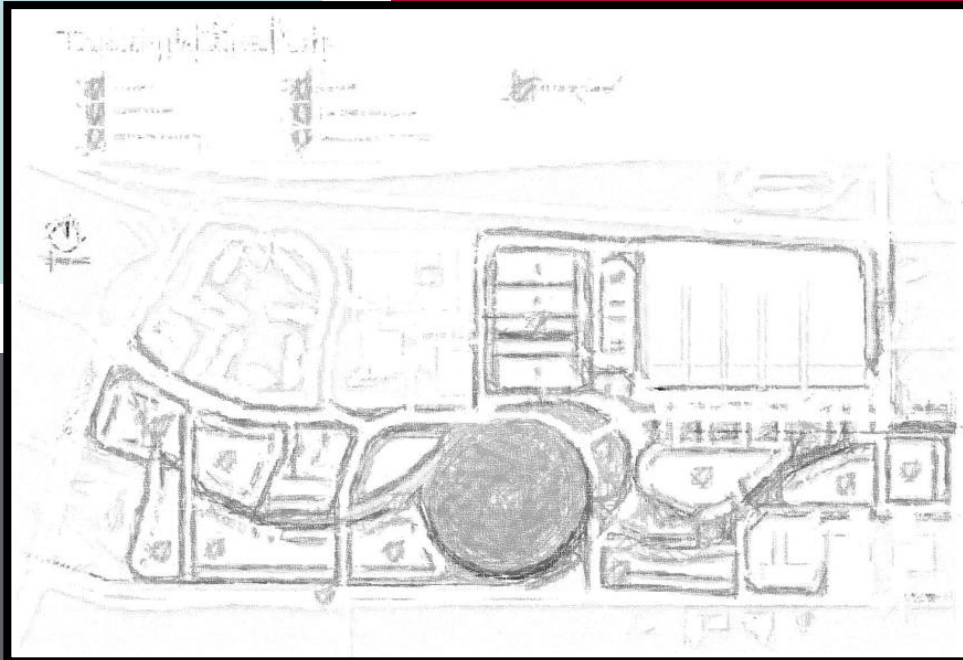


# City of Virginia Beach Arena Infrastructure

## Preliminary Conceptual Cost Estimates

*Doug Smith, Deputy City Manager  
Carl Tewksbury, Kimley-Horn  
City Council Briefing  
July 8, 2014*



# Presentation Overview

- Background
- Discussion of preliminary conceptual cost estimates for public infrastructure based on concept plans
  - Parking assumptions, needs and costs
  - Roadway improvements and costs
  - Site development, utility improvements and costs
  - Overall project infrastructure costs
- Discussion of path forward

# Background

- **November 8, 2013:** City received an unsolicited private proposal from the W.M. Jordan Company, HKS Sports & Entertainment, and Global Spectrum.
- **November 12, 2013:** City Council authorized the City Manager to accept the proposal for further study. The Council agreed to allow 90 days for competing private proposals to be submitted.
- **February 17, 2014:** City received an arena proposal from a consortium of United States Management LLC, AECOM Architects, Clark Nexsen Architects, Mortenson Construction, SB Ballard Construction and SMG.

# Background

- **March 24, 2014:** Both companies presented their proposals to the City Council-appointed Citizens Communications Committee.
- **May 13, 2014:** City Council received a briefing from Convention Sports & Leisure (CSL), a consultant brought in to provide an independent overview of each proposal.
- **May 27, 2014:** City Council adopted a resolution directing the city staff to:
  - Pursue negotiations with USM,
  - Hold the PPEA process and the Jordan proposal pending the outcome of these negotiations,
  - To prepare a report determining the scope and cost of public infrastructure, and
  - Continue involvement of the Citizens Communications Committee.

# USM Proposal Details

- USM proposal is to construct a locally owned, privately financed 18,000-seat capacity, 550,000-square foot entertainment and sports venue adjacent to the Virginia Beach Convention Center
- The facility would incorporate flexible seating and the amenity upgrade capabilities necessary to attract a professional sports franchise.



# USM Proposal

- The Arena, as proposed, accomplishes three major goals for the City:
  - Establishes a significant economic generator in Virginia Beach, creating new jobs and attracting new events and new visitors to the City
  - Creates a year-round attraction at the oceanfront, boosting existing businesses and dramatically enhancing the City's national convention draw
  - Provides a signature development that will offer events consistent with our City's stature and enhance our national and international exposure.
- Council directed staff to develop **preliminary conceptual cost estimates** for public infrastructure based upon **conceptual plans**. The following presentation provides the preliminary infrastructure costs.

# Kimley-Horn Presentation Summary

- Parking Assumptions, Needs, and Costs
- Roadway Improvements and Costs
- Site Development, Utility Improvements, and Costs
- Overall Preliminary Conceptual Cost Estimates

*Presented by Carl Tewksbury, P.E.*

*Sr. Vice President, Kimley-Horn*



# **Parking Assumptions, Needs, and Costs**



# Parking and Traffic Assumptions

- Attendance Levels/Arena Size:
  - 18,000 seat capacity
  - 15,500 permanent seats
- **13,950 design attendance (90% of 15,500) Oct-April**
- **7,500 design attendance (90% of 8,300) May-September**
- Convention Center Overlap: 300 parking spaces
- Mode Split: 85% vehicular; 15% other
- Vehicle Occupancy: 2.75 people per vehicle
- Shared Parking Occupancy: 50%
- Occupancy of Public Parking: 5% October-April; 70% May-September
- Acceptable Walking Distance to/from Dome Site: 15-17 minutes
- Employees will park off-site for large events

