Australian Tea Tree	Leptospermum Laevigatum
Catalina Cherry	Prunus Illicifolia Lyonii	Mexican Cardinal Flower	Lobelia Laxiflora
Coast Live Oak	Quercus Agrifolia	Monkey Flower	Mimulus Aurantiacus
Holly Oak	Quercus Ilex	New Zealand Flax	Phormium tenax
African Tulip Tree	Spathodea Campanulata	Variegated Mock Orange	Pittosporum Tobira 'var'
Firewheel Tree	Stenocarpus Sinuatus		
Tipu Tree	Tipuana Tipu		

2.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

TABLE 2-2, CONTINUED

Common Name	Botanical Name
SHRUBS (continued)	
Indian Hawthorn	Raphiolepis Indica CVRS
Coffeeberry	Rhamnus Californica
Lemonade Berry	Rhus Integrifolia
Catalina Perfume	Ribes Viburnifolium
White Carpet Rose	Rosa Meidland White
Prostrate Rosemary	Rosmarinus Officinalis Prost.
Black Eyed Susan	Rudbeckia Fulgida 'Little Suzy'
Autumn Sage	Salvia Greggii
Mexican Bush Sage	Salvia Leucantha
Lavender Cotton	Santolina Chamaecyparissus
Green Santolina	Santolina Romarinifolia
Bird of Paradise	Strelitzia Reginae
Society Garlic	Tubalghia Violacea
Cedros Island Verbena	Verbena Lilacia
PERENNIALS/GRASSES	
African Daisy	Arctotis Hybrid
Kangaroo Paw	Anigozanthos Flavids
Yarrow	Achillea spp
Bulbinella	Bulbinella Floribunda
Sedge	Carex spp
Cape Rush	Chondropetalum Tectorum
Bush Morning Glory	Convolvulus Cheorum
Ground Morning Glory	Convolvulus Mauritanicus
Tufted Hair Grass	Descampsia Cepitosa
Little Rev Flax Lily	Dianella Revoluta 'Little Rev'

Common Name	Botanical Name
PERENNIALS/GRASSES (continued)	
Seaside Daisy	Erigeron Glaucus
Blue Fescue	Festuca Glauca
Atlas Fescue	Festuca Mairei
Festuca	Festuca spp.
Red Yucca	Hesperaloe Parviflora
Red-hot Poker	Kniphofia CVRS
SUCCULENTS	
Aeonium	Aeonium spp
Agave	Agave spp
Aloe	Aloe spp
Rock Purselane	Cistanthe Grandiflora
Happy Young Lady	Coryndon Orbiculata
Dudleya	Dudleya Brittonii
Hen and Chicks	Echeveria spp
Resin Spurge	Euphorbia Resinifera
Ghost Plant	Graptopetalum Paraguayense
Kalanchoe	Kalanchoe spp
Stonecrop	Sedum Represtre Angelina
Blue Chalk Sticks	Senecio Mandraliscae
Dusty Miller	Senecio Viravira
Our Lord's Candle	Yucca Whipplei
BIOSWALE AREAS	
California Meadow Sedge	Carex Praegracilis
Red Fescue	Festuca Rubra
California Gray Rush	Juncus Patens
Deer Grass	Muhlenbergia Rigens
Scarlet Monkey Flower	Mimulus Cardinalis
Mexican Feather Grass	Nasella Tenuissima

Source: MW Peltz + Associates, 11/23/2016

TABLE 2-3. PROPOSED TREE PROGRAM

Category	Proposed Tree Program
Existing Trees	321
Trees Preserved	290
Tree Removal (-)	-31
Tree Relocation	0
Tree Addition (+)	+823
Total Tree Canopy	1,113

2.4.4 Street Beautification/Community Character Enhancement

Proposed street beautification features would include enhanced pavement treatments, attractive signage, and more space for public art. As an example of enhanced pavement treatment, instead of high visibility “continental-type” crosswalk striping for the pedestrian crossings as previously described, the crossings could be demarcated with decorative pavers, pavement etching, or other such techniques. No pavement treatments are currently proposed, but may be considered by the City.

Spaces will also be provided throughout the Project corridor for installation of temporary and/or permanent public art pieces such as sculptures, banners, murals, and kiosks, to be approved by the City Council.

2.4.5 Traffic Control Improvements

The Project aims to decrease the number and width of vehicular travel lanes to slow speeds, encourage a better bicycle and pedestrian experience, and eliminate cut-through traffic. Traffic control improvements to be employed with the Project include traffic calming measures, a road diet, a park assist lane, and a reduced speed limit.

Traffic Calming

As indicated in Table 2-4 below, new roundabouts are proposed at five intersections; the existing all-way stop at Marcheta Street is proposed to be replaced with a side-street stop; and either a roundabout or traffic signal is proposed at North Coast Highway 101/La Costa Avenue. The roundabouts are proposed at the intersections of North Highway 101 and El Portal Street, Jupiter Street, Grand View Street, Bishops Gate Road, and La Costa Avenue. With exception of the La Costa Avenue intersection, all proposed roundabouts would be designed to accommodate one travel lane entering and one travel lane exiting the roundabout from each direction. The La Costa Avenue roundabout would be constructed to accommodate two travel lanes entering/exiting the roundabout. Pedestrian crosswalks would be provided across each lane entering/exiting the roundabouts to facilitate crossing of the street at these locations, with a proposed median to provide refuge. Additionally, the central portion within each roundabout would be landscaped and may potentially include public art to enhance visual interest. Refer to Figures 2-3a to 2-3g which show the proposed design specifications at each roundabout.

A private property development is planned adjacent to the North Coast Highway 101/La Costa Avenue intersection, which is currently signalized for the NB/SB/WB approaches. If that development moves into construction prior to the proposed Project, then the private developer is responsible for installing a signal for the EB approach (i.e., west side of the intersection entering the private property). If the private development does not move into construction prior to construction of the proposed Project, then the City may construct a roundabout at the intersection or may opt to install traffic signal and street improvements for the NB, SB, and WB approaches.

All of these improvements would slow traffic speeds; improve vehicular, bicycle, and pedestrian movements; and increase public safety.

2.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

TABLE 2-4. PROPOSED INTERSECTION TRAFFIC CONTROLS

North Coast Highway 101 Intersection	Current Control	Proposed Control
Marcheta Street	All-Way Stop	Side Street Stop
El Portal Street	Side Street Stop	Roundabout
Jupiter Street	Side Street Stop	Roundabout
Grandview Street	Side Street Stop	Roundabout
Bishop's Gate Road	Side Street Stop	Roundabout
New Road ¹	None	Roundabout
La Costa Avenue ²	Signal	Roundabout or Signal

¹ Existing driveway between La Costa Avenue and Bishop's Gate Road.

Road Diet

Decreased Travel Lanes: As indicated in Table 2-5 below, the number and width of certain southbound (SB) and northbound (NB) travel lanes would be decreased within the Project corridor, as compared to existing lane configurations, to slow traffic speeds and improve safety.

TABLE 2-5. EXISTING AND PROPOSED LANE WIDTHS

From	To	Direction	Existing (Lanes/ Width)	Proposed Lanes	Proposed Lane Width	Change
A St.	La Costa Ave.	SB	2/11'-12'	1	10'-13' ^A	Reduced
A St.	Marcheta St.	NB	2/11'-14'	2	9.5'-12' ^B	No Change
Marcheta St.	Leucadia Blvd.	NB	2/9.5'-12'	1	12'	Reduced
Leucadia Blvd.	La Costa Ave.	NB	1/10.5'-14'	1	10'-12' ^C	No Change

^A 11' (A St.-150' to the north) -> 12'-13' (150' north of A St.-Europa St.)

^B 2-10' (A St.-500' to the north) -> 9.5'+10' (500' north of A St.-500' south of Marcheta St.) -> 12' (500' south of Marcheta St.-Marcheta St.)

^C 2-10' (Leucadia Blvd.-Jasper St.) -> 12' (Jasper St.-La Costa Ave.)

Park Assist Lane: The outer SB lane would be converted to a 7-foot-wide "Park Assist" lane between just north of A Street and Marcheta Street and between Phoebe Street and Avocado Street to reduce potential public safety and traffic congestion ("bottle-neck") effects that could otherwise occur due to conflicts with the through travel lane, bike lane, and reverse angle parking movements. It would also result in more efficient traffic flow and smoother transitions between roundabouts for the through travel lane.

Reduced Posted Speed Limit and Cut-Through Traffic

Decreased Travel Speeds: New posted speed limit signs would be installed throughout the Project corridor indicating 30 miles per hour.

Minimize Cut-Through Traffic: A new raised median would be provided at North Court, where such raised median currently does not exist, to eliminate cut-through traffic onto NB North Coast Highway 101 from this side street.

2.4.6 Vehicular/Bike/Pedestrian Safety Improvements: Side Street Intersections

Vehicular Improvements: Driver safety would be improved for motorists approaching North Coast Highway 101 from side streets due to the requirement to come to a complete stop at the new side street stop control at Marcheta Street, and due to the requirement to slow down and yield before entering a roundabout at the El Portal, Jupiter, Grandview, Bishop's Gate, New Road, and possibly La Costa Avenue intersections. Alternatively, a traffic signal at the La Costa Avenue intersection, instead of a roundabout, would also maintain driver safety for motorists approaching North Coast Highway 101 due to the requirement to come to a complete stop on a red signal.

Bicycle Improvements: The Project would increase safety for bicyclists on the west side of the corridor via the provision of a dedicated bike lane along the entire length, a Park-Assist lane along certain segments, and reverse-angle parking spaces along some segments. These features are intended to improve the visibility of bicyclists for motorists. For example, for vehicles pulling out of reverse-angle spaces, drivers face towards the road and have full unobstructed views of oncoming cars and bicyclists to their left. These conditions are great improvements over the difficulties, obstructions, and blind spots associated with pulling out of parallel and front-end diagonal spaces, where drivers must rely on rear view mirrors and head-turning to ensure the path is clear. The dedicated bike lane and Park-Assist lane would also improve the visibility of bicyclists for motorists approaching North Coast Highway 101 from side streets by providing more horizontal buffering between travel lanes and parked vehicles and increased sight distances.

Pedestrian Improvements: ADA-compliant curb cuts and ramps would be provided where sidewalks intersect all side streets along the Project corridor to facilitate safe pedestrian movements.

2.4.7 Parking Improvements

The total number of parking spaces along the Project corridor would be increased with the addition of off-street parking spaces in three new parking pockets within NCTD ROW between North Court and Basil Street; Leucadia Boulevard and Diana Street; and Jupiter Street and Avocado Street. These locations have been selected for development of new parking pockets based on the ability to construct new signalized and other safe pedestrian crossings, the current level of informal parking along the east side of the corridor, the proximity to public facilities and businesses, and the desire to provide parking at central locations along the corridor.

