RRR Scoping Report

FM# 447827-1

SR5/US-1/Biscayne Boulevard
From SR 915/NE 6th Avenue to NE 105th Street
(87030000 | 16.686 – 18.057)
Miami-Dade County, Florida

Prepared for
Florida Department of Transportation District 6
Planning and Environmental Management Office
1000 NW 111th Avenue
Miami, Florida 33172

FDOT Project Manager: Md S Hossain, MS, E.I.
Contract C-AD92, Task Work Order 04
FPID: 447827-1-52-01

FINAL REPORT **March 2023**

ENGINEER'S CERTIFICATION

I, hereby certify that I am a registered professional engineer in the State of Florida, practicing with GOAL Associates Inc., a Florida Corporation under Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes, and by the State of Florida, Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluation, findings, opinions, conclusions, or technical advice hereby reported for:

Project:	RRR Scoping Report for SR 5/US-1/Biscayne Boulevard From SR 915/NE 6th Avenue to NE 105th Street FM# 447827-1-52-01| Roadway ID: 87030000 | MP 16.686 – 18.057
Location:	Miami-Dade County, Florida
Client:	Florida Department of Transportation, District 6 Planning and Environmental Management Office 1000 NW 111th Avenue Miami, Florida 33172
FDOT Project Manager:	Md S Hossain, MS, E.I.
Report Prepared by:	GOAL Associates, Inc. 14750 NW 77th Court, Suite 320 Miami Lakes, FL 33016 Contract No. C-AD92, Task Work Order 04 Vendor No. F464649215

I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

Signature: Godfrey Lamptey Digitally signed by Godfrey Lamptey Date: 2023.03.29 19:47:29-04'00'

Name: Godfrey Lamptey, P.E., PTOE

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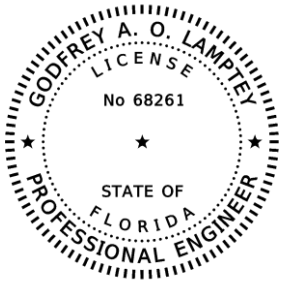
Date: 3/29/2023



SUMMARY OF PROJECT SCOPE ELEMENTS

The following list is provided as a basis for the Scope of Services for the Design Phase.

Summary of Project Information

- Description: SR 5/US-1/Biscayne Boulevard From SR 915/NE 6th Avenue to NE 105th Street
- County: Miami-Dade
- Project Type: RRR (Work Mix 0012)
- Project Limits: 87030000 | MP 16.686 – 18.057
- Highway Systems: NHS
- Functional Classification: Urban Principal Arterial Other
- Context Classification: C4 – Urban General from NE 6th Avenue to 92nd Street
  C3R – Suburban Residential from NE 92nd Street to NE 99th Street
  C3C – Suburban Commercial from NE 99th Street to NE 105th Street
- Bridges: N/A
- Railroad Crossing: N/A
- Design Speed: 40 mph
- Posted Speed: 35 mph
- Target Speed: 30 mph from NE 92nd Street to NE 99th Street
  35 mph from NE 99th Street to NE 105th Street

1 PURPOSE

- Major work mix includes: 0012, Resurfacing.
- Major work groups include: 3.1 Minor Highway Design
- Minor work groups include: 4.1.1 Miscellaneous Structures
  7.1 Signing, Pavement Marking & Channelization
  7.2 Lighting
  7.3 Signalization
  15.0 Landscape
  8.2 Design, Right of Way, Construction Surveying
- Known alternative construction contracting methods include: N/A

2.1 Project General and Roadway (Activities 3, 4, and 5)

- Public Involvement: CAP Level 2 anticipated. The District Public Information Office (PIO) consultant is responsible for coordination of all public involvement activities during the Design Phase. The Designer is expected to attend a Public Information Meeting.
- Other Agency Meetings: Miami-Dade DTPW, Village of Miami Shores
- Joint Project Agreements (JPAs): N/A
- Specification Package Preparation: Yes, Specifications Package required
- Value Engineering: N/A
- Risk Assessment Workshop: N/A
- Plan Type: Roadway Plans required (14 sheets)
- Typical Section: 3 Typical Sections
- Pavement Design: 2 Pavement Design
  - Milling and Resurfacing
  - Bridge Approach Slabs

- Pavement Type Selection Report(s): N/A
- Cross Slope: N/A
- Access Management Classification: Class 07
- Transit Route Features: N/A
- Major Intersections/Interchanges: No additional plan sheets required
- Roadway Alternative Analysis: N/A
- Level of Temporary Traffic Control Plans: Level I
- Temporary Lighting: N/A
- Temporary Signals: N/A
- Temporary Drainage: N/A
- Design Variations/Exceptions: 6-8* DV:
  - Design Variation for Lane Width
  - Design Variation for Median Width
  - Design Variation for Border Width
  - Design Variation for Lack of Bicycle Lanes
  - Design Variation for Clear Sight Triangles
  - Design Variation for Unobstructed Sidewalk Width
  - Design Variation for Cross Slope*
  - Design Variation for Vertical Clearance*

  * Additional survey is required to determine compliance with criteria.
- Back of Sidewalk Profiles: N/A

2.2 Drainage (Activity 6)

The existing drainage pattern is recommended to remain. The Designer is responsible to coordinate with the District Maintenance Office to determine if any outstanding drainage maintenance issues should be addressed by this project.

2.3 Utilities Coordination (Activity 7) N/A

The project utility coordination is to be completed by the District Utilities Group and the Project Utility Coordinator consultant. Utility coordination tasks include processing of any JPA, Utility Work Schedules (UWS), and Utility Clear Letters. Thirteen (13) Utility Agencies/Owners (UAOs) are identified within 0.25 mile of the project limits. No significant utility impacts are anticipated for this RRR Project. However, the Designer should perform Subsurface Utility Exploration (SUE) tests to verify any utility conflicts within the project limits.

2.4 Environmental Permits, Compliances, and Clearances (Activity 8)

The project will occur within the State Highway System (SHS) right-of-way and is therefore exempt from state and local environmental permitting requirements pursuant to Section 335.02, Florida Statutes and 62-330-051, F.A.C.

2.5 Structures (Activities 9 – 18) N/A

2.6 Signing and Pavement Markings (Activities 19 & 20)

Signing and Pavement Marking Plans are required (14 sheets at 1:40 Scale). Signing improvements include the upgrade of all substandard ground-mounted signs to meet current FDOT and MUTCD requirements. All pavement markings within the limits of milling and resurfacing shall be replaced to meet current FDOT Standard Plans for Road Construction.

2.7 Signalization (Activities 21 & 22)

The project requires improvements at the following 4 signalized intersection.

1. NE 6th Avenue
2. NE 91st Street
3. NE 96th Street
4. NE 105 Street

2.8 Lighting (Activities 23 & 24)

The existing lighting is to remain.

2.9 Landscape Architecture (Activities 25 & 26)

This project may require impacts to existing trees including trimming/relocation of trees/vegetation obstructing intersection sight triangles, or signals and signs visibility and ADA unobstructed sidewalk clearance. Coordination with the District Maintenance Office to review if this maintenance falls under any existing maintenance agreement with Miami-Dade County for landscaping will be required.

2.10 Survey (Activity 27) N/A

Survey services to be provided by the District. The Designer will create the Project Control sheets from data extracted from the project survey and sign and seal the Project Control Sheets.

2.11 Photogrammetry (Activity 28) N/A

Aerial photography to be provided by the District.

2.12 Mapping (Activity 29) N/A

Right of Way Mapping services to be provided by the District.

2.13 Terrestrial Mobile LiDAR (Activity 30) N/A

2.14 Architecture (Activity 31) N/A

2.15 Noise Barriers (Activity 32) N/A

2.16 Intelligent Transportation Systems (Activities 33 & 34) N/A

2.17 Geotechnical (Activity 35) N/A

Geotechnical services to be provided by the District. Pavement core borings are being performed for the proposed pavement resurfacing. The Designer is responsible for including the Project geotechnical information in the Roadway Plans component set.

2.18 Project Schedule (as of 03/29/2023)

- Begin Roadway Plans 10/24/2023
- Production Date 06/23/2025
- Transmit PS&E Package 09/15/2025
- Letting Date 12/03/2025

2.19 Submittal Schedule (as of 03/29/2023)

- 60% Plans Submittal 04/22/2024
- 90% Plans Submittal 09/17/2024
- 100% Plans Submittal 01/17/2025
- Plans Completed Submittal 03/19/2025
- PS&E Submittal 08/18/2025

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LIST OF UNITS

mph	miles per hour
psi	pounds per square inch

LIST OF ABBREVIATIONS

AADT	Annual Average Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
ADAAG	ADA Accessibility Guidelines
CAP	Community Awareness Plan
DHW	Design High Water
DTPW	Department of Transportation and Public Works
EB	Eastbound
ETRM	Exfiltration Trench Reference Manual
ESAL	Equivalent Single Axle Load
FAST	Florida Analysis System for Targets
FAC	Florida Administrative Code
FC	Friction Course
FDOT	Florida Department of Transportation
FDM	FDOT Design Manual
FM	Financial Management (Number)
FPDM	Flexible Pavement Design Manual
FPID	Financial Project Identification Number
FWD	Falling-Weight Deflectometer
FY	Fiscal Year
HCL	High Crash List
JPA	Joint Project Agreement
LBR	Limerock Bearing Ratio
LRE	Long Range Estimate
LT	Left
MP	Milepost
MR	Resilient Modulus
MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways
NB	Northbound
NHS	National Highway System
NMSA	Non-Major State Action
NOAA	National Oceanic and Atmospheric Administration
PCS	Pavement Condition Survey
PECCDR	Pavement Evaluation Coring and Condition Data Report
PIF	Permit Involvement Form
PIO	Public Information Office
PLEMO	Planning and Environmental Management Office
POP	Pavement-Only Project
PROWAG	Public Right of Way Accessibility Guideline
RCI	Roadway Characteristics Inventory
RRR	Resurfacing, Restoration, and Rehabilitation
RT	Right
SB	Southbound
SHS	State Highway System
SIS	Strategic Intermodal System
SLD	Straight Line Diagram
SMO	State Materials Office
SN	Structural Number
T_{24}	Truck Factor (% Trucks)
TTC	Temporary Traffic Control (Plan)
TEM	Traffic Engineering Manual
UAM	Utility Accommodation Manual
UAO	Utility Agency/Owner
UWS	Utility Work Schedule
WB	Westbound

1.0 INTRODUCTION

GOAL Associates was retained by the Florida Department of Transportation (FDOT) District 6 Planning and Environmental Management Office (PLEMO) to prepare a RRR Scoping Report for Project FM 447827-1: A Resurfacing, Restoration, and Rehabilitation (RRR) Project along SR 5/US-1/Biscayne Boulevard from SR 915/NE 6th Avenue to NE 105th Street. This Scoping Report is based on the requirements from the current edition of the FDOT Design Manual (FDM), Section 114, and the District 6 Design Handbook (revised May 2021). This project will be required to comply with the design criteria in the latest FDOT Design Manual (FDM); therefore, this Scoping Report considers the design criteria from the current edition of the FDM (dated January 2023). This Scoping Report documents the existing physical, operating, and safety conditions through office and field reviews. This Scoping Report also documents the design criteria, deficiencies, and recommended improvements to be addressed by the programmed RRR Project.

1.1 Project Purpose and Need

Project Purpose

The primary purpose of this RRR Project is to preserve and extend the service life of the existing pavement and to provide recommendations that enhance safety along the roadway segment for all transportation modes.

Objective

- Correct the deficient pavement conditions by milling and resurfacing.

Justification

- The project originated from the 2020 Pavement Condition Survey (PCS) Ratings, which identified the pavement within the project limits to be fair (Ride)
- Pavement age was the key primary factor for the origination of this project. The existing pavement within the project limits was resurfaced in 2006 and will be 19 years old by 2025 when this resurfacing project is funded for construction.
- Field reviews confirmed that overall, the existing pavement is in fair condition with multiple locations presenting deterioration. These included cracking, patching, and uneven manholes from utility work.

Additional Project Needs

The following additional project needs are identified to be addressed by this project:

- Evaluate sight distance obstructions.
- Upgrade all substandard ground-mounted signs and pavement markings.
- Upgrade signal heads with flexible backplates and retro-reflective borders.
- Upgrade pedestrian facilities to comply with the Americans with Disabilities Act (ADA).

- Upgrade pedestrian signal heads and detector.
- Trim trees and shrubs to comply with clear sight triangle and ADA requirements.

1.2 Project Type Determination

This project does not qualify as a Maintenance Resurfacing/Pavement-Only Project (POP) because segments within the project limits were identified on the District High Crash List (HCL). As such, the project is programmed as a RRR project and the scope of work shall meet the requirements of the FDM: Development and Processes, Section 114 Resurfacing, Restoration and Rehabilitation (RRR).

1.3 Project Location and Limits

The project is located in Miami-Dade County, within the Village of Miami Shores. The project limits are along SR 5/US-1/Biscayne Boulevard from SR 915/NE 6th Avenue to NE 105th Street (87030000 | MP 16.686 – 18.057). The Project Location Map is shown in **Figure 1-1**.

Figure 1-1 Project Location Map

1.4 Adjacent Projects

Based on the data collection from the FDOT archives, the following programmed or previous projects were identified within or adjacent to the project limits. The as-built or design plans for the previous projects are attached in **Appendix E**.

Previous Projects

- FPID 250222-1-52-01 (FY 2004)
  - SR 5/US-1/Biscayne Boulevard from NE 87th Street to NE 104th Street (Previous Resurfacing)

- FPID 440191-1-52-01 (FY 2020)
  - SR 5/US 1 Signalized Intersection Lighting from NE 22nd Street to Sans Souci Boulevard

Future Projects

- FM 445996-1-52-01 (FY 2023)
  - SR 5/US 1/Biscayne Boulevard from NE 61st Street to NE 6th Avenue

- FM 443912-1-52-01 (FY 2024)
  - SR 5/US 1/Biscayne Boulevard from north of NE 105th Street to south of NE 123rd Street

2.0 ASSESSMENT OF EXISTING CONDITIONS

The existing conditions were evaluated, and deficiencies identified through office and field reviews performed as part of the study.