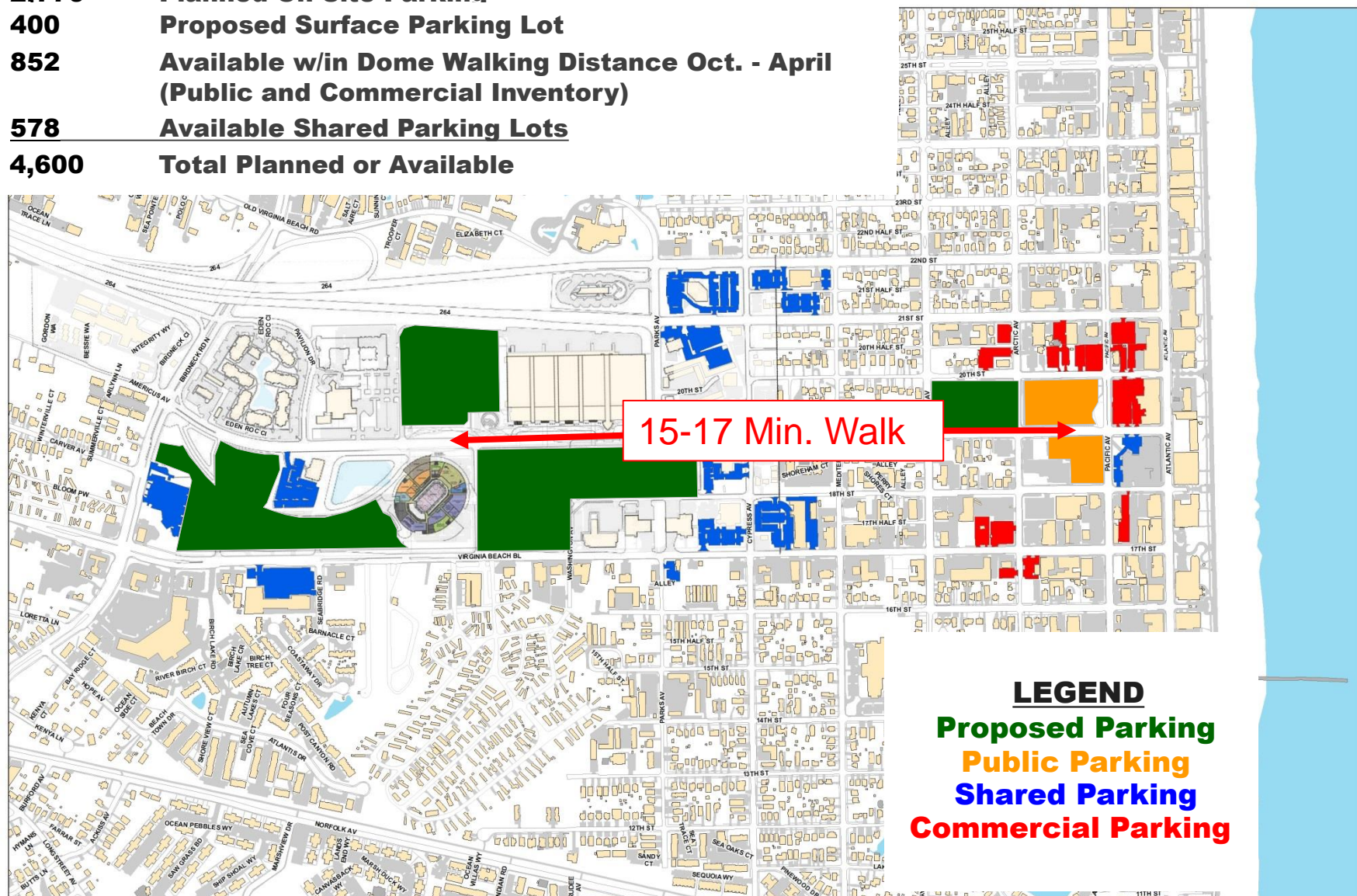
# Parking Demand

	13,950 Design Attendance	7,500 Design Attendance
	Oct-April	May-Sept
Planned On-Site	2,770	2,770
Proposed Additional Surface Parking (Treasurer's Block)	400	400
Available Public Spaces – w/in Dome walking distance	511	161
Available Commercial Spaces – w/in Dome walking distance	341	108
Available Shared Parking Spaces (50% of Available Inventory)	578	578
Total Parking Inventory Available	4,600	4,017
Arena Parking Demand	4,312	2,318
VBCC Parking Demand	300*	300*
Total Parking Demand	4,612	2,618
Parking Surplus/Deficit	-12	1,399
Anticipated People to be Shuttled	40	0

\* VBCC parking demands for larger events will be met by reserving parking directly adjacent to the facility. This will require additional people to be shuttled for arena events.