The proposed parking pockets within the NCTD ROW would be west of the existing railroad tracks. The parking pockets would include two rows of parallel parking separated by a one-way drive aisle; new trees would be planted in these parking pockets at a rate of one tree per 15 parking spaces; and driveways would be restricted to right-in/right-out vehicular movements from NB North Coast Highway 101. The parking pockets would be designed to accommodate the SANDAG Coastal Rail Trail improvements with the removal of some, but not all, of the parking spaces in the future. The parking areas are designed to meet certain provisions prohibiting public access across the train tracks in accordance with NCTD design recommendations for barriers and signage.

2.4.8 Transit Improvements

Bus ridership would be increased with the proposed Project by locating bus stops to maximize ridership, including removing existing bus stops and relocating others to meet the requirements of NCTD. Specifically, six existing bus stops in the Project corridor would be removed based on poor ridership, and the following existing bus stops will be relocated as shown in Table 2-6 below. Some relocated bus stops would be improved with ADA-compliant shelters and benches, and all would have nightlighting.

TABLE 2-6. PROPOSED BUS STOP RELOCATIONS

Bus Stop	Direction of Travel	Proposed Improvements
El Portal Street	SB stop	move to far side of intersection
El Portal Street	NB stop	move to near side of intersection
Jupiter Street	NB stop	move to far side of intersection
Grandview Street	SB stop	move to far side of intersection
Grandview Street	NB stop	move to near side of intersection
Basil Street	SB stop	move to far side of intersection

2.4.9 Drainage/Water Quality Improvements

A drainage study has been prepared for the proposed Project (Appendix F, Drainage Study and Storm Water Quality Management Plan) which includes a Storm Water Quality Management Plan (SWQMP) in accordance with MS4 Permit requirements and the City of Encinitas BMP Design Manual.

Pollutant-control and flow-control measures (BMPs) will be implemented, as required for Priority Development Project in the City BMP Manual. Pollutant-control aims to minimize discharge of pollutants in stormwater runoff and protect downstream receiving waters. Flow-control, or hydromodification, measures minimize excessive discharges which cause downstream erosion in receiving waters.

Proposed BMPs include installation of bioretention areas to capture, retain, filter, and infiltrate roadway runoff; and the use of permeable gravel surfaces for proposed offsite parking located within NCTD ROW. Runoff will be intercepted and conveyed in curb & gutter to the bioretention areas. Treated water from bioretention areas will enter proposed underground storm drain piping that will connect to existing storm drain infrastructure that discharges downstream of the site.

2.4.10 Utility Improvements

Along several segments of the Project corridor, selected existing underground utility lines (e.g., water, sewer, electrical, communications) would be relocated in order to improve the overall utility connections and services to all land uses along the corridor.

2.4.11 Increased Business Opportunities

All of the Project improvements described above would encourage greater business opportunities for shopping and entertainment and provide more gathering destinations for local residents throughout the Project corridor.

2.4.12 Easements and Land Use Agreements

The Project would result in improvements in several areas along the corridor that would encroach onto land outside of the City's right-of-way. Appendix I of this EIR provides exhibits that identify the areas affected by Project improvements located outside of the roadway right-of-way.

On the east side of North Coast Highway 101, within the NCTD property, improvements consisting of concrete sidewalk, landscaping/trees, parking areas, and a limited amount of asphalt paving at the roundabouts and bus-stops are proposed. On the west side of North Coast Highway 101, improvements would encroach onto private property at several intersections and private driveways, including at Jupiter Street, Grand View Street, Bishops Gate Road, and "New Road" south of the La Costa Avenue intersection. These improvements would consist of asphalt pavement, curb and gutter, concrete sidewalk, and landscaping.

The improvements on private property would require either a maintenance agreement between the City and property owner, or dedication of additional right-of way. It is anticipated that dedication would be required for the encroachments due to the proposed roundabouts at Grand View Street and Jupiter Street. Additional areas where dedication is required may also be identified at a later stage in the Project design.

In addition, the graded slope required for the construction of a roundabout at the La Costa Avenue intersection would extend into the private property to the west of the intersection. Property rights for the construction and maintenance of this slope would need to be obtained from the private property owner by the City if the City elects to construct the roundabout option. If the signalized intersection option is implemented instead, then these additional easement rights would not be required.

2.4.13 Construction Durations and Methods

Construction of the proposed Project would be phased into the "segments" listed below to better schedule construction disturbances and necessary funding. However, these segments need not be constructed in any particular order, nor must they necessarily be constructed individually. Multiple segments could be bid and constructed as one project at the same time, if desired in the future.

- Segment A A Street to Basil Street
- Segment B North of Basil Street to Jupiter Street
- Segment C North of Jupiter Street to La Costa Avenue
- Segment D La Costa Avenue intersection improvements

The overall timeframe for construction of the proposed Project is expected to be three years, with Segment A anticipated to occur in the first year. Subsequent segments are not currently funded; therefore, a construction schedule has not been identified for improvements beyond Segment A.

Typical construction equipment would include heavy-duty trucks, backhoes, bulldozers, excavators, tractors, graders, pavers, rollers, forklifts, and cranes. Construction work hours would be 7:00 AM – 4:00 PM, excluding weekends and holidays. All staging areas would be included within the work limits identified in Figures 2-3a through 2-3g for the Project corridor; no construction staging would occur outside the corridor.

2.5 Environmental Setting

Regional access to the Project corridor is via Interstate 5 (I-5) to westbound (WB) La Costa Avenue from the north and I-5 to WB Encinitas Boulevard from the south. North Coast Highway 101 within the Project corridor is designated as a 4-lane Major Arterial in the City General Plan Circulation Element, with a posted speed limit of 40 mph. North Coast Highway 101 is a 4-lane roadway between A Street and Leucadia Boulevard, and between Leucadia Boulevard and La Costa Avenue it provides one “through” vehicle lane and a bike lane in the NB direction, and a “through” vehicle lane and a shared vehicle/bicycle lane in the SB direction. The corridor is a portion of one of the most heavily bicycled routes in San Diego County.

Signalized intersections occur at Leucadia Boulevard at approximately the midpoint of the corridor and at La Costa Avenue at the north end of the corridor. These are the only two streets that intersect with North Coast Highway 101 from areas east of the corridor: La Costa Avenue and Leucadia Boulevard. An all-way stop-controlled (stop sign) intersection occurs at Marcheta Street near the south end of the corridor. These three controlled intersections provide the only non-vehicular crossings between the east and west sides of the corridor. All remaining side streets intersecting the corridor are stop controlled, without affecting traffic flow on North Coast Highway 101. In addition, there are 11 bus stops along the corridor.

Curb, gutter and sidewalk improvements are not consistent along the Project corridor. The longest stretch of continuous intact curb, gutter, and sidewalk improvements occurs between North Court and Jason Street. Some portions have broken curbs and cracked sidewalks, while other portions do not have curbs and sidewalks. The majority of the east side of the corridor is unimproved, with an asphalt path along limited sections in the south portion and dirt trails along other sections which are frequently used by joggers, dog walkers, and pedestrians. These conditions create problems for pedestrian circulation and negatively impact parking, bicycle safety, and drainage. For example, on-street parking occurs in an ad-hoc manner in extended sections without curbs, creating safety problems with vehicular sight distances and obstructed visibility for motorists from side streets. In addition, vehicles encroach into the NCTD railroad ROW and those parked in the public ROW on both sides of the street sometimes impede pedestrian and bicycle circulation.

The majority of on-street parking is along the west side of the Project corridor; parallel parking is permitted in areas where no red painted curb exists. On-street parking is discouraged along the east side except for a short section adjacent to businesses at the south end. There are no public parking lots within the corridor.

Drainage problems persist in areas within the Project corridor due to topography and lack of storm water conveyance systems. The relatively flat terrain throughout the corridor results in a lack of gravity flow in transporting water away from the roadway and pedestrian areas. Therefore, water collects and ponds in low spots along the roadway edges even during small rain events. This problem is exacerbated by the lack of curbs, gutters, and storm drains in these areas.

The north portion of the corridor is complemented by a strong presence of mature trees which surround and provide enclosure over the streets and walkways. There is a center median that provides a landscaped buffer, primarily eucalyptus trees, extending between Cadmus Street and La Costa Avenue. Many of the trees date back to the early settlers of the region, are over 100 years old, and provide an important role in defining the unique community character along the Project corridor. Aside from the trees, the median and

2.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

east side of the corridor is sparsely landscaped with informal plantings of groundcovers and shrubs but primarily consists of dirt and wood bark mulch.

On the west side of the Leucadia Boulevard intersection, at approximately the midpoint of the Project corridor, Leucadia Roadside Park consists of a lawn and trees, and it provides a small open space area but no pedestrian improvements.

The Project corridor is unique with its linear and mainly “one-sided” development configuration, with the NCTD railroad right-of-way abutting the east side of the Project corridor. Except for a few businesses on the east side of the street at the south end of the corridor, most development is on the west side. The composition of existing land uses in the south and middle portions of the corridor is mainly one- and two-story businesses, restaurants, and hotels many dating back to the mid-1900’s. The north portion of the corridor traverses the community of Leucadia which has a long and unique history dating back to the late 1800’s. These structures combined with newer commercial buildings and beach cottage-style residential neighborhoods form an eclectic blend of architecture that is distinctively “Leucadia.” In addition, in 2007 the City stamped new sidewalks throughout the corridor with the “Highway 101” and “Leucadia” insignias.

All properties along the side streets to the west of the corridor support residential land uses. The neighborhood side streets adjacent to the south portion of the corridor are generally wider and provide more curbs, gutters, and sidewalks than those adjacent to the middle and north portions of the corridor. The southern side streets generally follow a grid layout, while those to the north are typically shorter and do not lay out in a grid. The northern side streets include several dead ends, but most streets terminate at Neptune Avenue, which extends north-south atop the bluff edge. The neighborhoods west of the corridor are higher in elevation and block ocean views, except at both ends where the bluffs terminate and limited ocean views are available.

The NCTD railroad ROW runs parallel to the corridor on the east side, and there are no train stops along this section. The Leucadia Boulevard and La Costa Avenue intersections provide the only legal railroad crossings. This condition creates a “divide” between the neighborhoods to the east and west of the corridor/train tracks. Vulcan Avenue is a two-lane Collector Street that runs parallel to the corridor on the east side of the NCTD railroad ROW. Land uses are primarily residential along this street, with a few businesses in the vicinity of the Leucadia Boulevard intersection. Although outside the Project corridor, Vulcan Avenue is important for its effects on pedestrian, bicycle, and vehicular circulation in the vicinity.

2.6 Intended Uses of the Environmental Impact Report

This document is identified as a “Project” level Environmental Impact Report (EIR). This is an informational document intended to inform public agency decision-makers and the public of significant environmental effects of the proposed Project; identify ways to minimize the significant effects; and, describe reasonable Project alternatives. Under the provisions of the California Environmental Quality Act (CEQA), “the purpose of the environmental impact report is to identify the significant effect on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided” (Public Resources Code 211002.19a).

