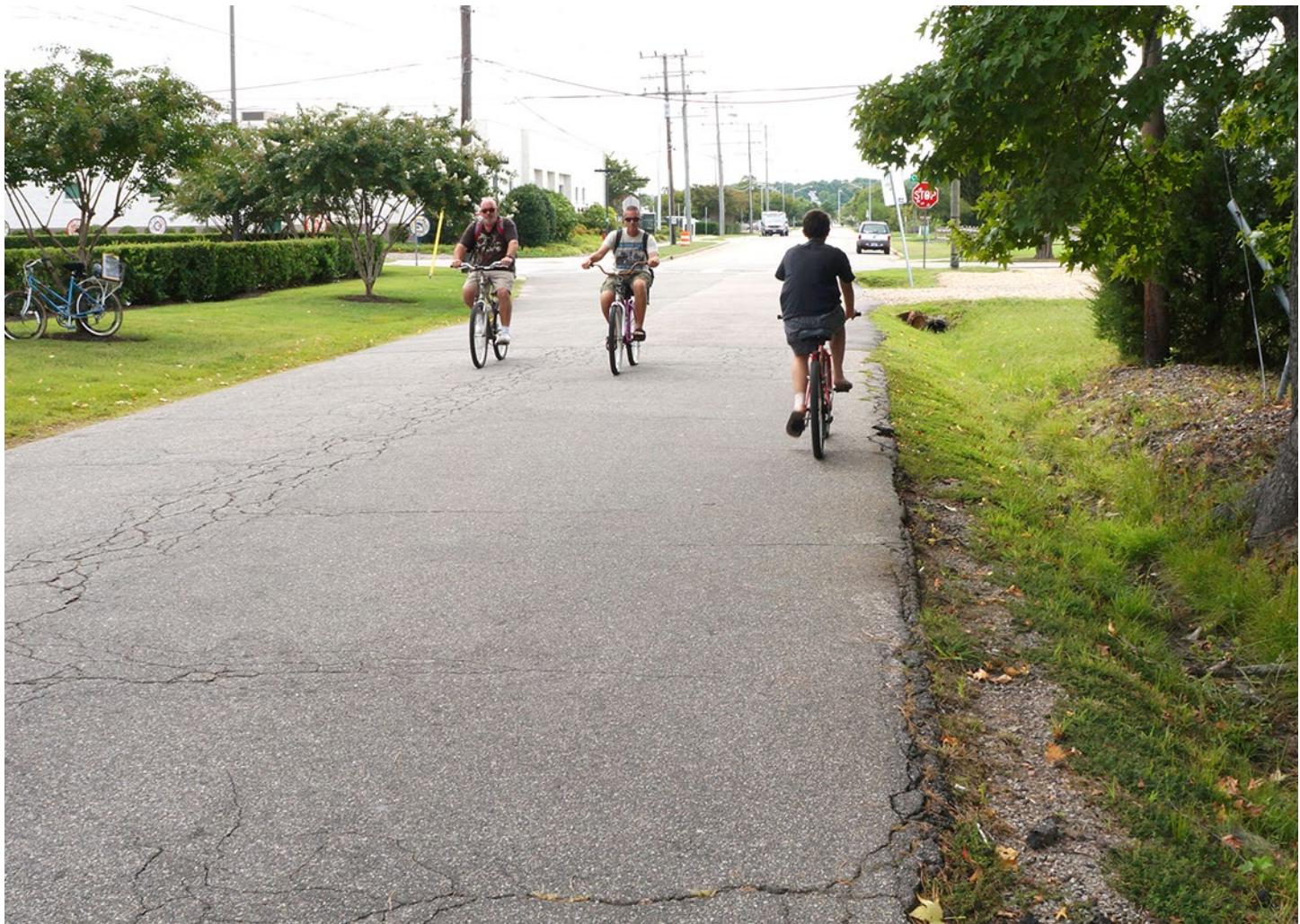




CONNECTIVITY PLAN



Adopted December 5, 2017
City of Virginia Beach

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1.0 BACKGROUND & PURPOSE



A group of artists, business owners and community leaders in and around 18th Street came together in 2014 to organize a creative arts and cultural district. In February 2015, the Virginia Beach City Council identified the creation of the ViBe Arts and Cultural District as a top priority. The vision for the ViBe District is to spur economic development by attracting residents, businesses and visitors through the creation of a unique place for local artists and creative businesses. One of the early strategies identified to achieve this vision is to create a walkable district complete with sidewalks, lighting, street trees, bike racks, crosswalks and accessibility upgrades. The district is currently fragmented and lacks much of this streetscape infrastructure.

The purpose of the ViBe District Connectivity Plan is to provide a vision for critical pedestrian and bicycle connections between ViBe business and community destinations, such as, Virginia Beach Middle School, the Oceanfront and the Convention and Visitors Bureau. The proposed street infrastructure improvements are needed to achieve the goals of the ViBe District by helping to attract and foster creative business, grow real estate values, stimulate commerce, and enhance the quality of life for citizens and visitors.

2.0 EXISTING INVENTORY & ANALYSIS



EVIDENCE OF USE - CYPRESS AVE CORRIDOR



CROSSWALK LOCATIONS AND CONDITIONS - PACIFIC & 17TH



ASSESSING SIDEWALK CONDITIONS & GAPS - 18TH ST

Before a connectivity plan could be developed, the existing walking and bicycling conditions of the ViBe District streets were documented. A walking/biking audit was conducted in August of 2015. Three things were assessed during the audit:

1. *Existing sidewalk conditions* - The existing sidewalks were ranked on a three point scale (see following page) and gaps were identified.
2. *Crosswalk locations and conditions* - Intersections throughout the ViBe district were analyzed to see where crosswalks are currently located and their conditions.
3. *Evidence of pedestrian and bicycle traffic* - Pedestrian and bicycle traffic patterns were noted and evidence of unpaved paths were documented.