# Parking Inventory

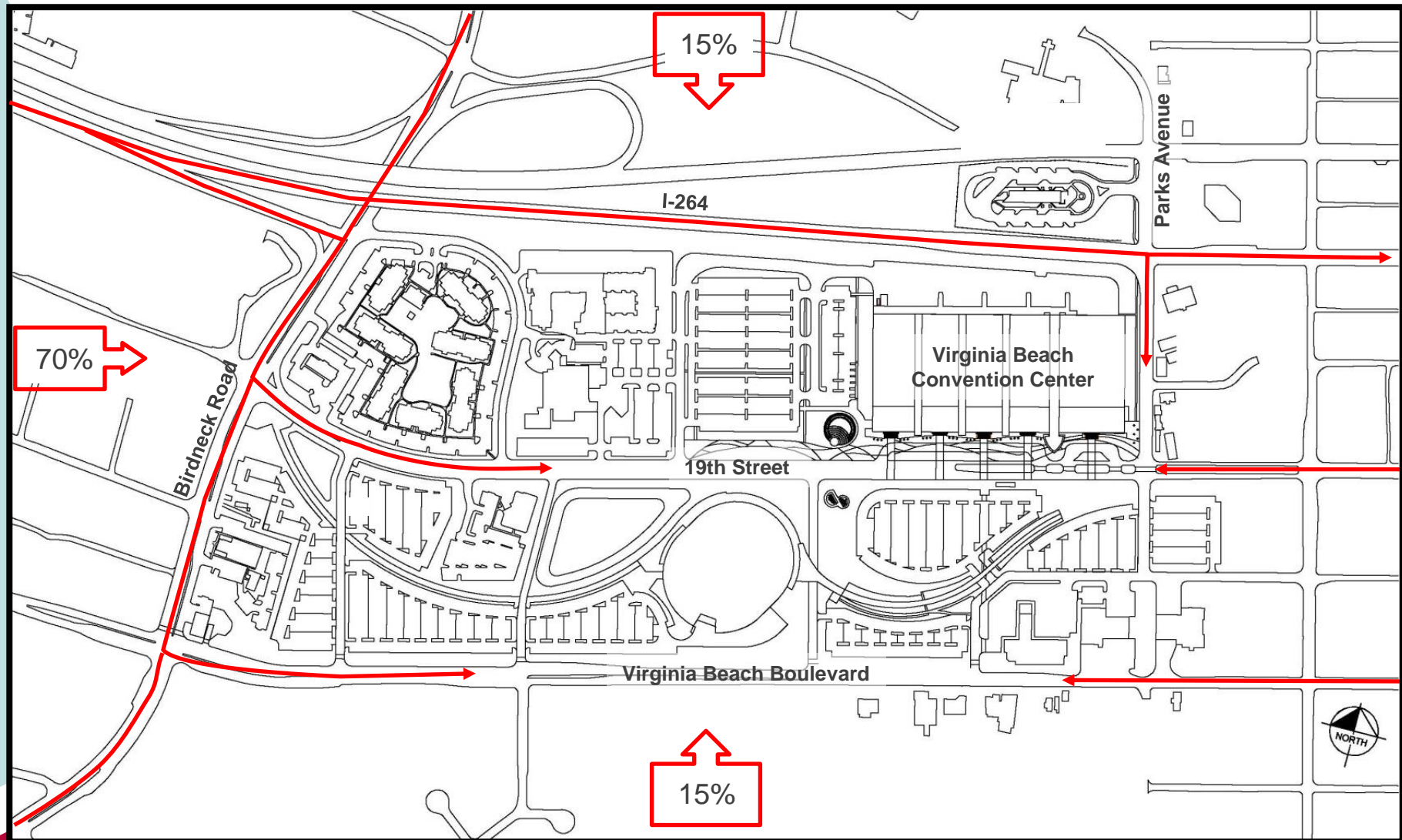
<b>2,770</b>	<b>Planned On-Site Parking</b>
<b>400</b>	<b>Proposed Surface Parking Lot</b>
<b>852</b>	<b>Available w/in Dome Walking Distance Oct. - April (Public and Commercial Inventory)</b>
<b>578</b>	<b>Available Shared Parking Lots</b>
<b>4,600</b>	<b>Total Planned or Available</b>





# **Roadway Improvements and Costs**

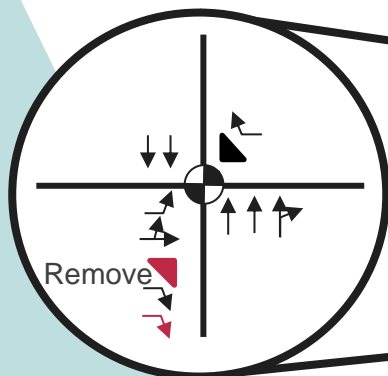
# Traffic Distributions





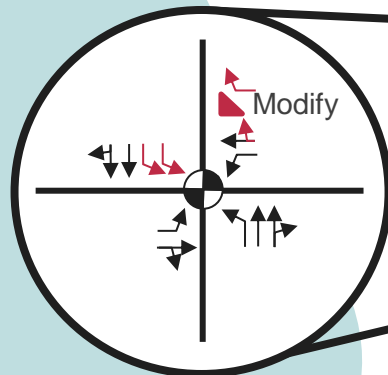
# Roadway Improvements

## Birdneck Road



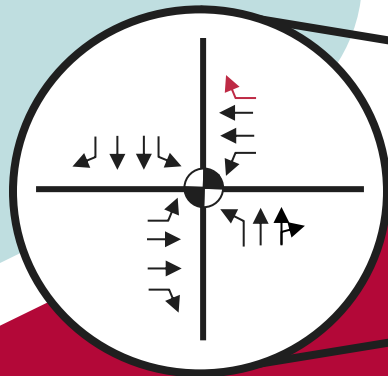
- Remove EB Channelization
- Construct Second EB Right Turn Lane
- Modify Birdneck Rd median
- Modify Traffic Signal