2.6.1 Matrix of Project Approvals/Permits

Table 2-8, Matrix of Required Approvals and Permits, lists discretionary actions, permits, and related environmental review/ consultation requirements for the proposed Project imposed by federal, State, or local laws, regulations, or policies (*State CEQA Guidelines* Section 15124 (d)(1)(C), and in the approximate order they are expected to be obtained. The California Coastal Commission (CCC), North County Transit District (NCTD), and Regional Water Quality Control Board (RWQCB) are Responsible Agencies under CEQA; no Trustee Agencies are involved with the Project.

2.6.2 Agency Coordination

Coordination between the City and CCC has been ongoing since March 15, 2010 (Appendix B). On this date, the City filed the required General Plan Amendment (GPA), Local Coastal Program (LCP) Amendment and N101SP Amendment application (Case No. 10-036 GPA/LCPA/N101SPA); and Design Review Permit and Coastal Development Permit (CDP) application (Case No. 10-035 DR/CDP). Refer to Section 4.1.1 of this EIR for evaluation of Project consistency with applicable CCC regulations. In addition, as a result of Caltrans and City of Carlsbad comments on these applications (Appendix C), City Council authorized staff to proceed with additional and refined traffic analyses and preliminary design work in November 2010. Refer to Section 4.1.5 of this EIR for evaluation of Project consistency with applicable Caltrans design standards.

Coordination between the City and NCTD began prior to Project initiation in 2007. At Workshop #2 on May 29, 2008 (see Appendix B), it was determined that encroachments up to 15 feet into the NCTD ROW on the east side of the corridor for construction of the proposed roundabouts could alleviate impacts to (encroachments into) private properties on the west side of the roundabouts, including significant effects on existing businesses. NCTD has indicated that such encroachments may be acceptable. In January 2010 and January 2012, NCTD agreed to the removal of some bus stops and relocation of others along the Project corridor, in conjunction with the project, based on poor ridership (Appendix B). Furthermore, as footnoted in Appendix B, the inventory of existing trees within the corridor has changed due to tree removals by NCTD. Lastly, in 2016 NCTD agreed to consider allowing the City to provide parking pockets within their ROW to increase the overall parking supply within the corridor as described above, under certain provisions to prohibit the public from entering the ROW and crossing the train tracks from these parking pockets (i.e., design recommendations for barriers and signage).

2.7 Project Consistency with Applicable Regional and General Plans

As described above, the proposed Project would require City approval of a GPA, LCP Amendment, and N101SP Amendment. These discretionary actions will keep the current General Plan Circulation Element designation for the Project corridor as a 4-lane Major Arterial, but with the ability to modify the number and configuration of SB lanes to transition between two lanes (travel and bike lane), three lanes (travel, bike, and 7-foot “Park Assist” lane; or 2 travel lanes and bike lane), and four lanes (turn lane, 2 travel lanes, and bike lane), while still maintaining the operational characteristics of the road as a 4-lane Major Arterial. This action will make the Project consistent with the General Plan Circulation Element. Based on a review of the General Plan and N101SP, the Project would be consistent with the respective goals and policies relating to maintenance of “the village atmosphere and pedestrian character” along the corridor because it would accomplish the following objectives as compared to existing conditions:

2.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

- Provide a greater balance of ROW needs for vehicular, pedestrian, and bicycle traffic;
- Provide safer pedestrian connectivity to the planned Coastal Rail Trail along the east side of the corridor by coordinating the roundabouts with future pedestrian under crossings and coastal access points;
- Allow for more public spaces by providing nodes at corners with roundabouts;
- Slow down traffic speeds; and,
- Provide more parking.

2.8 List of Past, Present, and Reasonably Anticipated Future Projects in the Project Area

Sections 15130 and 15065(c) of the *State CEQA Guidelines* require the discussion of cumulative impacts when they are significant. An EIR is required to identify and discuss cumulative impacts that may result from a project when considered with other closely-related projects and reasonably foreseeable projects.

The *CEQA Guidelines* define cumulative effects as “two or more individual effects that, when considered together are considerable, or which compound or increase other environmental impacts.” The Guidelines further state that the individual effects can be the various changes related to a single project, or the change involved in a number of other closely related past, present, and reasonably foreseeable future projects (*State CEQA Guidelines* Section 15355). The Guidelines allow the use of two alternative methods to determine the scope of a project for the cumulative impact analysis:

List Method – A list of past, present, and foreseeable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the lead agency.

General Plan Projection Method – A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document that has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact (*State CEQA Guidelines* Section 15130).

For purposes of this EIR, the List Method has been used; refer to Table 2-9, Cumulative Projects List. The locations of the cumulative projects are shown in Figure 2-2. A specific study area has been defined for individual issue areas (e.g., traffic and circulation, noise, air quality, etc.) to provide issue-specific analysis of potential Project-related cumulative impacts. Existing and reasonably anticipated projects within each study area have been identified and are discussed in greater detail in terms of their potential to contribute to significant cumulative impacts, as part of the subject-based analysis in Chapter 3.0.

2.0 PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

TABLE 2-8. MATRIX OF REQUIRED APPROVALS AND PERMITS

Permit/Action Required	Approving Agency	Lead/Trustee/Responsible Agency Designation
GPA	City of Encinitas (City)	Lead Agency
LCP Amendment	CCC	Responsible Agency
N101SP Amendment	City	Lead Agency
Design Review Permit	City	Lead Agency
CDP	City	Lead Agency
Construction Permit	City	Lead Agency
Improvement Plans	City	Lead Agency
SWMP	City	Lead Agency
Approval of Parking Pocket Design within Railroad ROW	NCTD	Responsible Agency
General Construction Storm Water Permit	RWQCB	Responsible Agency

TABLE 2-9. CUMULATIVE PROJECTS LIST

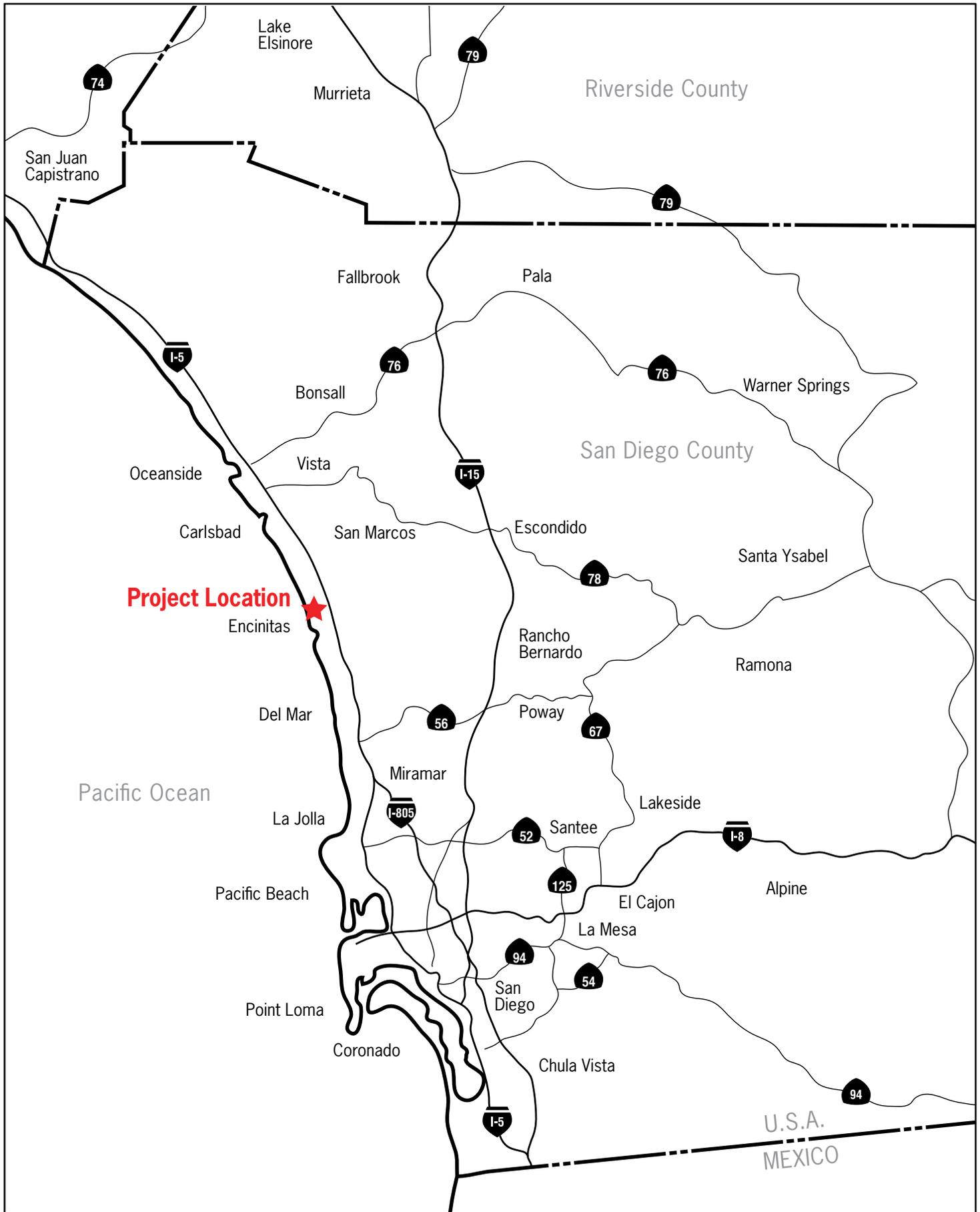
Map #	Permit Type	Permit #	Name of Project	Location
1*	MUP/V/TPM/DR/CDP	89-014	Sports Shinko Condominium Hotel (KSL)	2100 N. Hwy 101
2*	MUP/DR/CDP	00-201	Shoreline Resort	NE corner of North Coast Highway 101/La Costa Avenue
3*	TPM/CDP	08-132	Wallace Development	1967 North Vulcan Avenue
4*	DR/TPM/CDP	07-031	Lattitude 33	1911-1941 North Vulcan Avenue
5*	TPM/DR/CDP	13-223	La Esquina	1578 North Coast Highway 101
6*	TPM/DR/CDP	14-251	Law Subdivision	1265 North Vulcan Avenue
7	TMDB/DR/CDP	13-187	Hymettus Estates	378 Fulvia Street
8	TPM/CDP	13-056	Mashayekan Subdivision	825 & 837 Orpheus Avenue
9	TM/CDP	13-021	One Channel Island Subdivision	Southwest corner of Saxony Rd./ Puebla St.
10	TM/MUP/CDP	04-021	N/A	499 Quail Gardens Drive
11	CDP	13-153	San Diego Botanical Gardens	300 Quail Gardens Dr.
12	TMDB/MUP/DR/CDP	16-135	Quail Meadows	225 Quail Gardens Drive
13*	N/A		North Coast Corridor Program	Interstate 5 and NCTD railway improvements in Encinitas
14	MUP/DR/PMW/CDP	16-165	Sanderling School	749 Mays Hollow Ln
15*	Not Yet Assigned		El Portal Pedestrian Undercrossing	NCTD Right-of-Way East of El Portal St.

* Projects with an asterisk would have views of a portion of the proposed improvements.

