

# TECHNICAL MEMORANDUM

Florida Department of Transportation

District 2 Environmental Management Office

DATE: April 25, 2023

TO: Eric Shimer, Design Project Manager

CC: Terri Newman, Michael Brock, Scott Johns, File

FROM: Jared Sweat – District Noise Specialist

SUBJECT: **Traffic Noise Impact Assessment – PD&E/Design Phase Review**

Job Description: State Road 115 (Lem Turner Road) Trout River Bridge  
No. 720033  
Financial Project No.: 437437-2  
County: Duval County, Florida

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*Note: The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022, and executed by the Federal Highway Administration and FDOT.*

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## **Introduction**

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study for the replacement of the Lem Turner Road over Trout River Bridge No. 720033 from north of Trout River Boulevard to south of Broward Road. In accordance with Chapter 18, Part 2 of the FDOT PD&E Manual and 23 CFR Part 772, a desktop review was completed to determine if a traffic noise analysis is required for the project.

A traffic noise analysis is required if the project includes additional through-lanes; an increase of capacity to on or off interchange ramps; shifts of vertical or horizontal alignment; restriping existing pavement to add a through-lane or auxiliary lane; or addition of new or substantially altering weight stations, rest areas, ride share lots, or toll plazas. A traffic noise study is also required when lengthening the existing interchange ramp's acceleration or deceleration lanes and associated merging into the mainline when the linear distance is more than 2,500 feet, or if realignment of any segment of the ramp reduces the distance to the closest receptor by one-half. These criteria are listed fully in Figure 18-2, Chapter 18, Part 2 of the FDOT PD&E Manual.

The improvements proposed for this project include the replacement of the Trout River Bridge in a similar alignment from a four-lane undivided facility with a new bridge consisting of four 11-foot travel lanes, a 7-foot median, 8-foot paved shoulders, a 10-foot shared use path on each side, and two new stormwater pond facilities. The new bridge will be constructed to the east of the current alignment with a Temporary Traffic Control Plan (TTCP) utilizing the existing structure during the construction of the new bridge structure. These improvement activities are detailed in Figure 18-2 of Chapter 18, Part 2 under activities #7 (alteration of the horizontal alignment for an existing highway such as the edge of the outside lanes DOES NOT REDUCE the distance to the closest receptor by one-half) and #21 (resurfacing, restoration, rehabilitation or reconstruction of an existing facility) for Type I projects. The alteration of the new bridge structure also produces a vertical separation between the roadway and the adjacent residential noise receptor with a less direct line of sight. Therefore, a noise study is not required for this project.


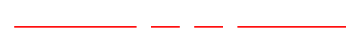




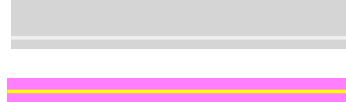


The concept reviewed for this determination is attached as **Appendix A**. If any changes in the design concept occur, a subsequent review and determination of applicability will be conducted to ensure the findings of this analysis remain valid.

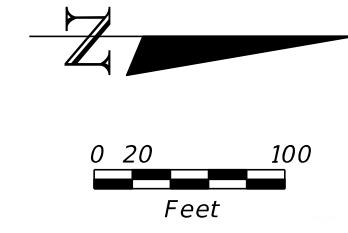
If you have any questions, please send me an email ([jared.sweat@dot.state.fl.us](mailto:jared.sweat@dot.state.fl.us)) or contact me directly at 386-961-7462.