I-264 EB Off-Ramp/Birdneck Rd



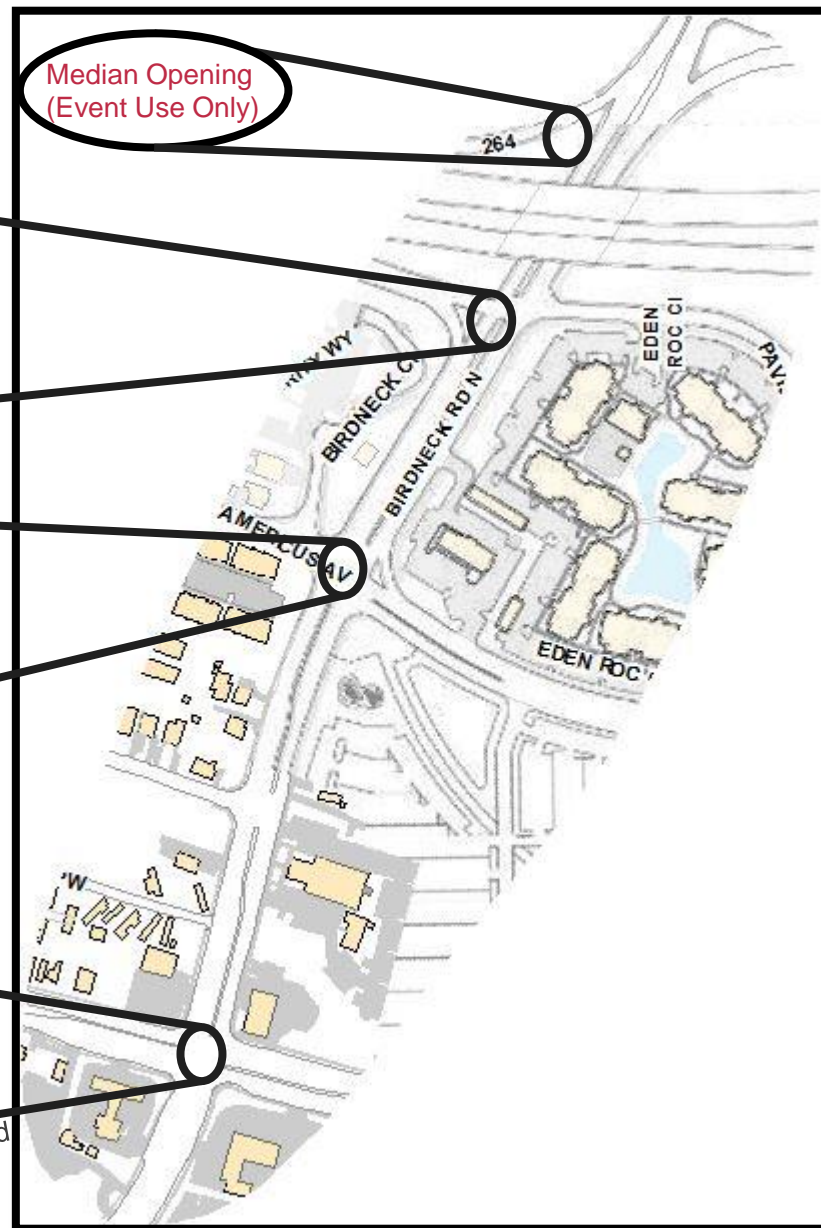
- Modify Channelization to allow right-turns from through lane (large events only)
- Restripe inside SB Through Lane to a Second Left Turn Lane
- Reconstruct Traffic Signal

19th St/Birdneck Rd



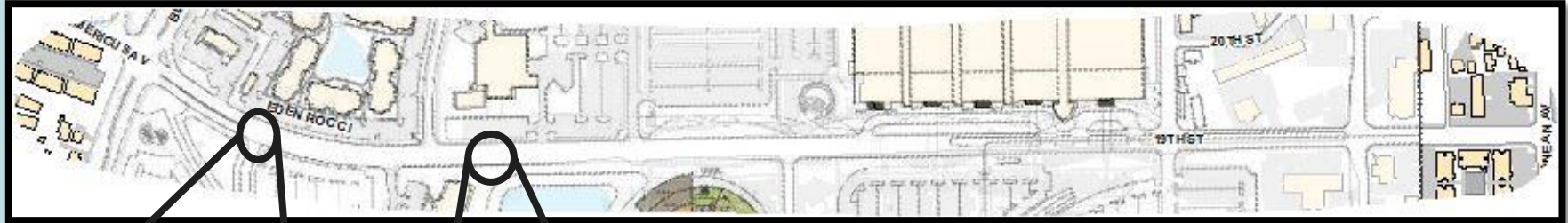
- Extend WB Right Turn Lane

Virginia Beach Blvd/Birdneck Rd

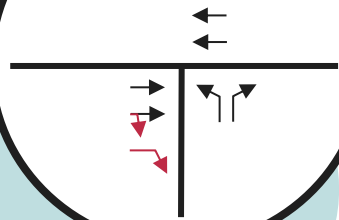


# Roadway Improvements

## 19<sup>th</sup> Street

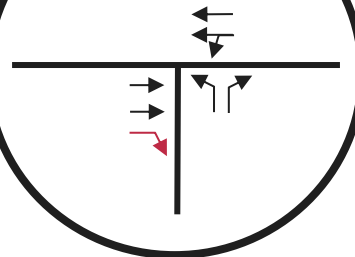


Driveway/19<sup>th</sup> St



- Construct EB Right Turn Lane
- Allow Second Right Turn Lane from Through Lane (Event Only)

