

# APPENDIX G

## Utility Assessment Package (UAP)

# **Utility Assessment Package (UAP)**

**Miami-Dade County Parks, Recreation and Open Spaces**



## **Project Development and Environment Study**

**Project Number: 403502-15-001-14470619**

**FM Number: 444236-1-22-01**

**ETDM Number: 14369**

### **Ludlam Trail Corridor**

**From SW 80<sup>th</sup> St to 400 feet North of NW 7<sup>TH</sup> Street**

**Miami-Dade County, Florida**

**6 July, 2021**

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## 1 INTRODUCTION

### 1.1 PROJECT DESCRIPTION

The Miami-Dade County Parks, Recreation, and Open Spaces (MDPROS) is proposing to develop a 5.6-mile multi-use trail within a former railroad corridor (i.e., the Ludlam Trail Corridor, or proposed project). As a future component of the Shared-Use Nonmotorized (SUN) Trail Network, this proposed publicly accessible trail would serve bicyclists, pedestrians, and users of other types of non-motorized vehicles. In addition, the proposed project is expected to provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, and shopping centers.

The proposed project limits extends from SW 80<sup>th</sup> St to 400 feet North of NW 7<sup>th</sup> Street, between 69<sup>th</sup> and 70<sup>th</sup> Avenues, within the former railroad right-of-way (**Figure 1-1**). The project occurs entirely within the former railroad right-of-way (ROW). The ROW for the proposed Ludlam Trail Corridor is approximately 100 feet wide for most of its length, although it narrows to between 75 or 80 feet in some areas. Further, at up to nine (9) roadway crossings, the ROW at the roadway crossing narrows to approximately 40 feet. These roadway crossings include the following: SW 72<sup>nd</sup> Street/Sunset Drive; SW 56<sup>th</sup> Street/Miller Drive; SW 40<sup>th</sup> Street/Bird Road; SW 24<sup>th</sup> Street/Coral Way; SW 23<sup>rd</sup> Street; SW 22<sup>nd</sup> Street; SW 21<sup>st</sup> Street; SW 8<sup>th</sup> Street/Tamiami Trail/Calle Ocho; and W Flagler Street. The proposed project study area extends through sections of the City of Miami and unincorporated Miami-Dade County, and is immediately adjacent to the City of South Miami and proximate to the City of West Miami. The one-quarter-mile project study area is shown in **Figure 1-1**.

