# HAMPTON TERRACE NEIGHBORHOOD RESURFACING AND TRAFFIC CALMING

Cal Hardie, P.E., Capital Projects Engineer
City of Tampa Transportation and Stormwater Services Dept.



### MEETING FORMAT



- Sign In Sheet/Comment Forms
- Presentation
  - Project Team
  - Resurfacing Information
  - Traffic Calming Information
- Question and Answers
- Traffic Calming Workshop



### PROJECT TEAM



### **Transportation and Stormwater Services Transportation Division**

- Jean Duncan, P.E., Director
- Cal Hardie, P.E., Capital Projects Manager
- Jorge Uy, P.E., City Pavement Management Engineer
- Danni Jorgenson, Chief Planning Engineer
- William Porth, Traffic Investigations Supervisor

#### **Natural Resources**

Coordinate tree issues

#### **Contract Administration**

Coordinate construction



#### **Cardno Engineering**

- Jason Yam, PE Project Manager
- Jeremy Runkle, PE Deputy Project Manager
- Susan Joel, PE, PTOE Traffic & Safety Engineer
- Daniel Shockey, PE Project Engineer/Designer



#### **Construction Contractor**

City-wide Contractor TBD

### WHAT IS THIS PROJECT?



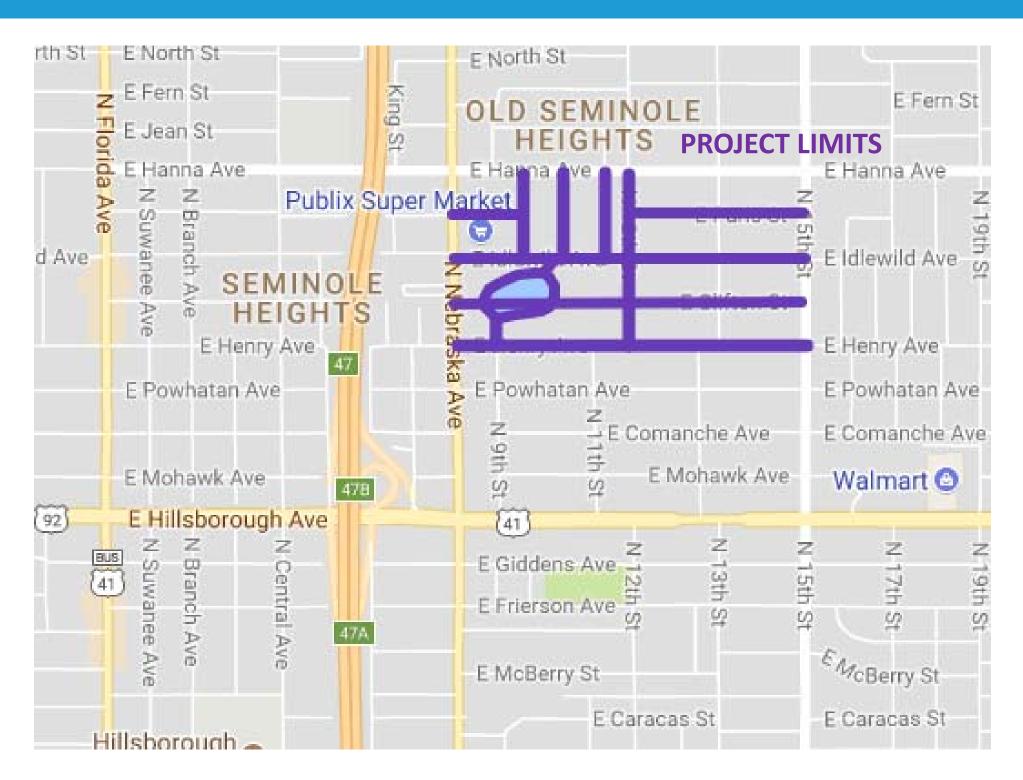
What it is	What it isn't
<ul> <li>This is a resurfacing project to restore and rebuild the City roadways.</li> <li>This project will restore drainage conditions and minimize ponding along the roadways.</li> <li>Install traffic calming to improve safety.</li> </ul>	<ul> <li>This is not a project to install sidewalks or boardwalks in Hampton Terrace.</li> <li>Some curb ramps will be rebuilt to meet ADA Standards.</li> <li>Some driveway aprons may be reconstructed.</li> <li>This is not a project to install curb in Hampton Terrace.</li> <li>This is not related to the stormwater project for Lake Roberta.</li> </ul>