2.1 Office Reviews

The office reviews included the review of documents provided by the District and data collection from other resources. Documents reviewed included the following:

- Aerial Photography, dated 2021
- Right of Way Maps
- Existing traffic volumes
- Straight Line Diagram (SLD)
- Roadway Characteristics Inventory (RCI)
- Identification of Utilities (Sunshine State One-Call of Florida)
- Pavement Condition Forecast, Resilient Modulus (MR) Recommendation Memos, and 18-kip Equivalent Single Axle Load (ESAL) Report
- As-Builts and Design Plans from previous projects

2.2 Field Reviews

Field reviews were conducted in June 2022 for this Scoping Report, based on the District 6 Field Review Checklists. Photos documenting these field reviews are included in the relevant sections of this report.

2.3 Design Controls

2.3.1 Highway Functional Classification

SR 5/US-1/Biscayne Boulevard from SR 915/NE 6th Avenue to NE 105th Street is classified as an Urban Principal Arterial Other and is part of the National Highway System (NHS).

2.3.2 Context Classification

The context classification is C4 Urban General throughout the project limits, based on the FDOT Roadway Characteristic Inventory (RCI) and the FDOT Transportation Data Analytics ArcGIS Online Feature Layers.

2.3.3 Design, Posted and Target Speeds

The existing design speed along SR 5/US-1/Biscayne Boulevard is 40 mph with a posted speed limit of 35 mph. Due to the highly urbanized nature of the corridor with residential and commercial developments on both sides of the corridor, a Target Speed of 35 mph is recommended for the corridor.

2.3.4 Traffic Volume and Design Year

Traffic Volume

One traffic count station is located within the project limits. The traffic volume data for the most current year (2020) is listed in **Table 2-1**.

Table 2-1 Existing Traffic Volume Characteristics (2021)

FDOT Count Station	Milepost	Location Description	AADT	K_{30}	D_{30}	Truck Factor (T_{24})
872556	17.927	SR 5/Biscayne Boulevard, 200' north of NE 104th Avenue	50,000	9.0	54.3	3.7%

Design Period

FDM Section 201.3 recommends a Design Period of 12 to 20 years for projects with milling. The Flexible Pavement Design Manual (FPDM) recommends a pavement Design Period of 15 to 20 years (Pavement Overlay with Milling, Non-Limited Access Facilities). A Design Period of 20 years is selected for this RRR Project. The Opening Year is 2026 and Design Year is 2046.

2.4 Existing Typical Section

There are three existing roadway typical sections along the project corridor as shown in **Figure 2-1** to **Figure 2-3**. The first typical section extends from NE 88th Street to NE 90th Street and consists of a four-lane divided roadway with two 10.5-foot travel lanes in each direction, and sidewalk along both sides of the roadway adjacent to the curb and gutter. The second typical section extends from NE 90th Street to NE 93rd Street and consists of a four-lane divided roadway with two 11-foot travel lanes in each direction, and an 8-foot sidewalk along both sides of the roadway separated by a 12.5-foot sod area. The typical section for the final segment extends from NE 93rd Street to NE 105th Street and consists of a four-lane divided roadway with two 11-foot travel lanes in each direction with an 8-foot sidewalk along both sides of the roadway separated by an 8-foot sod area.

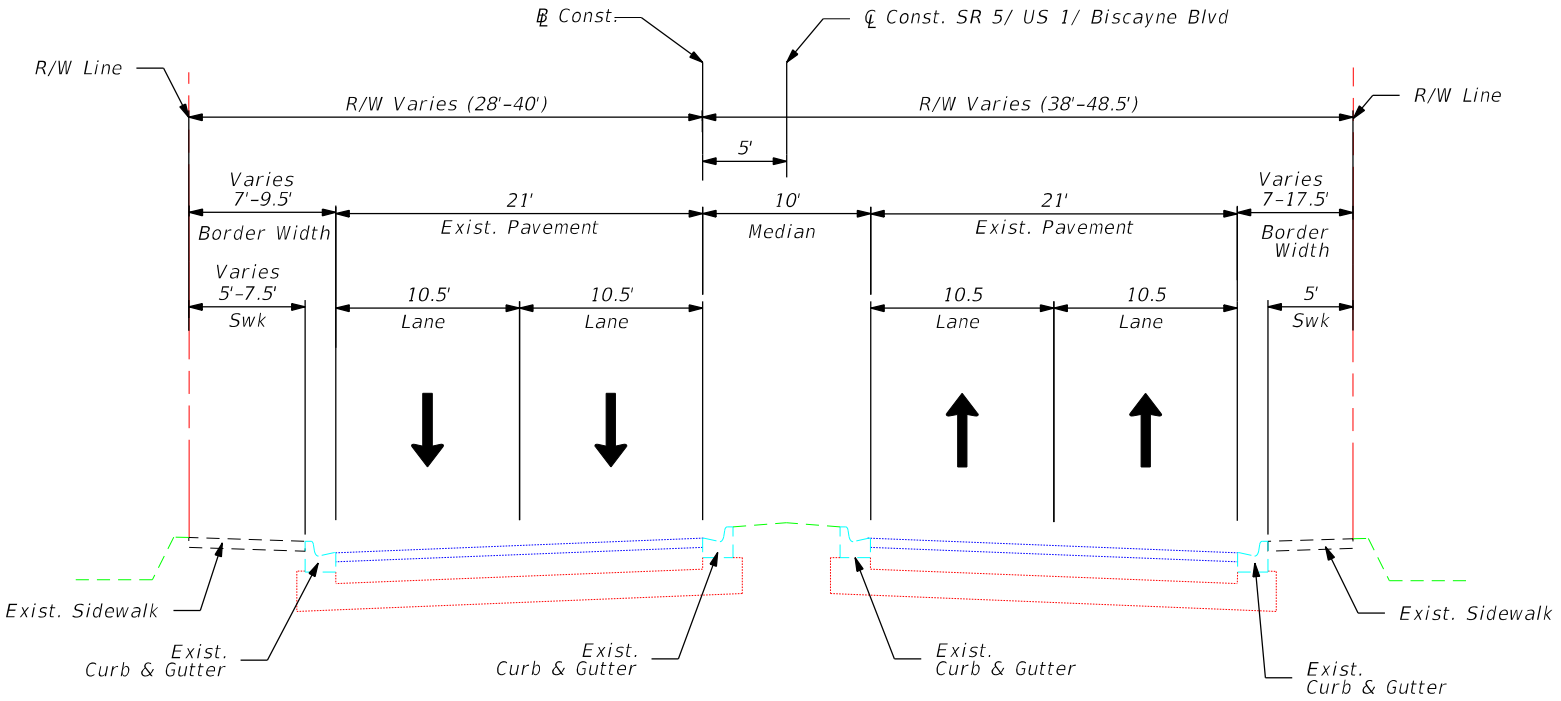


Figure 2-1 Existing Typical Section from NE 88th Street to NE 90th Street

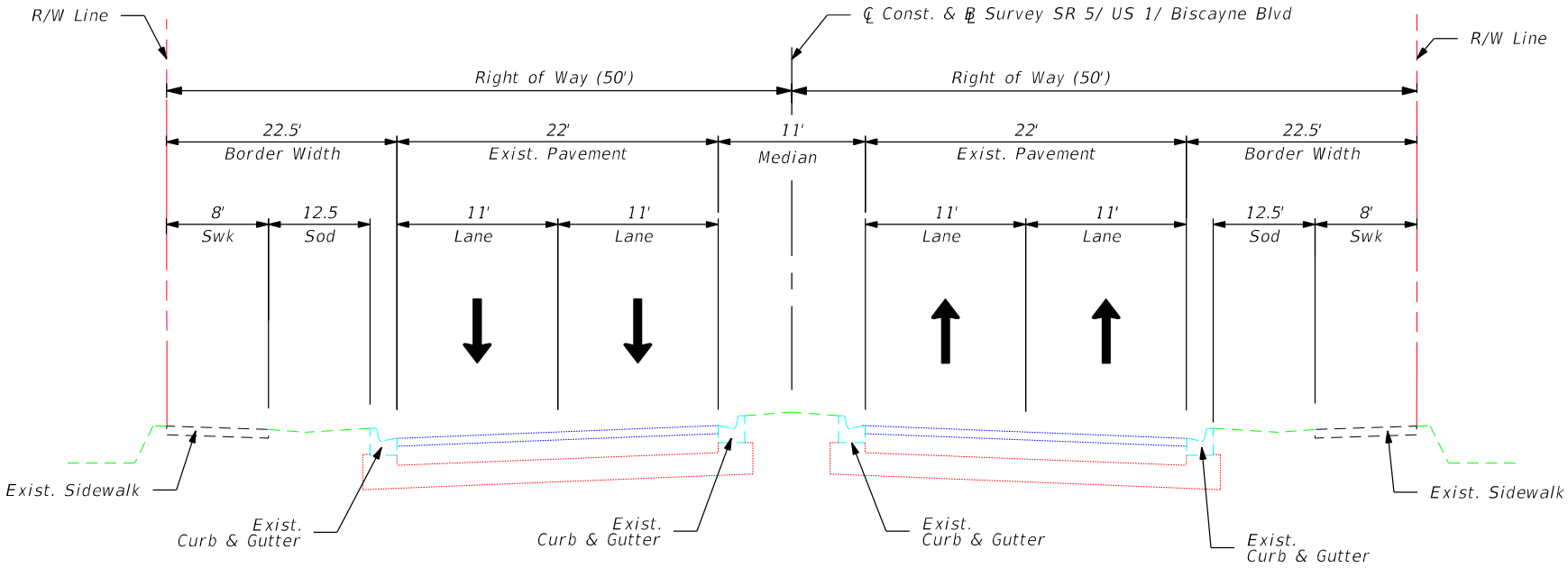


Figure 2-2 Existing Typical Section from NE 90th Street to NE 92nd Street

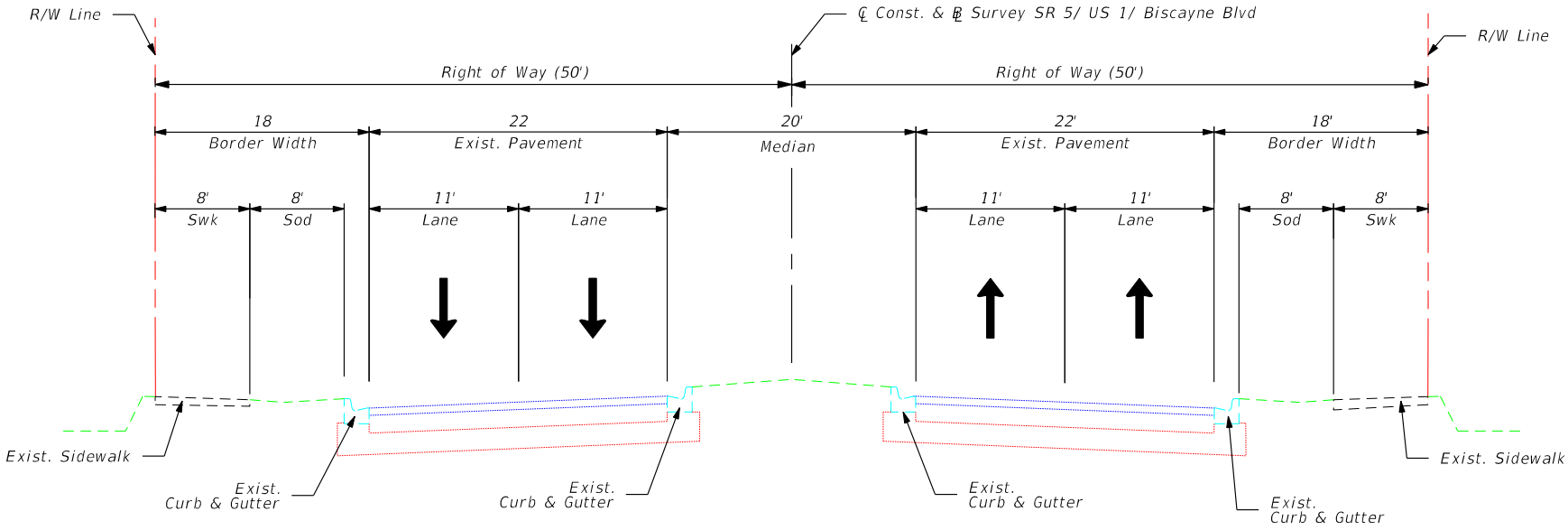


Figure 2-3 Existing Typical Section from NE 92nd Street to NE 105th Street

2.5 Existing Pavement

2.5.1 Pavement History

The existing pavement within the project segment was last resurfaced in 2006 by FPID 250222-1-52-01 (FY 2004) which extended from NE 87th Street to NE 104th Street. The existing pavement is currently 16 years old and will be 19 years old by 2025. The pavement design from the previous project is listed below.

New Construction

- Optional Base Group 12
- Type SP Structural Course (TLC) (2.5 inches)
- Friction Course FC-9.5 (TLC) (1.25”) (Rubber)

2.5.2 Existing Pavement Conditions

Based on a visual inspection of the pavement during our field reviews, the existing pavement condition appears to be fair with minor cracking and rutting observed at several locations within the limits of the project. Isolated pavement deficiencies such as cracking at intersections, poor utility patches were also observed as shown in **Figure 2-4.**

Figure 2-4 Existing Pavement Conditions

2.5.3 Pavement Condition Survey

Based on the 2021 Pavement Condition Survey (PCS), the existing pavement indicated the ride ratings are prone to be deficient for the 35-mph posted speed limit on the left and right sides of the roadway. The PCS rating from 2020 and 2021 are listed in **Table 2-2.** These values are forecast to further deteriorate by the 2027 forecast year (See **Appendix C**).

