

# Parkside 24-inch Force Main

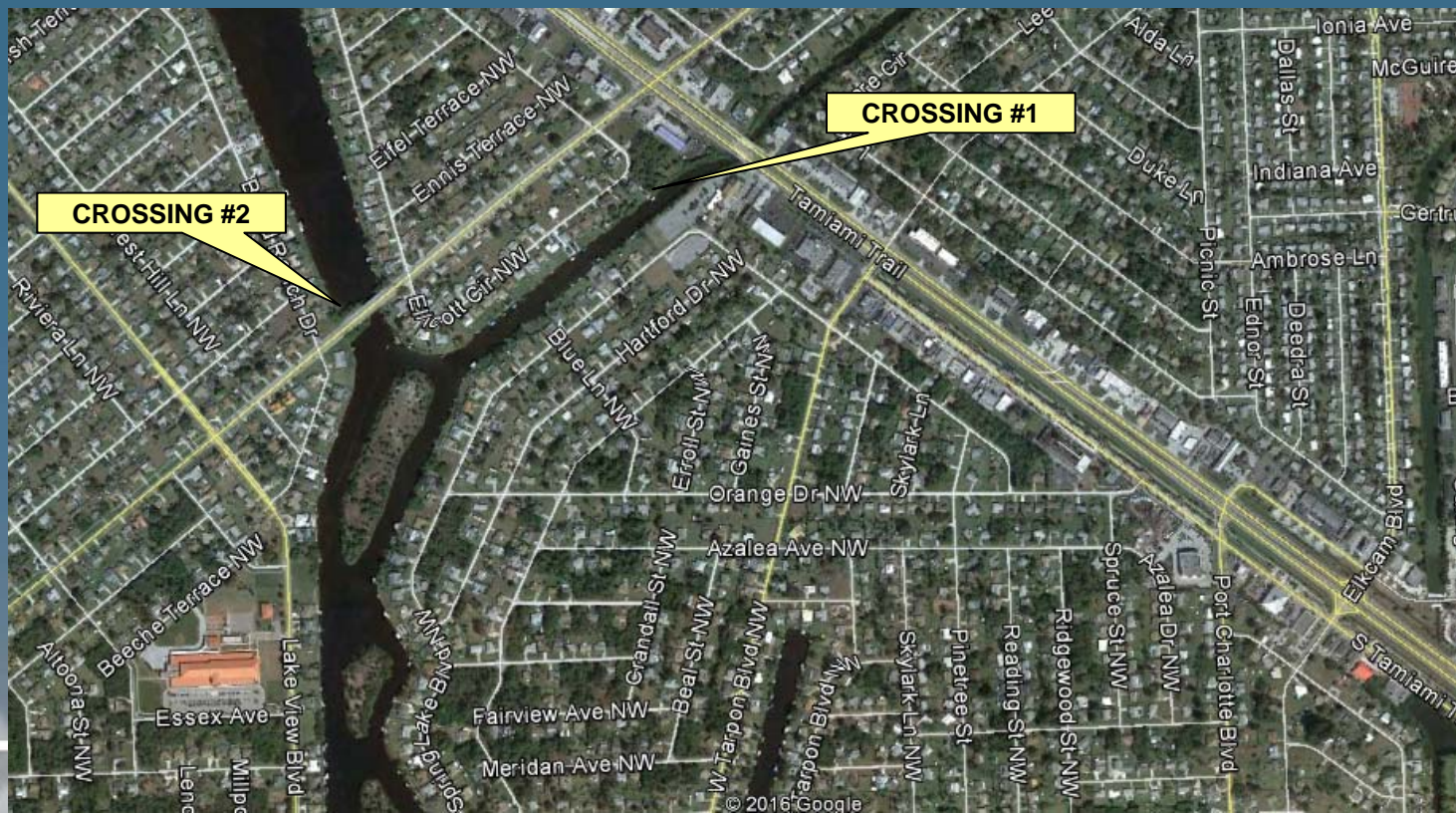
1. Morningstar Waterway Crossing Options
2. Spring Lake North Crossing