Proposed Rd/19<sup>th</sup> St



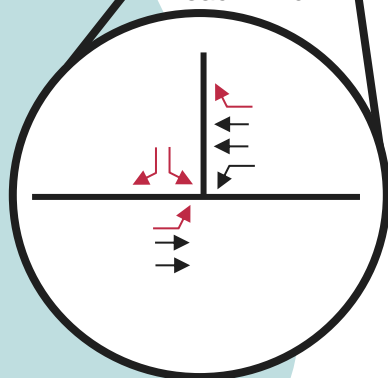
- Construct EB Right Turn Lane

# Roadway Improvements

## Virginia Beach Boulevard

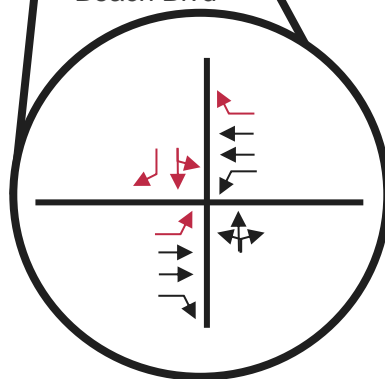


Driveway/VA  
Beach Blvd



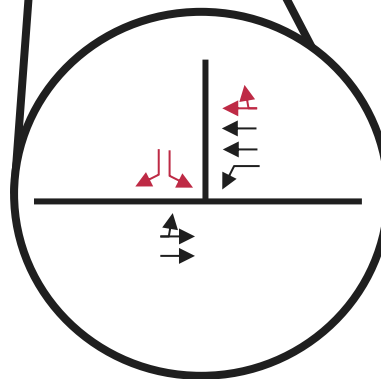
- Construct Left and Right Turn Lanes from New Parking Lot
- Construct WB Right Turn Lane
- Extend EB Left Turn Lane

Driveway/VA  
Beach Blvd



- Construct Left and Through/Right Lanes from New Parking Lot
- Construct WB Right Turn Lane
- Restripe/Extend EB Left Turn Lane

Washington  
Ave/VA Beach  
Blvd

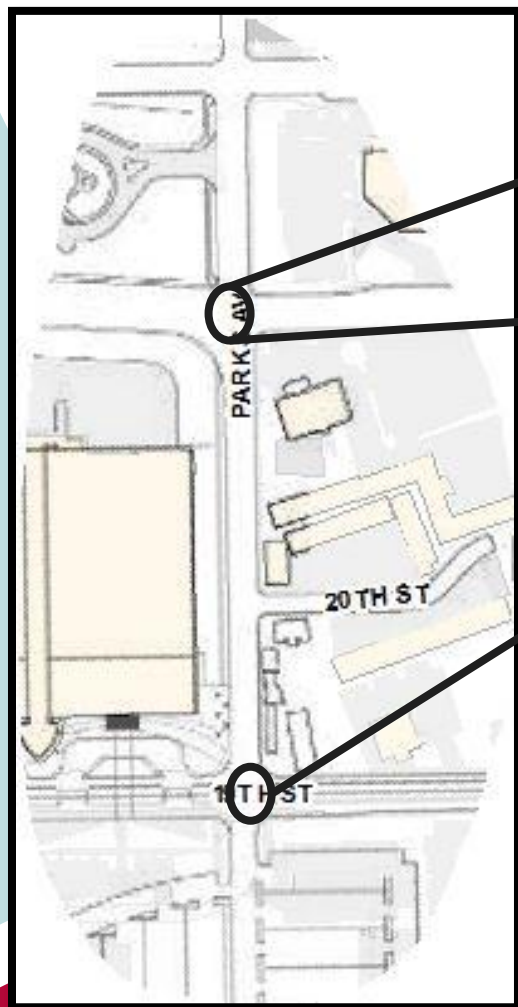


- Construct Left and Right Lanes from New Parking Lot
- Construct WB shared Through/Right Turn Lane

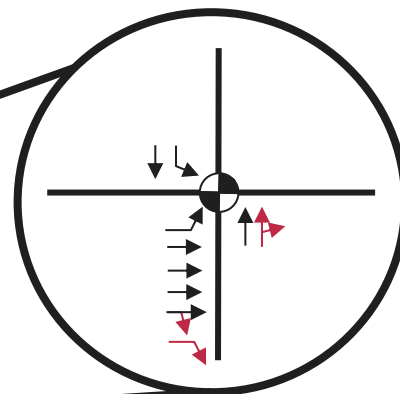


# Roadway Improvements

## Parks Avenue



21<sup>st</sup> St/Parks Ave



- Traffic Signal Modification

- Restripe NB Through/Right Turn Lane
- Allow shared EB Through/Right Turn Lane (Event Only)
- Construct EB Right Turn Lane

**Contraflow In**



**Contraflow Out**



# Roadway Improvements

Improvement	Cost
Birdneck Road/I-264 Eastbound Off-Ramp Improvements	\$761,000
Birdneck Road/I-264 Westbound On-Ramp Improvements	\$131,000
Birdneck Road/19th Street Improvements	\$1,590,000
19th Street/West Parking Lot Access Improvements	\$178,000
Birdneck Road/Virginia Beach Boulevard Improvements	\$200,000
Virginia Beach Boulevard/Parking Lot Access/Birch Lake Drive Improvements	\$370,000
Virginia Beach Boulevard/Parking Lot Access/Seabridge Road Improvements	\$307,000
Virginia Beach Boulevard/Jefferson Avenue Improvements	\$236,000
Parks Avenue/19th Street/Monroe Avenue Improvements	\$100,000
Parks Avenue between 19th and 22nd Street Improvements	\$11,000
Parks Avenue/21st Street Improvements	\$318,000
Parks Avenue/22nd Street Improvements	\$125,000
Wayfinding & Directional Signing	\$150,000
<b>Total</b>	<b>\$4,478,000</b>