Table 2-2 Pavement Condition Ratings

Milepost Limits	2020 PCS Ratings			2021 PCS Ratings			2027 Forecast PCS Rating	
	Crack	Ride	Rut	Crack	Ride	Rut	Crack	Ride
MP 16.686 –18.057	9.5	6.4	9.0	9.5	6.3	9.0	7.0*	5.7*

** Ride ratings are considered prone to be deficient.*

2.5.4 Ground-Penetrating Radar

A Ground-Penetrating Radar (GPR) Test for this project was completed in June 2022 the results are summarized in **Table 2-3.** The GPR test results indicate the existing asphalt thickness varies from 2.87 to 11.7 inches, with an overall average of 8.69 inches on the left side of the roadway and 3.41 to 12.99 inches and adjusted average of 8.68 inches on the right side of the roadway. The GPR Results are shown in **Appendix D.**

Table 2-3 Summary of GPR Test Results

Lane #	Total Asphalt Thickness (inches)							
	L-Direction				R-Direction			
	Min	Max	Average	Standard Deviation	Min	Max	Average	Standard Deviation
1	3.04	11.21	8.69	1.23	3.17	11.82	8.77	1.13
2	2.71	12.2	8.7	1.2	3.65	14.17	8.59	1.03
Overall	2.875	11.705	8.695	1.215	3.41	12.995	8.68	1.08

2.6 Analysis of Existing Deficiencies

2.6.1 Design Criteria

This Scoping Report analyzes the existing conditions for compliance with the design criteria from the current edition of the FDM (January 2023). Existing components reviewed include roadway, signing & pavement markings, and signalization. It is the Designer's responsibility to implement the design criteria from the applicable edition of the FDM and FDOT Standard Plans effective for this project (Letting Date December 2025). Other documents used for review of this RRR Project include the applicable editions of the following manuals or guidelines:

- American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets
- FDOT Utility Accommodation Manual (UAM)
- Americans with Disabilities Act (ADA) Standards for Accessible Design
- ADA Standards for Transportation Facilities
- AASHTO Roadside Design Guide (RSDG)
- FDOT District 6 Design Handbook
- FDOT Drainage Design Guidelines
- Americans with Disabilities Act Accessibility Guidelines (ADAAG)
- Public Right-of-Way Accessibility Guidelines (PROWAG)
- FDOT Speed Zoning Manual
- Manual of Uniform Traffic Control Devices (MUTCD)
- FDOT Traffic Engineering Manual (TEM)

2.6.2 Lanes

2.6.2.1 Lane Width

Based on a review of the plans from the resurfacing Project FPID 250222-1-52-01 (FY 2004), the existing travel lane widths vary from 10.5 feet to 11-feet wide. The roadway lane widths do not provide the minimum 11 feet required for a C4 context class and design speed of 40 mph from NE 88th Street to NE 90th Street. As such, a design variation for lane width is required to maintain the existing lane widths.

2.6.2.2 Pavement Cross Slope

The existing pavement cross slopes will be documented by the Design Survey to be performed as part of the final Design Phase of this project. An analysis of the digital terrain model (DTM) to identify specific locations with substandard cross slopes is not included in this report. It is assumed the existing cross slopes may be substandard within the project limits.

Based on the Department's Practical Design Guidelines, minor cross slope correction should be eliminated from Resurfacing Projects, if the existing cross slopes are within the allowable ranges per FDM, Section 210.2.4.1, Table 210.2.3. The District Design Handbook states "cross slope correction should be included in the scope of work only when historical crash data can be directly attributed to the deficient cross slope and the cross-slope correction can be practically constructed without extreme constraints or impacts."

At the time of this report submittal, the District Traffic Operations Office has not identified a significant crash pattern directly related to substandard cross slopes within the project limits. The Designer is responsible for reviewing the most recent five-year crash data and coordinating with the District Traffic Operations Office to determine if there is a historical crash pattern directly attributed to the deficient cross slopes.

2.6.2.3 Roadway Transitions

No roadway transitions are within the project limits.

2.6.3 Median

The median within the project limits varies from 10 feet to 20 feet. FDM requires 22 feet median for curbed roadways with C4 context class and 40 mph design speed. However, where existing curb locations are fixed due to severe right of way constraints, the minimum median width may be reduced to 15.5 feet for design speeds ≤ 40 mph. Based on the existing plans, the existing median width does not meet the FDM requirements; as such, a design variation for median width will be required.

2.6.4 Shoulders

There are no roadway shoulders present. However, there are Type F curb and gutter on the outside of the roadway throughout the project limits.

2.6.5 Curbed Roadways

Existing Type F curb and gutter is located along both sides of the roadway and along the median throughout the project limits. The existing curb placement meets criteria for the C4 context class and design speed of 40 mph.

2.6.6 Roadside Slopes

Within the curbed roadway segment, no steep side slope conditions are present. The existing back of sidewalk generally matches the grade of the adjacent property.

2.6.7 Border Width

The existing minimum border width of 7 feet along the project limits does not meet the minimum 8 feet requirement for this roadway context class and design speed. As such, a design variation for border with will be required to maintain the existing condition.

2.6.8 Horizontal Alignment

There is one horizontal curve located within the project limits based on the existing as-built plans. The existing curve has a radius of 1,151.28 feet with curve length of 787.08 feet. The existing horizontal curve radius and length meet the requirements for a 40-mph curbed roadway. As such, the existing condition will remain.

2.6.9 Superelevation

The existing horizontal curve located within the project limits provided the required reverse crown (0.02) superelevation.

2.6.10 Vertical Alignment

2.6.10.1 Grades

The existing roadway has a sawtooth profile with minimum profile grade of 0.3% and maximum profile grade of 0.42%. The maximum change in grade without vertical curve is 0.72% which is less than less than maximum 0.8% requirement for curbed roadway with 40 mph design speed. The existing profile grades meet the FDM criteria and will be maintained.

2.6.10.2 Vertical Curvature

There are no vertical curves along the roadway corridor. The existing sawtooth profile meets the requirements for maximum change in grade without vertical curve.

2.6.10.3 Vertical Clearance

Overhead Signals and Signs: All existing overhead signals within the project limits are mounted on existing mast-arms and are present at 4 signalized intersections. Existing overhead signs are

also mounted on mast-arm signal poles. Based on a review of the existing plans, the existing mast-arm mounted signals were constructed to meet a minimum vertical clearance of 17 feet. The exact vertical clearances are unknown at this time and will be documented by the Design Survey to be performed as part of the final Design Phase of the project.

Utilities: Existing utility lines cross over the roadway at several locations within the project limits. The exact vertical clearances for the utilities are unknown at this time.

2.6.11 Sight Distance

2.6.11.1 Stopping Sight Distance

Based on the existing plans, there no vertical stopping sight distance issues since there are no vertical crest curves along the corridor.

2.6.11.2 Clear Sight Triangles

Clear sight triangles were evaluated at the intersections and driveways within the project limits. Based on field observations and an office review, obstructions to intersection sight distance were identified at several locations within the project limits as shown on the Roadway Plans. **Figure 2-5** shows examples of existing intersection sight distance issues within the project limits.

Figure 2-5 Clear Sight obstructions at intersections

Based on field observations and an office review, sight triangle obstructions consist of trees, light poles, signposts, fences and privacy walls. At the time of this Scoping Report submittal, the District Traffic Operations Office has not documented any specific intersections where a significant crash history is directly related to the existing sight triangle obstructions. Where

intersection sight distance obstructions are located within the right of way and are easily movable, the Designer should consider relocation of the obstruction. Any proposed tree relocation/removal should be coordinated with the District Landscape Architect. If relocation/removal of any obstructions is deemed unfeasible, a design variation for clear sight distance is required.

2.6.12 Intersections

This RRR Scoping Report does not include an evaluation of the existing intersections to determine if a Traffic Engineering Study is required.

2.6.13 Lane Tapers & Auxiliary Lanes

Existing turn lanes are present at 7 intersections within the project limits as shown in **Table 2-4**. Based on the existing plans, the taper length meets the required length of 50 feet for single turn lane. Deceleration lengths for the turn lanes were evaluated based on minimum criteria from FDM Exhibit 212-1. The minimum deceleration distance of 155 feet for the design speed of 40 mph is provided at all the existing turn lanes. At the time of this Scoping Report submittal, the District Traffic Operations Office has not documented any specific intersections with a significant crash history related to turn lanes, a need to extend the existing left-turn lanes, or a need to construct new turn lanes.

Table 2-4 Existing Turn Lane Length

Intersection	Turn Lane Direction	Total Length (ft)	Taper Length (ft)	Meets Minimum Deceleration Distance per FDM 212.6
NE 91st Street	NB Left	275	50	Yes
	SB Left	300	55	Yes
NE 8th Avenue	SB Left	305	55	Yes
The Pastoral Center Entrance	SB Left	230	50	Yes
NE 96th Street	NB Left	480	50	Yes
	SB Left	450	80	Yes
	SB Right	320	60	Yes
Miami Shores Country Club	NB left	240	50	Yes
Miami Shires Aquatic Center	NB Left	250	60	Yes
NE 104th Street	NB Left	260	50	Yes
NE 105th Street	NB Left	205	50	Yes

2.6.14 Driveways

Existing driveways typically consist of urban concrete flared driveways. No inactive driveways were encountered from our site visits. At the time of this Scoping Report submittal, no ADA complaints have been received concerning the sidewalk or driveway cross slope deficiencies within the project limits. Driveway signs at the commercial driveways with a stop sign as per FDM 222.3 requirements,

2.6.15 Drainage

The existing drainage system was reviewed based on the plans from the previous projects. The existing conditions throughout the project limits typically consist of closed drainage system with curb inlets and ditch-bottom/curb inlets at side-street intersections. **Figure 2-6** shows some drainage inlets and ponding locations encountered during the field review.

Figure 2-6 Existing Drainage Issues

This Scoping Report does not include an evaluation of the hydraulic, safety and physical adequacies of the existing drainage system. Since this is a RRR project, no changes in the existing drainage system are anticipated. However, the designer should regrade curb return locations with identified ponding as shown in the project exhibits.

2.6.16 Pedestrian, Bicyclists, and Transit Facilities

2.6.16.1 Sidewalks

Existing sidewalks are located along both sides of the roadway throughout the project limits. The sidewalk widths vary from 5 feet to 8 feet as indicated in the existing typical sections. Locations of uneven and damaged sidewalks were identified at some locations within the project limits. **Figure 2-7** shows some of deficiencies encountered during the filed review.

Figure 2-7 Damaged or Uneven Sidewalks

For RRR projects, the FDM recommends that unaltered sidewalk with width 4 feet or greater may be retained within any context classification. As such, the existing sidewalk widths are recommended to remain. However, the following are substandard conditions identified.

- Unobstructed Sidewalk Width

  Clear sidewalk width less than 48 inches was identified at some locations as illustrated in the roadway concept plans. Where there is landscape buffer, it is recommended to provide additional sidewalk area to meet the 48 inches clear sidewalk width requirement. Where it is not feasible due to right of way constraints, a **design variation for unobstructed sidewalk width** is required when relocation of obstructions is not feasible and additional sidewalk width cannot be provided.

- Sidewalk Vertical Clearance

  Some of the existing shade trees along the corridor do not provide the 8.5 ft minimum vertical clearance required for vegetation over the sidewalk. These low hanging tree branches should be trimmed.

Figure 2-8 Sidewalk Obstructions

2.6.16.2 Curb Ramps and Detectable Warnings

Existing pedestrian curb ramps are located at all the intersections within the project limits. The existing pedestrian ramps were evaluated for compliance with the FDOT Design Standards and ADA Standards. Based on our field review, several curb ramp deficiencies were identified including missing/worn out detectable warnings, detectable warnings and curb ramps not aligned with the crosswalk, substandard ramp slopes and substandard transition slopes. **Figure 2-9** shows examples of the deficiencies encountered within the project limits. It is recommended to upgrade all the deficient curb ramps within the project limits.

Figure 2-9 Existing Curb Ramps

2.6.16.3 Crosswalks

Existing marked crosswalks are typically 10 feet wide with 12" parallel standard crosswalk markings located at 11 intersections within the project limits. The current FDM criteria requires special emphasis crosswalk markings at signalized intersections on all marked legs. The signalized intersection at NE 96th Street has special emphasis crosswalk markings on all legs. Two signalized intersections are missing special emphasis crosswalk markings on the following legs.

1. NE 91st Street – missing special emphasis crosswalk on the north leg
2. NE 105 Street – missing special emphasis crosswalk on the west leg

New high emphasis crosswalks are recommended to be installed at all the legs of the existing signalized intersection with the exception of NE 6th Avenue, which has no crosswalks.

2.6.16.4 Bicycle Facilities

There are no bicycle lanes along the roadway. A Design Variation will be required for the lack of bicycle facilities.

2.6.16.5 Pedestrian Signals

Four signalized intersections are located within the project limits. Existing pedestrian signal heads are provided at most of the signalized crosswalks. However, several deficiencies were identified including no countdown pedestrian signals, obsolete or missing pedestrian push buttons and detectors signs. In addition, the location of some of the push buttons exceed the 10" maximum reach. **Figure 2-10** shows the existing pedestrian signalization features.

Figure 2-10 Existing Pedestrian Signalization Features

Miami-Dade County's preference is to provide push buttons with actuation for all the crosswalks including the minor streets.

2.6.16.6 Transit Facilities

Miami-Dade Transit (MDT) Bus Route 3, 33, 93, and Miami Shores East Shuttle have operations along the project limits. There are 10 bus stops along the project corridor; however, only three of the bus stops provide benches and trash cans. Most of the bus stops provide the required boarding and alighting areas however, these do not meet the minimum 5 feet width and 8 feet length requirement and are recommended to be widened. **Figure 2-11** shows examples of existing transit features within the project limits.

Figure 2-11 Existing Transit Facilities

2.6.17 At-grade Railroad Crossing

There are no railroad crossings within the project limits.

2.6.18 Lighting

The existing lighting system within the project limits consists of decorative light poles located along the back of sidewalk on both sides of the roadway between NE 88th Street and NE 93rd Street and on the west side from NE 93rd Street to NE 105th Street. Lighting retrofit was recently done for the signalized intersections along the project corridor under FM 440191-1 (FY 2019) except for the NE 6th Avenue intersection. At the time of this report submittal, the District Lighting Engineer has not documented any additional lighting improvements to be addressed by this RRR

Project. However, it is recommended to provide lighting retrofit at the NE 6th Avenue intersection to meet the FDOT requirements.

2.6.19 Signing and Pavement Markings

Existing signing includes ground-mounted signs within the sidewalk, and median along the project corridor. There are also signs mounted on overhead mast-arms at signalized intersections. Faded, broken or substandard signs were observed within the project limits.

Based on field observations, the existing pavement markings are generally in fair condition, with faded striping as well as raised reflective pavement markers that are missing or with low reflectivity. **Figure 2-12** illustrates examples of substandard signing and pavement markings within the project limits.

Figure 2-12 Existing Signs and Pavement Markings

An existing sign inventory is not included in this Scoping Report. A review of all existing signage with the Manual on Uniform Traffic Control Devices (MUTCD) and the FDOT Traffic Engineering Manual (TEM) criteria should be conducted at the Design Phase. Based on field observations, there are some existing signs within the project limits that are defaced/damaged, and therefore do not comply with the latest standards. Most of the existing single-post signs along the roadside comply with the standard placement per Index 700-101. It is also recommended to provide wrong way countermeasure signs and pavement markings at the unsignalized intersections.