**Attachment (1):** Appendix A - SR 115 over Lem Turner Bridge No. 720033 Concept Alternative E

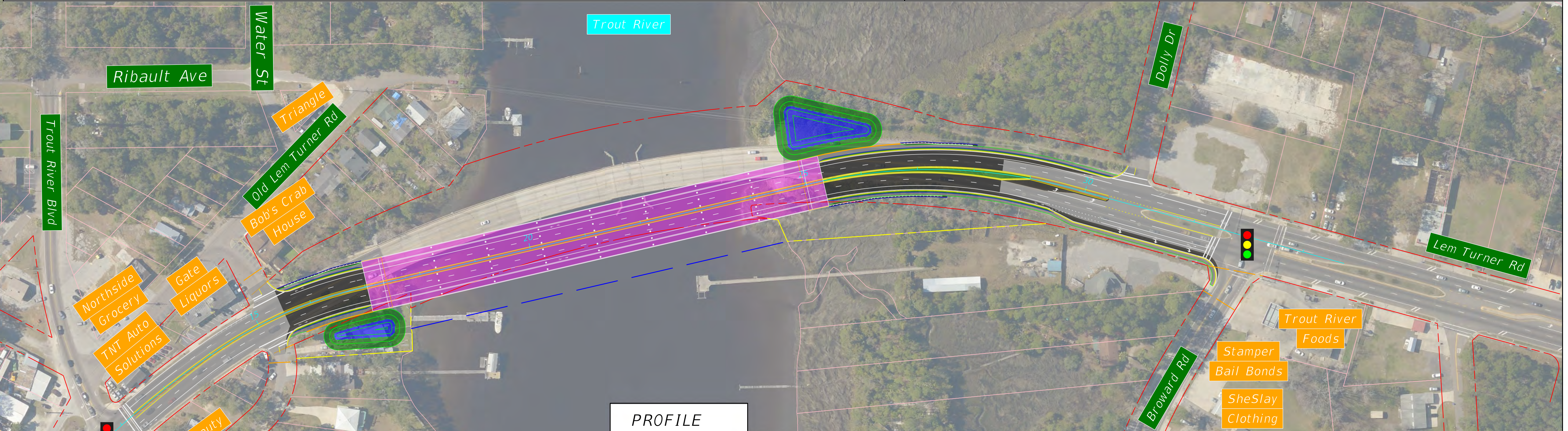
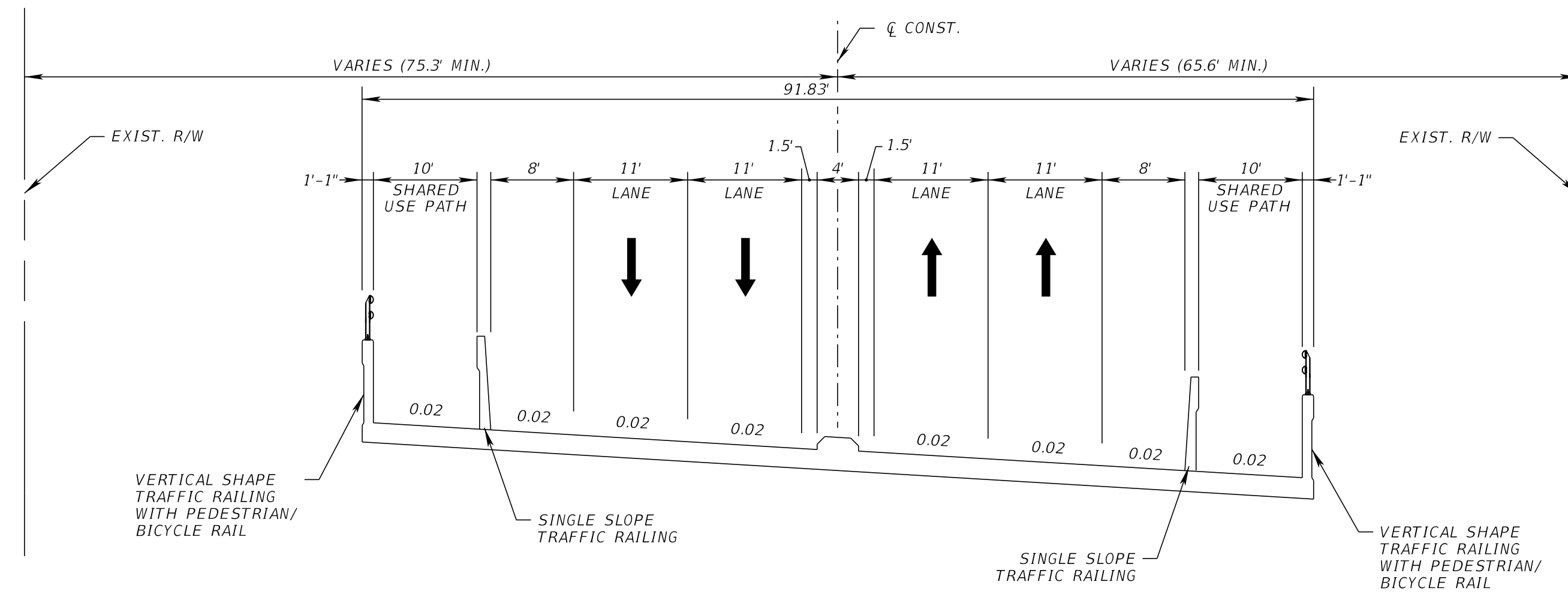
**APPENDIX A - SR 115 over Lem  
Turner Bridge No. 720033 Concept  
Alternative E**