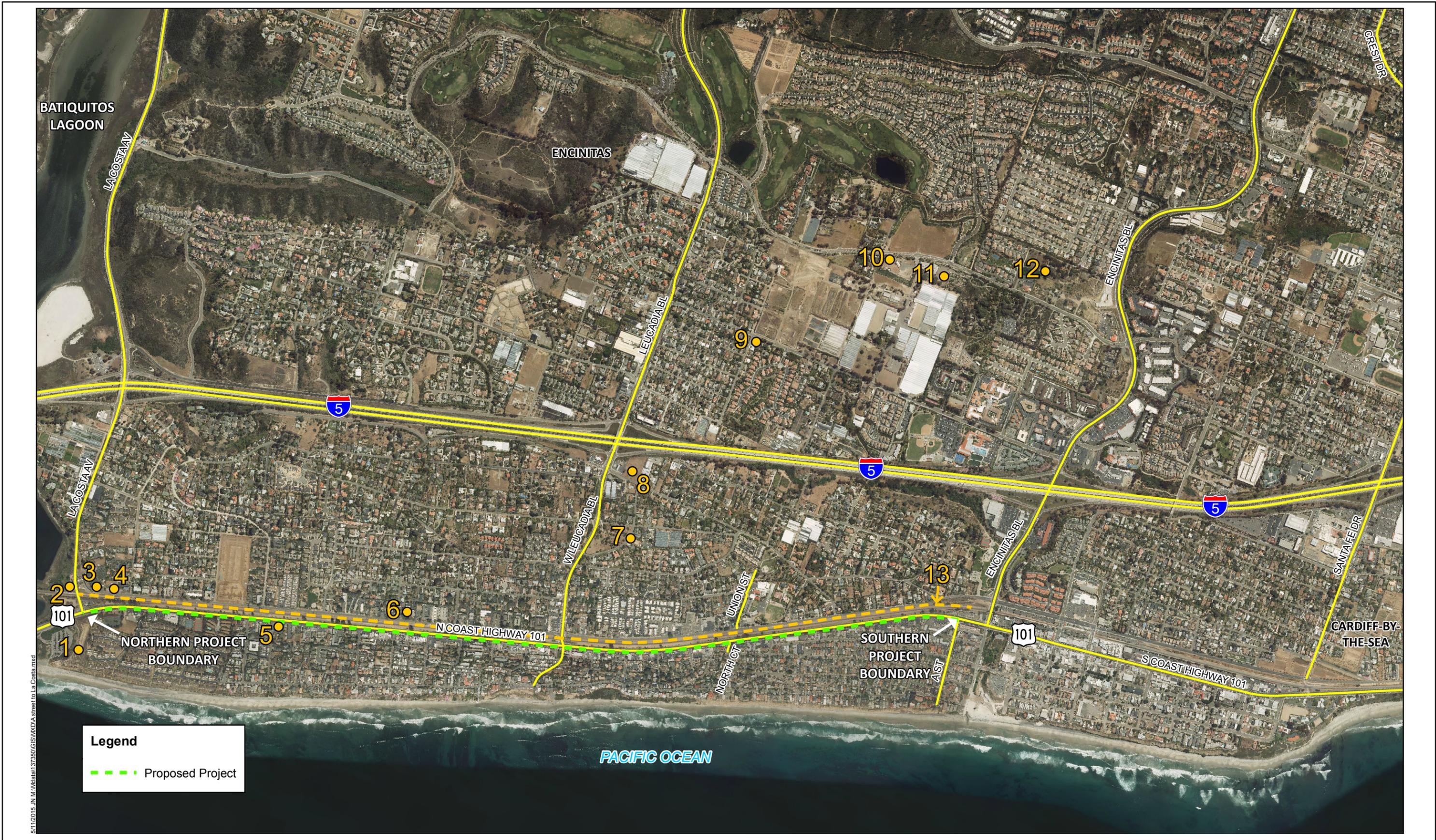
DEFINITIONS:

CDP: Coastal Development Permit	DR: Design Review	MUP: Major Use Permit
TM: Tentative Map	TPM: Tentative Parcel Map	PMW: Parcel Map Waiver
TMDB: Tentative Map Density Bonus	V: Variance	

THIS PAGE INTENTIONALLY LEFT BLANK



THIS PAGE INTENTIONALLY LEFT BLANK



Legend

- Proposed Project

THIS PAGE INTENTIONALLY LEFT BLANK



PARKING TABLE			
	REGULAR	HANDICAP	MOTORCYCLE
WEST	40	3	0
EAST	17	0	3
EXISTING	50		

-  EXISTING TREE
-  PROPOSED TREE

TAPER LENGTH CALCULATION

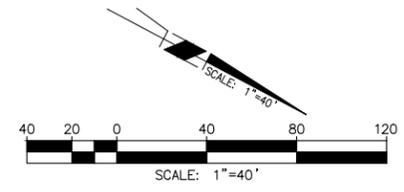
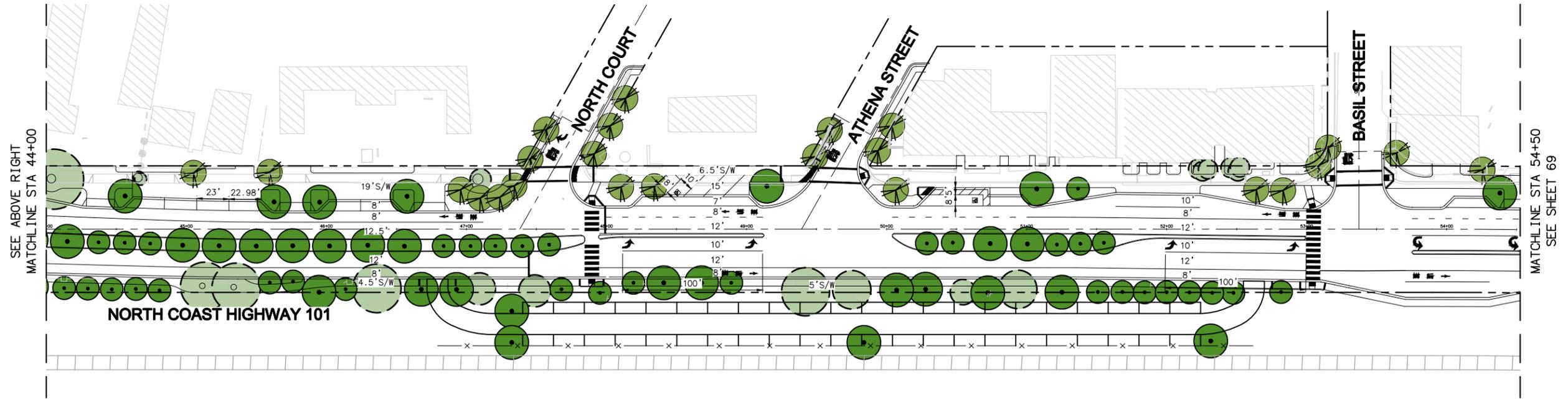
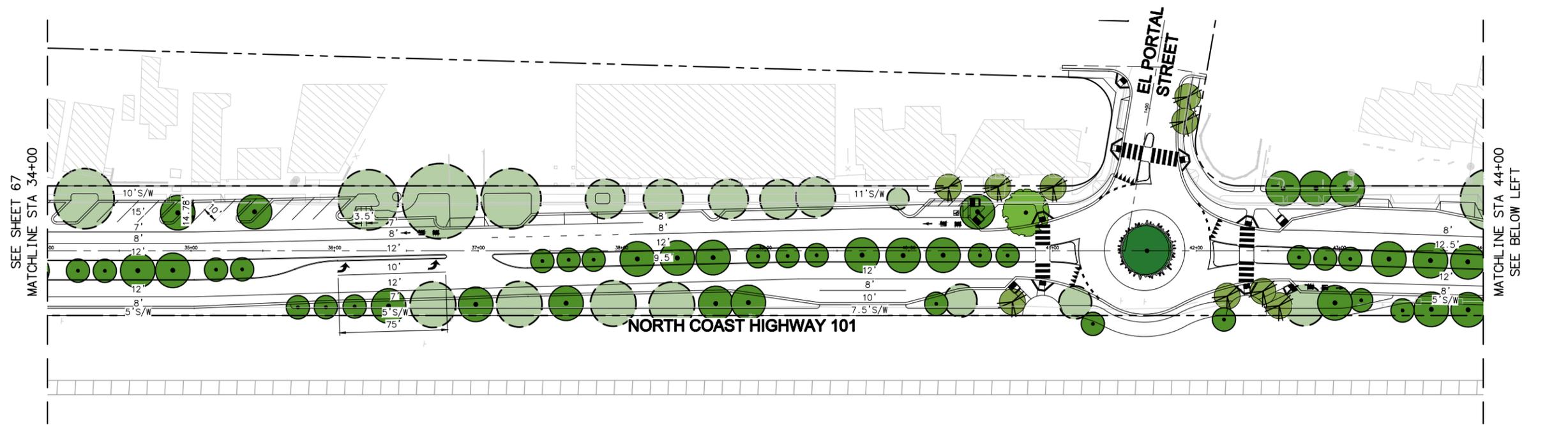
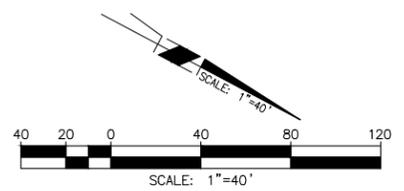
1. MERGE TAPER
 L= LENGTH OF TRANSITION
 W= OFFSET
 S= DESIGN SPEED
 $L=WS^2/60=(10)(35^2)/60=204.2$ USE 289'

2. SHIFT TAPER
 L= LENGTH OF TRANSITION
 W= OFFSET
 S= DESIGN SPEED
 $L=WS^2/60=(6)(35^2)/60=122.5$ USE 170'

THIS PAGE INTENTIONALLY LEFT BLANK

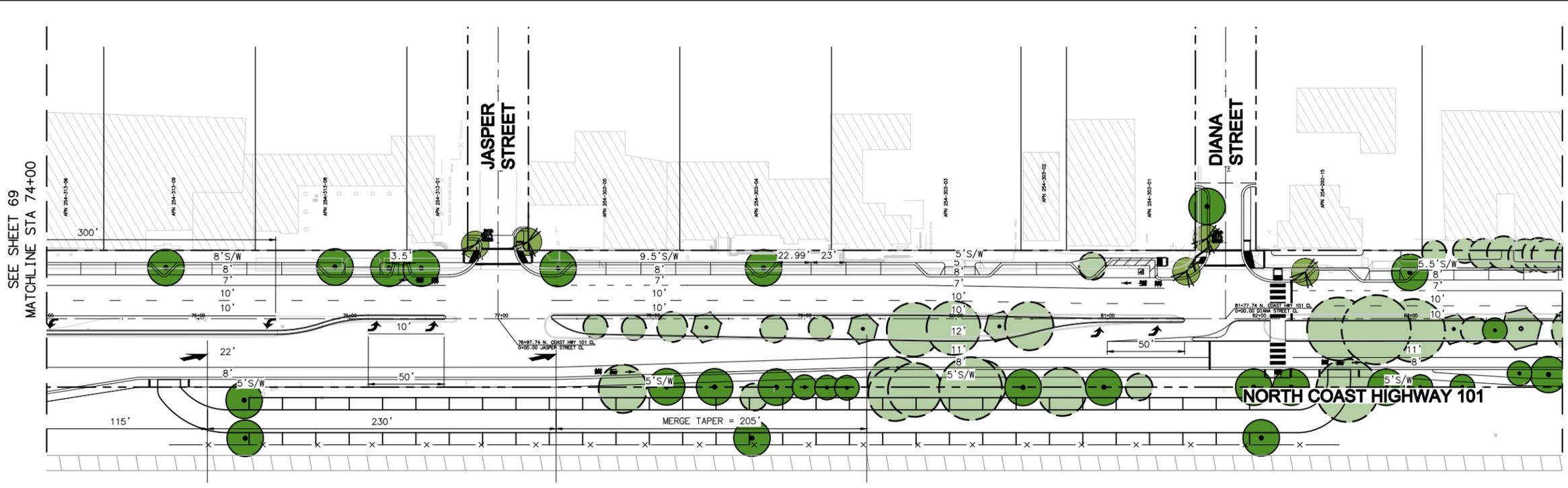
PARKING TABLE			
	REGULAR	HANDICAP	MOTORCYCLE
WEST	27	2	3
EAST	50	0	0
EXISTING	74		