2.6.20 Signalization

Four signalized intersections are located within the project limits as follows:

1. NE 6th Avenue
2. NE 91st Street
3. NE 96th Street
4. NE 105 Street

The signal maintaining agency is Miami-Dade County. The existing signalization consists of traffic signals mounted horizontally on mast arms.

The existing traffic signals do not include backplates. It is recommended to provide flexible retroreflective backplates to all signals at signalized intersections. However, if the retro reflective backplates cannot be installed without replacing the signal heads then the recommendation can be omitted. Pedestrian signals with countdown are present at the existing crosswalks; however, some of the side street cross walks do not have pedestrian signals. In addition, the location of some of the push buttons exceed the 10 feet maximum distance to the curb ramp. The existing traffic signals do not include video detection, per current District criteria. It is recommended to provide video detection at the existing signalized intersections. Based on coordination with the District Traffic Operations Office, the existing cabinets at these the signalized intersections may have to be replaced due to current age of the cabinets, age of cabinets post construction, and suitability of cabinets to support TSM&O improvements. In addition, the electrical service disconnect also needs to be provided or replaced.

2.6.21 Bridges Structures

The SR 5/Biscayne Boulevard Bridge (870770) over the C-8 canal is located within the project limits. The bridge was constructed in 1994 and has a sufficiency rating of 86.4 and a health index of 99.47. No modifications to the existing bridge structure are required.

2.6.22 Roadside Safety

2.6.22.1 Lateral Offset & Control Zone

Light Poles

The existing lighting system within the project limits have a lateral offset of greater than 1.5 feet from the face of the curb. The existing light poles also meet the 4 feet lateral clearance within the intersection control zones to satisfy the minimum requirement for RRR.

Signal Poles and Controller Cabinets

All existing mast-arm signal poles and controller cabinets meet the minimum required lateral offset of greater than 1.5 feet from the face of the curb. The existing signal mast arms and cabinet also meet the 4 feet lateral clearance within the intersection control zones to satisfy the minimum requirement for RRR.

Trees

The existing trees are typically located at the back of the sidewalk. All the existing trees along the corridor meet criteria for lateral offset of greater than 1.5 feet from the face of the curb to satisfy the minimum requirement for RRR.

Aboveground Utilities

The existing above ground utility poles within the project limits that have a lateral offset of 4 feet or more from the face of curb and meet the minimum lateral offset or clear zone requirements.

Traffic Control Signs

All existing ground-mounted signs meet the minimum lateral offset requirements from the Standard Plans Index 700-101 and provide for the minimum 2 feet offset from the face of curb to the inside edge of the sign panel.

Bus Stops

All the existing shelters, benches, and other facilities at the bus stop locations within the project limits have a lateral offset greater than 4 feet from the face of curb and meet the RRR lateral offset requirements.

Based on the evaluation of the existing features along the project corridor meet the lateral offsets requirements. The existing condition is to remain.

2.6.22.2 Roadside Barriers

Pedestrian handrails are located at the back of the sidewalk on the west side between NE 99th Street and NE 104th Street and along the east side from north of NE 100th Street to NE 104th Street. The existing pedestrian handrails are in good condition and are to remain. Guardrails are also present within the project limits. The locations, conditions and recommendations are provided in the table below.

Table 2-5 Existing Guardrail Condition

#	From	To	Side	Condition	Recommendation
1	333+15	334+15	LT	The existing guardrail is located behind the sidewalk on both sides of the roadway at the approaches to the bridge over the C-8 Canal. The guardrails are in fair condition and do not provide a thrie-beam connection to the bridge. The approach end anchorages do not meet standards.	Replace the existing guardrails at the bridge to provide thrie-beam connection to the bridge and end anchorages
2	335+40	336+20	LT		
3	333+60	334+30	RT		
4	336+10	337+08	RT		

2.6.23 Ancillary Structures

Existing ancillary structures within the project limits include existing signal mast arm poles, light poles, and utility poles. The existing conditions are to remain.

2.6.24 Landscape

There are existing trees on both sides of the roadway and the median. Trim trees that are obstructing the visibility of road signs. Coordinate with the Village of Miami Shores for any tree trimming as needed. When corrective pruning is required, the designer shall use the pay item for Tree Root and Branch Pruning, to ensure the corresponding specification is added to the project.

2.7 Operating Conditions

2.7.1 Access Management

SR 5/US-1/Biscayne Boulevard from SR 915/NE 6th Avenue to NE 105th Street is designated with an Access Management Class 7 within the project limits. The existing condition is primarily a divided roadway. The existing conditions include 4 signalized and 11 unsignalized intersections within the project limits. The existing condition is to remain.

2.7.2 Maintenance Concerns

At the time of this Scoping Report, the District Maintenance Office (North Dade Yard) has not documented any specific maintenance issues within the project limits to be addressed by this RRR Project. It is the Designer's responsibility to coordinate with the District Maintenance Office to determine if any additional outstanding maintenance issues within the project limits will be addressed or should be included in the scope of work for this RRR Project.

2.8 Safety Conditions

This Scoping Report does not include an assessment of the historical crash statistics by a qualified safety specialist. The District Traffic Operations Office provided a RRR Safety Review Technical Memorandum to identify significant crash locations, possible causes, suggested correction measures, or additional safety improvements to be included in the scope of work for this RRR Project.

3.0 RECOMMENDATIONS IMPROVEMENTS

To address the project purpose and need and the deficiencies identified, the design of this project should implement the following recommendations**.**

3.1 Roadway

- Mill and resurface the existing pavement.
- Adjust the existing storm drain manholes, utility manhole tops, and valves within the limits of milling & resurfacing or sidewalk reconstruction, as necessary.
- Regrade the curb and gutter at the intersection curb returns locations where water ponding was observed.
- Repair/replace damaged drainage inlet tops.
- Reduce the curb radius at NE 91st Street and NE 104th Street intersections to improve operations.
- Provide channelization islands at NE 90th Street and NE 92nd Street intersections.
- Replace the existing guardrails at the approaches to the C-8 Canal bridge to provide thrie-beam connection to the bridge and end proper anchorages.
- Upgrade TMS 872556 to permanent installation with inductive loops, axle sensors, cabinets, pull boxes and conduit.

3.2 Pedestrian and Bicycle Facilities

- Upgrade deficient pedestrian curb ramps and related components such as detectable warning surfaces, pavement markings, pedestrian crossing signs and plaques.
- Reconstruct damaged or missing sidewalk segments (lifted, sunken or broken sidewalk) and address the cause of said damage.
- Provide new high emphasis crosswalk with pedestrian signals on the north leg of NE 91st Street intersection.
- Upgrade the crosswalk on the west leg of NE 105th Street to high emphasis crosswalk.

3.3 Signing and Pavement Markings

- Upgrade all broken and substandard ground-mounted signs to comply with the applicable editions of the FDOT Standard Plans, the FDOT Traffic Engineering Manual (TEM), and the Manual on Uniform Traffic Control Devices (MUTCD).
- Provide wrong way countermeasure signs and pavement markings at the unsignalized intersections.
- Replace and upgrade all pavement markings to meet the latest FDOT Standard Plans for Road Construction.

- Replace all missing, damaged and/or non-ADA compliant signs within the project limits.
- Replace the existing pavement markings along the bridge over C-8 Canal with permanent tape per FDM 230.3.1.4

3.4 Signalization

- Provide new countdown pedestrian signals and/or install ADA-compliant pedestrian pushbuttons and detector signs at all signalized intersections.
- Replace pull boxes (traffic signal and lighting) impacted by the reconstruction of sidewalk and/or pedestrian curb ramps.
- Provide flexible retroreflective backplates to all signals at signalized intersections. If the retro reflective backplates cannot be installed without replacing the signal heads, then the recommendation can be omitted.
- Provide video detection for the existing signalized intersections and upgrade the existing cabinets and electrical service disconnect.

3.5 Lighting

- Replace lighting pull boxes impacted by the reconstruction of sidewalk segments and/or pedestrian curb ramps.

3.6 Landscape

- Coordinate with the maintenance office to trim trees and shrubs to comply with clear sight triangle requirements where feasible.
- When corrective pruning is required, the designer shall use the pay item for Tree Root and Branch Pruning to ensure the corresponding specification is added to the project.

3.7 Safety Improvements

The District Traffic Operations Office provided a 3R Safety Review Technical Memorandum to identify significant crash locations, possible causes, suggested correction measures, or additional safety and non-safety improvements to be included in the scope of work for this RRR Project. Additional studies along the corridor are ongoing and will be provided at a later time. The designer should coordinate with the District Safety Office on the status and recommendations from these studies.

SR 5 Biscayne Boulevard at NE 91st Street

Non-Safety Improvements

- Upgrade the crosswalk on north leg to high-emphasis pavement markings.

- Provide a crosswalk on the north leg of the intersection. (This improvement may require realigning/relocating the stop bar facing southbound. A technical memorandum was assigned to CHP to evaluate this improvement. The Draft Report is still under review by the Safety office. Extracts from the Draft Report are included in Appendix E. Upon completion of the study, further coordination should follow between the Safety office and Design PM to implement the improvements).

SR 5 Biscayne Boulevard at NE 96th Street

Safety Improvements

- Install flexible retroreflective backplates facing all approaches.

Non-Safety Improvements

- Upgrade the school crossing signs to fluorescent green yellow.
- Upgrade the pedestrian push buttons for crossing the north leg to meet FDOT standards.
- Trim vegetation that may be obstructing visibility of traffic signals and signs.

SR 5 Biscayne Boulevard at NE 10th Avenue

Safety Improvements

- Replace the existing Stop sign with an oversized stop sign facing northbound.
- Install an additional oversized stop sign facing northbound traffic on NE 10th Avenue.
- Trim vegetation that may be obstructing the stop sign.

SR 5 Biscayne Boulevard at NE 105th Street

Safety Improvements

- Install flexible retroreflective backplates facing all approaches.

Non-Safety Improvements

- Upgrade the crosswalk on the west leg of the intersection to high emphasis pavement markings.
- Upgrade the pedestrian push buttons for crossing the north leg to meet FDOT standards.

3.8 Other Improvement Recommendations

An Environmental Resource Desktop Analysis (ERDA) was prepared by the District PLEMO Environmental Consultant and included in **Appendix B**.

3.9 Design Exceptions and Variations

A review of AASHTO and FDOT Design Criteria for this RRR Project identified the following Design Variations required for this project.

- Design Variation for Lane Width
- Design Variation for Median Width
- Design Variation for Border Width
- Design Variation for Lack of Bicycle Lanes
- Design Variation for Clear Sight Triangles
- Design Variation for Unobstructed Sidewalk Width

At the Design Phase, an additional review is required to determine compliance for the following elements. The Designer is responsible for reviewing the Design Survey to determine if the existing conditions comply with the design criteria. A Design Variation may be required for the following elements:

- Design Variation for Cross Slope
- Design Variation for Vertical Clearance

3.10 Recommended Typical Section

The existing cross sectional elements for the roadway typical section are recommended to remain the same as shown in **Figure 3-1** to **Figure 3-3.**

3.11 Concept Plans

Concept plans summarizing the existing deficiencies and recommended improvements are shown in **Figure 3-4.**