LEGEND

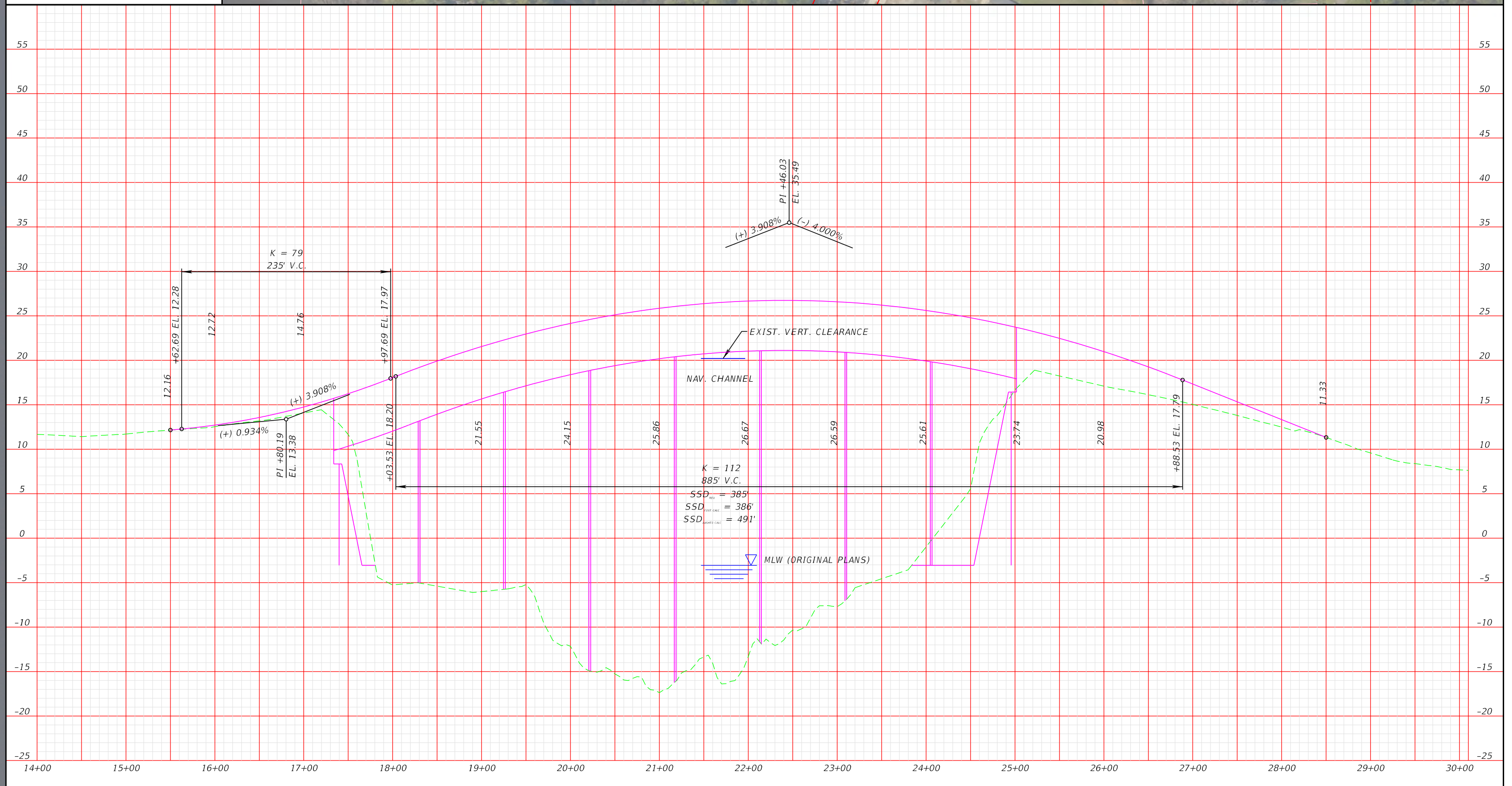
-  PARCEL LINE
-  EXISTING RIGHT-OF-WAY
-  PROPOSED RIGHT-OF-WAY
-  TEMPORARY CONSTRUCTION EASEMENT
-  PROPOSED TITF EASEMENT
-  WIDENING / RECONSTRUCTION
-  MILLING & RESURFACING
-  BRIDGE
-  PONDS



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PROFILE


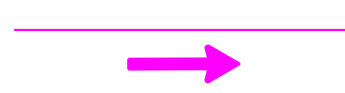
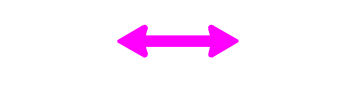