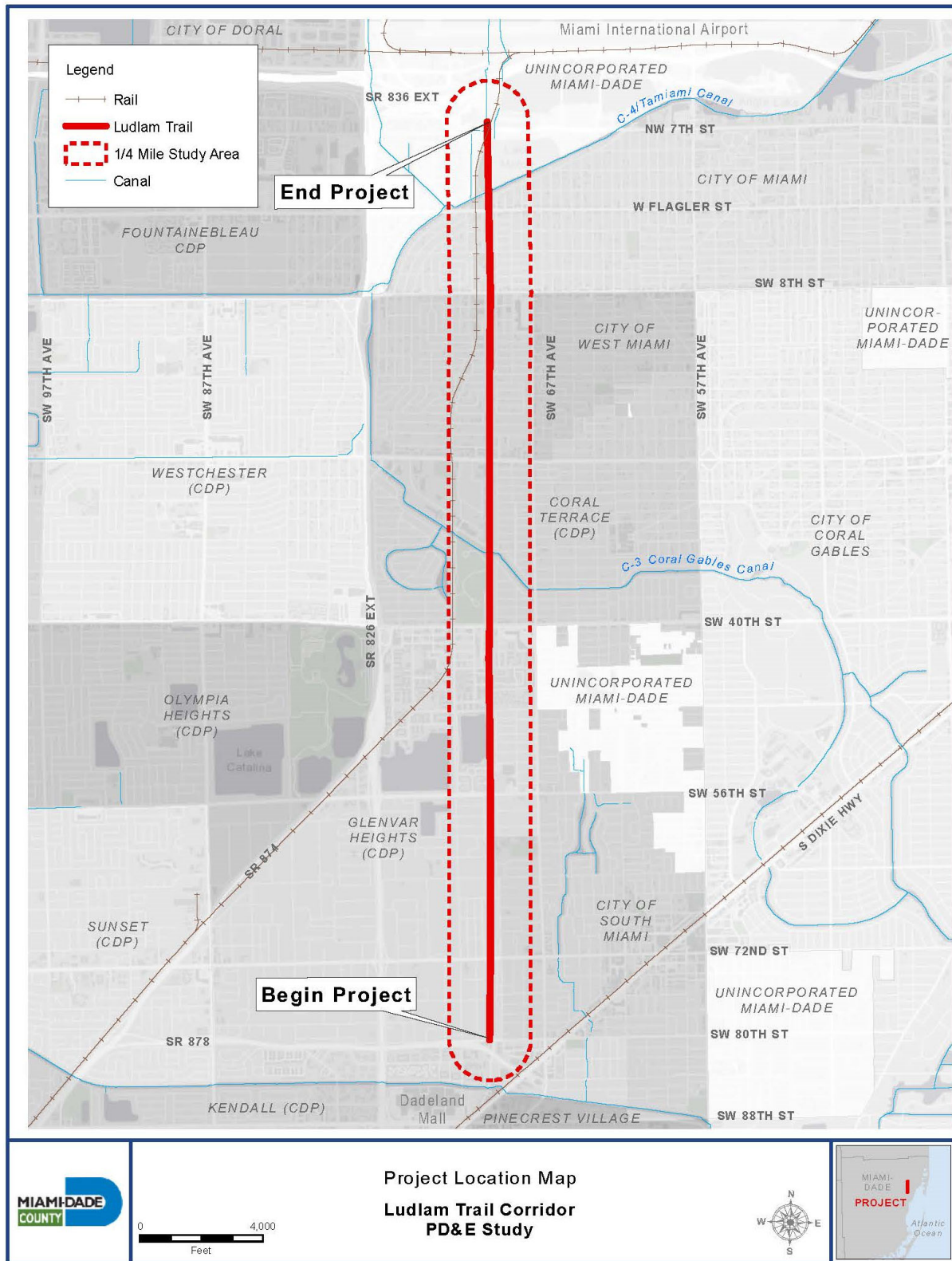


Figure 1-1 Project Location Map

## **1.2 PROJECT BACKGROUND**

MDPROS has acquired the land formerly used as a railroad corridor by the Florida East Coast (FEC) Railway. Approximately one (1) mile of the northernmost section of the corridor has an Interim Trail Use designation by the Surface Transportation Board (STB) and, although the rails are removed, could be re-activated for railroad use in the future. The remaining approximate 5-mile portion of the corridor has been fully abandoned from railroad use since 2006. The County will develop the Ludlam Trail for public use as allowed by the County's Comprehensive Development Master Plan (CDMP) and zoning approvals. Miami-Dade County intends to utilize Florida Department of Transportation (FDOT) funds for the project through a Local Agency Program (LAP) agreement with the FDOT.

As permitted by the 2018 Miami-Dade County CDMP and zoning approvals, parcels for mixed-use development along the proposed Ludlam Trail Corridor are located in three (3) development zone, or nodes. In addition, the County acquired an 18-foot wide easement for trail continuity through the proposed development nodes for the Ludlam Trail. The locations of the proposed development nodes are: SW 40th Street/Bird Road; SW 24th Street/Coral Way; and SW 8th Street/Tamiami Trail/Calle Ocho. Easement agreements between the private developers of the zones and MDPROS stipulate which party will construct and maintain the trail and/or ramps and bridges in each node.

## **1.3 UTILITY ASSESSMENT PACKAGE PROCESS**

In accordance with Part 2, Chapter 21; Utilities and Railroads of the PD&E Manual, Section 21.2.2.3, the Utility Assessment Package (UAP) is prepared as part of the PD&E Study to provide documented utility information for the purpose of evaluating and considering potential surface and subsurface utility conflicts associated with the proposed project. This process requires coordination between MDPROS, the FDOT, FEC Railway, and/or the Utility Agency/Owners (UAOs). The information provided by the UAOs through coordination during the Project Development and Environment Study (PD&E) phase is used in preparing the UAP. For each of the proposed alternatives, the UAP includes:

1. Names of all identified UAOs
2. One set of aerials denoting the location of major existing and planned utility facilities, where the aerials are developed in such a way that information regarding the major utility facilities is easily discernable
3. A description of all existing and planned utilities
4. A discussion of mitigation/avoidance recommendations to reduce utility conflicts, if any (*to be completed upon finalization of currently ongoing Subsurface Utility Engineering (SUE) field work*)
5. A cost estimate and anticipated time frames for relocation of major facilities where conflicts are anticipated to be unavoidable (including ROW costs) (*not applicable to this project*)
6. A discussion of joint ROW acquisition (*not applicable to this project*)
7. A discussion of ROW needs for FGT [Florida Gas Transmission Company], if applicable (*not applicable to this project*)
8. A discussion of which UAOs are likely to enter into a Utility Work by Highway Contractor Agreement (UWHCA), including whether existing facilities are affected by the project or are proposed installations, and including cost and schedule impacts (*not applicable to this project*)
9. A description of existing or proposed encroachments onto any UAO easement or property interest as well as any subordinations (*not applicable to this project*)
10. Information concerning the UAO disposition if it is determined that a UAO will not be affected by the project (*not applicable to this project*)

## 2 EXISTING UTILITIES

To evaluate potential utility conflicts associated with the most feasible improvement alternative, available information was obtained with respect to the location and characteristics of the major existing or planned/proposed utilities within the Ludlam Trail Corridor. The UAOs within the Ludlam Trail Corridor (including utility companies, municipalities, and government agencies), were contacted and requested to provide information regarding their utility facilities within the project area. The information is organized in accordance with the FDOT PD&E Manual, Part 2, Chapter 21.

### 2.1 UTILITY AGENCIES/OWNERS

The utility coordination was initiated by MDPROS. UAOs within the Ludlam Trail Corridor study area were provided aerial photography base maps depicting the project corridor (see **Appendix A**). Each UAO was asked to mark and return a set of the plans to indicate their known existing and proposed utilities as well as any easements that may affect their reimbursement rights for relocations (if available, to provide a CADD file with their direct input; and to include any other pertinent information). The utility owners, including address, and contact person, are listed in **Table 2-1**. A copy of the letter sent to the UAOs is included in **Appendix B**. The UAOs within the corridor responded via written communications. The utility owners provided the requested information concerning their facilities using either the base map or by providing reference documentation.

**Table 2-1 UAO Contact List**

Utility Agency/Owner	Facility	Contact Information	
AT&T - Transmission	Communications/ Fiber Optic	Craig Petrie P.E.A. of Florida 6000 Metro West Blvd., #201 Orlando, FL 32835	407-578-8000 x-10 Office 407-341-5722 Cell <a href="mailto:cpetrie@pea-inc.net">cpetrie@pea-inc.net</a> <a href="mailto:peafl@pea-inc.net">peafl@pea-inc.net</a>
AT&T - Florida	Telephone	Steve Low 9101 SW 24 <sup>th</sup> Street Miami, FL 33165	305-222-8745 Office 305-221-0974 Fax 305-987-7351 Cell <a href="mailto:sl4504@att.com">sl4504@att.com</a>
American Traffic Solutions	Communications/ Electric	Santiago Martinez 1150 N Alma School Road Mesa, AZ 85201	480-596-4595 <a href="mailto:santiago.martinez@atsol.com">santiago.martinez@atsol.com</a>

**Table 2-1 UAO Contact List**

Utility Agency/Owner	Facility	Contact Information	
Atlantic Broadband	Cable TV	Pete Freytag 1681 Kennedy Causeway North Bay Village, FL 33141	305-861-8069 x-5208 Office 305-865-9845 Fax 786.251.5989 Cell <a href="mailto:pfreytag@atlanticbcb.com">pfreytag@atlanticbcb.com</a>
CenturyLink is now Lumen (CenturyLink) (Formerly Qwest Communications)	Fiber Optic	Xan Rypkema	Relocations@Lumen.com <a href="mailto:xan.rypkema@lumen.com">xan.rypkema@lumen.com</a>
Comcast Cable	Cable TV & Fiber	Leonard Maxwell-Newbold 2601 SW 145 <sup>th</sup> Ave. Miramar, FL 33027	954-447-8405 Office 954-447-8445 Fax 954-444-5113 Cell <a href="mailto:Leonard_Maxwell-Newbold@cable.comcast.com">Leonard_Maxwell-Newbold@cable.comcast.com</a>
Crown Castle Fiber	Fiber	Danny Haskett 1601 NW 136 Ave. Suite A-200 Sunrise, FL 33323	786-610-7073 Office 786-246-7827 Cell <a href="mailto:danny.haskett@crowncastle.com">danny.haskett@crowncastle.com</a>
Dade County Public Works	Traffic/ Street Lights	Octavio Vidal	305-412-0891 Ext. 201 786-345-0986 <a href="mailto:octavio.vidal@miamidade.gov">octavio.vidal@miamidade.gov</a>
Fiberlight, LLC. is now Atlantic Broadband	Fiber Optic	Wayne Kramer 602 South Military Trail Deerfield Beach, FL 33442	754-227-4345 Office 954-596-2569 Fax 786-535-0730 Cell <a href="mailto:wkramer@atlanticbcb.com">wkramer@atlanticbcb.com</a>
Florida City Gas	Natural Gas Distribution Sys.	Maria Paula Lopez 4045 NW 97 Ave. Doral, FL 33178	305-835-3638 Office 786-332-8913 Cell <a href="mailto:maria.lopez@nexteraenergy.com">maria.lopez@nexteraenergy.com</a>
Florida Gas Transmission	Gas Pipeline-Coral Springs	Joe Sanchez 2405 Lucien Way Suite 200 Maitland, FL 32751	407-838-7171 Office 407-838-7101 Fax 407-808-4607 Cell <a href="mailto:joseph.e.sanchez@energytransfer.com">joseph.e.sanchez@energytransfer.com</a>
Florida Power & Light Distribution	Electric	John Giraldo 4200 W. Flagler Street Miami, FL 33134	305-442-5172 Office 305-442-5123 Fax 305-798-8914 Cell <a href="mailto:John.Giraldo@fpl.com">John.Giraldo@fpl.com</a>
Florida Power & Light Transmission	Electric	Michael Foley 700 Universe Blvd TS4/JW Juno Beach, FL 33408	561-904-3640 Office 561-523-9896 Cell <a href="mailto:Michael.Foley@fpl.com">Michael.Foley@fpl.com</a>