# **Site Development, Utility Improvements, and Costs**

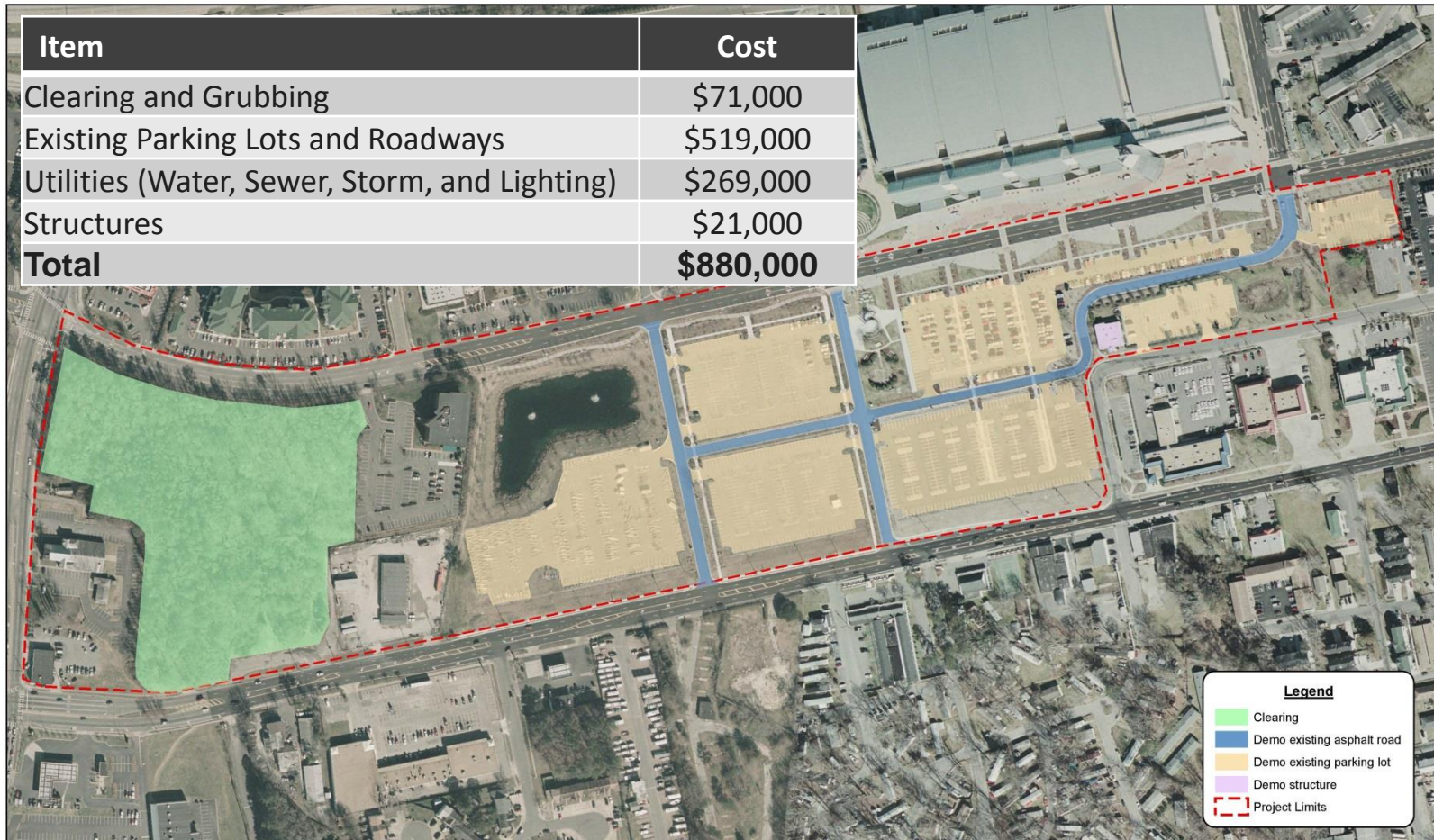
# Utilities

Item	Cost
Water	\$257,000
Sewer	\$1,105,000
Drainage*	\$1,301,000
Electric Duct Banks (Dominion Virginia Power)	\$1,680,000
Telecommunications (Verizon and Cox)	\$279,000
Virginia Natural Gas	\$100,000
<b>Total</b>	<b>\$4,722,000</b>

\* Drainage includes the use of permeable pavement – cost captured in site development

# Site Development Demolition

Item	Cost
Clearing and Grubbing	\$71,000
Existing Parking Lots and Roadways	\$519,000
Utilities (Water, Sewer, Storm, and Lighting)	\$269,000
Structures	\$21,000
<b>Total</b>	<b>\$880,000</b>