### **RESURFACING PHASE**

### RESURFACING PHASE





# HAMPTON TERRACE NEIGHBORHOOD RESURFACING

- Existing Conditions
  - Alligator cracking
  - Failing asphaltic and brick streets previously overlaid with asphalt
  - Granite curbs
  - Ponding
  - Pothole patching
- Preliminary Project Construction Cost: \$1.4 Million

### CONSTRUCTION EXPECTATIONS



#### **Equipment**

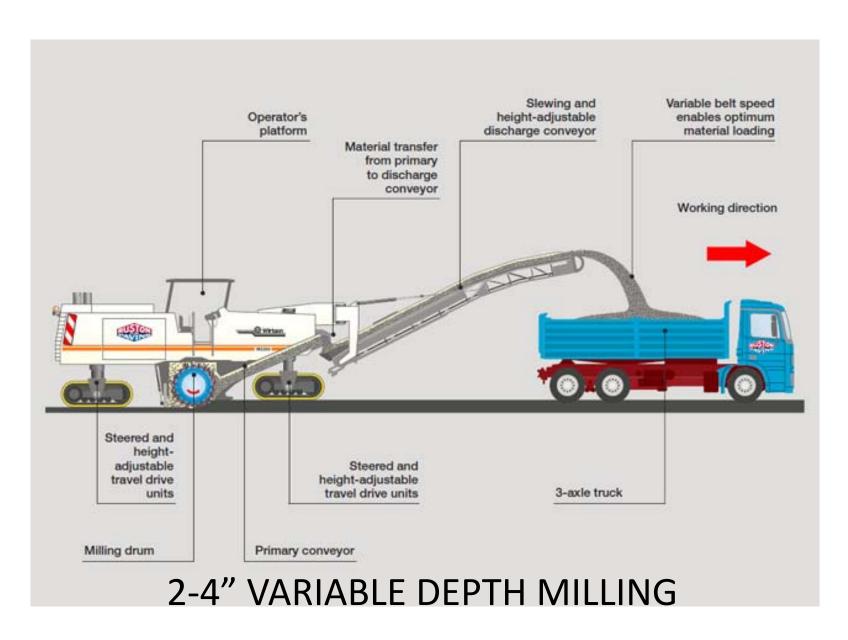
- Milling machine & rollers Loud and minor ground vibrations
- Dump Trucks Back up beeping, Diesel Engines, tail gates bangs
- Back hoe & front end loaders Back up beeping, Diesel Engines
- Concrete trucks Engine noise and backup beepers
- Paving machine Diesel engine and smell of new asphalt
- Sweeper Dust
- Vac-Truck Vacuum noise

#### **Workers**

- Milling and Cleaning 7-10 people
- Paving operation 15-20 people
- Arborist pavement removal 2-4 people
- Concrete driveways and pedestrian ramps 4-6 people
- Overnight Parking of Pavement Equipment in right-of-way