# Goals

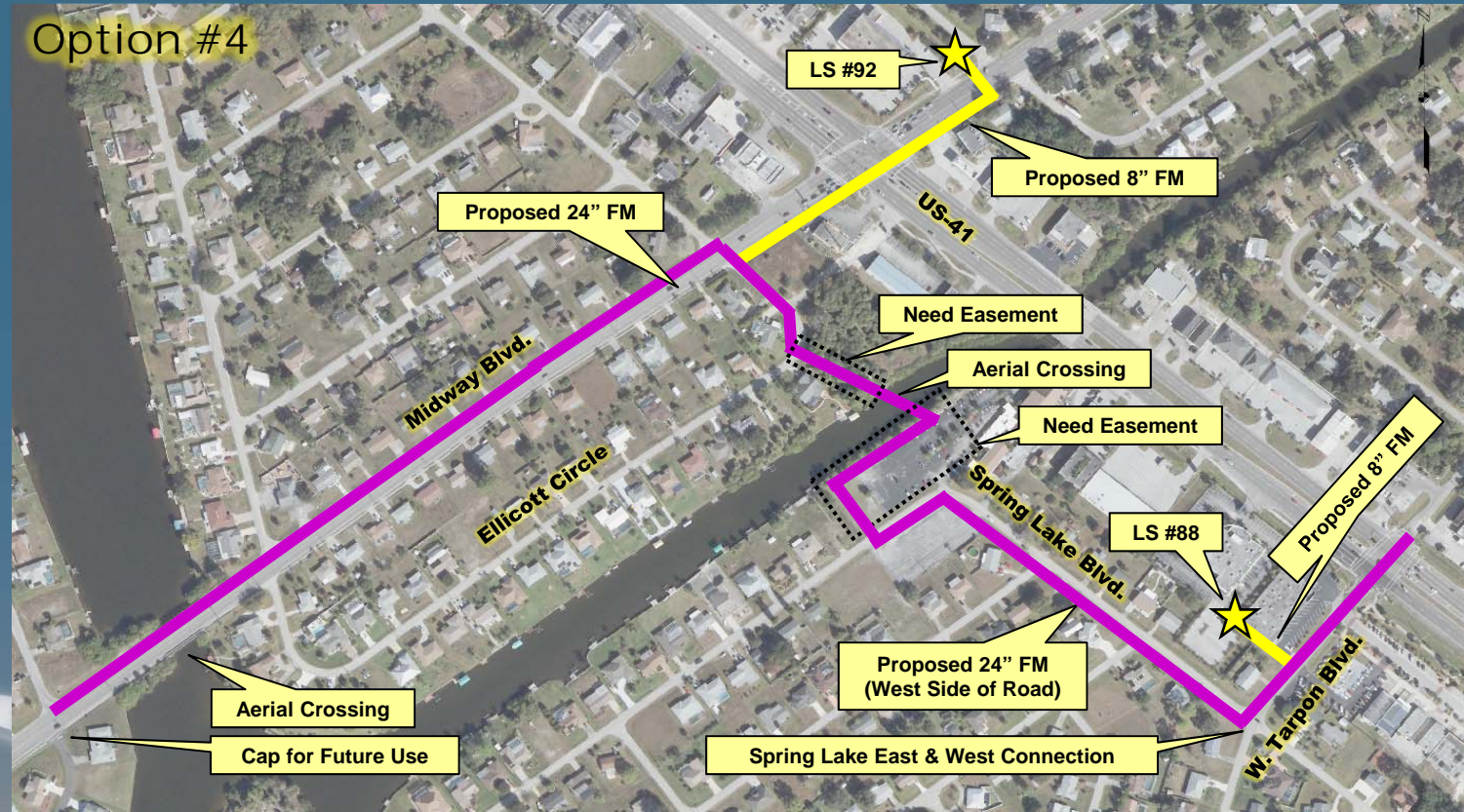
1. Discuss Potential Options for Crossing #1 – Morningstar Waterway
2. Discuss Planned Spring Lake North Crossing #2