The ViBe District is an ideal walkable scale, with most destinations under a 10 minute walk from one another. Sidewalks within the ViBe District, however, are fragmented and vary widely in condition, width and placement. Most critically, pedestrians can not circulate between ViBe business, such as during a First Friday event, without having to walk in traffic or on an unpaved shoulder for several blocks.

The walking/biking audit revealed several corridors that are currently carrying the majority of pedestrians and bicycles through the ViBe District. North/south, many bicycle and pedestrians were observed traveling along Cypress Avenue to destinations such as Virginia Beach Middle School to the north and the 7-11 on 17th and Cypress to the South. East/west, a large amount of pedestrian and bicycle traffic was observed traveling on 18th Street from west of Cypress Avenue towards the Oceanfront.

ViBe DISTRICT

EXISTING WALKING CONDITIONS



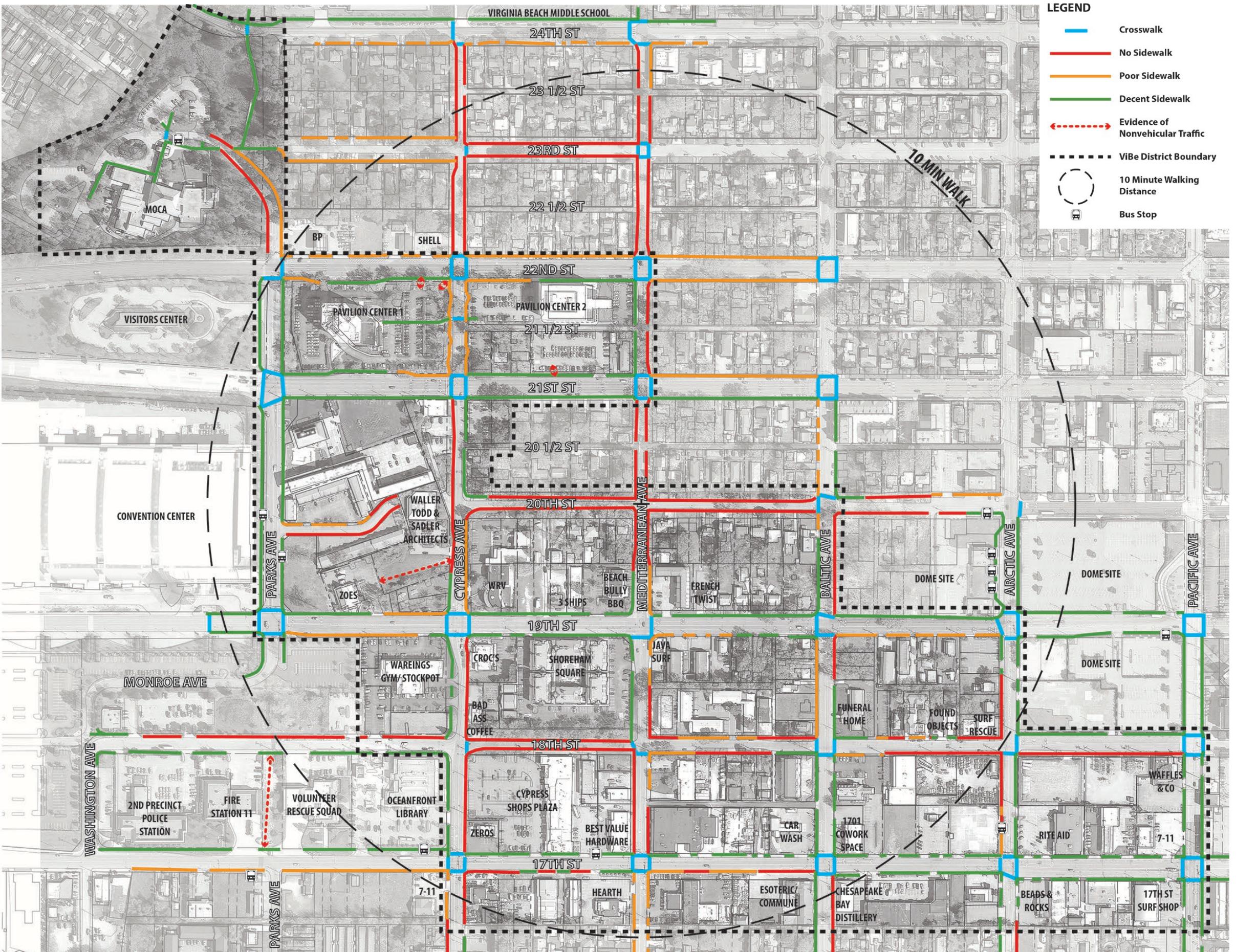
NO SIDEWALK - MEDITERRANEAN AVE



**POOR SIDEWALK - PARKS AVE
SIDEWALK IS LESS THAN 5'WIDE, CONTAINS FAILING PAVEMENT AND DOES NOT
MEET AMERICAN DISABILITY ACT (ADA) STANDARDS**



