

QUIET ZONES – AN OVERVIEW

Presented by the Community Development Department

2/21/24

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AGENDA

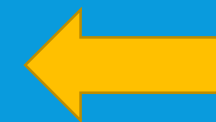
- What are Quiet Zones?
- How are Quiet Zones implemented?
- Town Steps thus far
- Potential Next Steps
- Discussion and Direction of Staff

WHAT ARE QUIET ZONES?

- The Federal Rail Administration allows for local governments to implement quiet zones at railroad crossings.
- All quiet zones are at least one-half mile in length and may contain all sequential crossings within that municipal jurisdiction.
- Normally, a train will sound 2 long, 1 short, 1 long horn a half-mile in advance of any railroad crossing.
- Through the installation of mitigating infrastructure, a municipality may suspend this procedure as a matter of routine, though engineers may still sound the horn at their discretion in emergencies.

HOW ARE QUIET ZONES IMPLEMENTED?

- The process for establishing quiet zones is generally as follows:
 - A local government must initiate the QZ process and maintain the installed mitigating infrastructure.
 - Local government must inventory existing crossing infrastructure to identify the current level of protection (All QZ improvements are locally funded, though in our case mitigating infrastructure has already been installed by Brightline for high-speed rail operation which can double as QZ infrastructure).
 - Calculating the Quiet Zone Risk Index (QZRI) based on existing infrastructure.
 - Send a notice of intent to the FEC Railroad, FDOT, neighboring jurisdictions, and any other authority impacted or having jurisdiction in affected ROWs.
 - Assuming no challenges arise during the 60-day comment period for the NOI, the local government would then provide a Notice of Establishment.



We are here
😊

TOWN STEPS THUS FAR

- Crossing inventory



NORTHLAKE BOULEVARD STATUS

Existing Infrastructure:

- 2 quad gates and lights
- Constant warning timer
- 4 pedestrian gates (1 doubling as a road gate)
- Power out indicator
- Pedestrian warning bells.

Required Infrastructure for QZ:

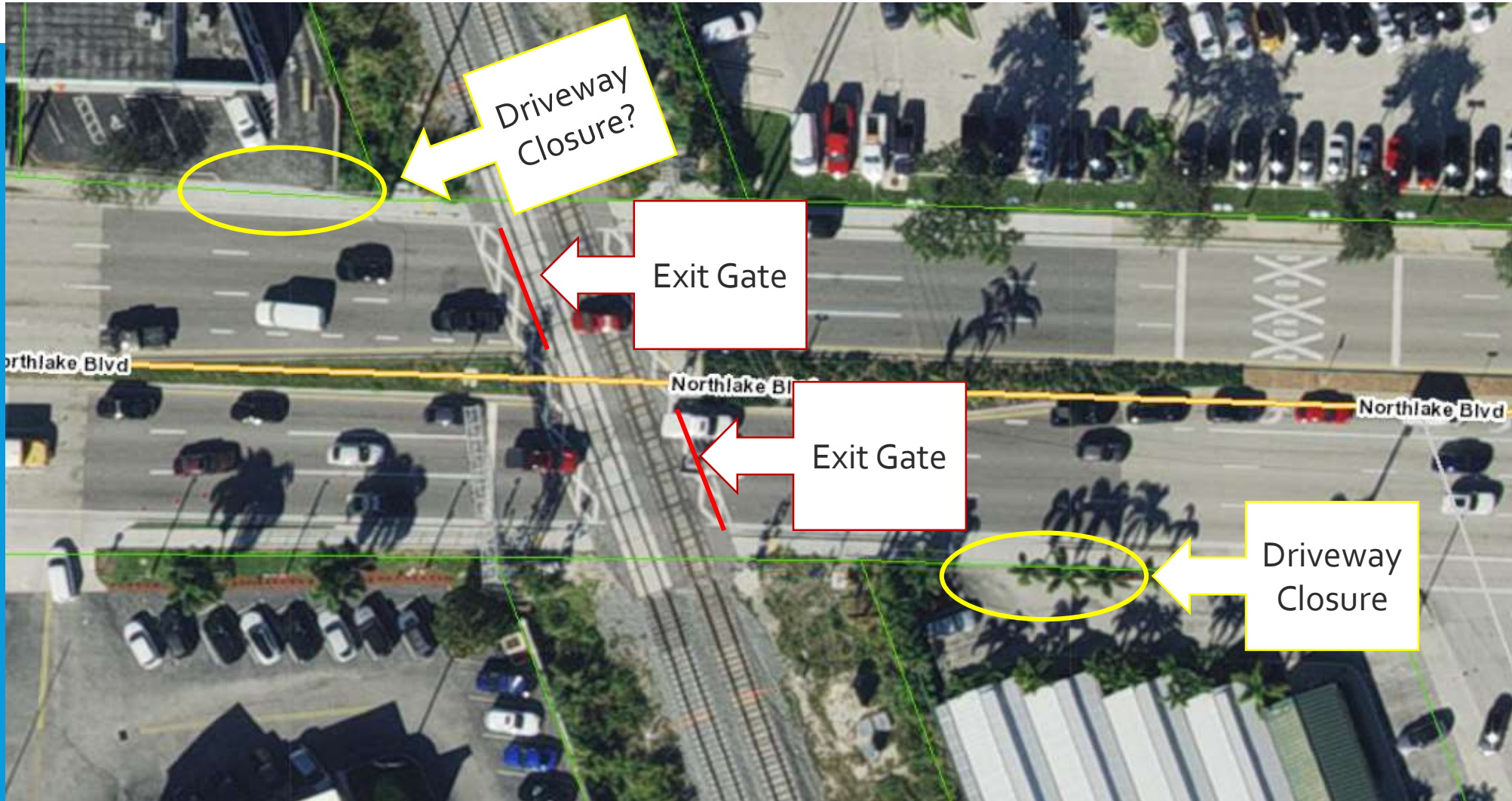
- Signage indicating a quiet zone is in effect at that crossing.
- 2 exit gates (to prevent traffic driving the wrong way from entering the crossing)

OR

- Pursue Alternative Safety Measure (ASM) credits for existing medians, which would entail closing a driveway at a nearby nursery business.