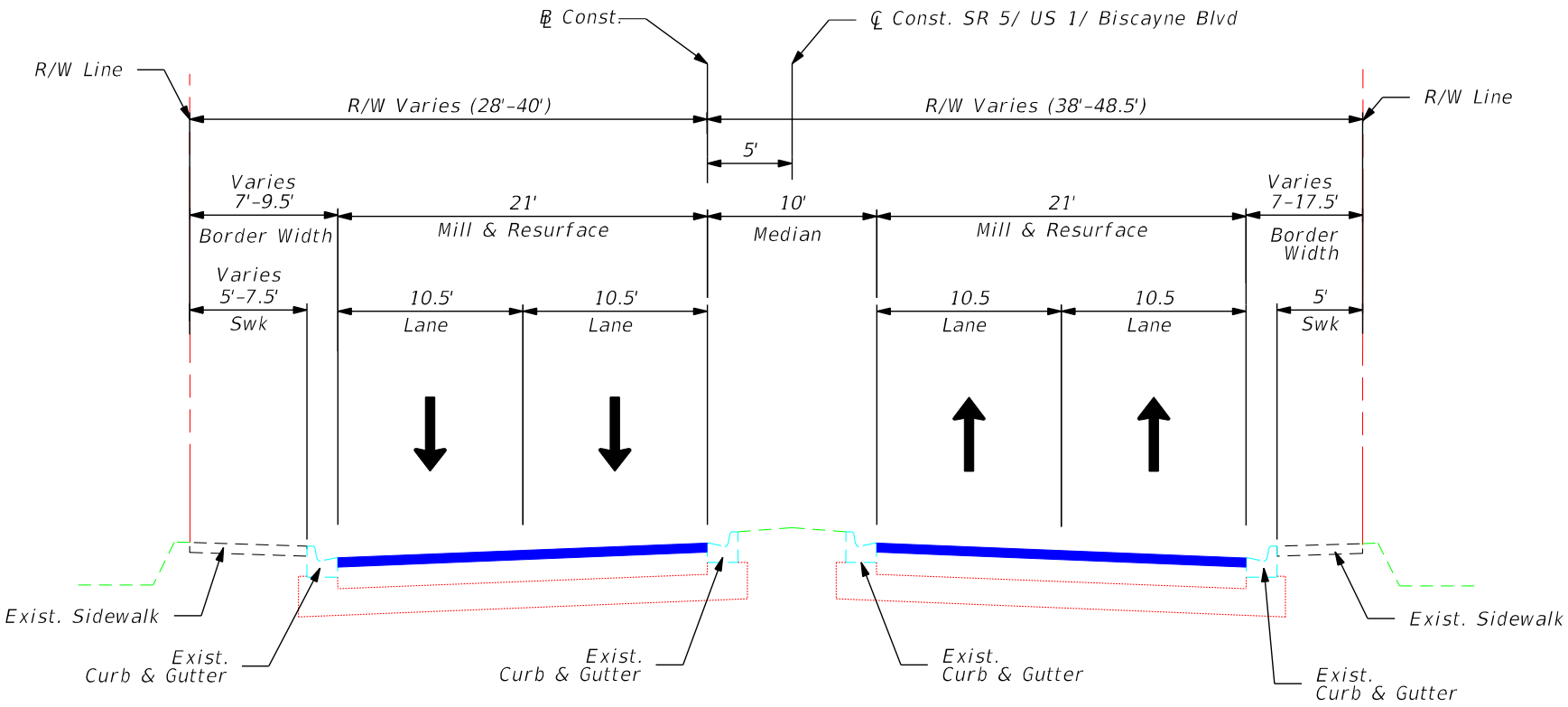


Figure 3-1 Recommended Typical Section from NE 88th Street to NE 90th Street

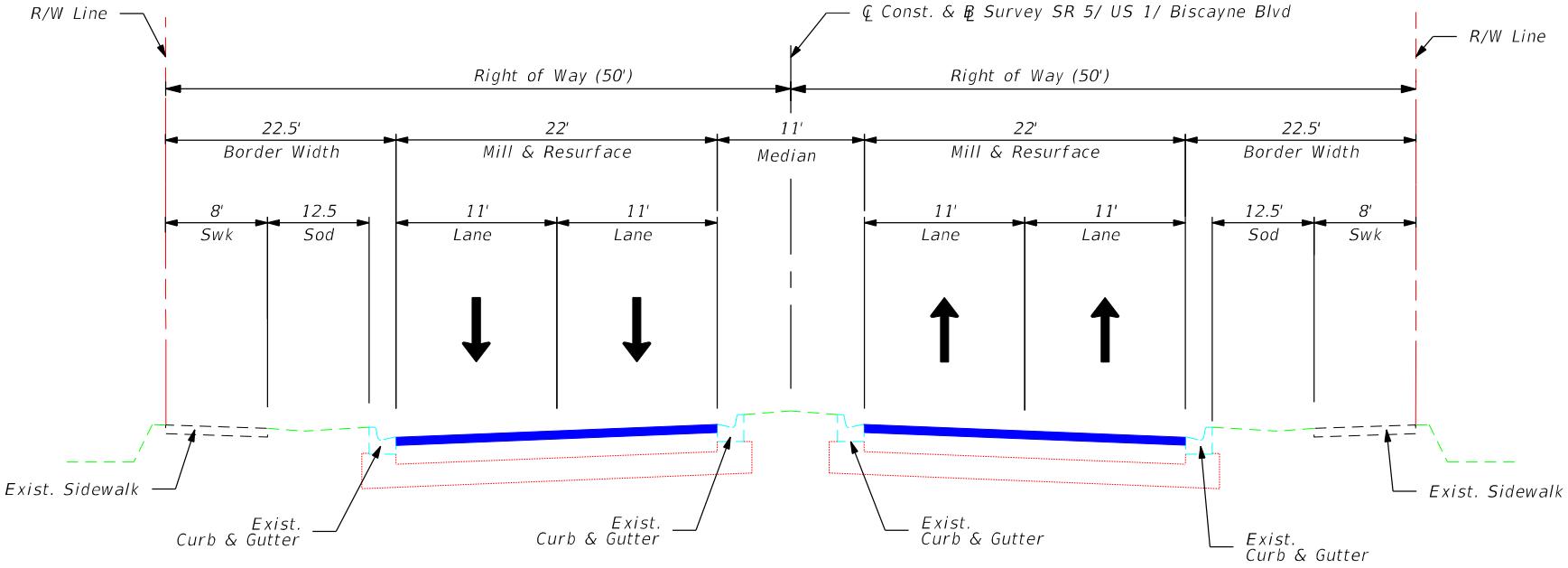


Figure 3-2 Recommended Typical Section from NE 90th Street to NE 93rd Street

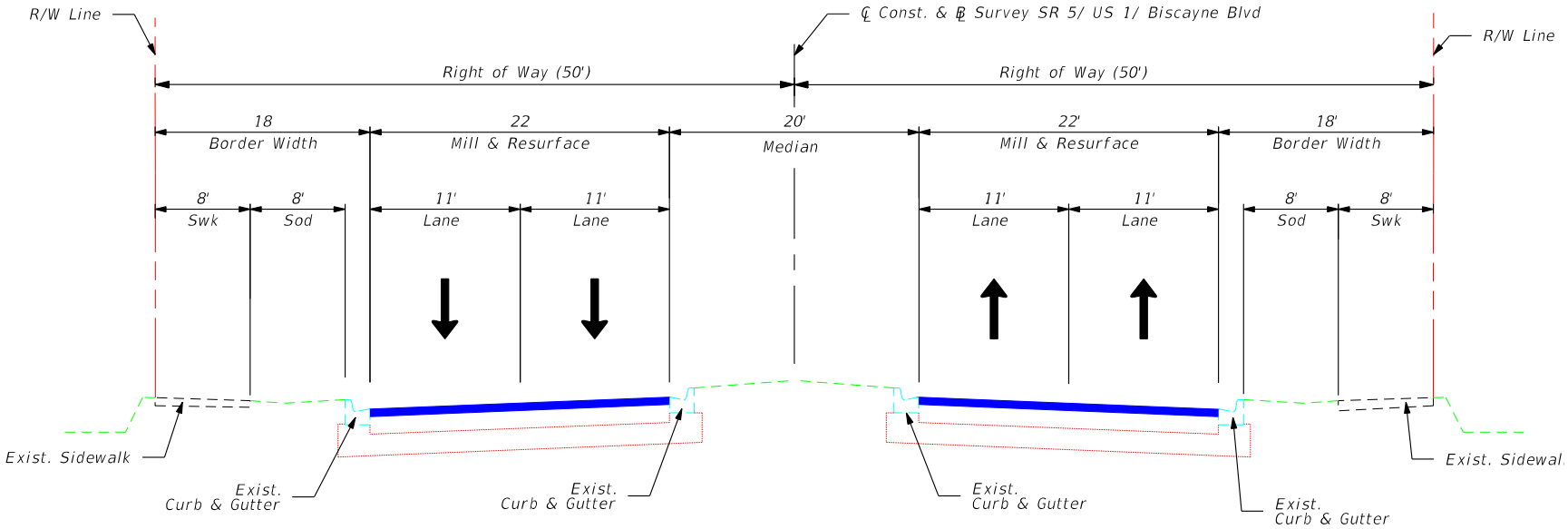
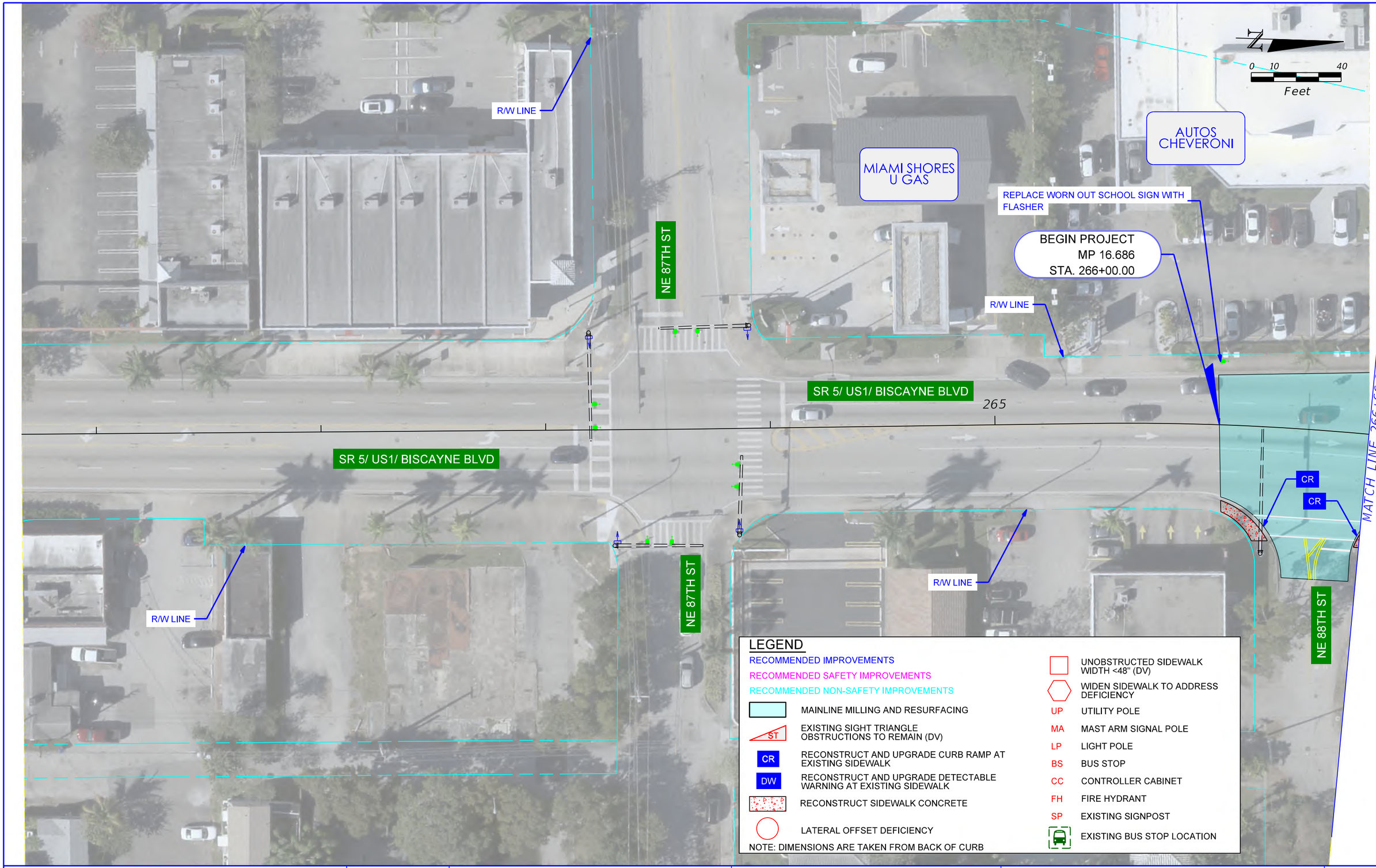


Figure 3-3 Recommended Typical Section from NE 93rd Street to NE 105th Street



FDOT DISTRICT 6
PLANNING AND ENVIRONMENTAL MANAGEMENT OFFICE
1000 NW 111TH AVENUE
MIAMI, FLORIDA 33172

PAVEMENT RESTORATION ASSESSMENT REPORT FOR
SR 5/ US 1/ BISCAYNE BLVD
FROM SR 915/NE 6TH AVE TO NE 105TH ST
(FM# 447827-1/ ROADWAY ID: 87030000/ MP 16.686-18.057)

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MIAMI-DADE	447827-1

FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

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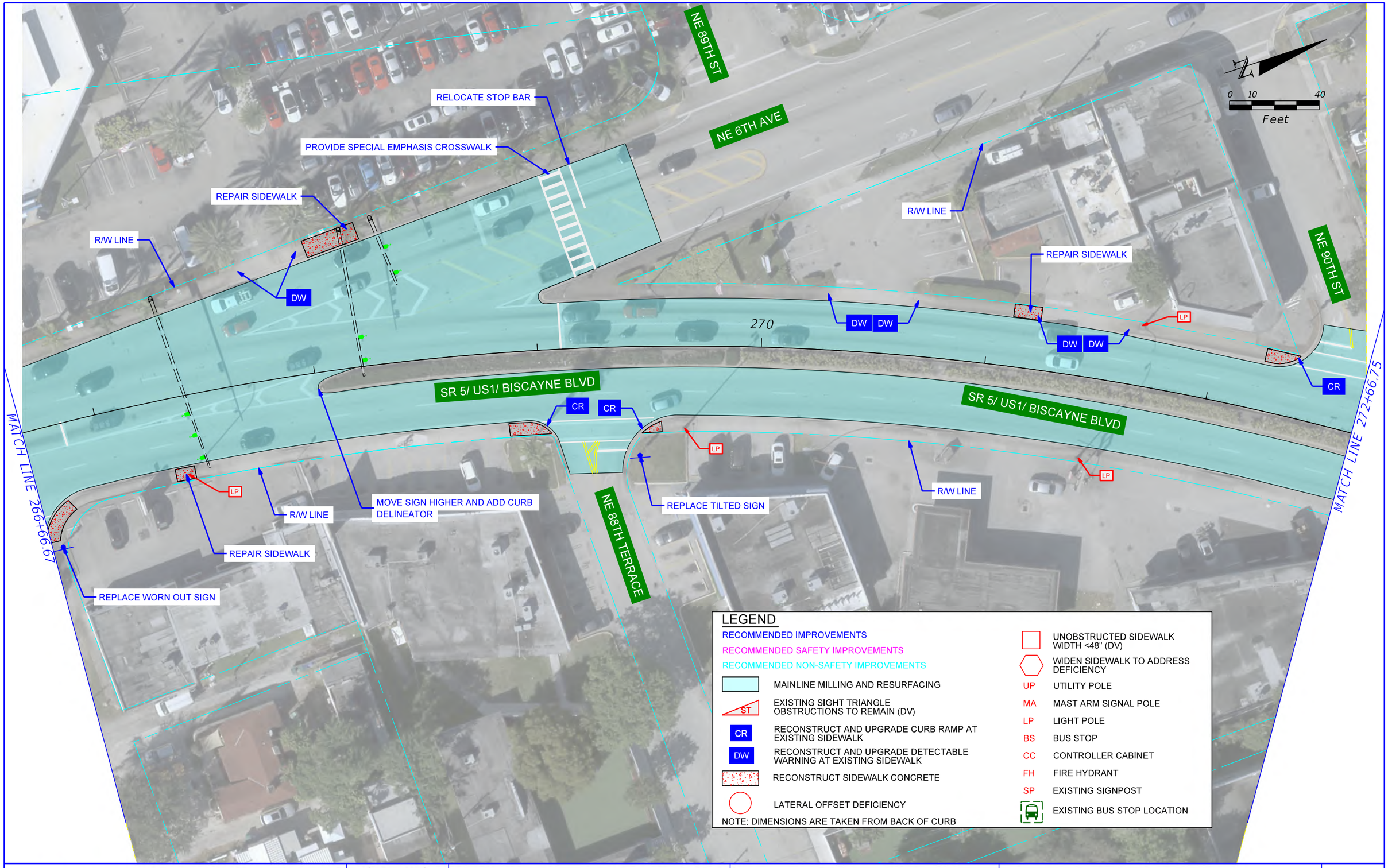