### MILLING EQUIPMENT





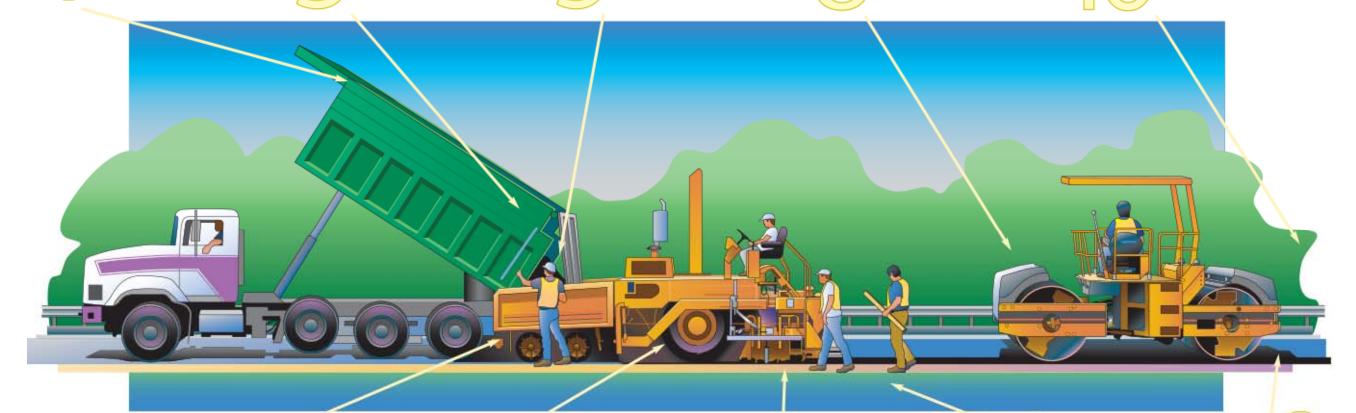


### "PAVING TRAIN"



- 1. Asphalt is manufactured in a plant, discharged into the dump truck, and transported to the project location. The mixture is typically heated to a temperature between 275 and 350 degrees Fahrenheit.
- 3. The truck gate is released, and the asphalt is discharged from the truck into the paver hopper. To avoid segregation of the mixture, the material should be allowed to "flood" the hopper and not "dribble" out of the truck.
- 5. The dump man uses hand signals to direct the truck driver's location and when and how much to raise and lower the truck bed.
- 8. The first roller is called the "breakdown roller" and provides the primary compaction (95 percent or more of specified density) of the mixture by applying weight – and sometimes vibration – to the mat.
- 10. Behind the rolling operation, quality control technicians from the contractor will typically perform density testing or obtain core samples from the roadway.

  Asphalt pavements are typically ready for traffic once the mixture has cooled below 150 degrees usually in a few short hours.



- 2. The truck driver backs up just short of the paver the driver should be careful not to bump the paver. Once the paver makes contact with the truck, the driver raises the bed. The truck driver applies the brakes gently, and the tractor unit on the paver pushes the truck forward.
- 4. The asphalt material flows from the hopper along the slat conveyors to the augers and eventually to the screed at the rear of the paver. A continuous, non-stop paving process ensures a quality product.
- 6. The free-floating (self-leveling) screed unit strikes off the material to create a smooth mat and provides initial compaction of the mixture. The screed also sets thickness, width and creates a smooth, uniform mat.
- 7. Paving crew members monitor the mixture for temperature and thickness and perform raking when necessary. Thin resurfacing may be accomplished in one pass, but thicker sections (for rehabilitation or new construction) may require multiple passes of the paver.
- 9. Most contractors will have two or three rollers on a project. The second roller is called the "intermediate roller" and provides the balance of the required density to the mixture. The final roller is called the "finish roller," and its purpose is to remove any remaining roller marks and provide smoothness to the pavement.

### YOUR STREET

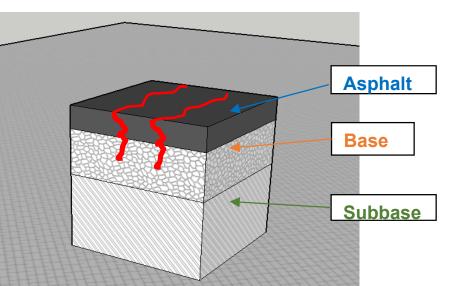


- Expect 1 to 2 weeks for your street.
  - Tree streets take longer and may have more dust.
- Door hangers will be placed in advance of construction.
  - Please do not park in the street during construction.
- Emergency vehicle access, mail delivery services, and trash pickup access will be maintained during construction.
- Some driveway aprons will need to be reconstructed.
  - You will be notified ahead of driveway closure.
  - You may not have access to your driveway for 1 to 3 days while the apron is being constructed or the concrete is curing.