-  EXISTING TREE
-  PROPOSED TREE

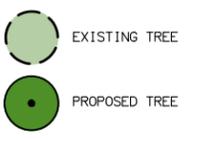


THIS PAGE INTENTIONALLY LEFT BLANK

THIS PAGE INTENTIONALLY LEFT BLANK

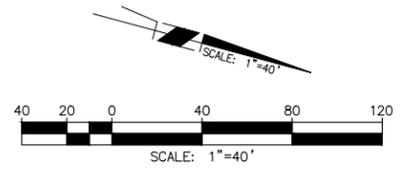


PARKING TABLE			
	REGULAR	HANDICAP	MOTORCYCLE
WEST	38	3	3
EAST	54	0	0
EXISTING	53		

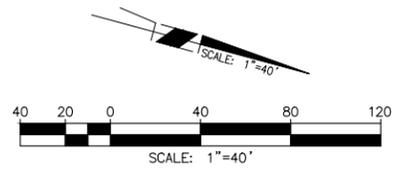


MATCHLINE STA 84+00
SEE BELOW LEFT

SEE SHEET 69
MATCHLINE STA 74+00



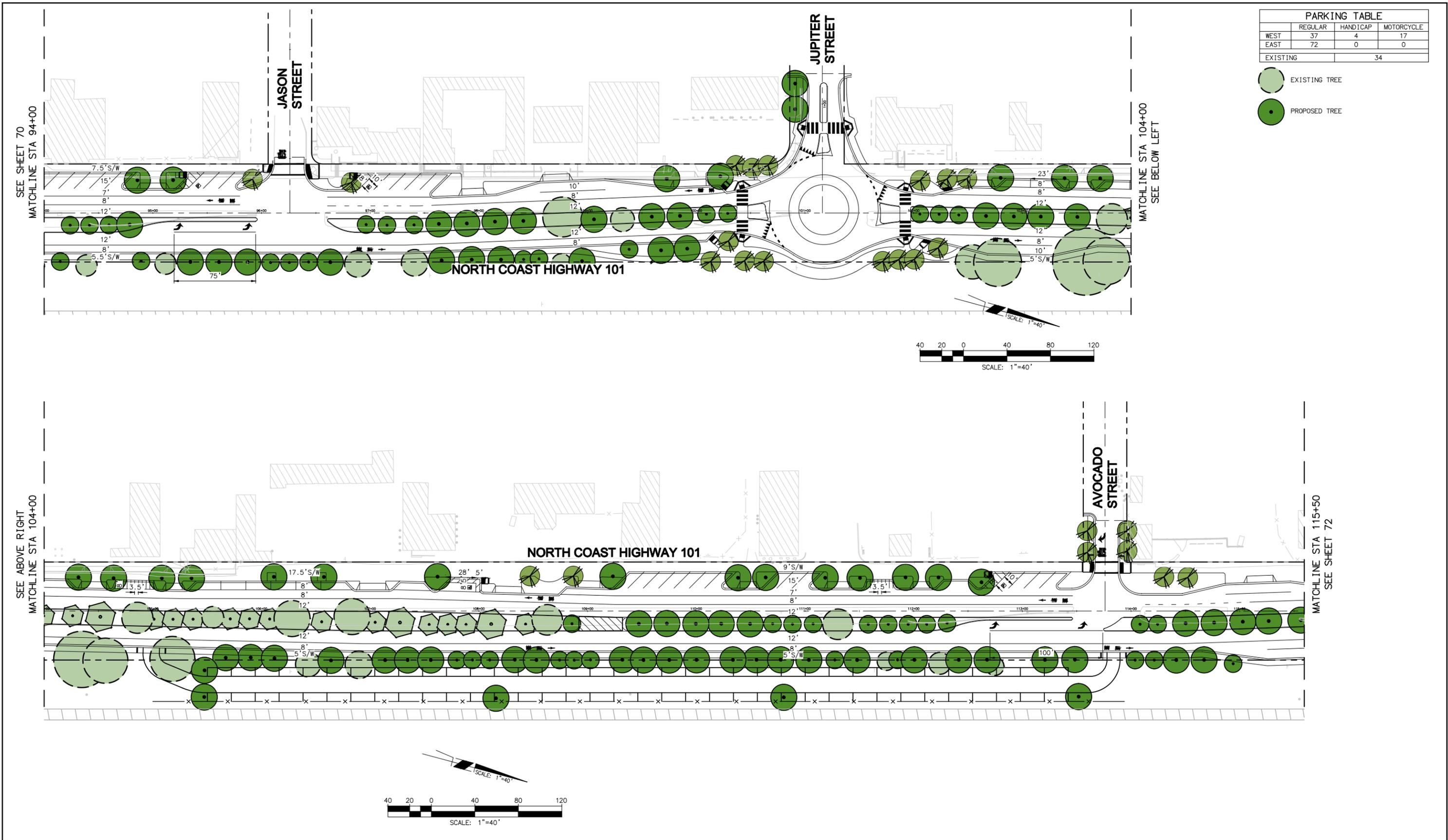
TAPER LENGTH CALCULATION
 1. MERGE TAPER
 L= LENGTH OF TRANSITION
 W= OFFSET
 S= DESIGN SPEED
 $L=WS^2/60=(10)(35^2)/60=204.2$ USE 205'



MATCHLINE STA 94+00
SEE SHEET 71

SEE ABOVE RIGHT
MATCHLINE STA 84+00

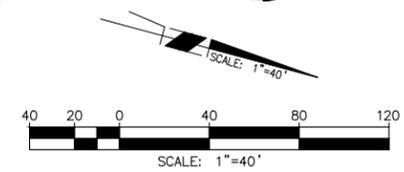
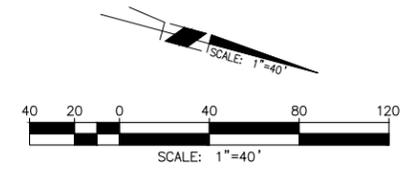
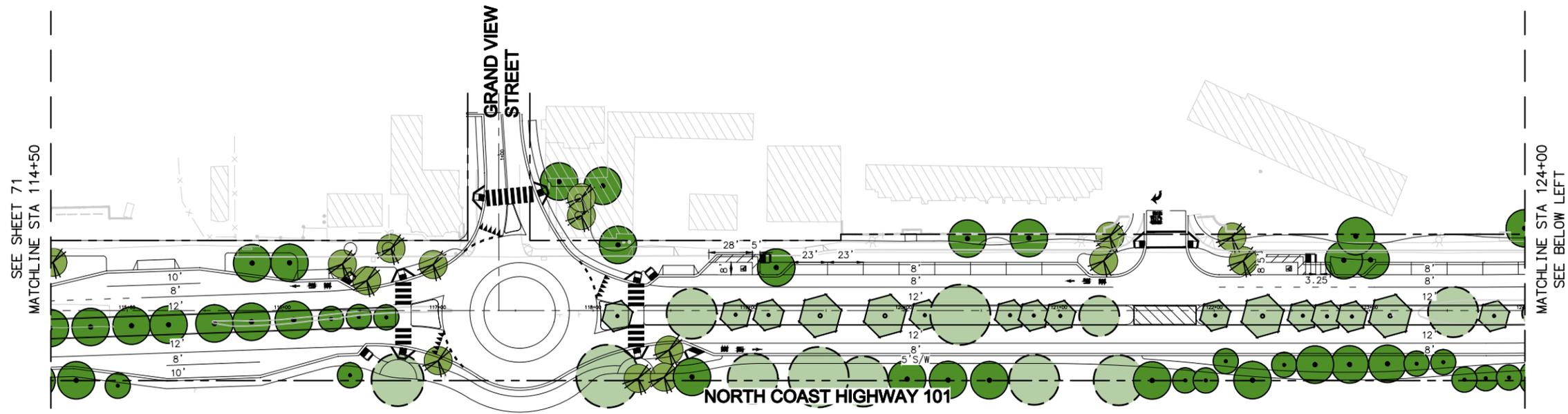
THIS PAGE INTENTIONALLY LEFT BLANK