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FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

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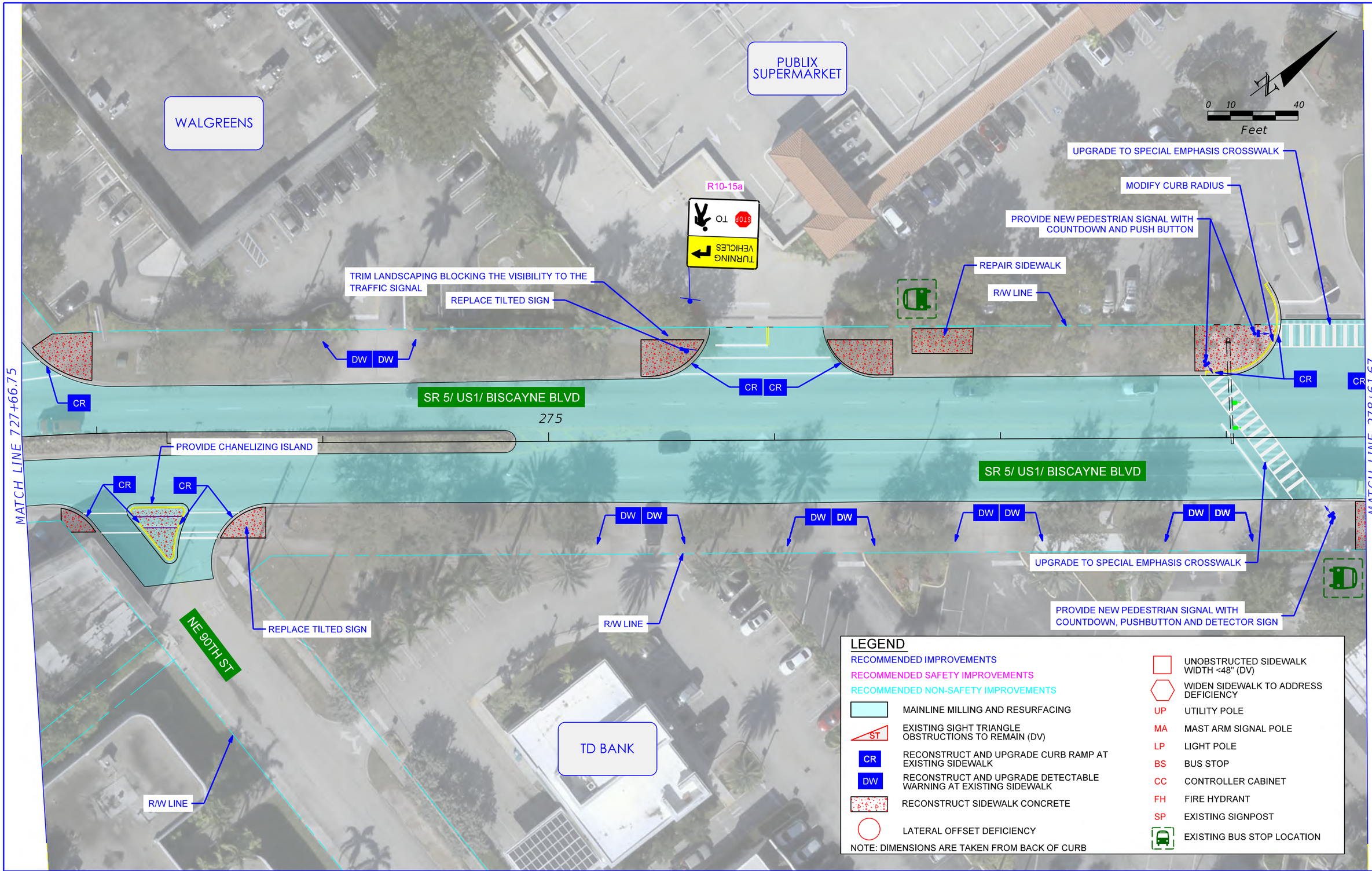

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FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

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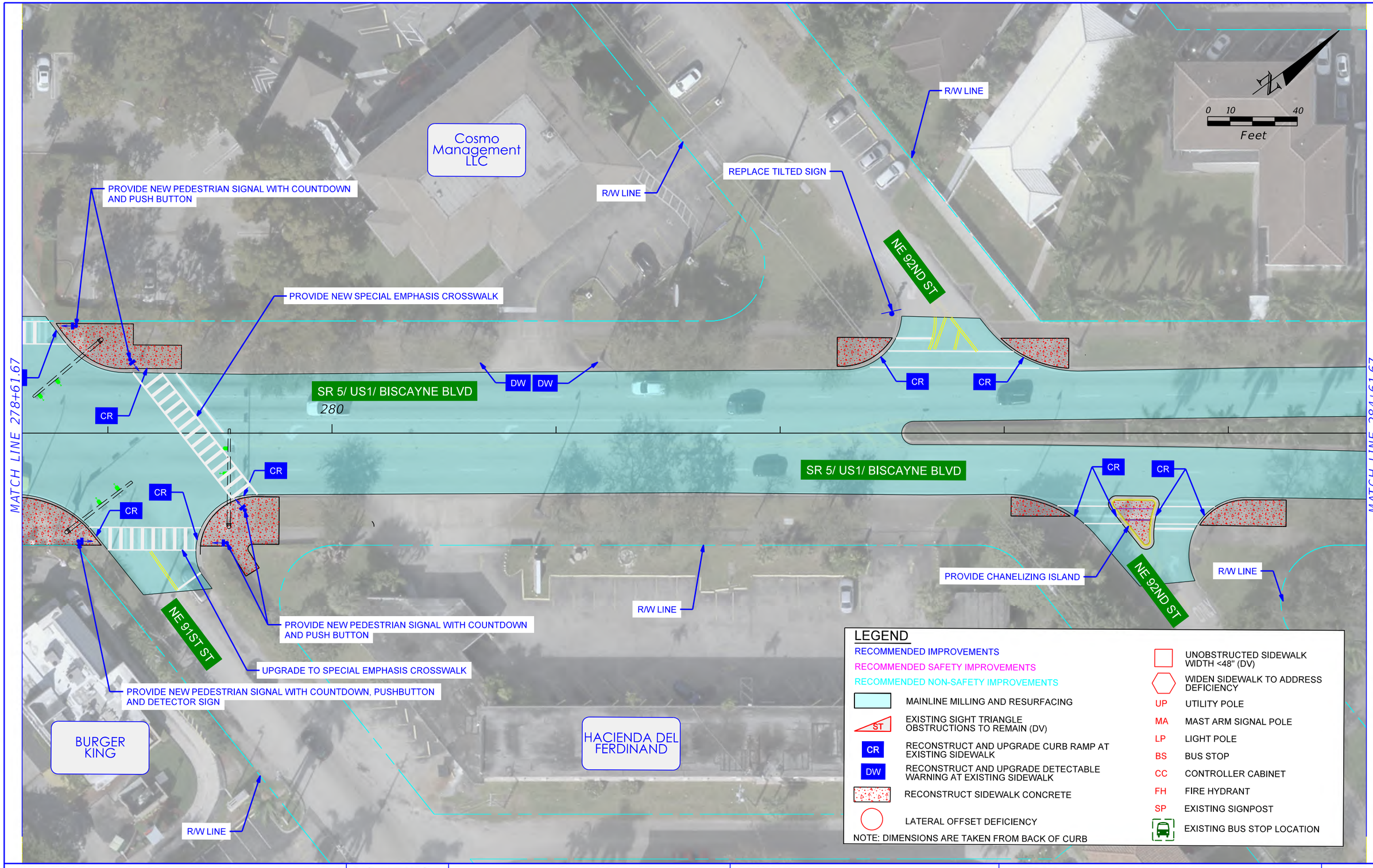

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FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

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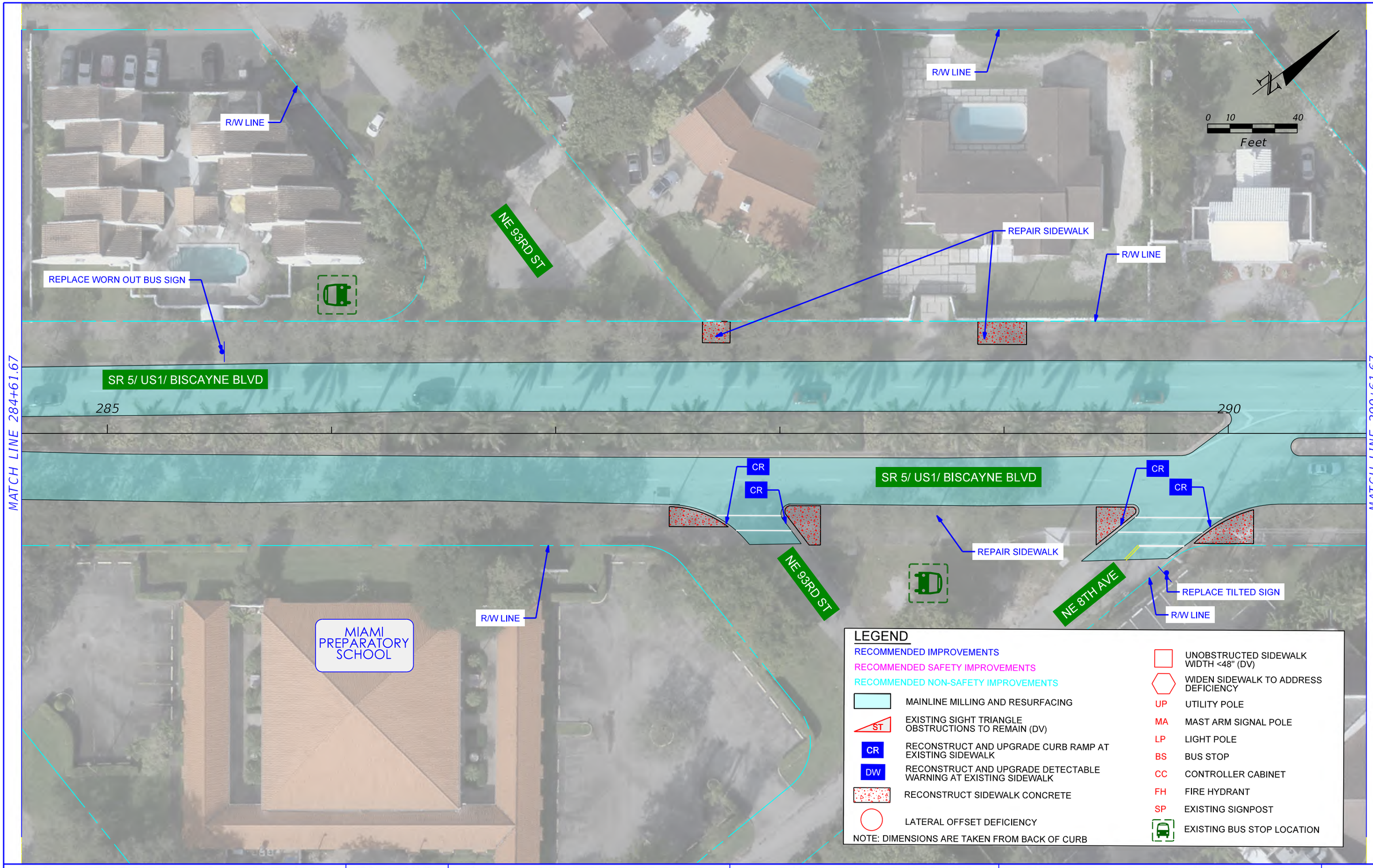

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FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

fmorales 3/29/2023 7:32:30 PM C:\Users\fmorales\Goal Associates Inc\Goal Associates - Projects\GA22011 - SR 5 US-1B

MATCH LINE 290+61.67

R/W LINE

NE 94TH ST

REPAIR SIDEWALK

R/W LINE

REPAIR SIDEWALK

NE 95TH ST

0 10 40

Feet

R/W LINE

SR 5/ US1/ BISCAYNE BLVD

295

SR 5/ US1/ BISCAYNE BLVD

MATCH LINE 296+61.67

R/W LINE

ARCHDIOCESE OF MIAMI

LEGEND

RECOMMENDED IMPROVEMENTS

RECOMMENDED SAFETY IMPROVEMENTS

RECOMMENDED NON-SAFETY IMPROVEMENTS

MAINLINE MILLING AND RESURFACING

ST — EXISTING SIGHT TRIANGLE OBSTRUCTIONS TO REMAIN (DV)

CR — RECONSTRUCT AND UPGRADE CURB RAMP AT EXISTING SIDEWALK

DW — RECONSTRUCT AND UPGRADE DETECTABLE WARNING AT EXISTING SIDEWALK

RECONSTRUCT SIDEWALK CONCRETE

LATERAL OFFSET DEFICIENCY

NOTE: DIMENSIONS ARE TAKEN FROM BACK OF CURB

UNOBSTRUCTED SIDEWALK WIDTH <48" (DV)

WIDEN SIDEWALK TO ADDRESS DEFICIENCY

UP — UTILITY POLE

MA — MAST ARM SIGNAL POLE

LP — LIGHT POLE

BS — BUS STOP

CC — CONTROLLER CABINET

FH — FIRE HYDRANT

SP — EXISTING SIGNPOST

EXISTING BUS STOP LOCATION

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PAVEMENT RESTORATION ASSESSMENT REPORT FOR
SR 5/ US 1/ BISCAYNE BLVD
FROM SR 915/NE 6TH AVE TO NE 105TH ST
(FM# 447827-1/ ROADWAY ID: 87030000/ MP 16.686-18.057)