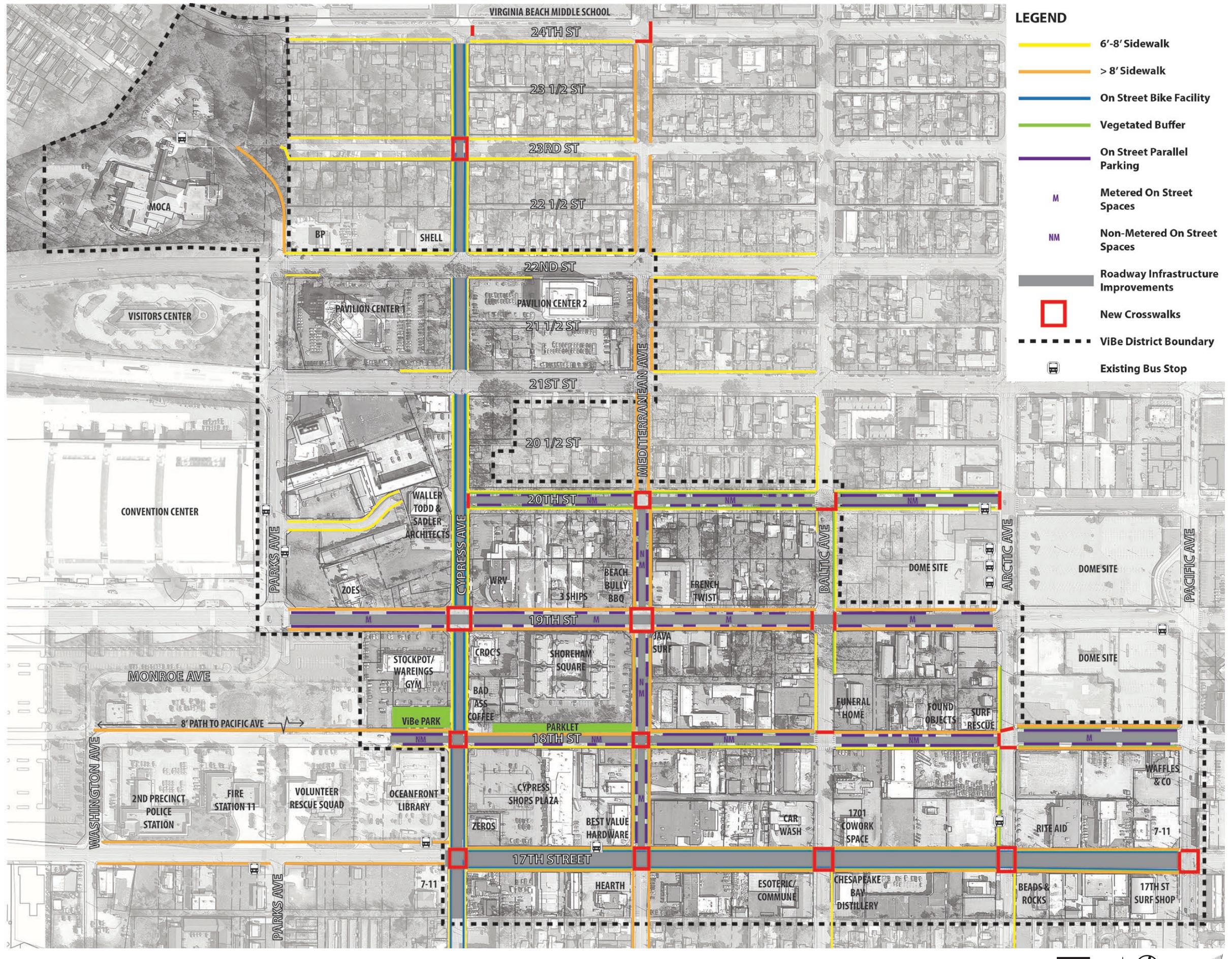
DECENT SIDEWALK - 21ST ST
SIDEWALK IS A MINIMUM OF 5'WIDE AND PARTIALLY MEETS ADA STANDARDS



3.0 ViBe DISTRICT CONNECTIVITY VISION PLAN

The plan to the right depicts the long-term vision for streetscape improvements in and around the ViBe District. Proposed improvements to individual streets and blocks are discussed in more detail in the following sections. The major features of the Connectivity Vision Plan include:

- A continuous sidewalk network and accessibility upgrades
- Crosswalks on all legs of every intersection
- Additional street trees and pedestrian-scaled lighting
- Two primary north/south corridors for pedestrian and bicycle traffic in the form of on street bike lanes on Cypress Avenue and wide sidewalks Mediterranean Avenue
- Two primary east/west corridors for pedestrian and bicycle traffic in the form of an 8' side path on 18th Street and wide sidewalks and on-street bicycle facilities on 17th Street
- More defined on-street parallel parking opportunities to support businesses and residents on Mediterranean Ave, 18th, 19th and 20th Streets
- Designated open spaces along 18th Street for informal gatherings, events, outdoor art displays, and low impact development (LID) facilities
- Stormwater and utility infrastructure upgrades



NORTH/SOUTH STREETS

Cypress Avenue



EXISTING CONDITIONS - CYPRESS AVE

Figure 1 on the following page depicts the proposed typical section of Cypress Avenue from 16th to 24th Streets. Bike lanes and sidewalks are proposed to support the existing high volumes of bicycle and pedestrian traffic traveling the corridor between destinations in and around the ViBe District. The City of Virginia Beach recorded an Average Daily Traffic (ADT) volume of 4,670 between 19th and 20th Streets in 2017. These traffic volumes and existing ROW widths support the typical section proposed. Additionally, the proposed typical section for Cypress Avenue supports the recommendations for bicycle facilities on Cypress Avenue in the City of Virginia Beaches' *Bikeways and Trails Plan*.

Mediterranean Avenue



SIDEWALK WITHOUT CURB AND GUTTER - MEDITERRANEAN AVE

Eight foot wide sidewalks are proposed for Mediterranean Avenue between 16th and 24th Streets to support the existing volumes of pedestrian and bicycle traffic traveling in and through the ViBe District. Figure 2 depicts the proposed typical section of Mediterranean Avenue between 17th and 20th Streets specifically. It includes the proposed eight foot sidewalks in addition to more defined on street parallel parking to support adjacent business and residents. See Table 1 on page 10 for a full comparison of the existing and proposed on street parking spaces within the ViBe District. North of 20th Street, the wide sidewalks could potentially be retro-fitted around existing stormwater ditches in some areas and avoid the costly need for curb and gutter and utility relocation.

The City of Virginia Beach recorded an ADT volume of 3,437 at the 20-1/2 Street intersection on Mediterranean Avenue in 2017. These volumes and existing ROW support the typical section proposed. Additionally, the proposed typical section for Cypress Avenue supports the recommendations for bicycle facilities on Cypress Avenue in the City of Virginia Beaches' *Bikeways and Trails Plan*.

Baltic and Arctic Avenues

The Connectivity Vision Plan proposes filling in existing sidewalk gaps on Baltic and Arctic Avenues within the ViBe District. The streetscape of Arctic Avenue west of the Dome Site may be impacted as part of that redevelopment. Continuous sidewalks, a minimum of six foot wide, should be maintained on both sides of the street if redeveloped.