THIS PAGE INTENTIONALLY LEFT BLANK

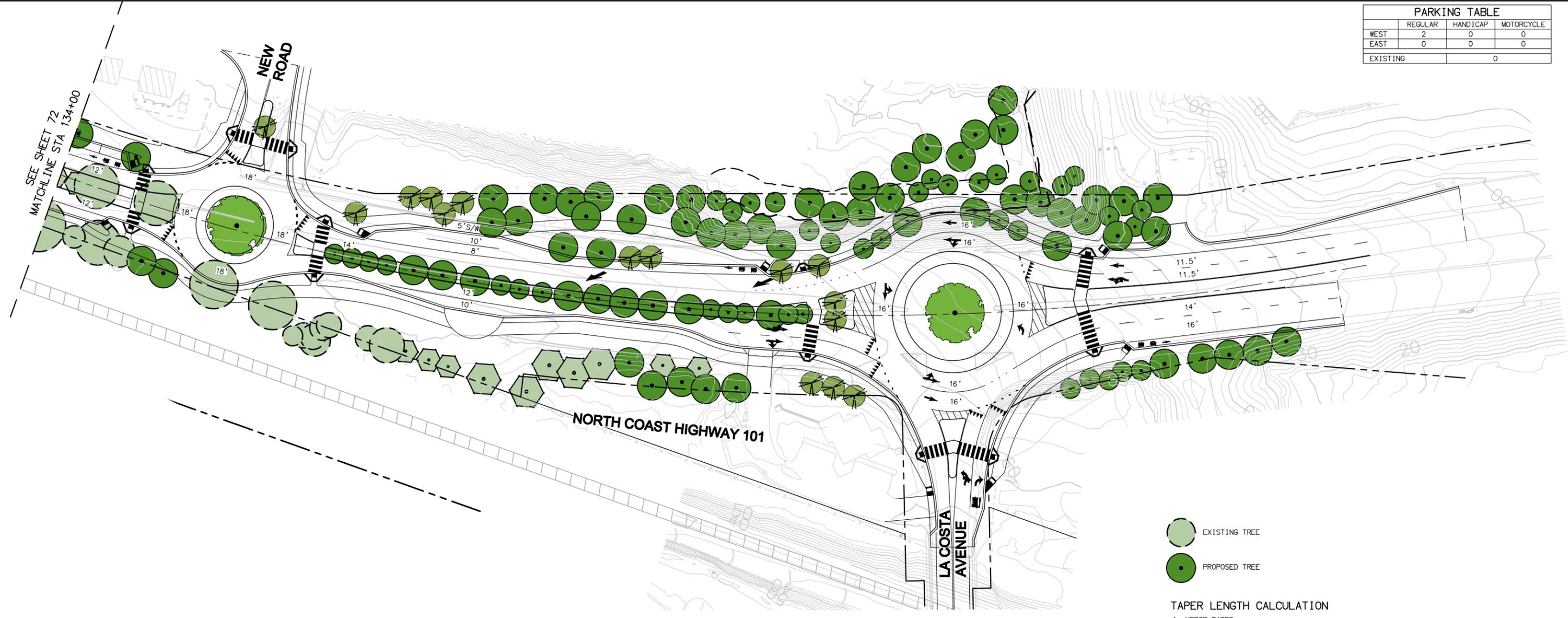
PARKING TABLE			
	REGULAR	HANDICAP	MOTORCYCLE
WEST	24	3	5
EAST	0	0	0
EXISTING	24		

-  EXISTING TREE
-  PROPOSED TREE



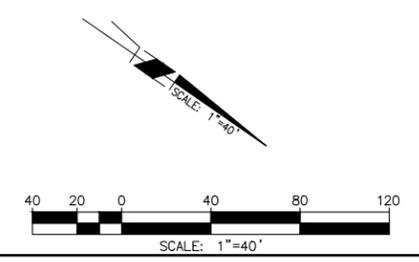
THIS PAGE INTENTIONALLY LEFT BLANK

PARKING TABLE			
	REGULAR	HANDICAP	MOTORCYCLE
WEST	2	0	0
EAST	0	0	0
EXISTING	0		

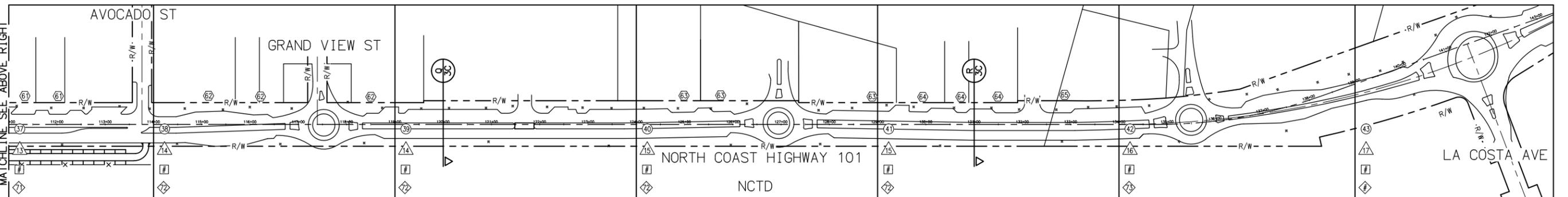
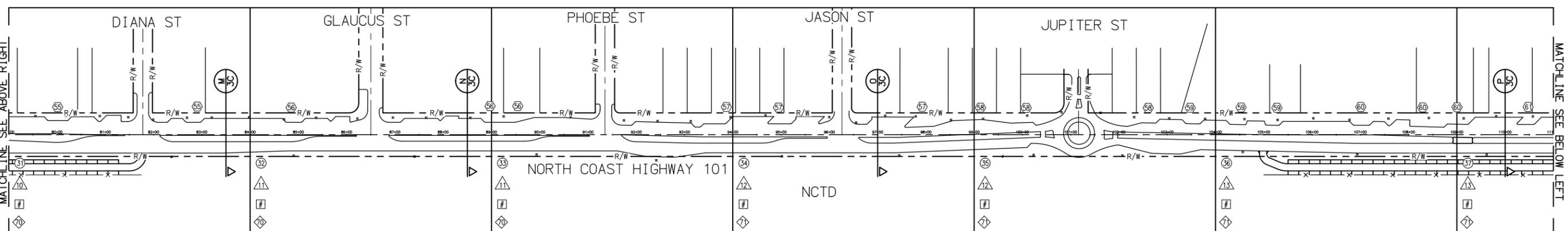
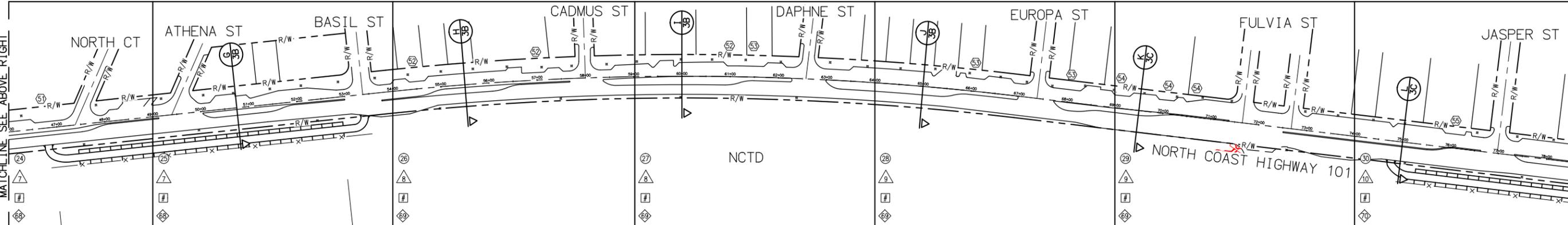
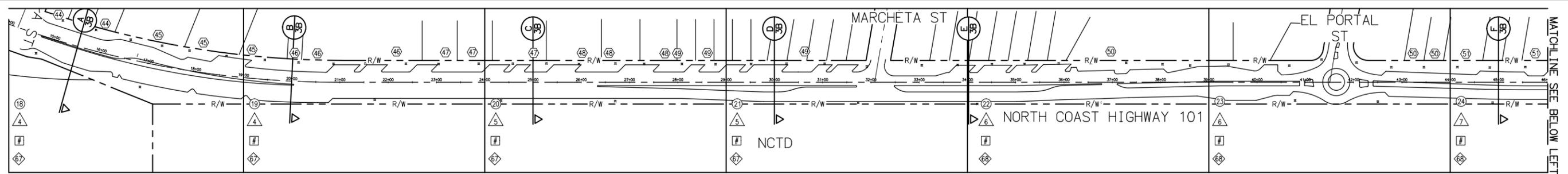


-  EXISTING TREE
-  PROPOSED TREE

TAPER LENGTH CALCULATION
 1. MERGE TAPER
 L= LENGTH OF TRANSITION
 W= OFFSET
 S= DESIGN SPEED
 $L = WS^2/60 = (11)(35^2)/60 = 224.6$ USE 262'

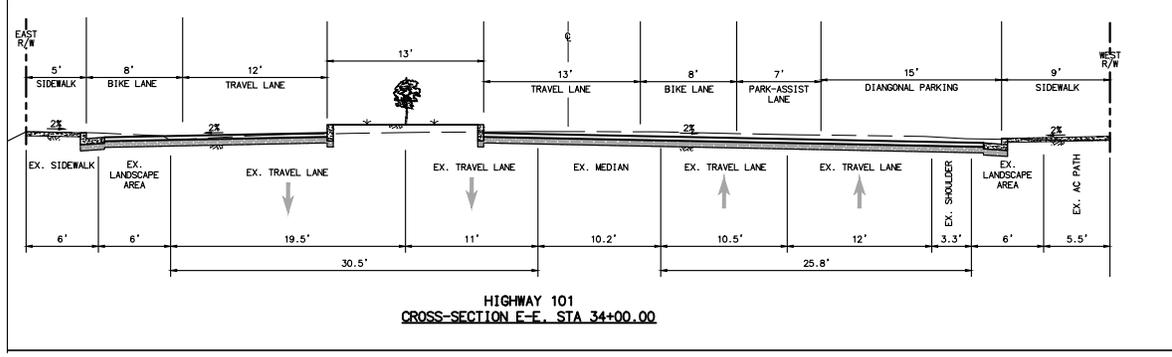
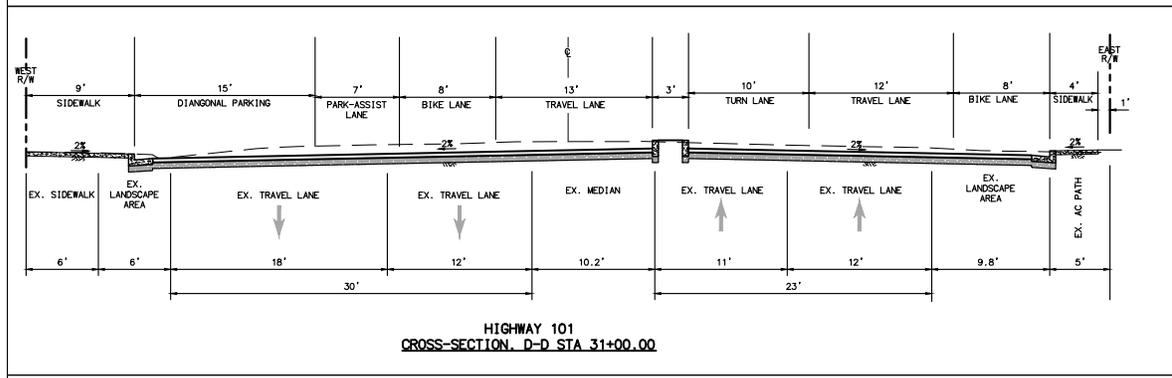
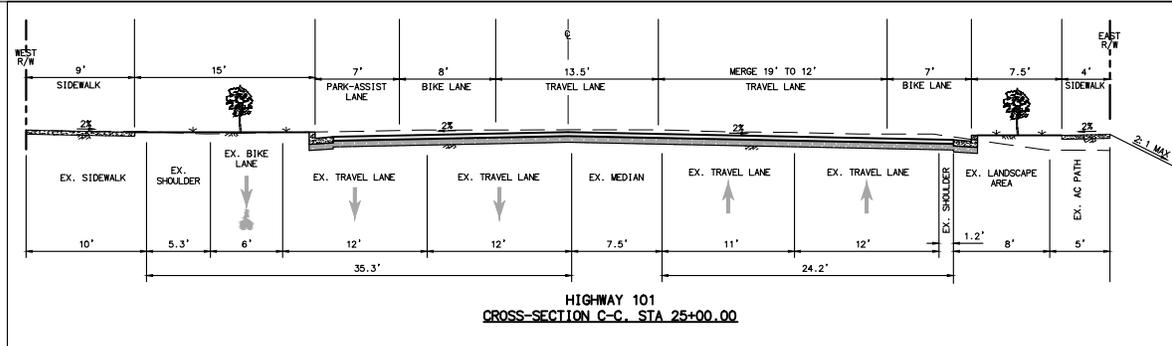
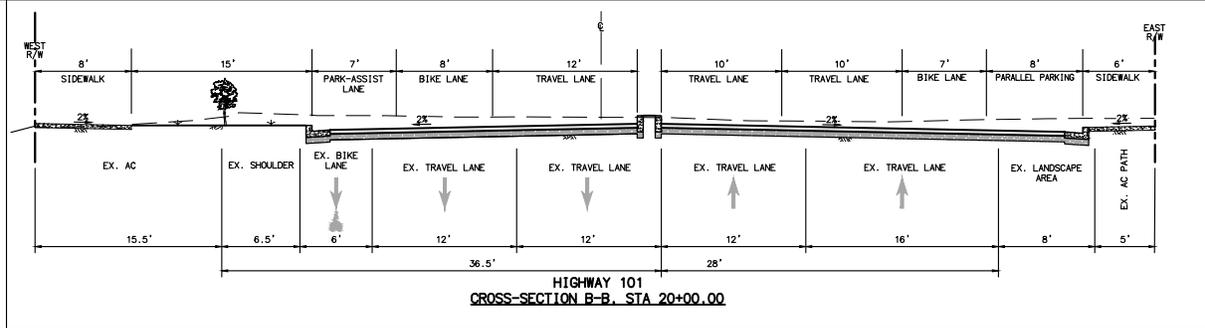
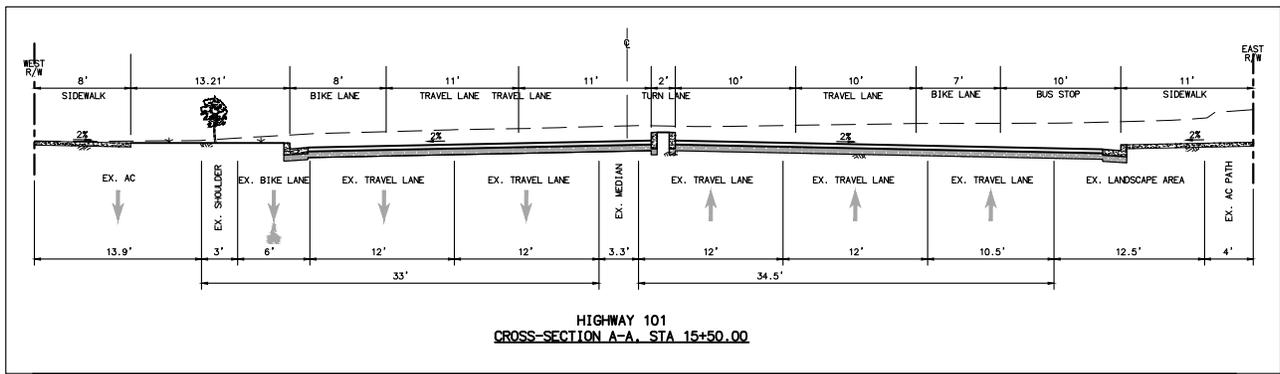