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 5	MIAMI-DADE	447827-1

FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

PAGE NO. 40

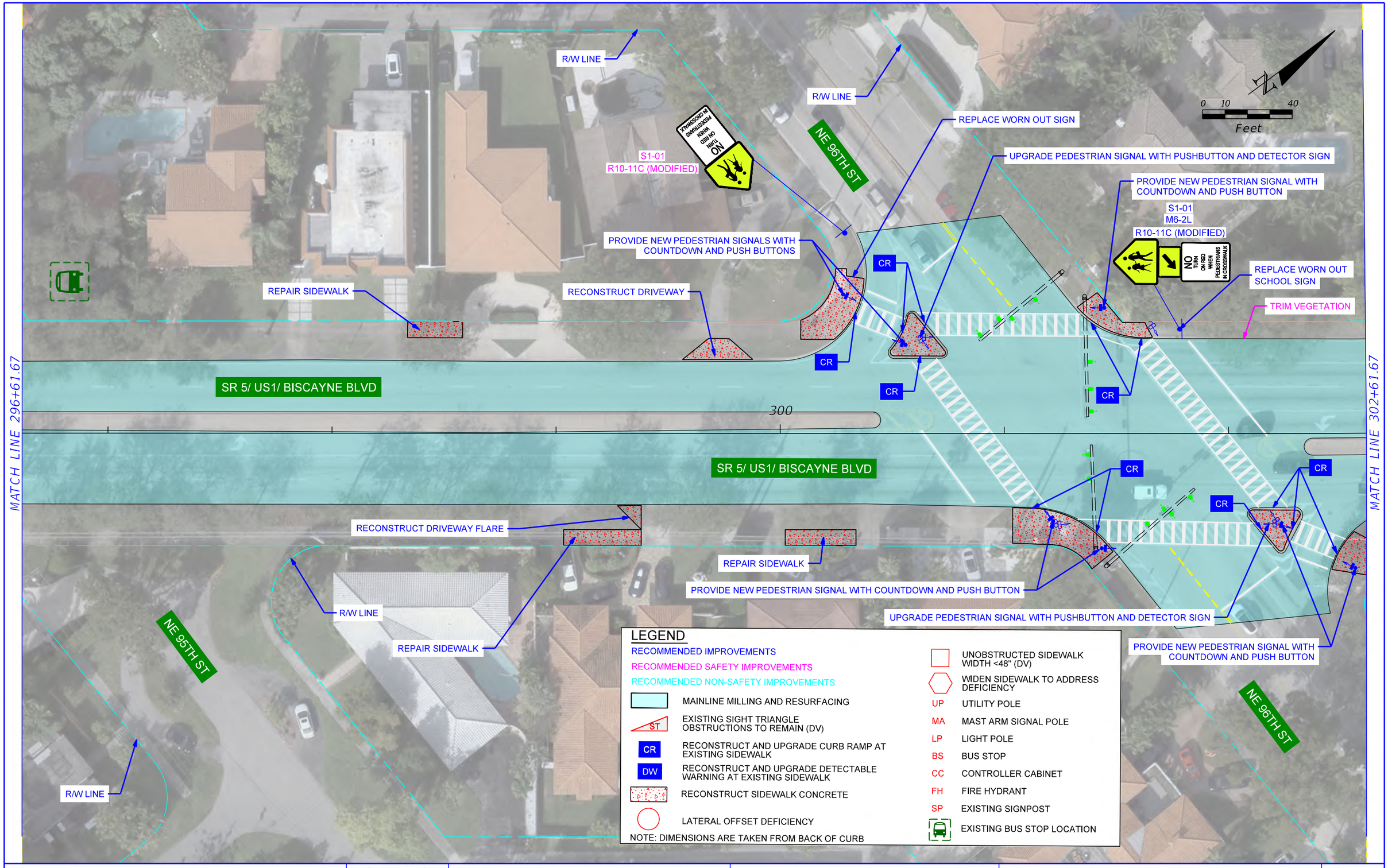

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FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

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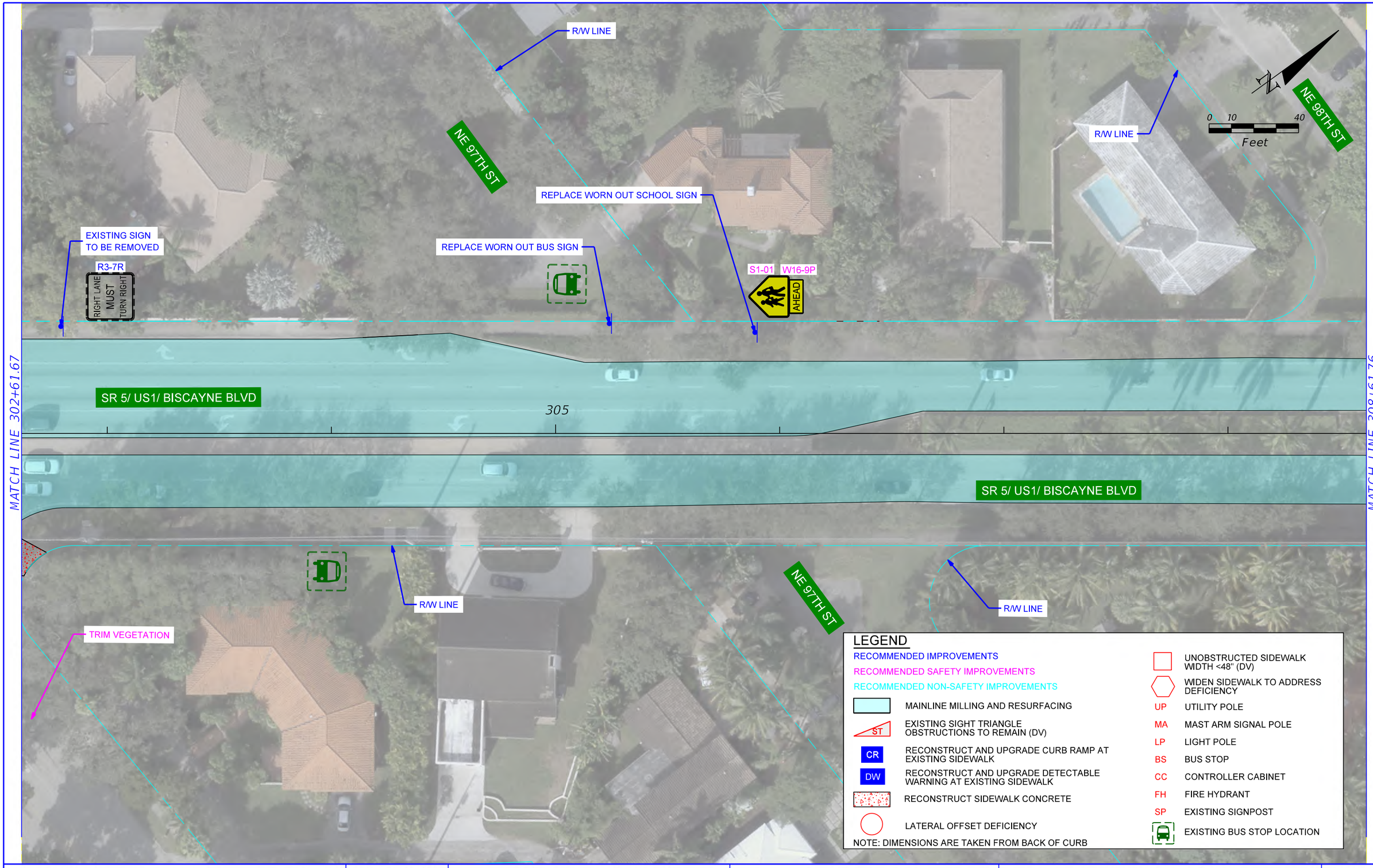

LEGEND

RECOMMENDED IMPROVEMENTS

RECOMMENDED SAFETY IMPROVEMENTS

RECOMMENDED NON-SAFETY IMPROVEMENTS

- MAINLINE MILLING AND RESURFACING
- ST — EXISTING SIGHT TRIANGLE OBSTRUCTIONS TO REMAIN (DV)
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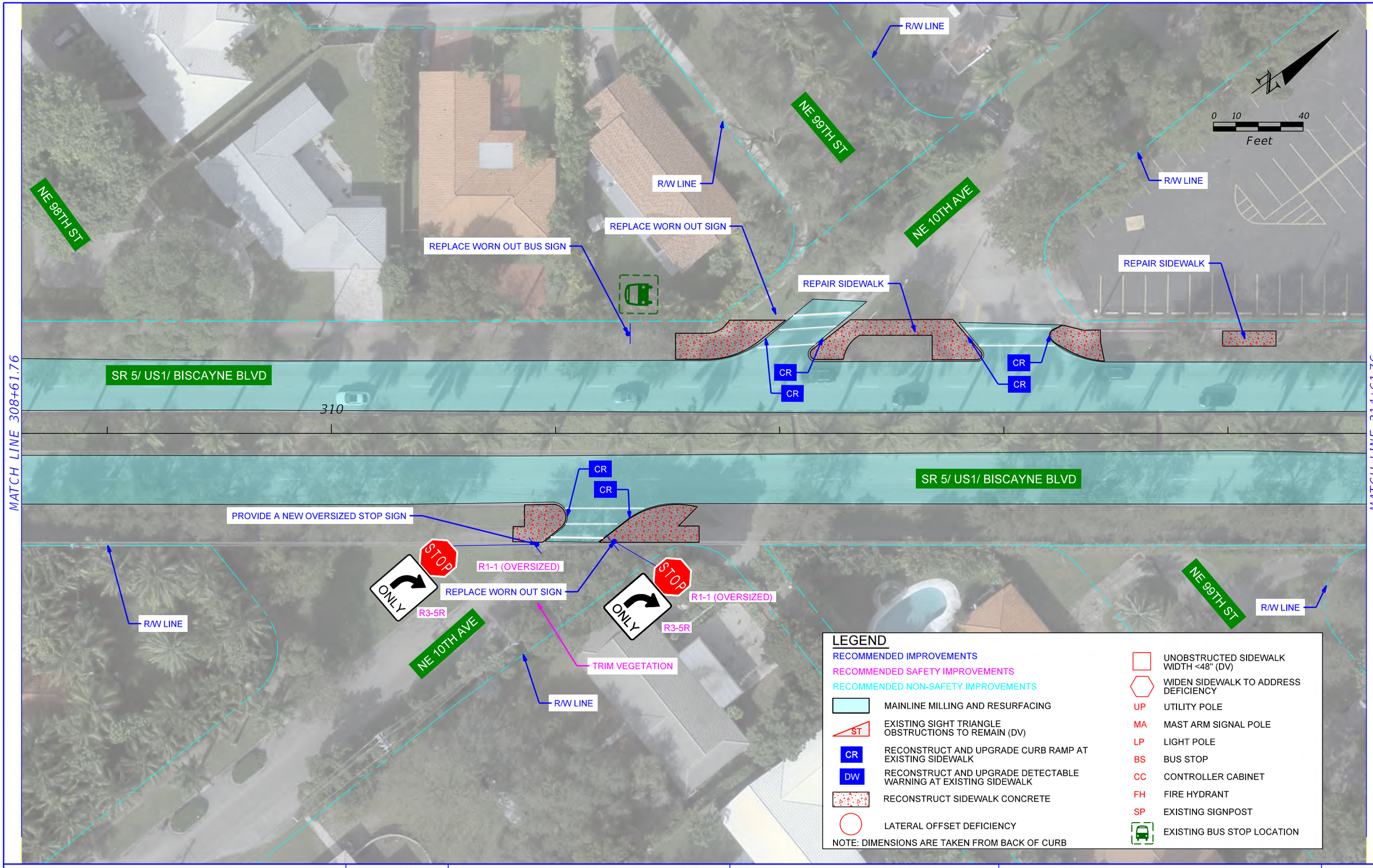
FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

PAGE NO. 42



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PAVEMENT RESTORATION ASSESSMENT REPORT FOR
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FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

PAGE NO. 43

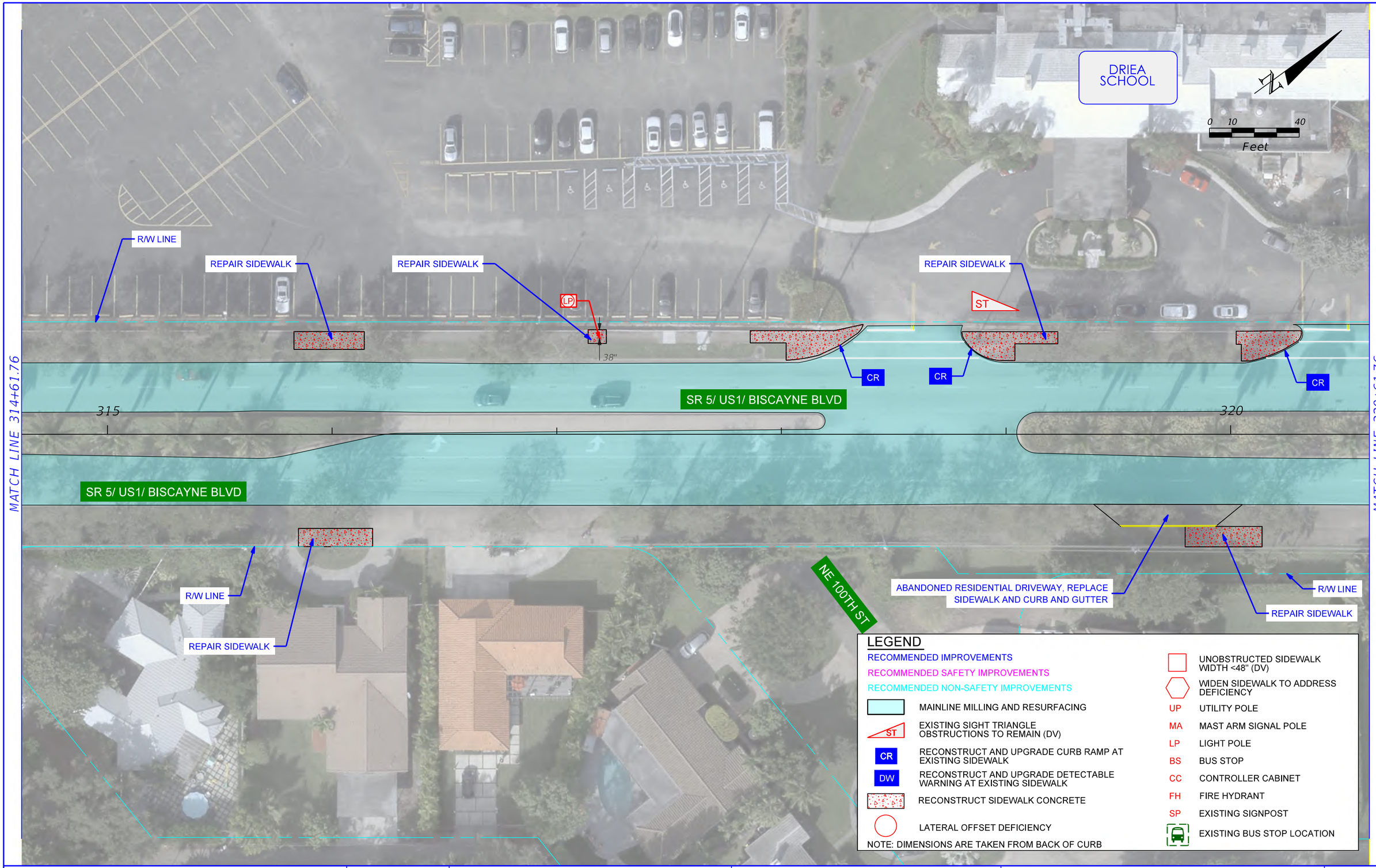

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FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