# Parkside Force Main – Supplemental Alignment Analysis

## Original Alignment





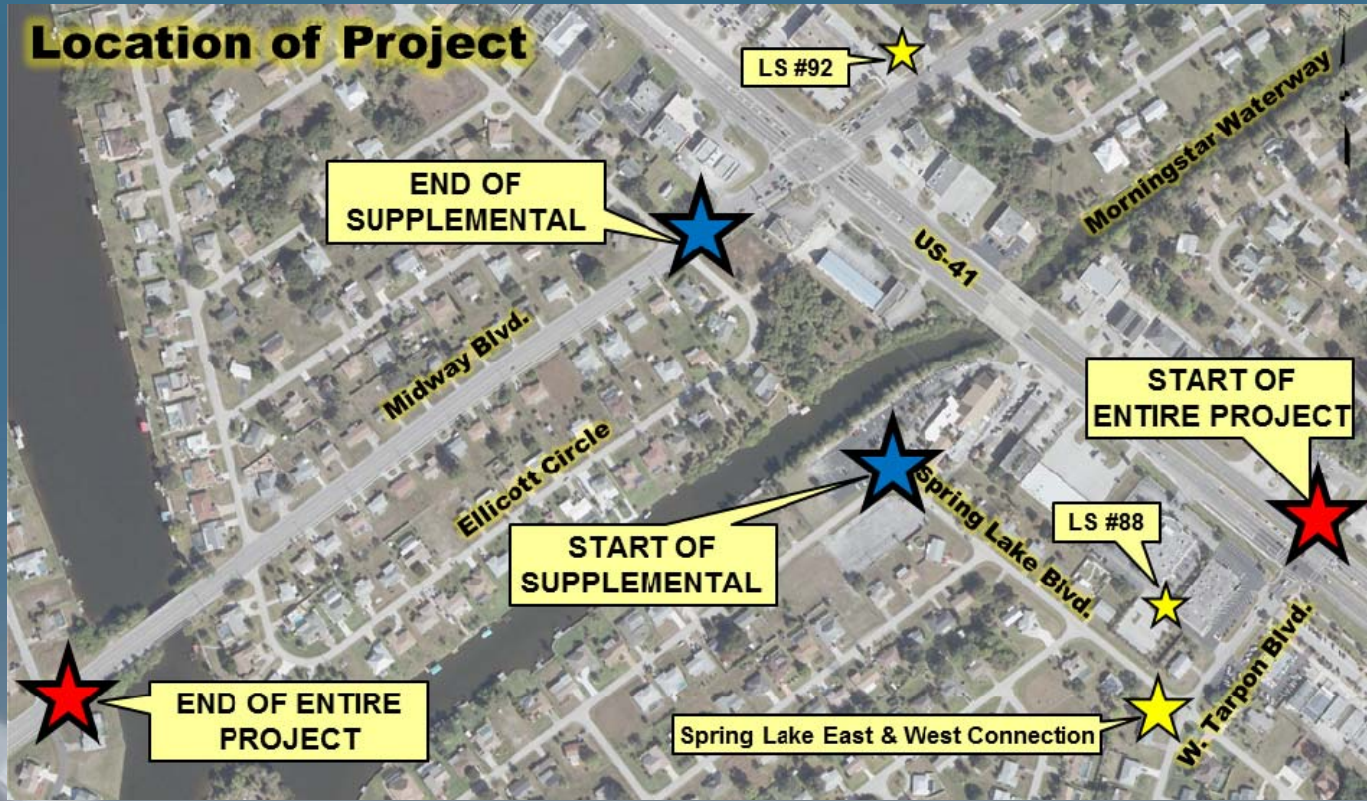
# Parkside Force Main – Supplemental Alignment Analysis