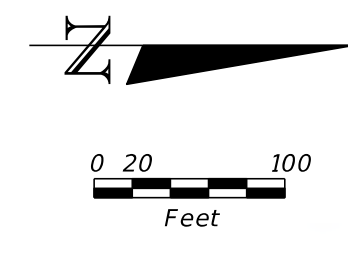
TTCP Alt E Mod 1  
Phase 1A

SR 115 (LEM TURNER) at TROUT RIVER

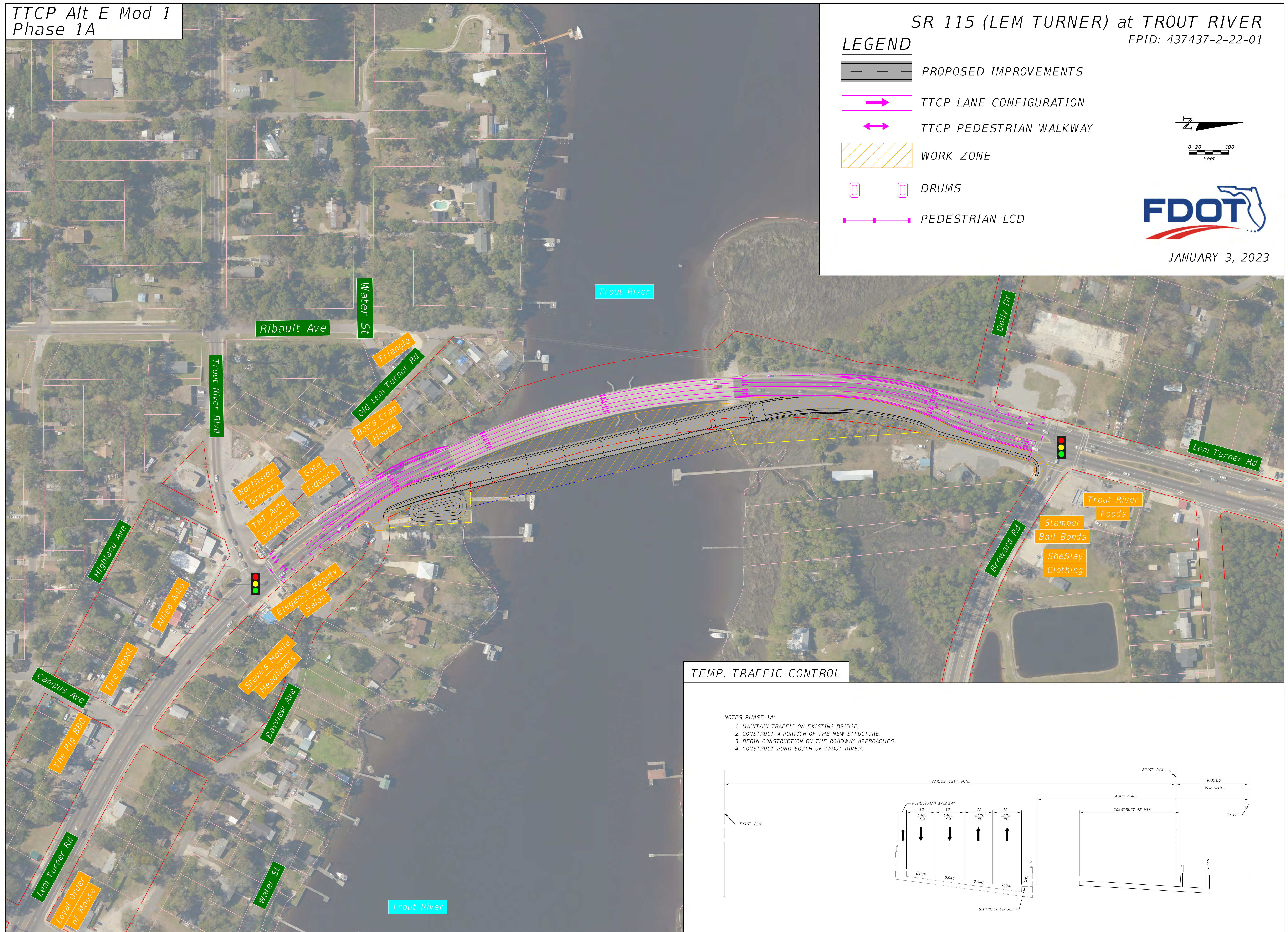
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LEGEND