FIGURE 1. CYPRESS AVENUE TYPICAL SECTION

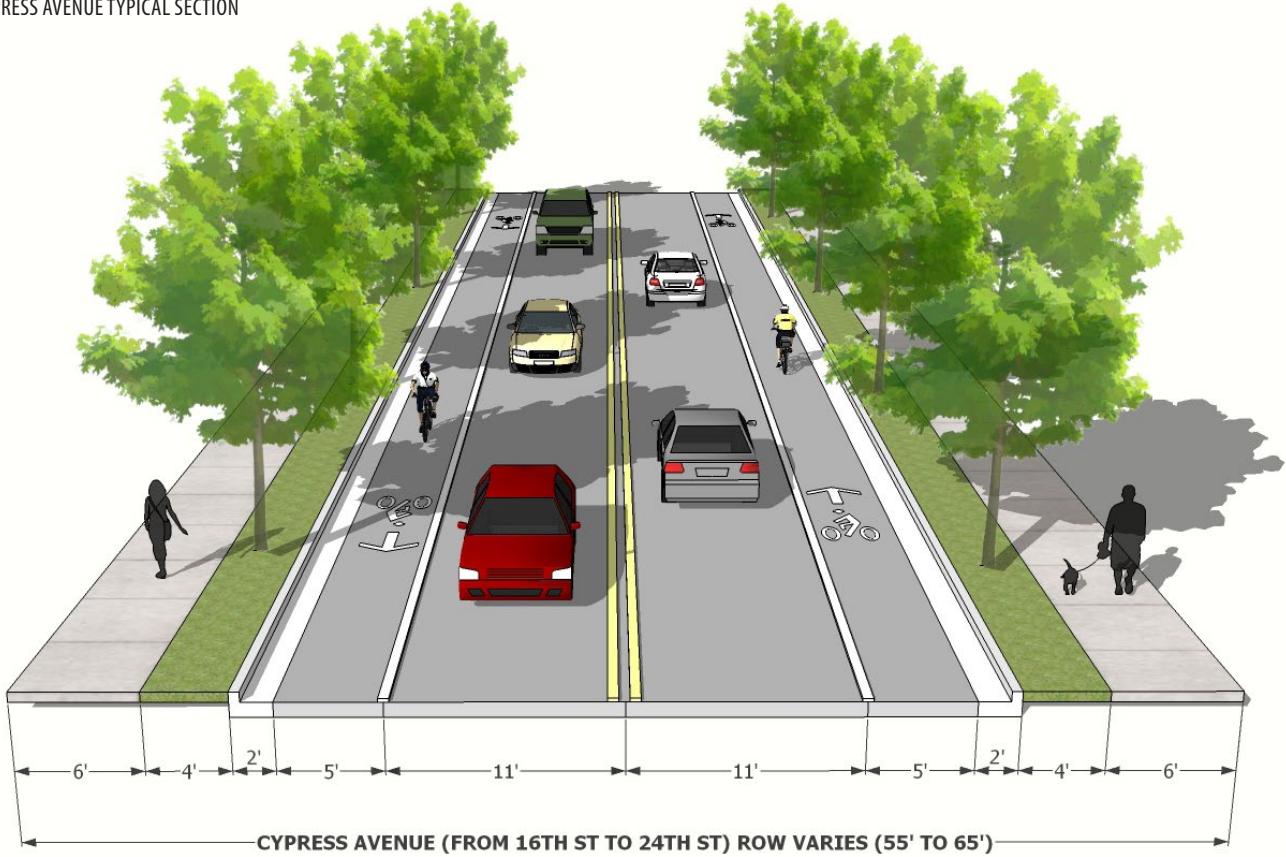
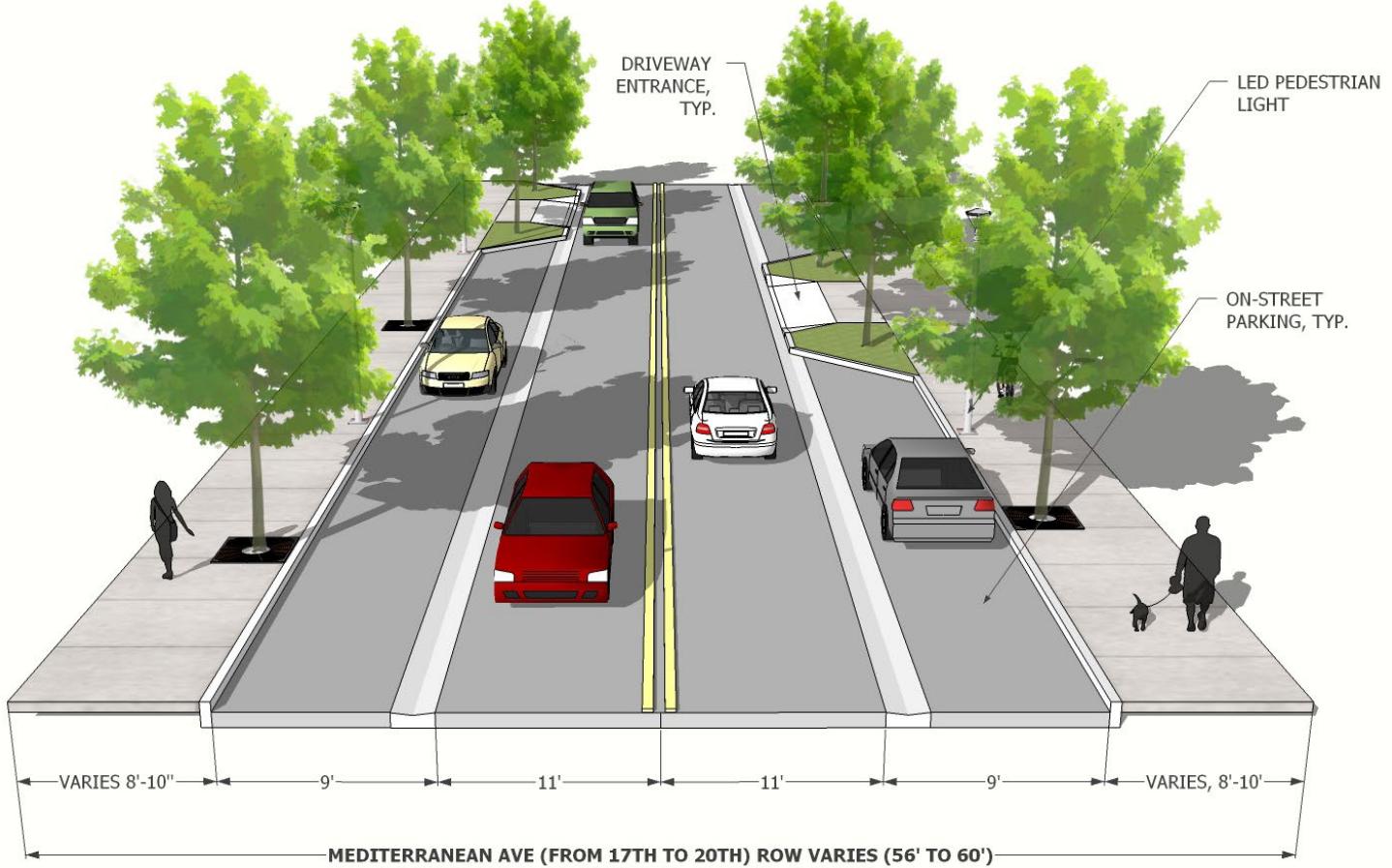