## Supplemental Alignment



# Parkside Force Main – Supplemental Alignment Analysis

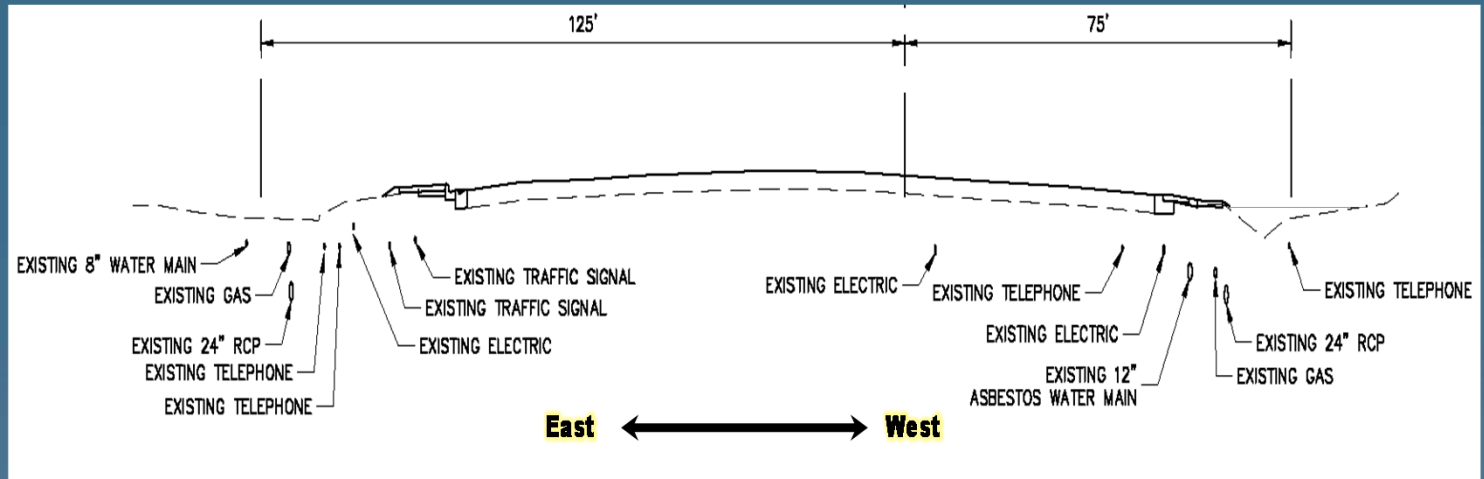
## Supplemental Alignment – Crossing #1



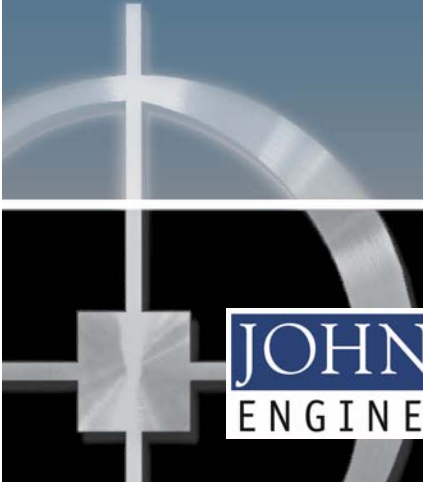


# Parkside Force Main – Supplemental Alignment Analysis

## Existing Conditions



**US-41 is very congested**



# Parkside Force Main – Supplemental Alignment Analysis

## Existing Information

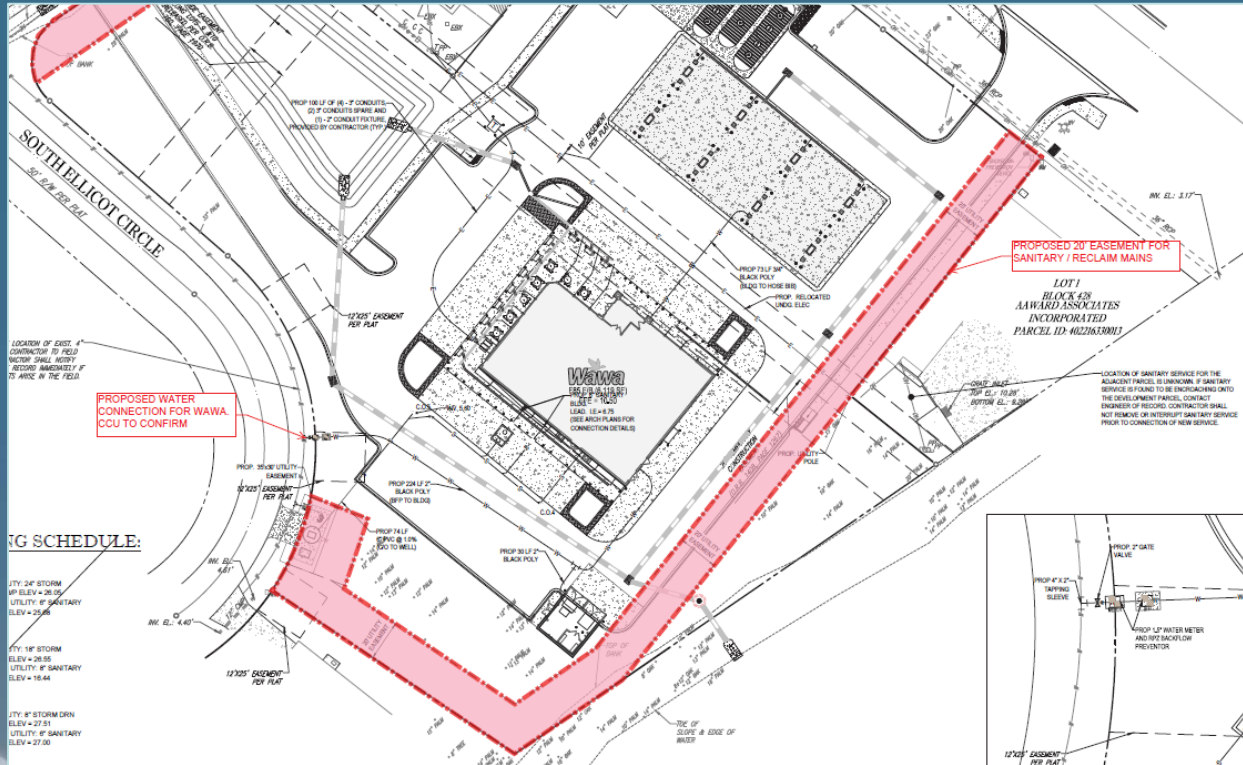


**Aerial Crossing is required due to the sensitive nature of this force main**



# Parkside Force Main – Supplemental Alignment Analysis

## Existing Information

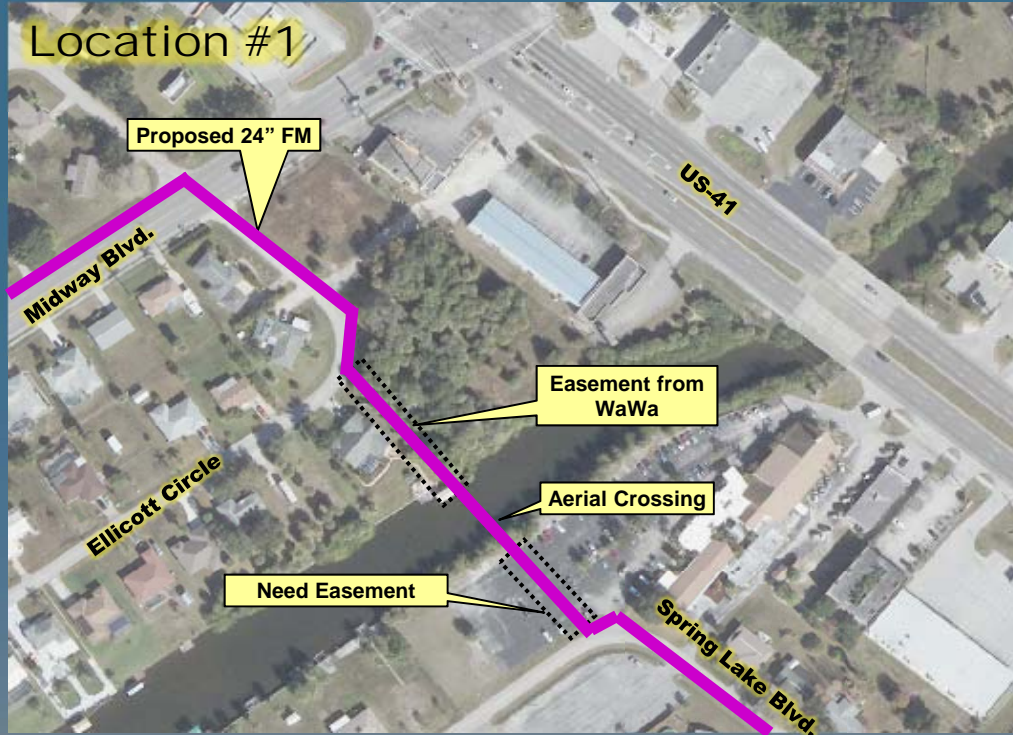


**WaWa Proposed Easement**



# Parkside Force Main – Supplemental Alignment Analysis

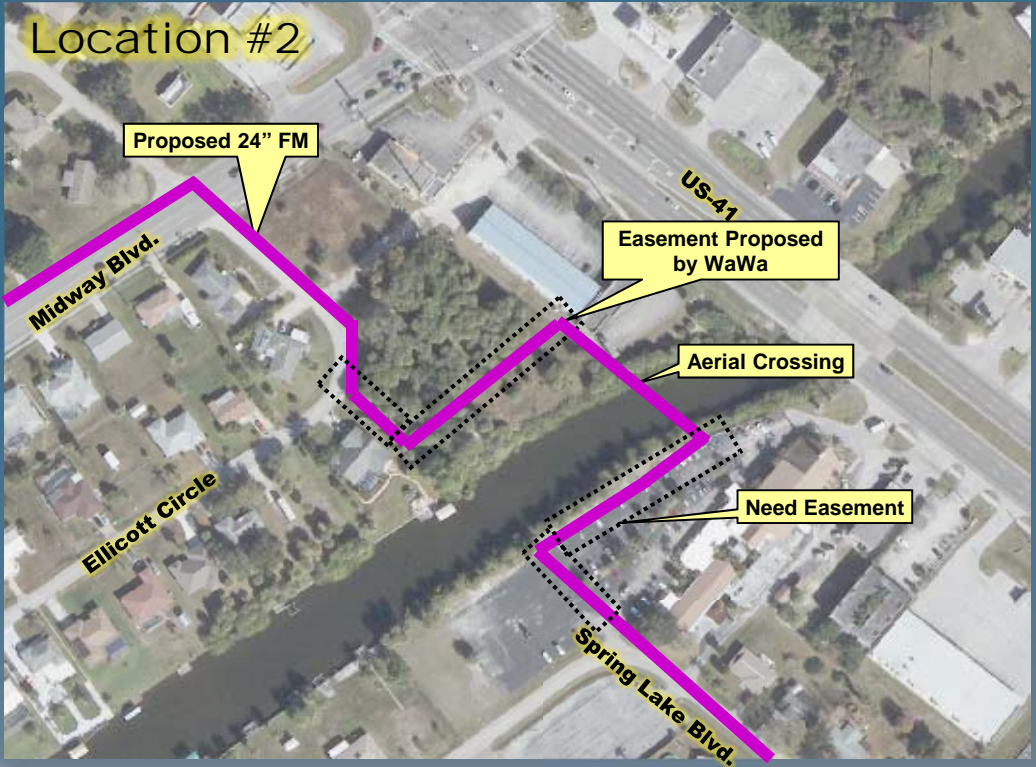
## Proposed Locations for Crossing



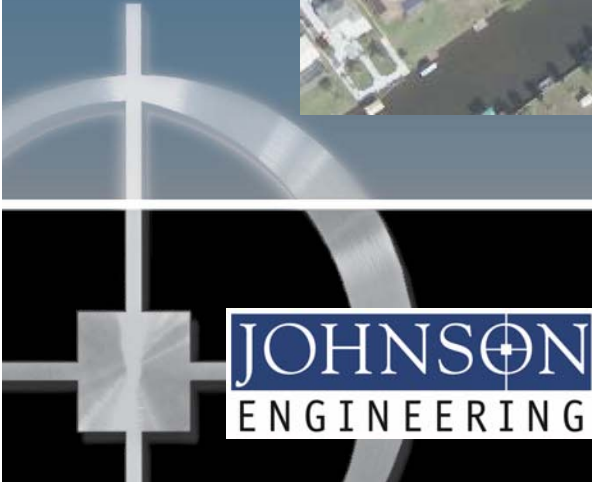