-  PROPOSED IMPROVEMENTS
-  TTCP LANE CONFIGURATION
-  TTCP PEDESTRIAN WALKWAY
-  WORK ZONE
-  DRUMS
-  PEDESTRIAN LCD



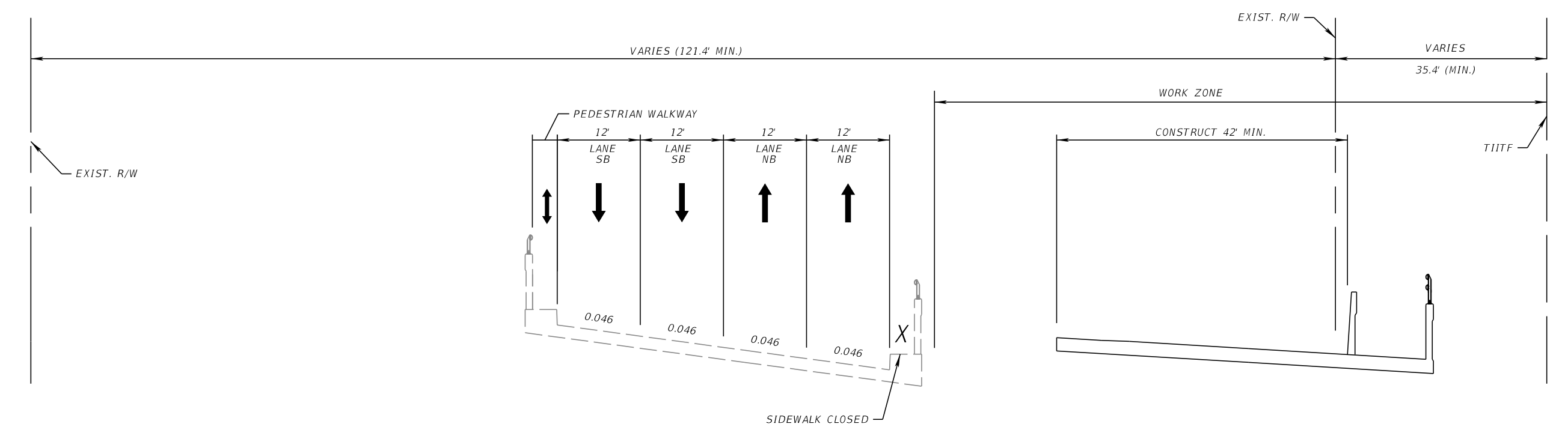
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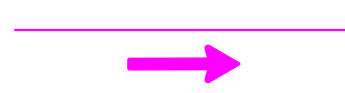
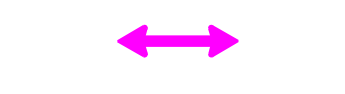



TEMP. TRAFFIC CONTROL

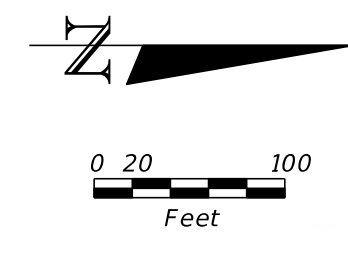
NOTES PHASE 1A:

1. MAINTAIN TRAFFIC ON EXISTING BRIDGE.
2. CONSTRUCT A PORTION OF THE NEW STRUCTURE.
3. BEGIN CONSTRUCTION ON THE ROADWAY APPROACHES.
4. CONSTRUCT POND SOUTH OF TROUT RIVER.