- **Neither Palm Beach Gardens or Palm Beach County are pursuing QZs at this location at this time.**

NORTHLAKE BOULEVARD STATUS



Stakeholder meetings will be required with the property owners and traffic engineers if a QZ is to be pursued.

PARK AVENUE STATUS

Existing Infrastructure:

- Four quad gates and lights
- Constant warning timer
- Power out indicator
- Pedestrian warning bells

Required Infrastructure for QZ:

- Signage indicating a quiet zone is in effect at that crossing.

SILVER BEACH ROAD STATUS

Existing Infrastructure:

- Four quad gates and lights
- Constant warning timer
- Power Out Indicator
- Pedestrian warning Bells

Riviera Beach is pursuing a QZ at this location.

TOWN STEPS THUS FAR

12/18/23, 10:16 AM

FRA - Quiet Zone Calculator

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Cancel

Change Scenario: LP QZ NLB _69550

Continue

Create New Zone

Manage Existing Zones

Crossing	Street	Traffic	Warning Device	Pre-SSM	SSM	Risk	
272386A	NORTHLAKE BLVD	42191	Gates	0	0	133,565.00	MODIFY
272387G	PARK AVE	5902	Gates	0	6	20,170.13	MODIFY

Log Off

* Only Public At Grade Crossings are listed.

Click for Supplementary Safety Measures [SSM]

Click for ASM spreadsheet: **ASM** * Note: The use of ASMs requires an application to and approval from the FRA.

Step by Step Instructions:

Step 1:

To specify New Warning Device (For Pre-Rule Quiet Zone Only) and/or SSM, click the **MODIFY** Button

Step 2:

Select proposed warning device or SSM. Then click the **UPDATE** button. To generate a spreadsheet of the values on this page, click on **ASM** button—This spreadsheet can then be used for ASM calculations.

Step 3:

Repeat Step (2) until the **SELECT** button is shown at the bottom right side of this page. Note that the **SELECT** button is shown **ONLY** when the Quiet Zone Risk Index falls below the NSRT or the Risk Index with Horn.

Step 4:

To save the scenario and continue, click the **SELECT** button

Summary

Proposed Quiet Zone:	LP QZ NLB AND PARK
Type:	New 24-hour QZ
Scenario:	LP QZ NLB _69550
Estimated Total Cost:	\$128,000.00
Nationwide Significant Risk Threshold:	15488 .00
Risk Index with Horns:	57952.13
Quiet Zone Risk Index:	76867.56

In order to be eligible for a quiet zone, the Quiet Zone Disk Index must be below the Risk Index With Horns.

In our case, there is a 18,915.43 point deficiency that must be mitigated through either the 2 additional quadrant gates at NLB or through a median ASM with driveway closure(s).

POTENTIAL QZ EXTENT



NEXT STEPS

- The Town is now at a juncture where we are looking for direction from the Town Commission on how to proceed.
- Given the outcome of our QZ risk index calculation, if the Town wishes to pursue QZ, we will either need to install exit gates at Northlake Boulevard or apply to the FRA for an alternative safety measure.
- First, we will need to submit an NOI
- Then we will need to provide detailed plans of the ASM to the FRA. Assuming the FRA finds the ASM adequate, they would approve it (there is no timeline for how long this may take)
- Once approved, we would send out the notice of establishment (which would include a copy of the FRA ASM approval)

BENEFITS AND LIABILITIES

- Benefits – Quiet Zones Established. No routine horns at train crossings.
- Liabilities – Exit gates would need to be installed at Northlake Boulevard if our ASM is not approved and these would likely become our O and M responsibility going forward. Exit gate design, materials, and install may range from \$200K to \$400k.
- Liabilities – The Town would have to recertify the QZs every 3 years with ASMs and every 5 years with SSMs
- Liabilities – The Town would be required to install and maintain quiet zone notice signage at crossings.
- Liabilities – Given the infrastructure already in place, the elimination of the routine horn soundoff at crossings is a net reduction in safety redundancy, regardless of the mitigation process.

DISCUSSION PERIOD

Staff is inclined to recommend taking no action at this time. As of this time, we have received no complaints on train horns. The Park Avenue crossing is our only crossing that will be in close proximity to residences once ongoing development projects are completed. The development of midrise apartments at the intersection of Park and 10th should result in further noise buffering for the single family residential core to the east and the developments will generate more pedestrian and vehicle activity at the Park Avenue crossing. Safety redundancy may be beneficial to new residents becoming acclimated to the area. Additionally, the standard required hurricane-rated impact windows should significantly reduce noise for the new apartment residents. If train horns do become a nuisance over time, it can always be revisited at a later date.

Please let us know if you have any questions!