Location #1

# Parkside Force Main – Supplemental Alignment Analysis

## Proposed Locations for Crossing



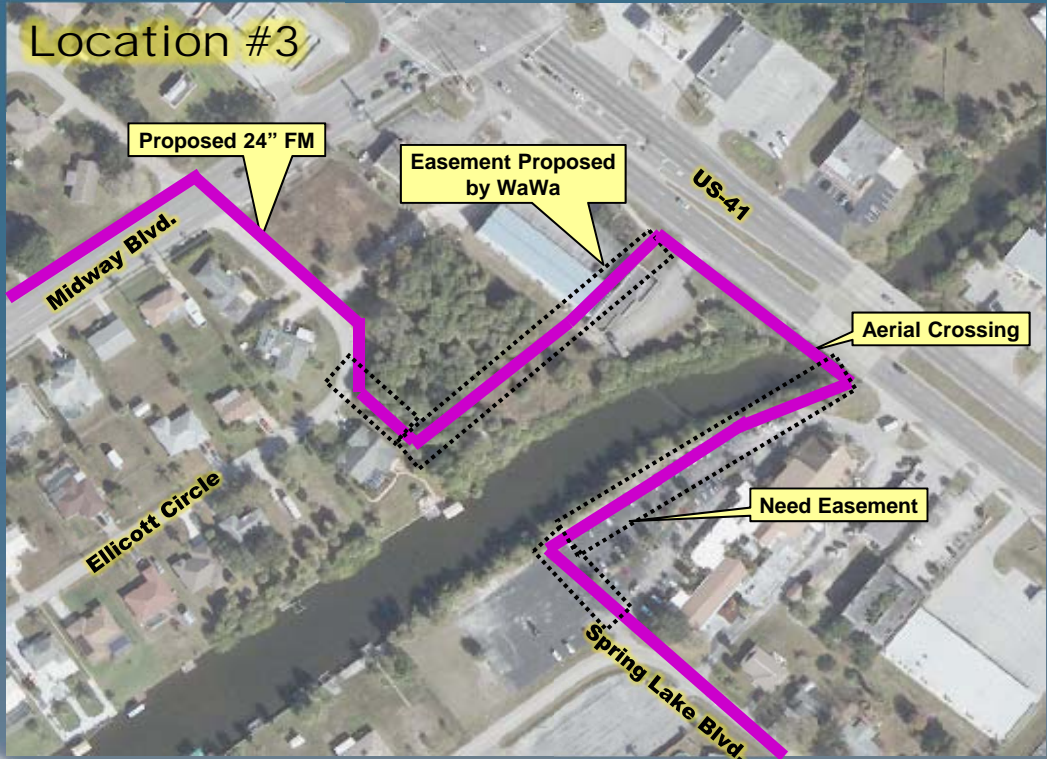
Location #2



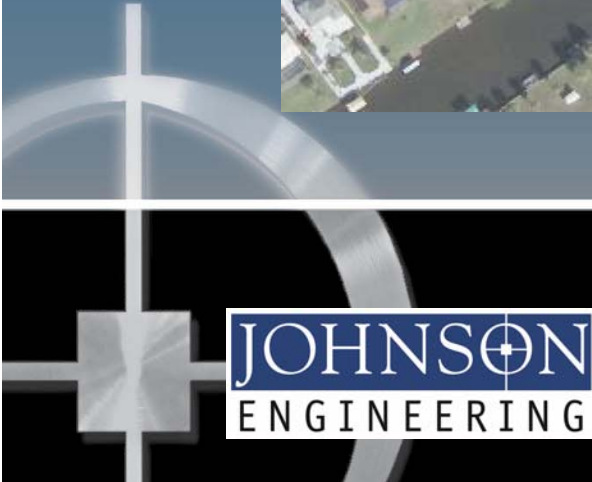


# Parkside Force Main – Supplemental Alignment Analysis

## Proposed Locations for Crossing



Location #3



# Parkside Force Main – Supplemental Alignment Analysis

## Proposed Types of Crossing Options



Crossing Option #1



# Parkside Force Main – Supplemental Alignment Analysis

## Proposed Types of Crossing Options



Crossing Option #2

# Parkside Force Main – Supplemental Alignment Analysis

## Proposed Types of Crossing Options



Crossing Option #3



# Parkside Force Main – Supplemental Alignment Analysis

## Proposed Types of Crossing Options



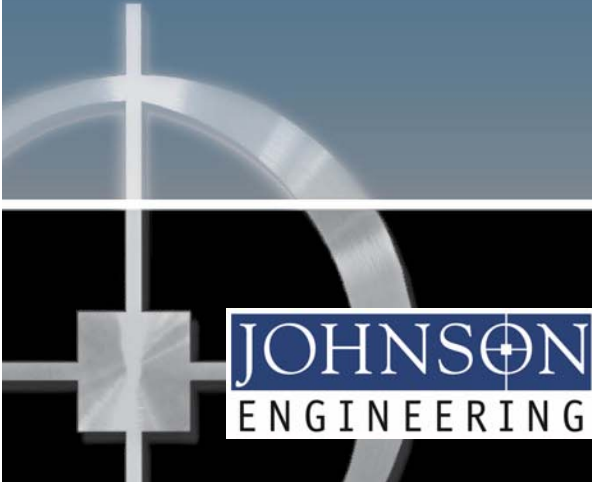