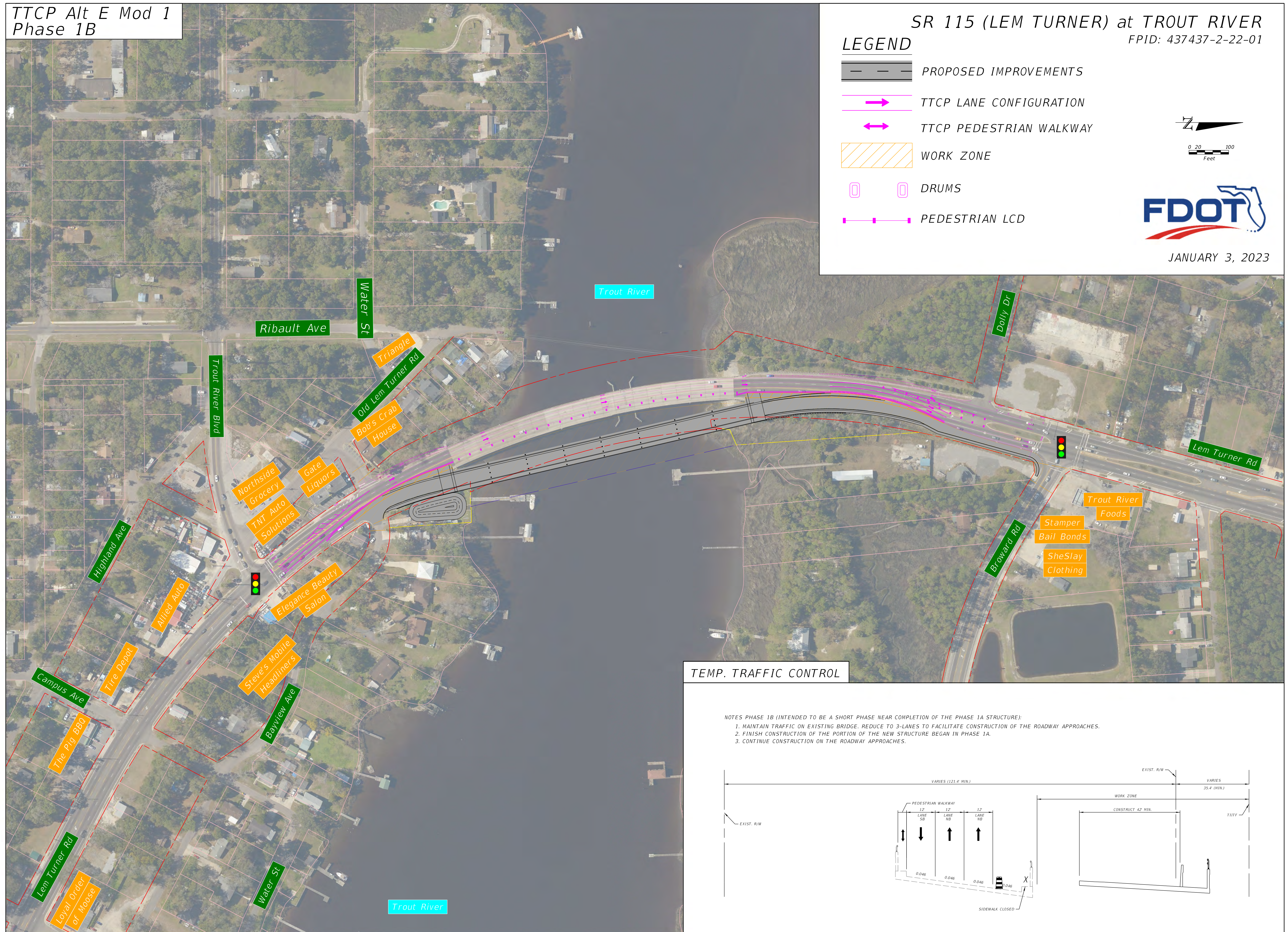


LEGEND

-  PROPOSED IMPROVEMENTS
-  TTCP LANE CONFIGURATION
-  TTCP PEDESTRIAN WALKWAY
-  WORK ZONE
-  DRUMS
-  PEDESTRIAN LCD

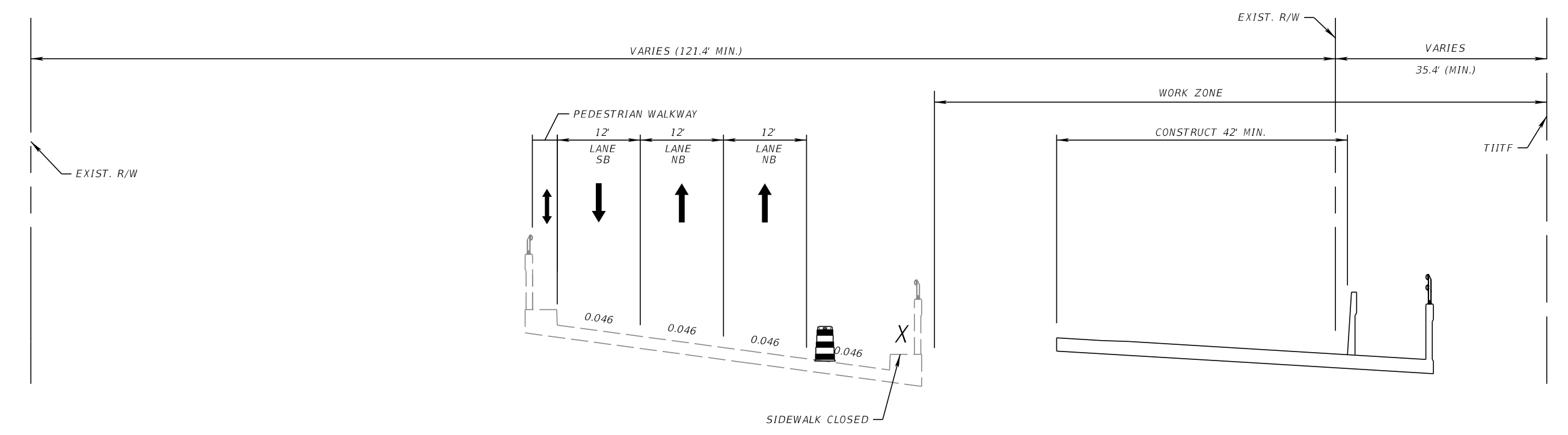


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TEMP. TRAFFIC CONTROL

- NOTES PHASE 1B (INTENDED TO BE A SHORT PHASE NEAR COMPLETION OF THE PHASE 1A STRUCTURE):
1. MAINTAIN TRAFFIC ON EXISTING BRIDGE. REDUCE TO 3-LANES TO FACILITATE CONSTRUCTION OF THE ROADWAY APPROACHES.