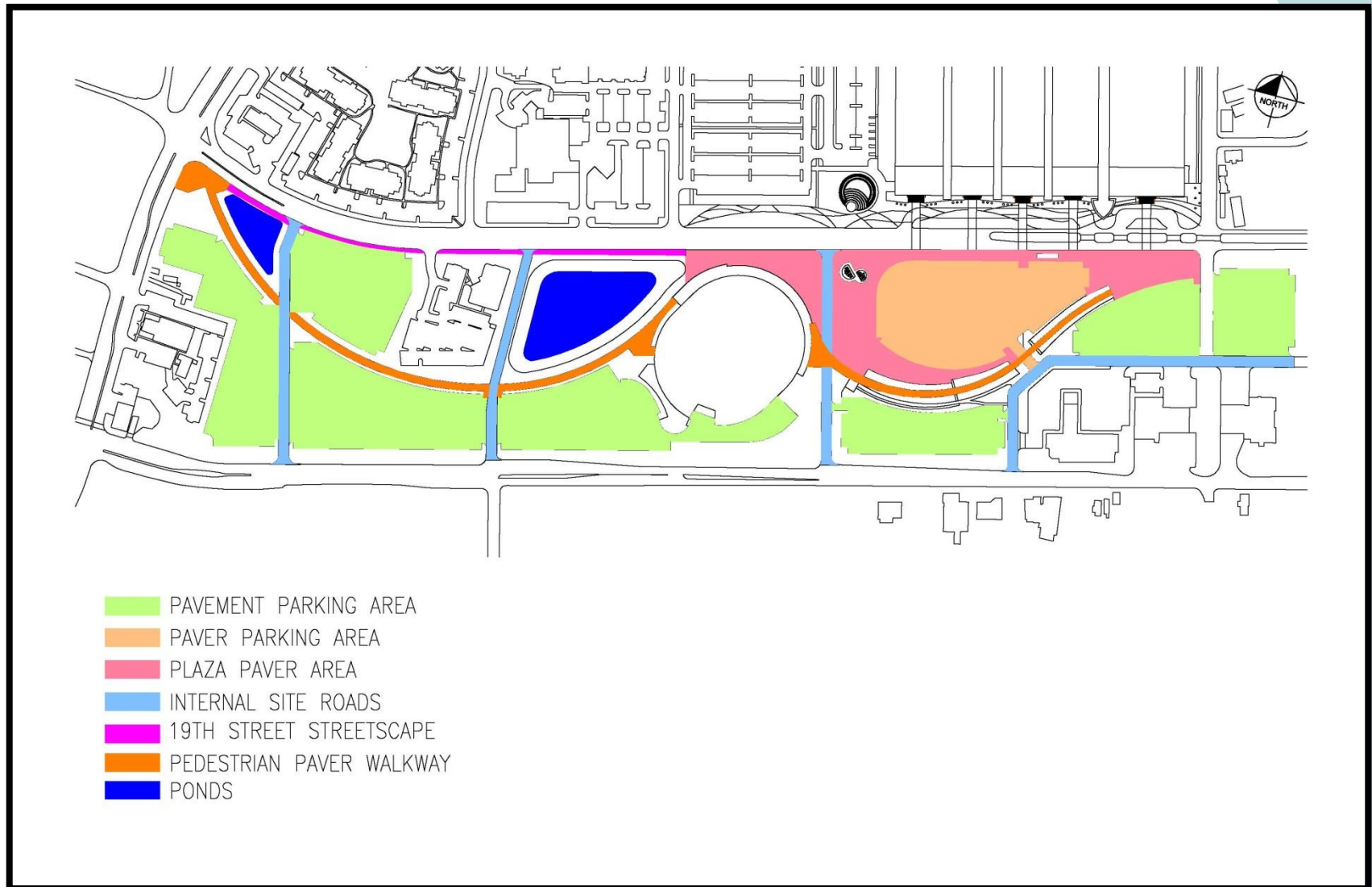


0 100 200 400 Feet

Proposed Demolition Plan

Kimley  Horn

# Site Development Areas

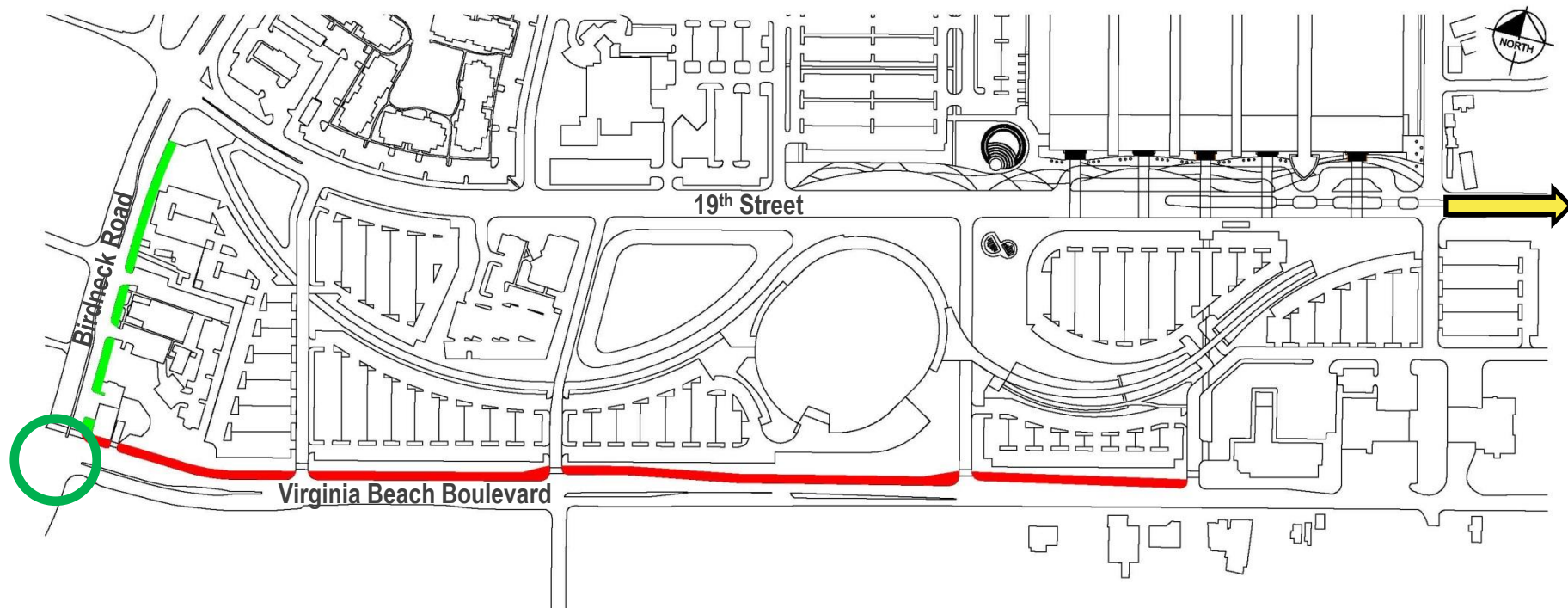




# Site Development

Item	Cost
Surface Parking Development (Asphalt)	\$2,979,000
Surface Parking Development (Permeable Pavement)	\$3,738,000
Surface Parking Development (Pavers)	\$2,661,000
Site Lighting	\$1,575,000
Internal Roadways	\$2,100,000
19 <sup>th</sup> Street Streetscape	\$341,000
400 Space Off-Site Surface Parking Lot (Treasurer's Site)	\$1,200,000
Hardscaping (Plaza Pavers and Paver Walkways)	\$2,752,000
East and West Concourse Access Treatment	\$1,000,000
Enhance Veteran's Memorial and Park	\$250,000
Marquees	\$3,000,000
Site Furnishings and Irrigation	\$1,047,000
Environmental	\$770,000
<b>Total</b>	<b>\$23,413,000</b>

# Optional Site Development Areas



 VIRGINIA BEACH BLVD/BIRDNECK RD INTERSECTION IMPROVEMENTS

 BIRDNECK ROAD STREETSCAPE

 VIRGINIA BEACH BOULEVARD STREETSCAPE

 19TH STREET STREETSCAPE IMPROVEMENTS

Optional Site Development Items	Cost*
Virginia Beach Boulevard Streetscape	\$7,473,000
Birdneck Road Streetscape	\$2,482,000
Intersection Improvements	\$6,491,000
19th Street Streetscape Improvements	\$9,716,000
<b>Total</b>	<b>\$26,162,000</b>

\*Does not include right-of-way acquisition that may be necessary pending further design.





# **Overall Preliminary Conceptual Cost Estimates**

# Overall Preliminary Conceptual Project Costs

Construction Item	Cost
Mobilization	\$2,500,000
Roadway Improvements	\$4,478,000
Utilities	\$4,722,000
Demolition	\$880,000
Site Development	\$23,413,000
<b>Total Construction Costs</b>	<b>\$35,993,000</b>
Soft Costs	Cost
Contingency and Escalation (20%)	\$7,199,000
Design (15%)	\$6,479,000
Construction Inspection	\$3,000,000
<b>Total Soft Costs</b>	<b>\$16,678,000</b>