Location #3

# Parkside Force Main – Supplemental Alignment Analysis

## Pros and Cons

<u>Crossing Option 1 - Pile and pile caps</u>		
	Pros	Cons
Location 1	Shortest route, Least amount of easements required, No FDOT permitting required, Quickest installation for aerial crossing	Homeowner view impeded, Potential mangroves impacted, No sidewalk connectivity
Location 2	Aerial crossing is within existing Overhead Powerline easement, No FDOT permitting required, Quickest installation for aerial crossing	Somewhat impedes view of canal, Potential for mangrove impacts, No sidewalk connectivity
Location 3	No impedece of view of homeowners, Clear of mangroves, Quickest installation for aerial crossing	Most expensive force main routing, FDOT Permitting required, Use existing widening shoulder for sidewalk

Crossing Option #1



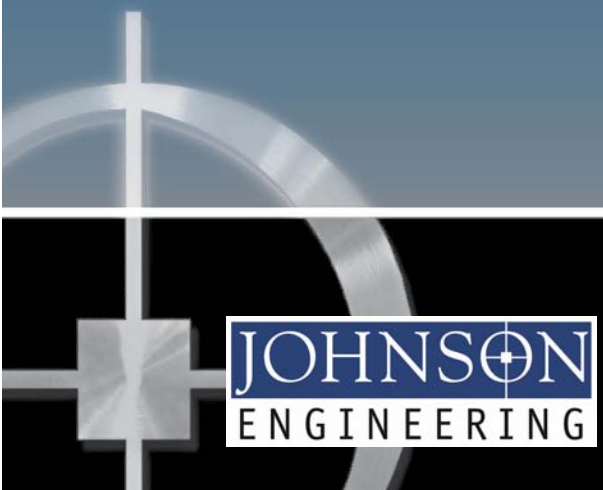


# Parkside Force Main – Supplemental Alignment Analysis

## Pros and Cons

	<u>Crossing Option 2 - Double Tee with hand rail</u>	
	Pros	Cons
Location 3	No impedece of view of homeowners, Clear of mangroves, Cheapest installation for sidewalk purpose, increased safety for pedestrians	Most expensive force main routing, FDOT Permitting required, Not as aesthetically pleasing

### Crossing Option #2

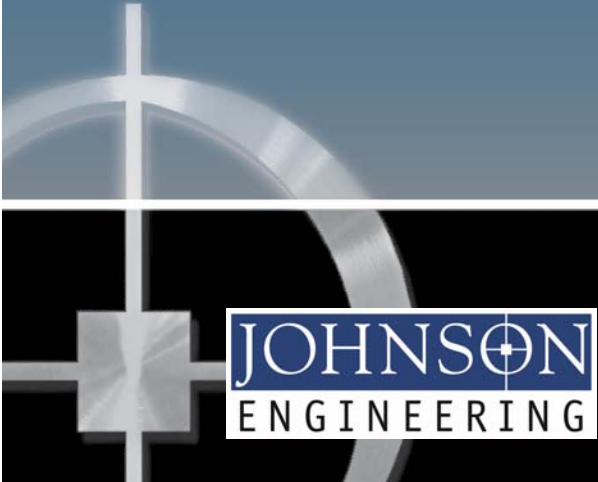


# Parkside Force Main – Supplemental Alignment Analysis

## Pros and Cons

Crossing Option 3 - Contech Bridge		
	Pros	Cons
Location 3	No impedece of view of homeowners, Clear of mangroves, Most aesthetically pleasing, Creates sidewalk connectivity, increased safety for pedestrians	Most expensive force main routing, FDOT Permitting required, Most expensive crossing option