FIGURE 2. MEDITERRANEAN AVENUE TYPICAL SECTION



EAST/WEST STREETS

18th Street



IMAGES OF THE NOV. 6, 2015 FIRST FRIDAY EVENT - 18TH ST & PARKLET

Figures 3 and 4 on the following page depict the proposed typical sections for 18th Street between Cypress and Pacific Avenues.

18th Street carries low volumes of existing motor vehicle traffic and high volumes of bicycle and pedestrian traffic. An eight foot path is proposed to provide an off-street multi-use path and direct connection between the Convention Center and Oceanfront through the ViBe District.

The block between Cypress and Mediterranean Avenues is a central hub for the ViBe District and could frequently be closed for events such as First Fridays and the Farmers Market. The design of the street for this block should be free of vertical curbs and other obstructions to facilitate the full use of the street for events while also adding on street parking spaces to support the daily needs of businesses and residents. The city-owned Parklet along the northern side functions as an existing LID facility and contains clearings for art displays and small gatherings. Tents and vendors could line the Parklet and/or south side of the street during events. The street itself could be a canvas for art.

TABLE 1. VIBE DISTRICT ON STREET PARKING COMPARISON

Street	Existing Metered Spaces	Proposed Metered Spaces	Existing Non-Metered Spaces	Proposed Non-Metered Spaces	Total Change
Cypress Ave	0	0	0	0	0
Mediterranean Ave	0	12	25	31	+18
Baltic Ave	0	0	41	41	0
Arctic Ave	7	7	0	0	0
17th St	17	0	0	0	-17
18th St	33	27	67	72	-1
19th St	0	55	12	0	+43
20th St	0	0	5	30	+25
21st St	0	0	34	34	0
22nd St	0	0	32	32	0
Totals	57	101	216	240	+68