THIS PAGE INTENTIONALLY LEFT BLANK

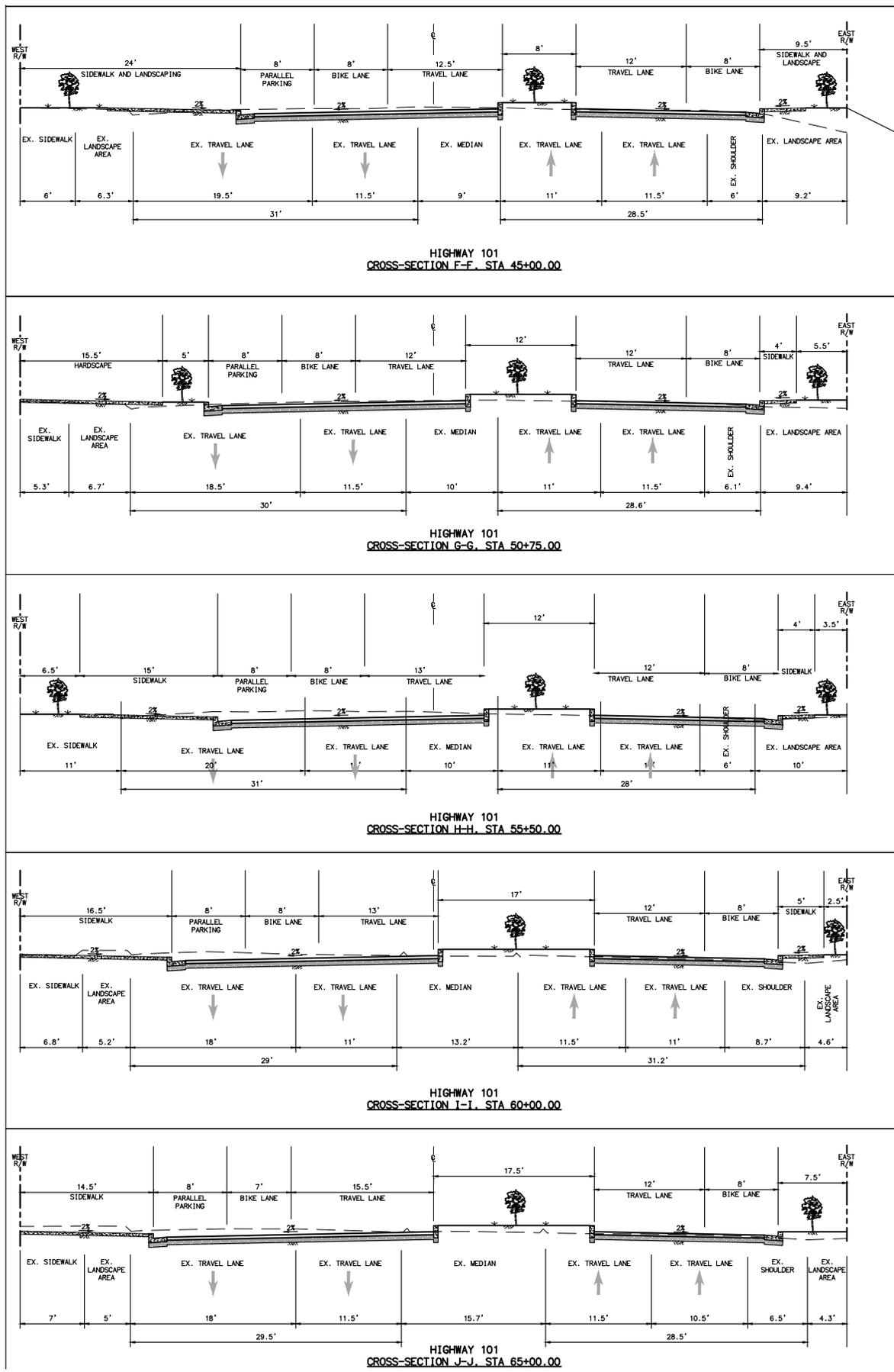


- INDEX MAP LEGEND**
- Ⓜ IMPROVEMENT PLAN SHEET NUMBER
 - Ⓧ DRIVEWAY DETAILS SHEET NUMBER
 - ⚠ DEMOLITION PLAN SHEET NUMBER
 - Ⓛ EROSION CONTROL PLAN SHEET NUMBER
 - Ⓝ SIGNING & STRIPING PLAN SHEET NUMBER