<b>Total Infrastructure Cost</b>	<b>\$52,671,000</b>
<b>Birdneck Road Streetscape Costs*</b>	<b>\$2,482,000</b>
<b>Virginia Beach Blvd. Streetscape Costs*</b>	<b>\$7,473,000</b>
<b>19<sup>th</sup> Street Streetscape Costs*</b>	<b>\$9,716,000</b>
<b>Optional Intersection Improvements*</b>	<b>\$6,491,000</b>
<b>Estimated Total Project Infrastructure Costs</b>	<b>\$78,833,000</b>

\* Does not include right-of-way acquisition that may be necessary pending further design.

# Summary of Estimated Total Project Infrastructure Costs

These are preliminary conceptual cost estimates were developed based on conceptual layouts. They are subject to change based on detailed engineering design.

<b>Direct Arena Infrastructure Costs</b>	<b>\$52,671,000</b>
<b>Optional Infrastructure Costs*</b>	<b>\$26,162,000</b>

\* Does not include right-of-way acquisition that may be necessary pending further design.

# The Path Forward

- Continue to refine infrastructure design elements and costs
- Continue to quantify fiscal impacts
- Develop an operational and management plan
- Negotiate the business terms and booking policies with United States Management
- Develop Central Beach District Master Plan
- Milestones
  - Summer 2014
    - Finalize Traffic and Parking Study
    - Integrate Light Rail Plan into Arena Study
  - Late Summer 2014
    - Visit Pinnacle Bank Arena in Lincoln Nebraska to tour comparable facility;
    - Citizens Communications Committee Briefing and Discussion
  - Fall 2014
    - Term Sheet presented to City Council for consideration
  - Late 2014/Early 2015
    - Agreements presented to City Council for consideration



# Discussion



# **Light Rail Transit Integration**

# 17<sup>th</sup> Station and East End of Direct Oceanfront/Former NSRR

17<sup>th</sup> Street



17<sup>th</sup> Street Park and Ride