FIGURE 3. 18TH STREET TYPICAL SECTION - CYPRESS TO MEDITERRANEAN AVENUES

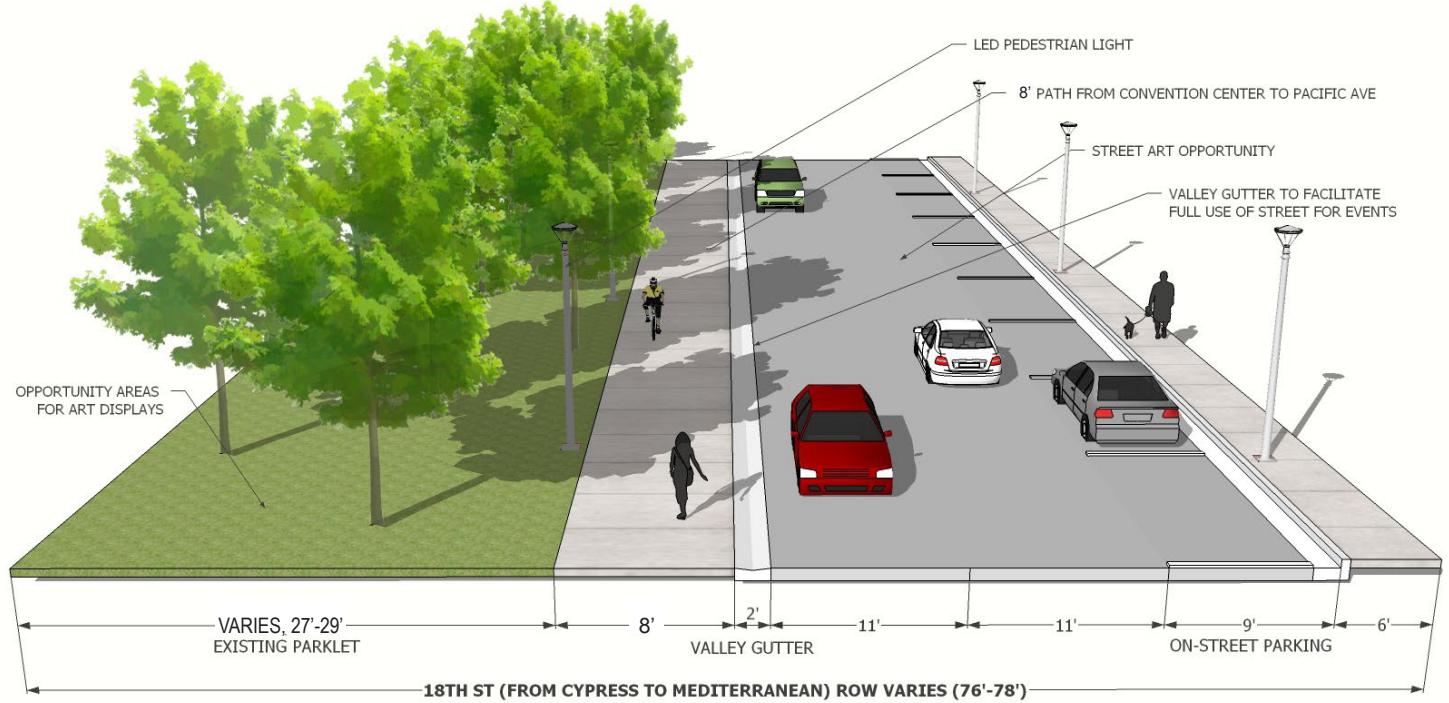
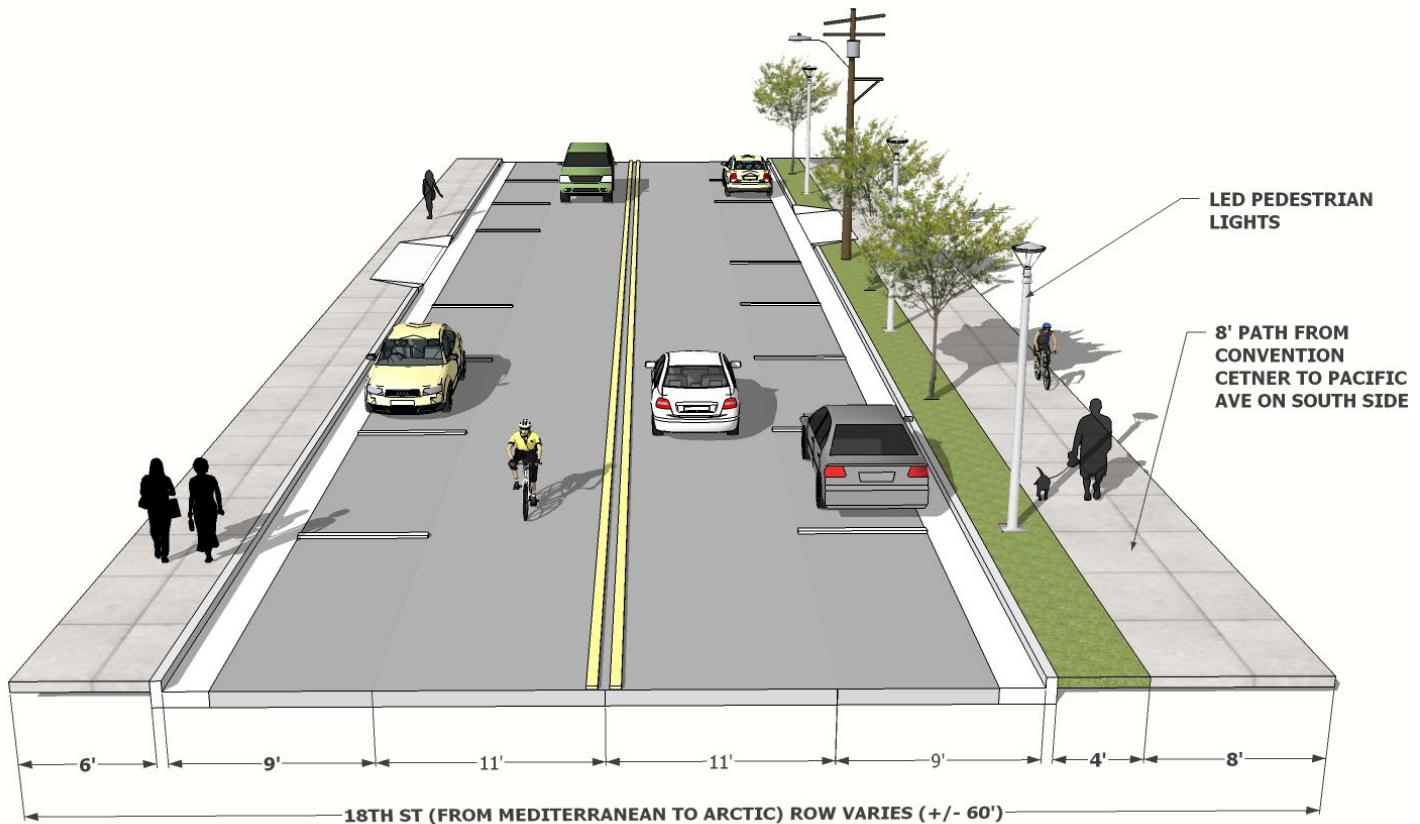


FIGURE 4. 18TH STREET TYPICAL SECTION - MEDITERRANEAN TO ARCTIC AVENUES



EAST/WEST STREETS

17th Street



EXISTING CONDITIONS - 17TH ST

17th Street (also known as Virginia Beach Boulevard) is a four lane minor arterial street along the southern edge of the ViBe District. The street is poised to become a walkable commercial corridor for the ViBe District with new land uses and development emerging along it. But the existing streetscape is characterized by a lack of street trees, the presence of overhead utilities, numerous curb cuts, frequent sidewalk gaps and poor pavement conditions.

Figure 5 depicts the proposed typical section for 17th Street from the 2008 *Resort Area Strategic Action Plan* (RASAP). This typical section requires approximately 20 feet of additional ROW from the north side of the street, which would include full acquisition of some properties and the demolition of existing buildings. In order to achieve the much needed pedestrian improvements within a shorter time frame, Figures 6 & 7 propose alternative typical sections for 17th Street.