PAGE NO. 44

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MATCH LINE 320+61.76

MATCH LINE 326+61.76

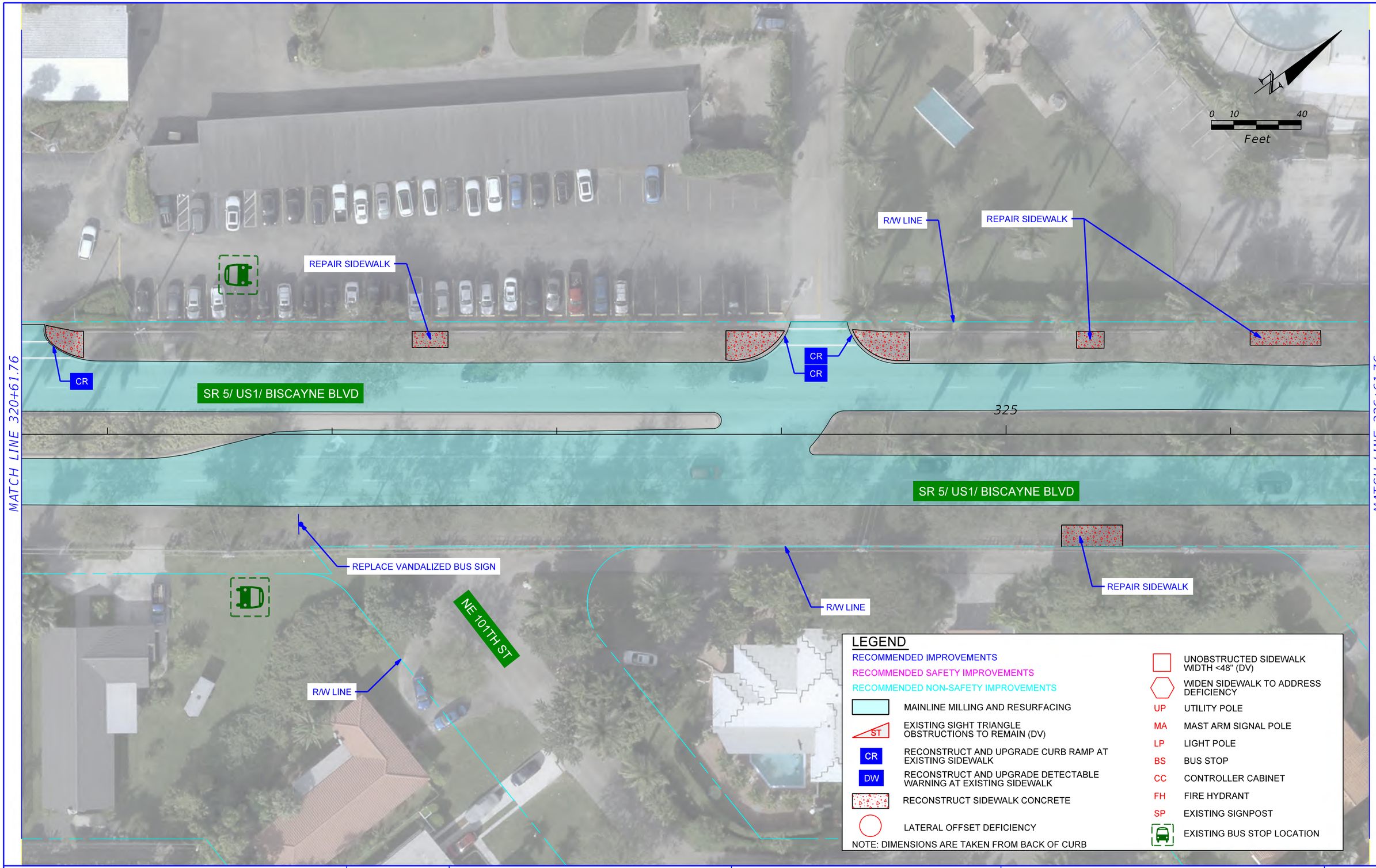

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FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

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MIAMI SHORES AQUATIC CENTER

MATCH LINE 326+61.76

MATCH LINE 332+61.76

0 10 40
Feet

REPLACE WORN OUT SIGN

NE 104TH ST

R/W LINE

MODIFY CURB RADIUS

R/W LINE

REPAIR SIDEWALK

DW

CR

SR 5/ US1/ BISCAYNE BLVD

330

SR 5/ US1/ BISCAYNE BLVD

NE 102TH ST

R/W LINE

R/W LINE

NE 103TH ST

R/W LINE

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FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

PAGE NO. 46

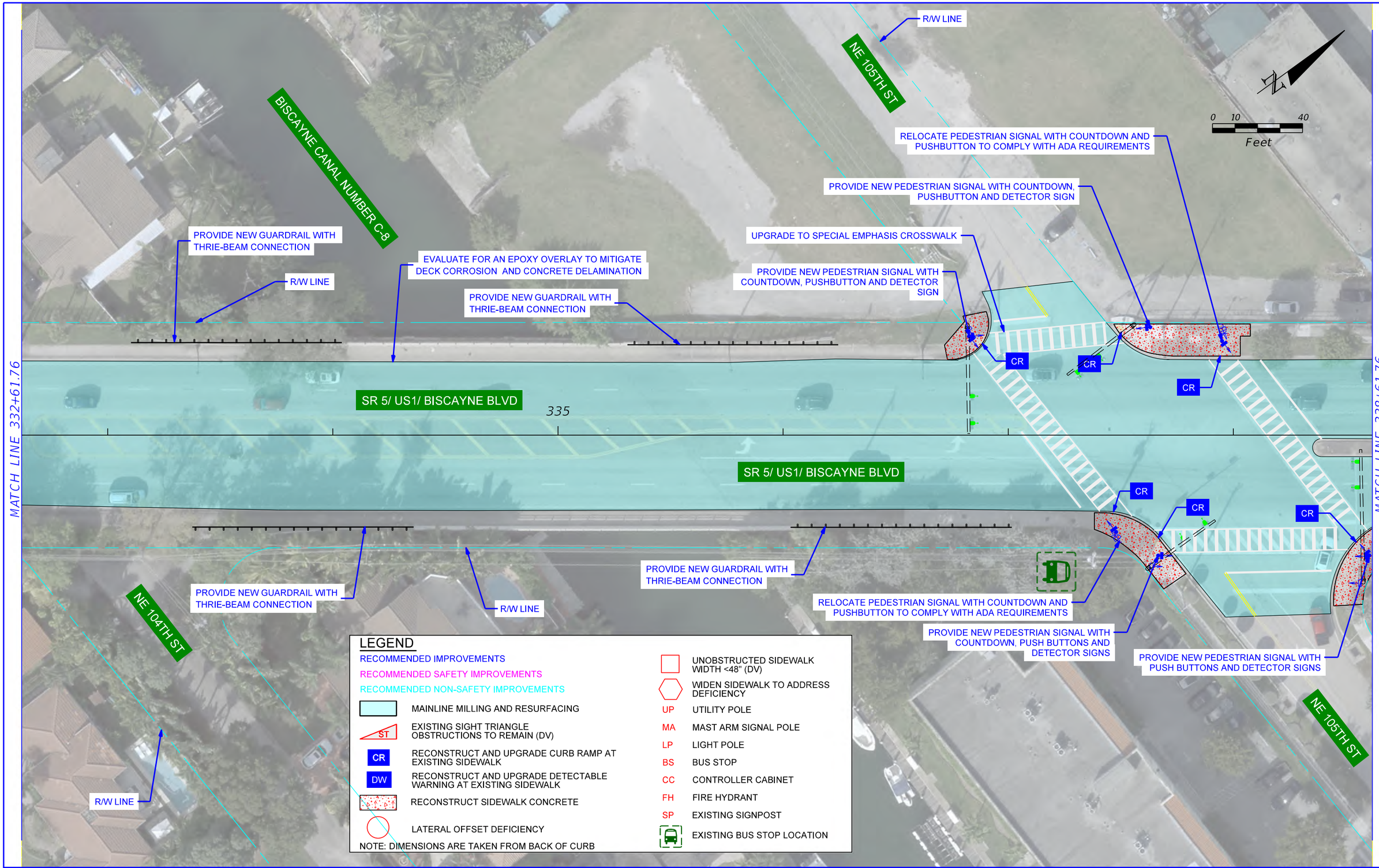

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FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

PAGE NO. 47

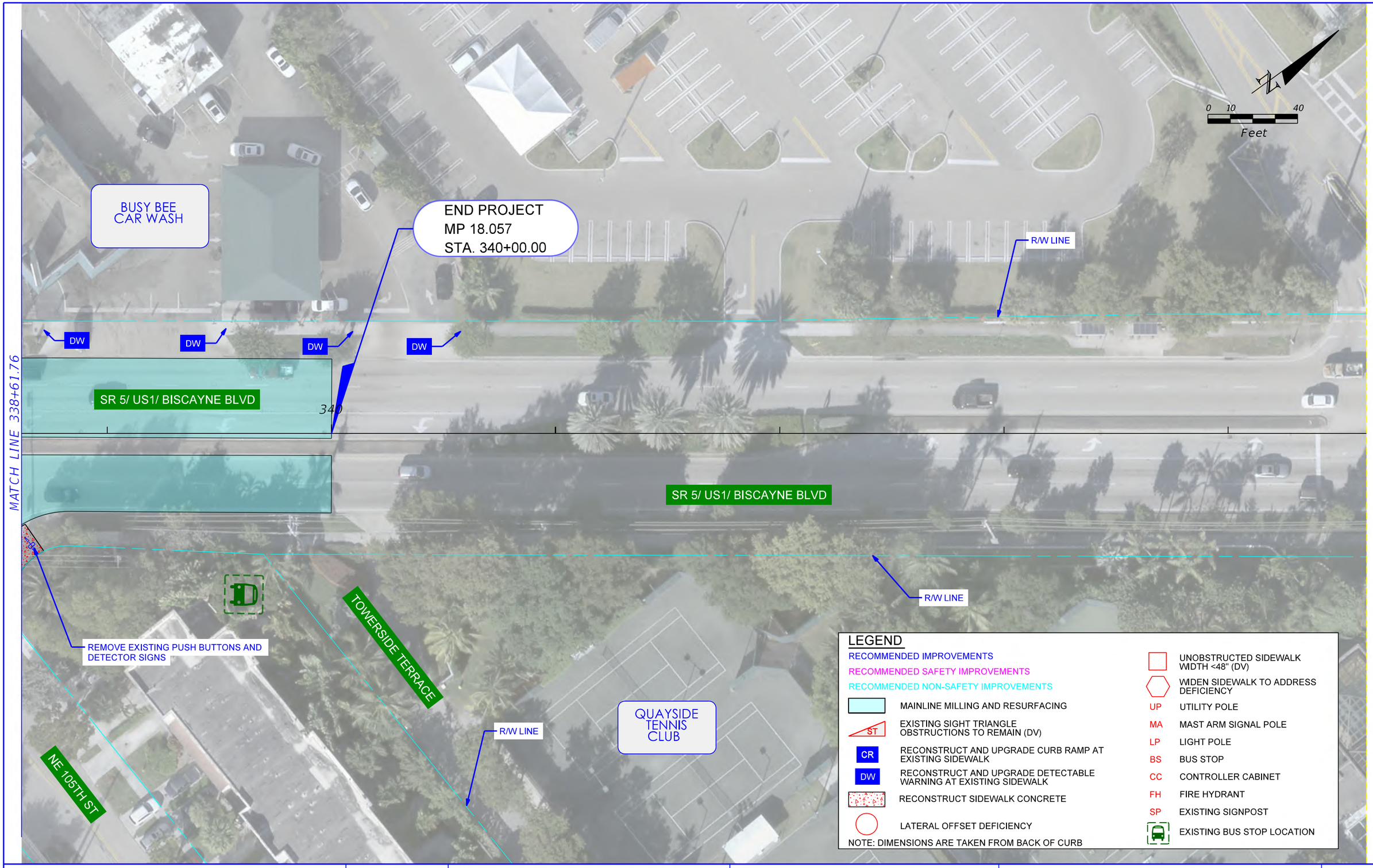

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FIGURE 3-4
DEFICIENCIES AND RECOMMENDATIONS

4.0 PRELIMINARY COST ESTIMATE

A preliminary construction cost estimate was developed for the recommended improvements listed in this Scoping Report using the FDOT Long Range Estimates (LRE) Program. The costs listed do not represent the estimated construction cost for FY 2025 or the project Work Program Budget. **Table 4-1** summarizes the cost of improvements recommended to be included in the scope of work for this RRR Project and funded by the Resurfacing Program. The detailed Long-Range Cost Estimate is included in **Appendix F**.

Table 4-1 Preliminary Construction Cost Estimate

Cost Component	Cost Estimate
Earthwork	$130,396.89
Roadway	$1,620,545.28
Shoulder	$518,186.20
Median	$6,917.15
Drainage	$10,134.23
Signing & Pavement Markings	$21,298.85
Lighting	$11,072.88
Signalizations	$417,815.76
Sub-Total	**$2,736,367.24**
Maintenance Of Traffic	$273,636.72
Mobilization	$301,000.40
Initial Contingency	**$50,000.00**
Total	**$3,361,004.36**

List of Appendices

A. Project Correspondence

B. Environmental Resources Desktop Analysis

C. Corridor Files

- C-1. Straight Line Diagram
- C-2. Project Data Sheet and Pavement Forecast
- C-3. Utility Owners List

D. Pavement Design Documents

- D-1. 18-kip ESAL Report
- D-2. Ground Penetration Radar (GPR)
- D-3. Resilient Modulus (MR)

E. Plans from Previous and Programmed Projects

- E-1. FPID 250222-1-52-01
- E-2. FPID 440191-1-52-01

F. Long Range Estimates (LRE)

G. Context Class and Target Speed Memorandum