  2. FINISH CONSTRUCTION OF THE PORTION OF THE NEW STRUCTURE BEGAN IN PHASE 1A.
  3. CONTINUE CONSTRUCTION ON THE ROADWAY APPROACHES.


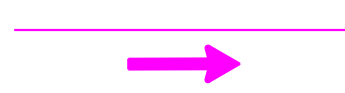
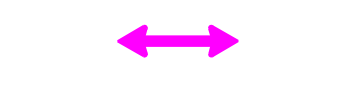





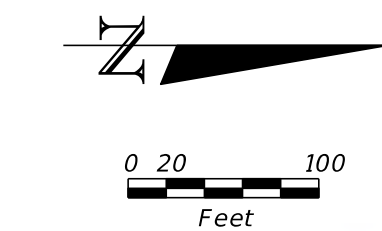
TTCP Alt E Mod 1  
Phase 2 & 3

SR 115 (LEM TURNER) at TROUT RIVER

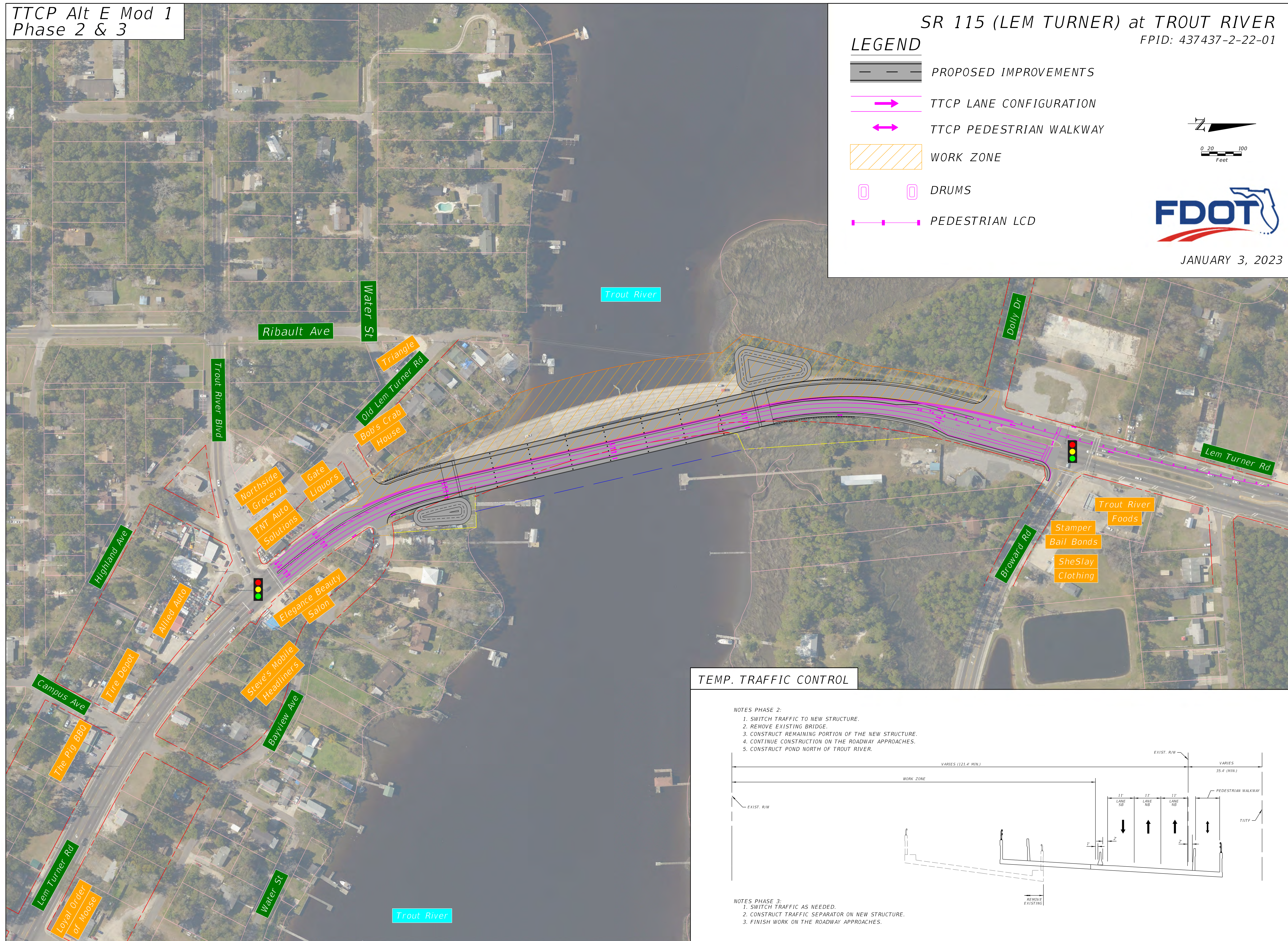
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LEGEND