FIGURE 5. RASAP 17TH STREET TYPICAL SECTION PROPOSAL

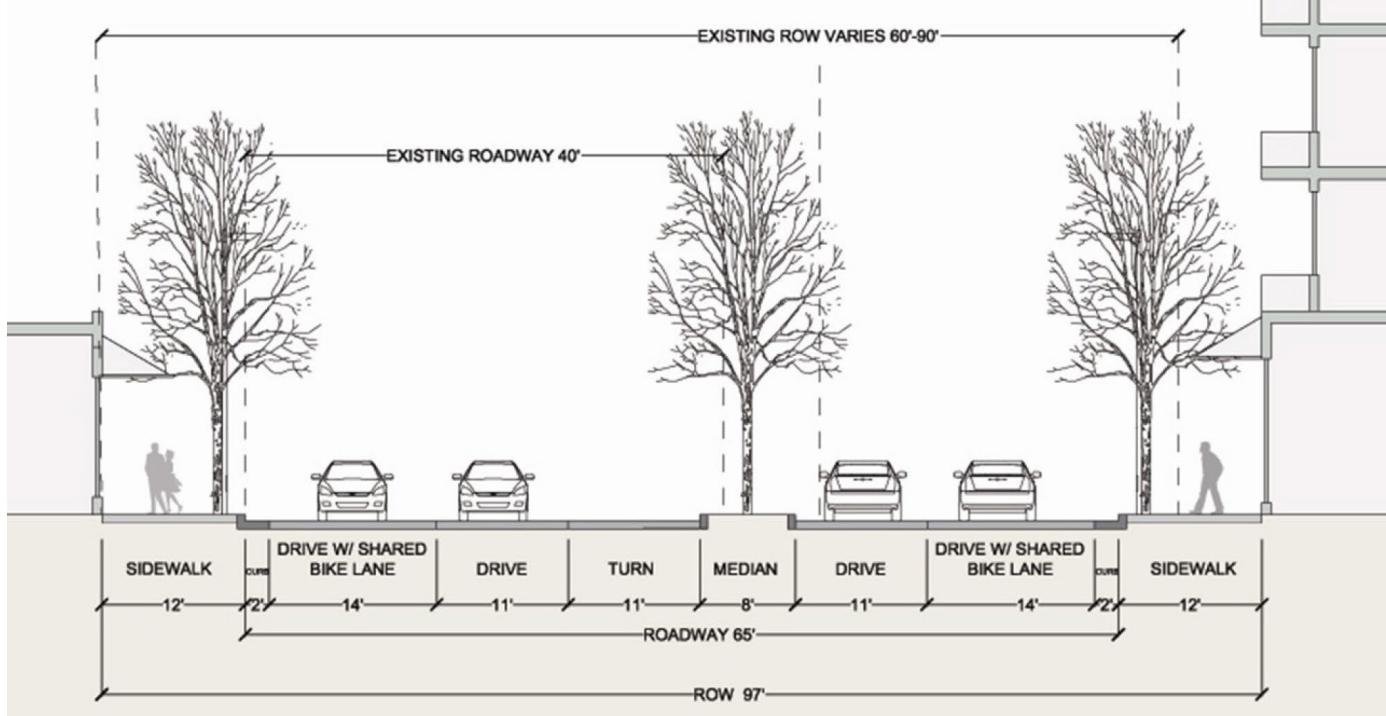
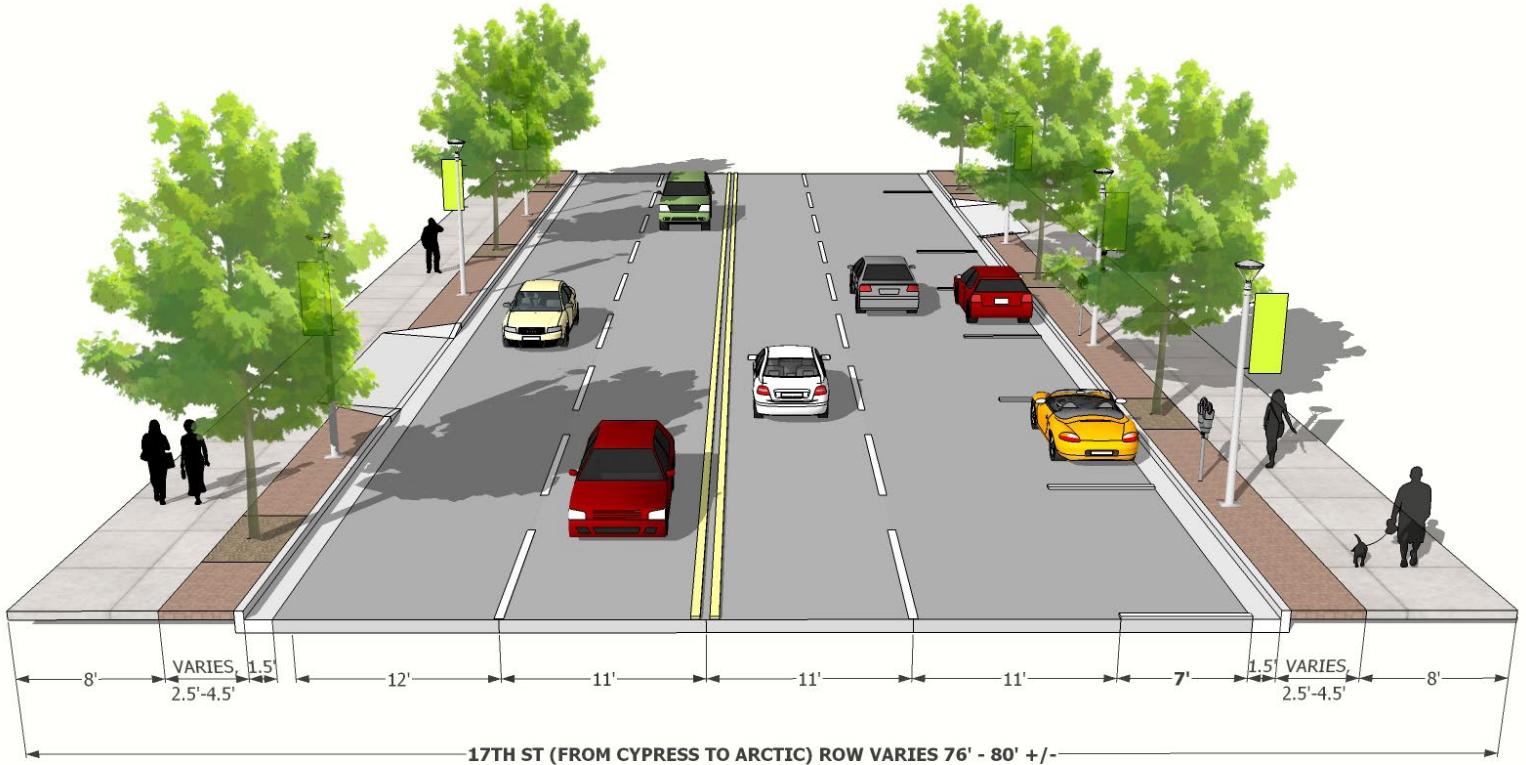