### **EXISTING CONDITIONS**



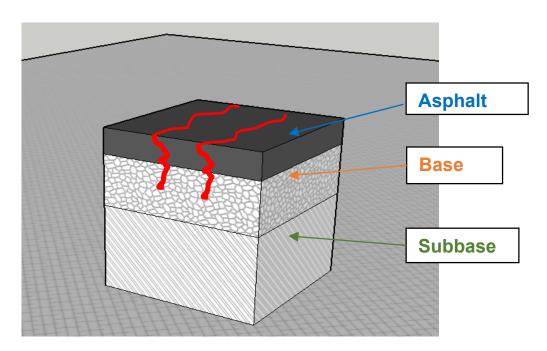


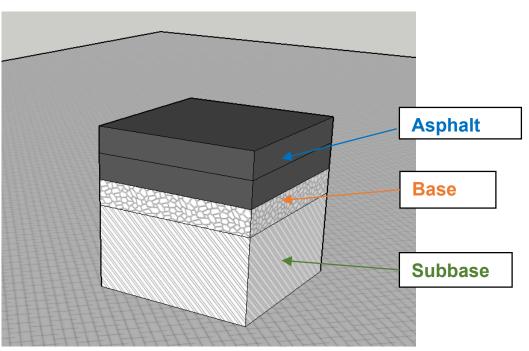


- Ponding
- Tree uplifting curb
- Multiple Pavement Failures:
  - Potholes/patches
  - Rutting
  - Ravelling

### REMEDIATION STRATEGY







- Existing failures extend into the base.
- A simple mill and overlay (1") would not solve the issue.
- So we would do a deeper mill (3"-4.5") to get below the failure, and replace with new asphalt.
- To solve drainage issues, we will establish new grades at the edges to make sure that the roadway drains.
- To accommodate the new grades, curb and driveway aprons may need to be rebuilt.

### **CONSTRUCTION AROUND TREES**



- Right now, we do not know if trees will need to be removed.
- During construction, we have a Certified Arborist on board at all times.
- The construction methods change around trees.
  - Asphalt is removed in a way that causes less potential damage to the tree roots
  - Roots are excavated, evaluated and pruned by a certified arborist.
  - After the arborist gives the all clear, asphalt is overlaid.
- In a recent project, using the CARE method, the City limited tree removal to 6 trees out of 240 conflicting trees.



### PROJECT TIMELINE



#### **DESIGN PHASE**

- Plans will be finalized by the end of this year
- The City will post the final concepts on the project website, and notify all meeting participants, the neighborhood association, and any other civic association.

#### **CONSTRUCTION PHASE**

- Construction will be handled by the City-wide Contractor.
- Currently, the City is still in the bid process for this contractor.
- The project website will be updated with the construction schedule once it is known.
- The City will also notify all meeting participants, the neighborhood association, and any other civic association.

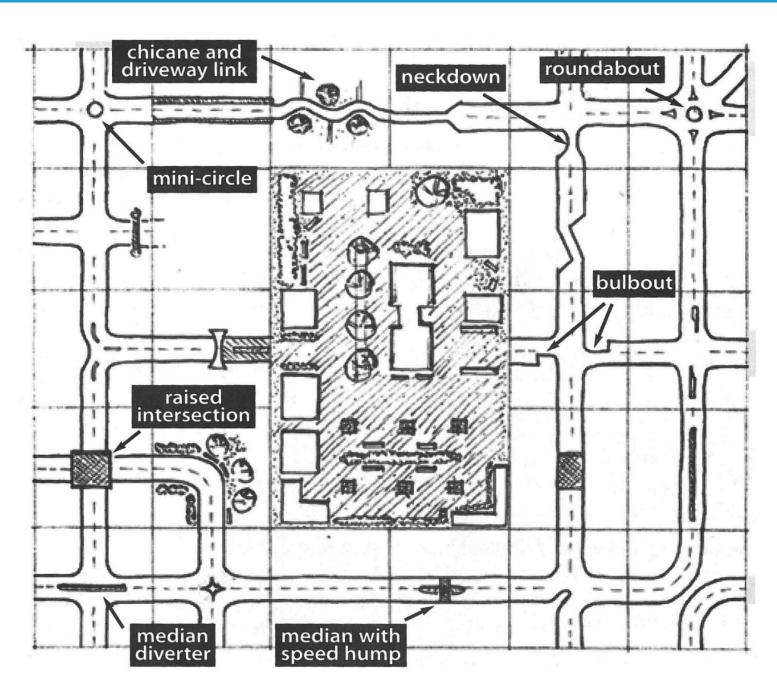


### TRAFFIC CALMING PHASE

### WHAT IS TRAFFIC CALMING?



- Physical measures to reduce speeding and accidents
- Focus on local roads that have speeding/cutthrough problems
- Create livable communities with:
  - Improved safety
  - Increased access and mobility
  - Better quality of life
  - A sense of place
- Neighborhood based solutions
  - Local roads
- Implemented during maintenance projects