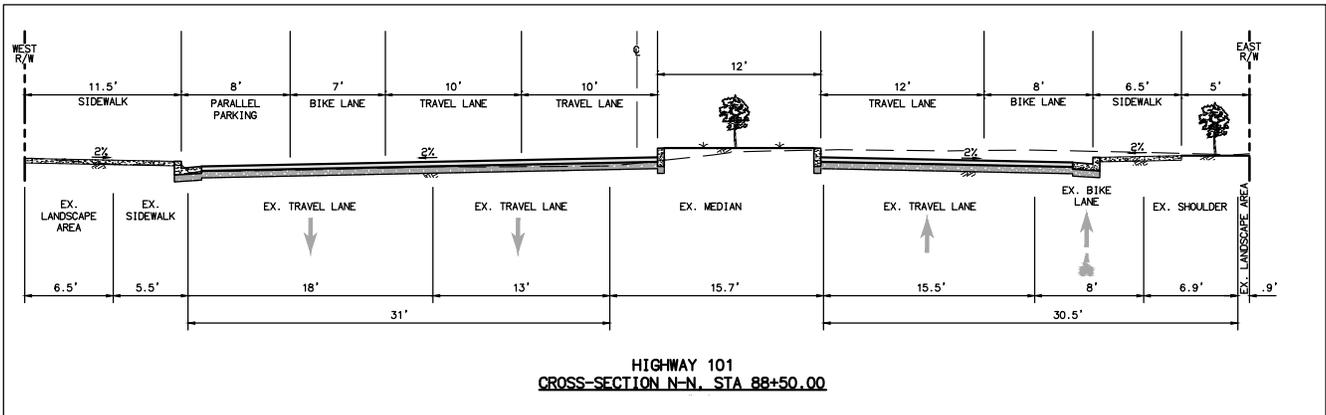
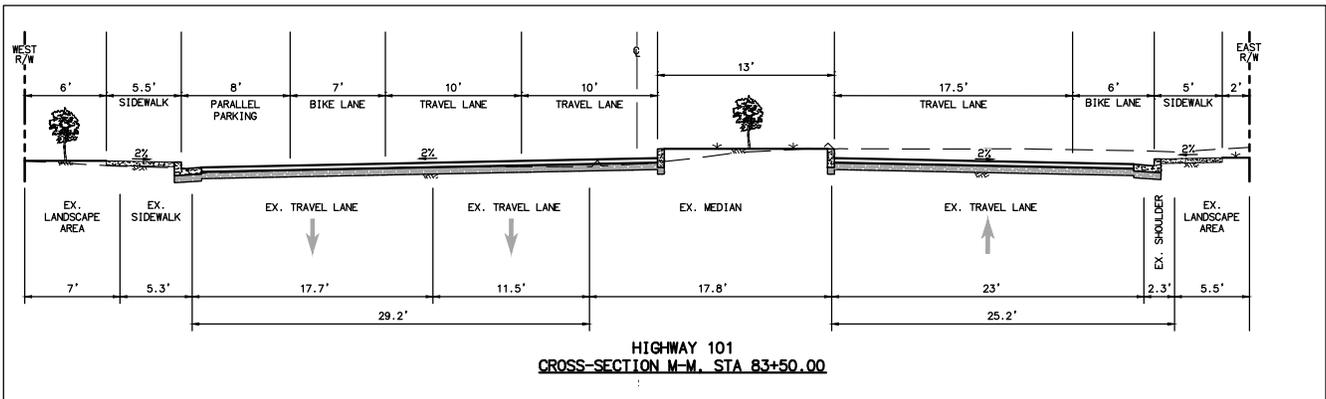
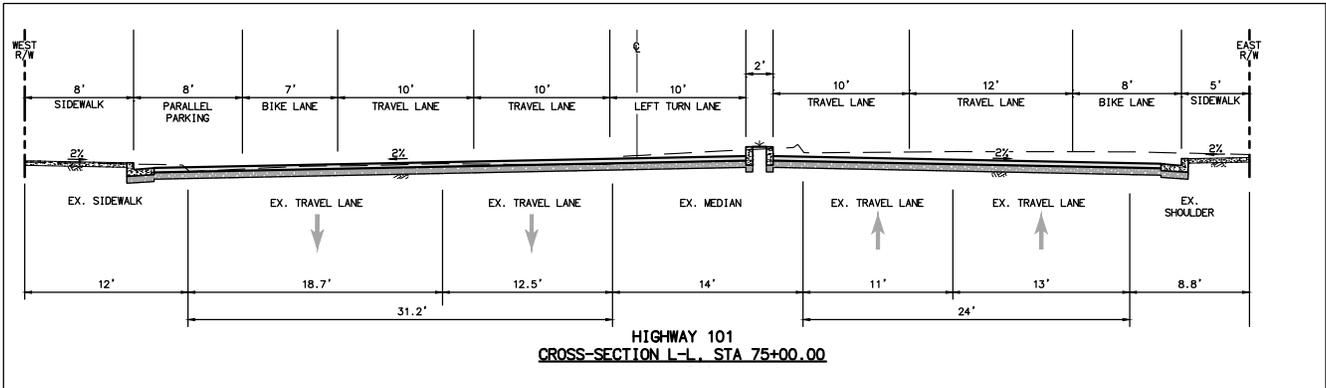
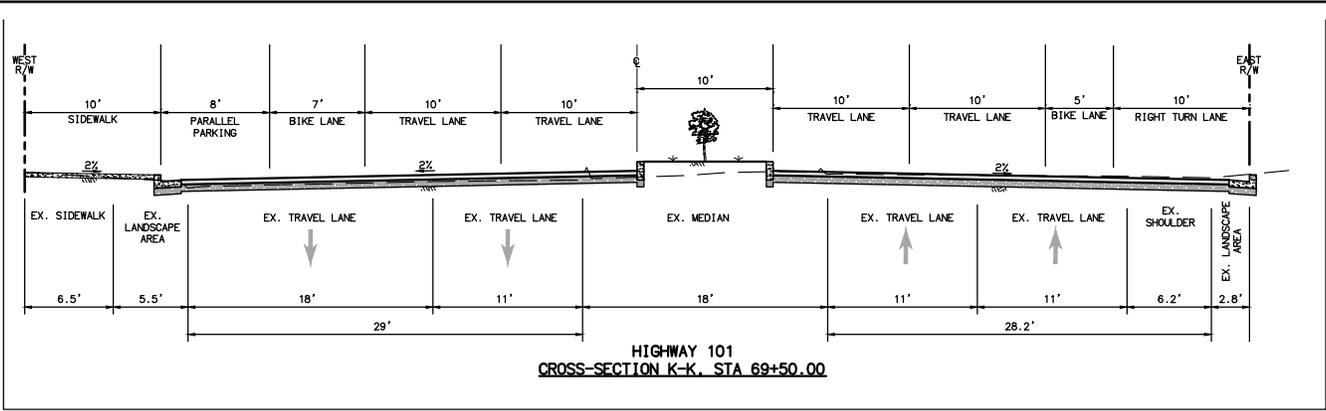
THIS PAGE INTENTIONALLY LEFT BLANK



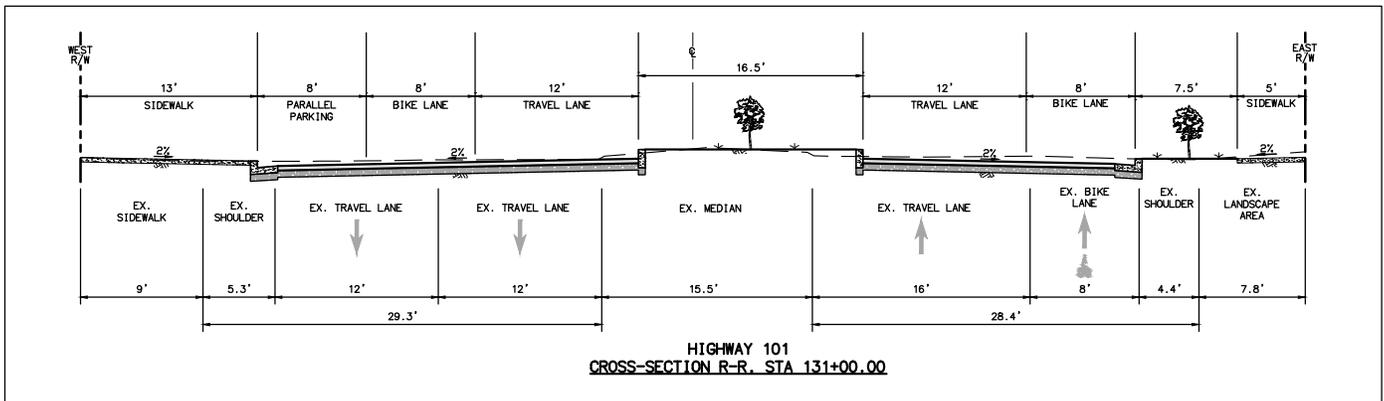
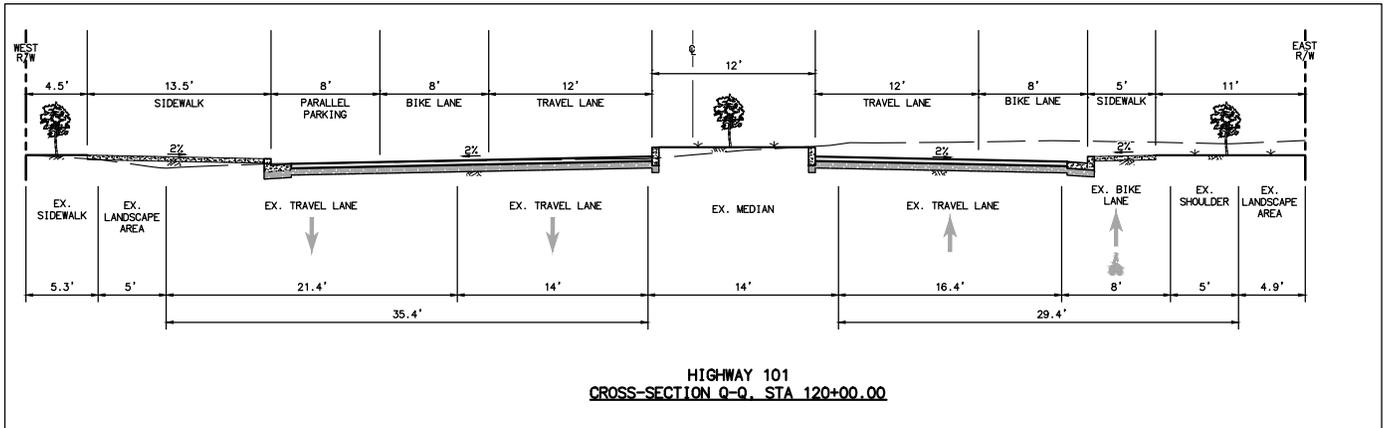
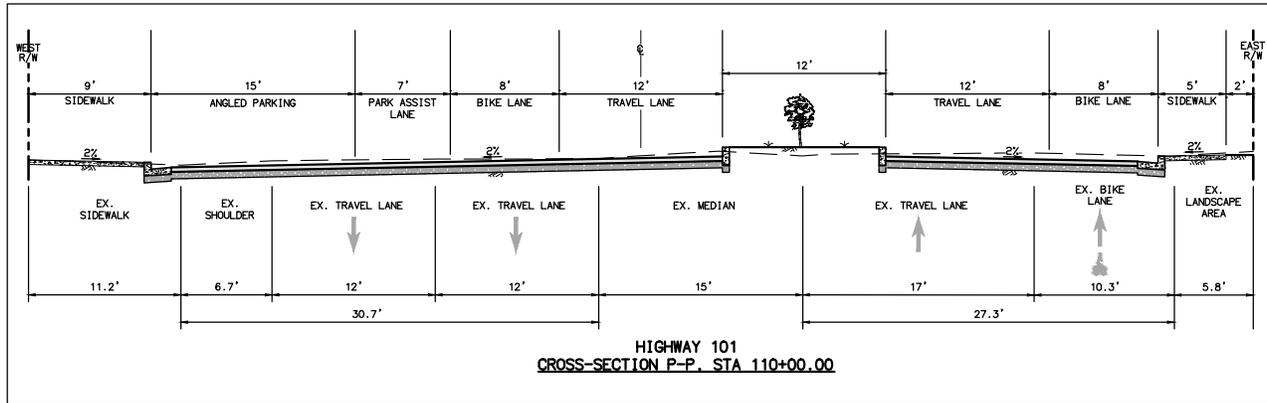
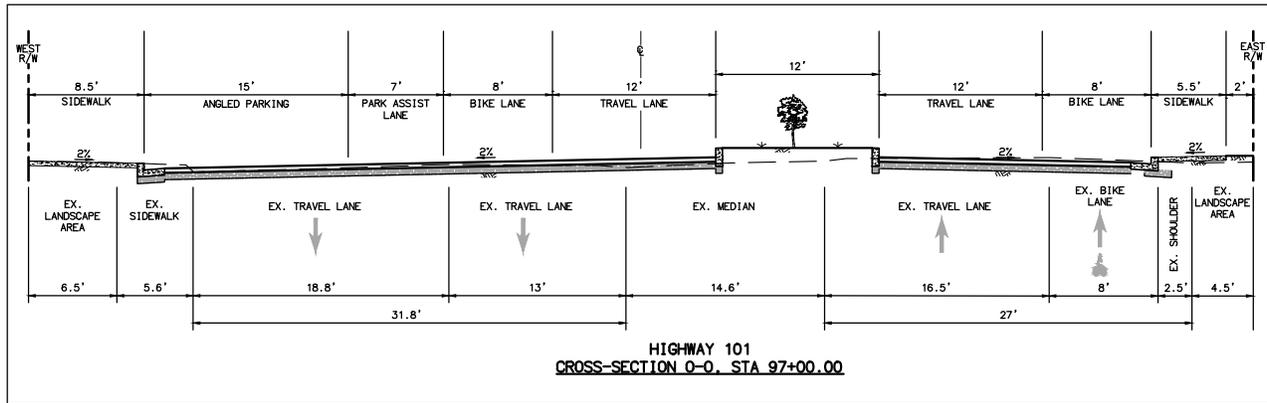
THIS PAGE INTENTIONALLY LEFT BLANK



THIS PAGE INTENTIONALLY LEFT BLANK



THIS PAGE INTENTIONALLY LEFT BLANK



THIS PAGE INTENTIONALLY LEFT BLANK