FIGURE 6. 17TH STREET PROPOSED SECTION A - BIKE LANES



FIGURE 7. 17TH STREET PROPOSED SECTION B - ON STREET PARKING



EAST/WEST STREETS

19th Street



RASAP RENDERING OF THE PROPOSED 19TH STREET CORRIDOR

19th Street not only is a major commercial corridor for the ViBe District, but the main pedestrian corridor for the Central Beach Entertainment District. The redesign of 19th Street has been a major initiative of the Resort Area Commission since 2012. A typical section with a wide central median was planned in 2013, however, the future of light rail changed, as have the development proposals at either end of the corridor. Figure 8 depicts an alternative typical section for 19th Street with one lane in either direction, a center turn lane and on street parking. Wide sidewalks, street trees, pedestrian lights and the under grounding of overhead utilities remain the primary goal for the future of 19th Street.

20th Street

Sidewalks are recommended on the primarily residential 20th Street corridor between Cypress and Arctic Avenues in the ViBe District. Sidewalks could be installed with or without the full streetscape section and could potentially be retro-fitted around existing utilities and stormwater ditches in some areas to avoid the costly expense of curb and gutter and relocation of utilities.

FIGURE 8. 19TH STREET TYPICAL SECTION - PARKS TO ARCTIC AVENUES



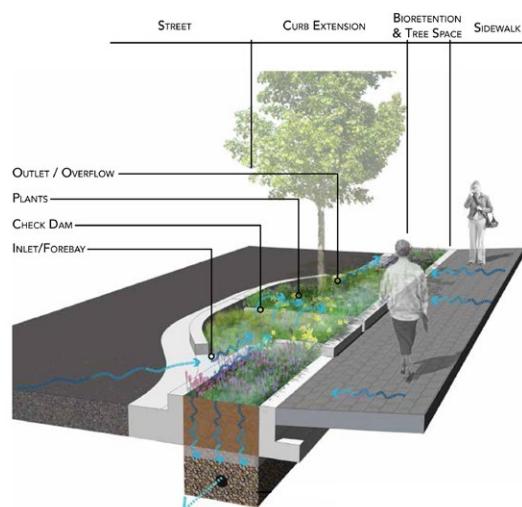
ViBe DISTRICT STREETSCAPE STANDARDS



CREATIVE CROSSWALK - NORTH HOLLYWOOD, CA
SOURCE: ALTERNATIVE PAVING CONCEPTS



CUSTOM BENCH -IDAHO FALLS, ID
SOURCE: IDAHO FALLS DOWNTOWN DEVELOPMENT



CURB EXTENSION BIORETENTION
SOURCE: D.C. DEPARTMENT OF TRANSPORTATION GREEN
INFRASTRUCTURE STANDARDS

Creative Crosswalks

New crosswalks will be needed at intersections throughout the ViBe as new sidewalks are added and walkability is improved. This presents an opportunity for creative crosswalks. A growing trend in arts and cultural districts throughout the country, creative crosswalks help to reinforce the identity of a place and improve aesthetics. The design, type of paint used, and application of the creative crosswalks should be matched with the anticipated traffic volumes and desired longevity.

Unique Street Furniture

Unique street furniture, such as custom benches, bike racks and litter receptacles, should be considered for the ViBe District streets. Street furniture should be located on wider sidewalks, in buffer strips and at intersections where it will not impede pedestrian travel. Unique street furniture is ideal for corridors that will receive high volumes of pedestrian traffic, such as 18th and 19th Streets, and Mediterranean and Cypress Avenues.

Low Impact Development (LID) Facilities

As new street infrastructure is implemented in the ViBe District, opportunities to incorporate LID facilities should be considered. The following LID facilities are recommended for streets in the ViBe:

- *Permeable Pavements* - Pavement materials such as pervious concrete, porous asphalt and permeable interlocking unit pavers should be considered for new sidewalks and roadway areas.
- *Curb Extension Bioretention* - Ideal for where on street parking and curb extensions are proposed. Stormwater is diverted from the street into depressed vegetated areas within the curb extension before entering the sewer system.
- *Structural Soil Under Sidewalk* - As new street trees are planted in the ViBe, adequate soil volume should be provided to support healthy tree growth. Generally, two cubic feet of soil is needed per one square foot of a tree's mature drip line area. This can be achieved with additional soil volumes provided under the sidewalk adjacent to the tree pit with the use of structural soils and suspended pavement technologies.

4.0 PRIORITY CORRIDORS



VIBE DISTRICT STAKEHOLDER MEETING - CROC'S, SEPT. 9, 2015

A design charette was held at Croc's with ViBe District Business Owners and Stakeholders in September of 2015 to present the findings of the existing inventory and analysis and gather feedback about connectivity issues. Attendees were asked which three streets they wished to see improved most in the ViBe. Figure 9 depicts the collective results. It is recommended that resources be directed to these corridors first as they become available or as new development occurs.

Streetscape improvements that can be implemented incrementally and facilitate achieving the long term vision for the street are encouraged.

FIGURE 9. PRIORITY CORRIDORS FOR IMPROVEMENT