### NEIGHBORHOOD INPUT



- Please remember that although some residents have been advocating for traffic calming, others may not want it
- There are trade-offs/conflicts that need to be considered
  - Inconvenience
  - Removal of on-street parking
  - Not in my front yard
  - Aesthetics
    - Measures may not be landscaped
    - Extra signage
  - Emergency vehicles



### TRAFFIC CALMING TOOLBOX



There are many traffic calming tools in the toolbox the City can utilize:

















### TRAFFIC CALMING TOOLBOX



And some that the City does not. No speed humps, bumps, or tables. No measures that close or divert traffic X:







### HAMPTON TERRACE



- First traffic calming project to be completed under our Neighborhood Traffic Calming program.
- The City has received many requests to provide traffic calming in the neighborhood.
- This project will focus on traffic calming within the project limits only.
- Idlewild Ave. has a high volume of cutthrough traffic due to the Publix.



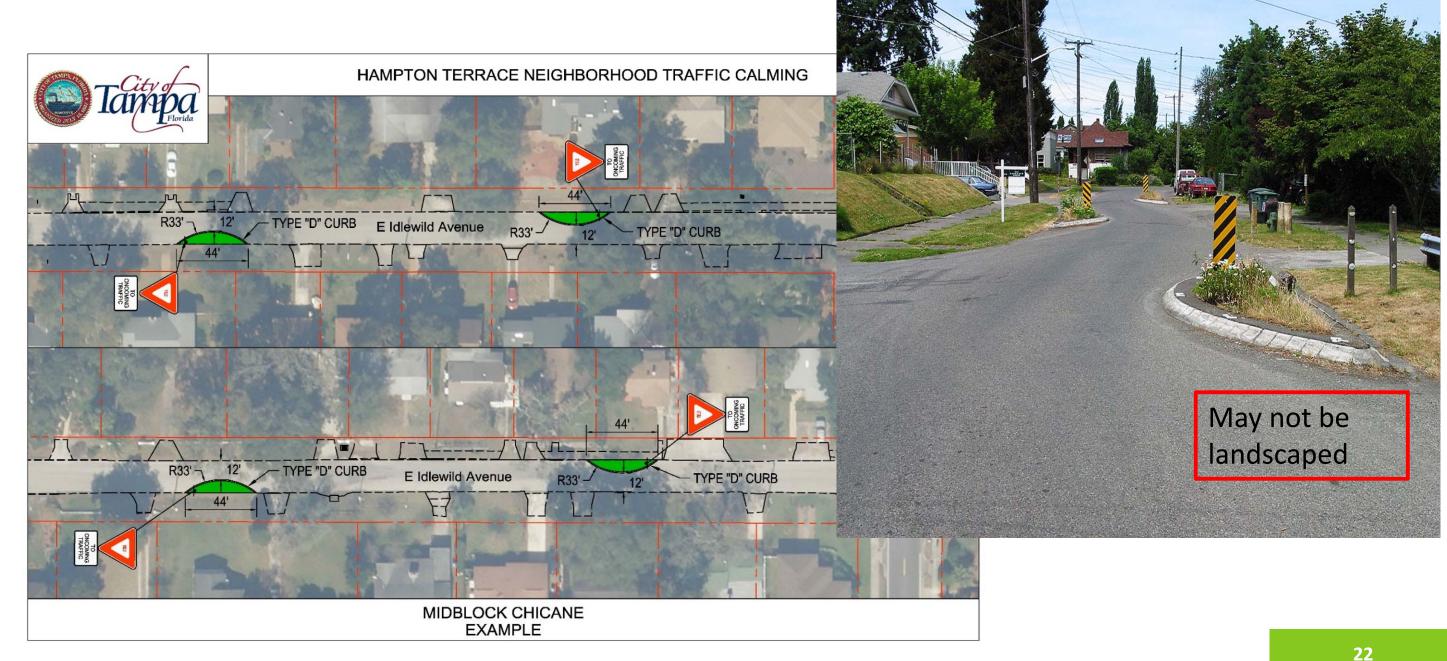
### IDLEWILD- MEDIAN ISLANDS





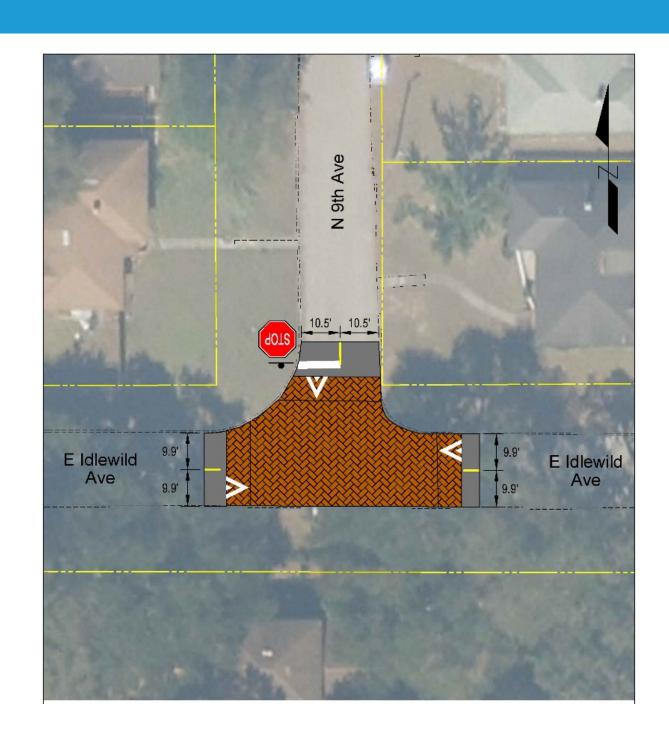
### IDLEWILD - MID BLOCK CHICANES

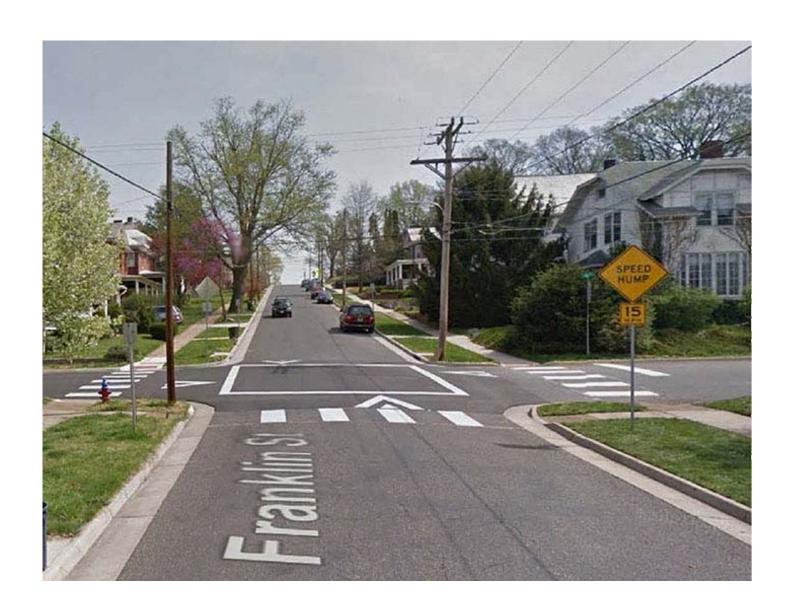




### IDLEWILD - RAISED INTERSECTION

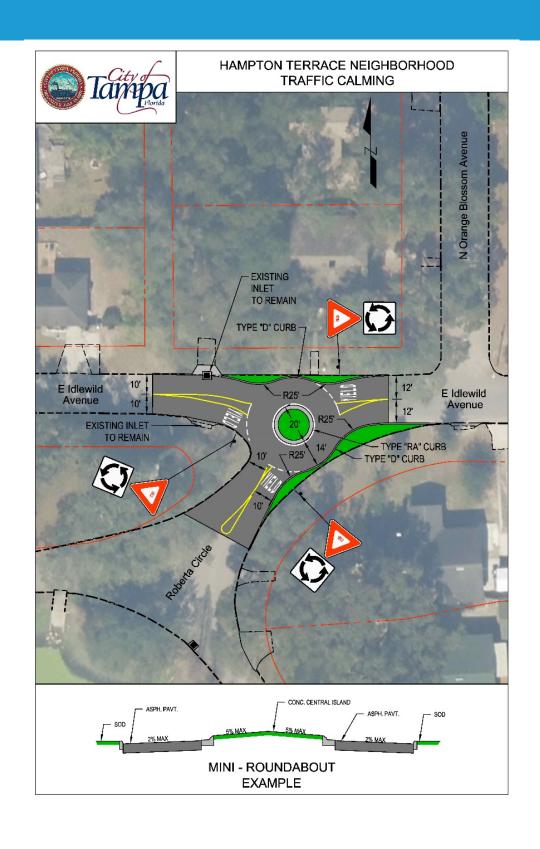






### IDLEWILD - MINI ROUNDABOUT



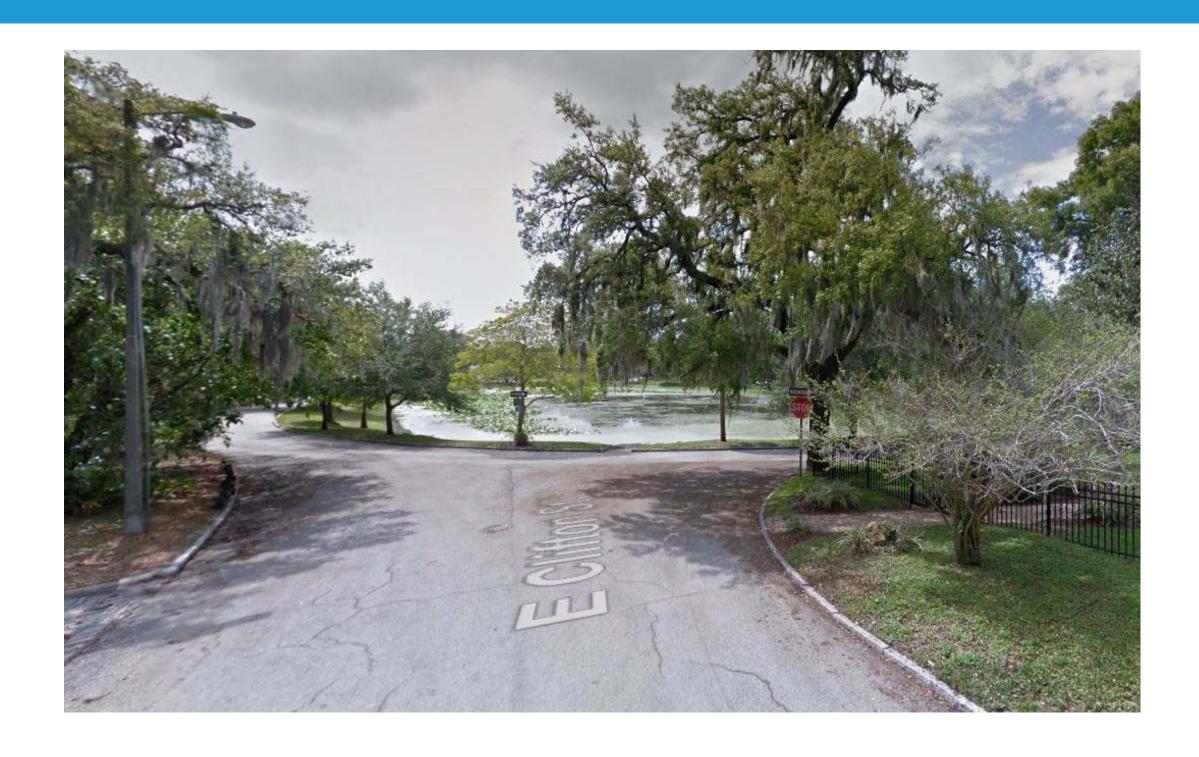




X This has been ruled out due to the vertical deflection of Roberta Circle