Crossing Option #3





# Parkside Force Main – Supplemental Alignment Analysis

## Relative Cost Estimates

Crossing Option 1 - Pile and pile caps

	Cost
Location 1	\$ 422,280.00
Location 2	\$ 480,973.33
Location 3	\$ 693,013.33

Crossing Option 2 - Double Tee with hand rail

	Cost
Location 3	\$ 993,013.33

Crossing Option 3 - Contech Bridge

	Cost
Location 3	\$ 1,143,013.33

# Parkside Force Main – Supplemental Alignment Analysis

## Basis of Relative Costs

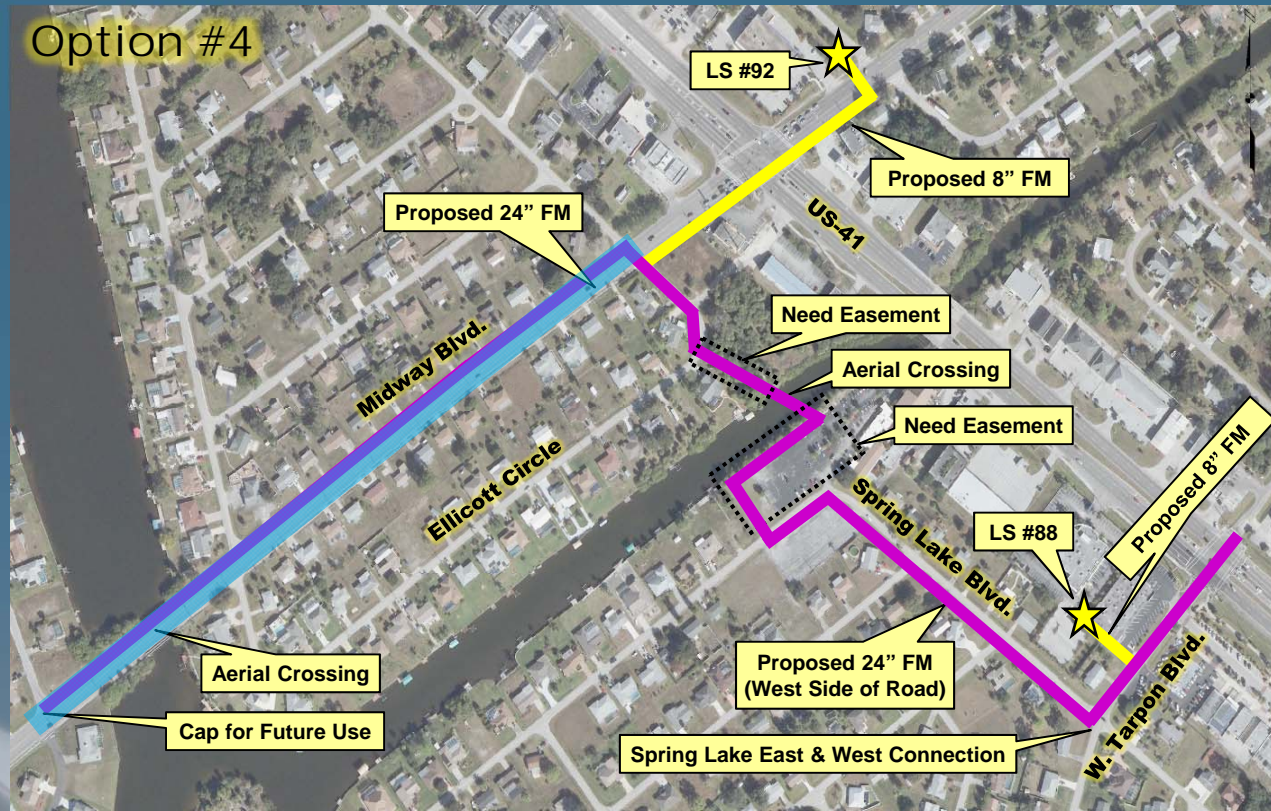
Location 3					
Crossing Option #3					
ITEM	DESCRIPTION	EST. QTY.	UNIT	UNIT PRICE	EXTENDED PRICE
<b>1.0</b>	<b>FORCE MAIN CONSTRUCTION</b>				
A.	24" PVC FM (OPEN CUT)	1,710	LF	\$ 120	\$ 205,200
B.	24" FM (AERIAL CROSSING)	100	LF	\$ 5,000	\$ 500,000
<b>2.0</b>	<b>RESTORATION</b>				
A.	LOCAL ROAD ROW	560	LF	\$ 20	\$ 11,200
B.	PARKING LOT	1,444	SY	\$ 25	\$ 36,111
<b>3.0</b>	<b>EASEMENT ACQUISITION</b>				
A.	20'x650' -CHURCH	13,000	SF	\$ 10	\$ 130,000
B.	20'x500' - WaWa	7,000	SF	\$ -	\$ -
<b>4.0</b>	<b>MAINTENANCE OF TRAFFIC</b>				
A.	US-41	1	LS	\$ 50,000	\$ 50,000
B.	LOCAL ROADS	1	LS	\$ 20,000	\$ 20,000
	<b>SUBTOTAL</b>				\$ 952,511
	<b>CONTINGENCY</b>	20%			\$ 190,502
	<b>TOTAL</b>				\$ 1,143,013

This is the CONTECH Bridge Option (#3) closest to US-41 (#3)



# Parkside Force Main – Supplemental Alignment Analysis

## Original Alignment



# Parkside Force Main – Supplemental Alignment Analysis

## Supplemental Alignment





# Parkside Force Main – Supplemental Alignment Analysis

## Crossing #2 – Spring Lake North



South Side of Midway  
(Looking East)



North Side of Midway  
(Looking East)

*Questions?*



JOHNSON  
ENGINEERING