-  PROPOSED IMPROVEMENTS
-  TTCP LANE CONFIGURATION
-  TTCP PEDESTRIAN WALKWAY
-  WORK ZONE
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-  PEDESTRIAN LCD

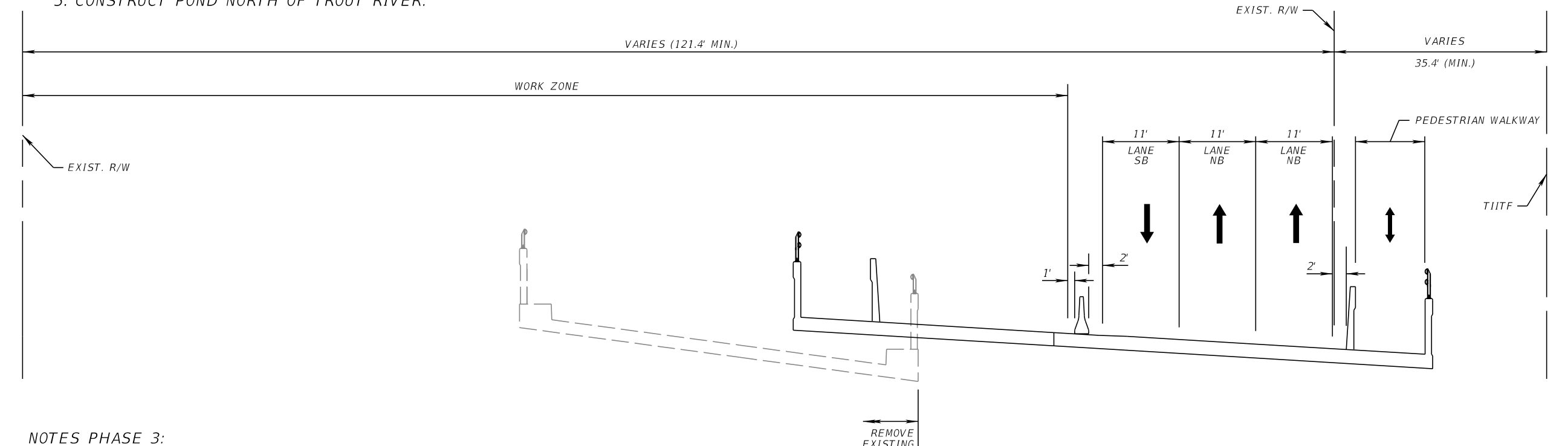


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TEMP. TRAFFIC CONTROL

- NOTES PHASE 2:
1. SWITCH TRAFFIC TO NEW STRUCTURE.
  2. REMOVE EXISTING BRIDGE.
  3. CONSTRUCT REMAINING PORTION OF THE NEW STRUCTURE.
  4. CONTINUE CONSTRUCTION ON THE ROADWAY APPROACHES.
  5. CONSTRUCT POND NORTH OF TROUT RIVER.



- NOTES PHASE 3:
1. SWITCH TRAFFIC AS NEEDED.
  2. CONSTRUCT TRAFFIC SEPARATOR ON NEW STRUCTURE.
  3. FINISH WORK ON THE ROADWAY APPROACHES.