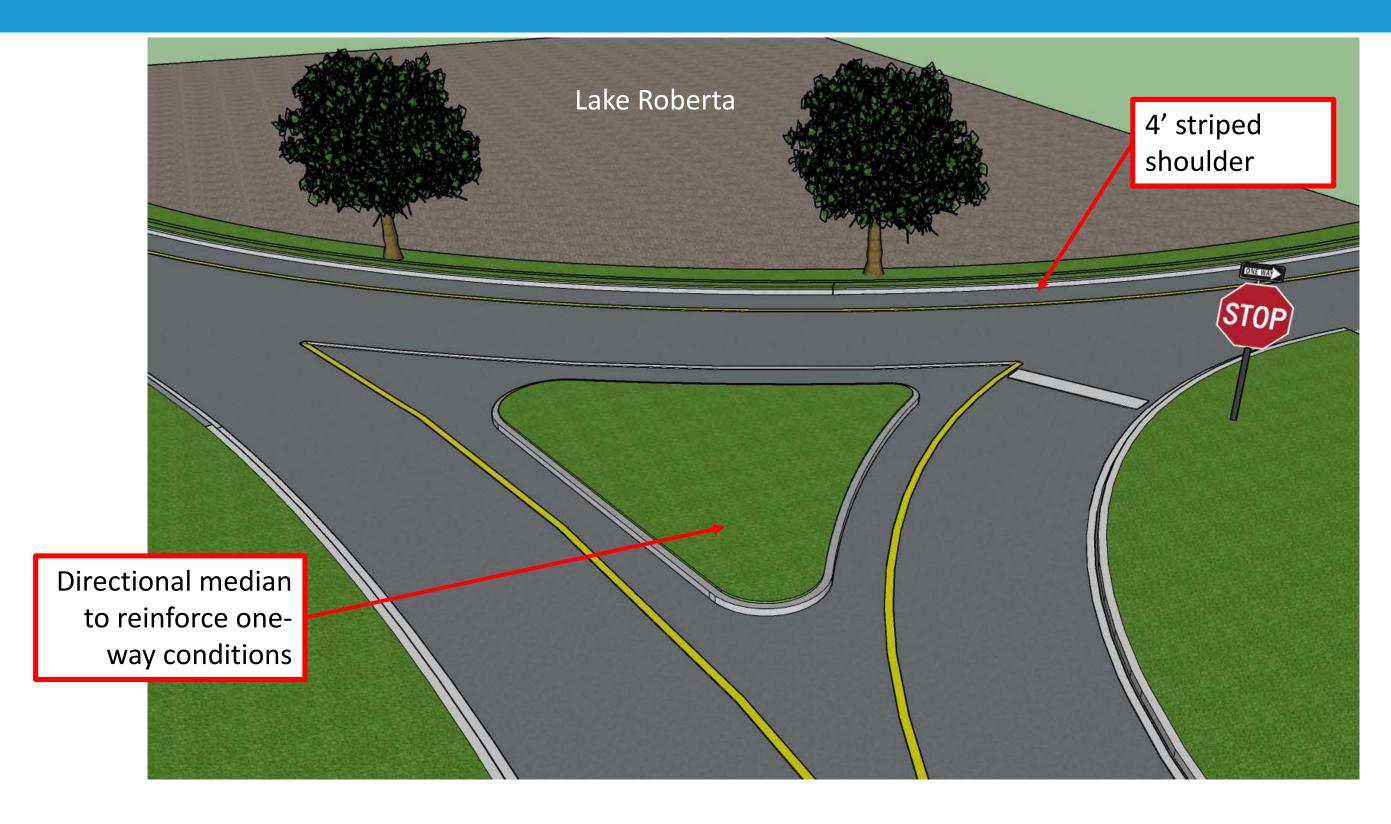
### ROBERTA CIRCLE- EXISTING





### ROBERTA CIRCLE- CONCEPT





### RESOURCES



#### Project Website:

https://www.tampagov.net/tss-transportation/info/projects/hampton\_terrace\_resurfacing

#### FHWA Traffic Calming:

https://safety.fhwa.dot.gov/speedmgt/ePrimer\_modules/module3pt2.cfm

### **CONTACT INFORMATION**



# **QUESTIONS?**

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### TRAFFIC CALMING WORKSHOP