**Table 2-1 UAO Contact List**

Utility Agency/Owner	Facility	Contact Information	
Level 3 is now Lumen (Level 3) (same as CenturyLink)	Fiber Optic	Xan Rypkema	Relocations@Lumen.com <a href="mailto:xan.rypkema@centurylink.com">xan.rypkema@centurylink.com</a>
MCI / Verizon	Communications / Fiber Optic	Attn : Investigations MCI - Verizon Business 2400 N. Glenville Dr. Richardson, TX 75082	972-729-6322 <a href="mailto:Investigations@Verizon.com">Investigations@Verizon.com</a>
Miami-Dade ITD	Fiber Optic	Frank Dopico	305-275-7813 Office 786- 208-5658 Cell <a href="mailto:Frank.Dopico@miamidade.gov">Frank.Dopico@miamidade.gov</a>
Miami-Dade DTPW	Street Lighting	Octavio Marin/ Julio Navarro	(305) 375-4664 Office <a href="mailto:Octavio.Marin@miamidade.gov">Octavio.Marin@miamidade.gov</a> <a href="mailto:Julio.Navarro@miamidade.gov">Julio.Navarro@miamidade.gov</a>
Miami-Dade DTPW	Traffic Signals	Octavio Marin/ Evelin Legcevic	(305) 375-4664 Office <a href="mailto:Octavio.Marin@miamidade.gov">Octavio.Marin@miamidade.gov</a> <a href="mailto:Evelin.Legcevic@miamidade.gov">Evelin.Legcevic@miamidade.gov</a>
Miami-Dade Water & Sewer	Water & Sewer	Patrick Chong/ Edith Nogueira 3501 NW 46 ST Miami, FL. 33142	786-552-4416 Office <a href="mailto:Patrick.Chong@miamidade.gov">Patrick.Chong@miamidade.gov</a> 786-552-4417 Office <a href="mailto:Edith.Nogueira@miamidade.gov">Edith.Nogueira@miamidade.gov</a>
Hotwire Communications, LLC.	Fiber, Telephone, Cable TV, Coax	Phil Gallub 10360 USA Today Way Miramar, FL 33025	954 248-7396 Cell 954-241-1263 Fax <a href="mailto:pgallub@hotmail.com">pgallub@hotmail.com</a> <a href="mailto:walter.sancho-davila@hotmail.com">walter.sancho-davila@hotmail.com</a>
Miami-Dade County Public Schools	Sewer??	Fernando Albuerne Department of Planning, Design and Sustainability 1450 NE 2 Avenue, Room 525 Miami, FL 33132	(305) 995-7286 <a href="mailto:fabluerne@dadeschools.net">fabluerne@dadeschools.net</a>
Florida Department of Transportation D6 Drainage Department	Drainage facilities?	Mario Dominguez 1000 NW 111 <sup>th</sup> Ave Room 6211 Miami, FL 33172	Phone: 305-470-5482 Fax: 305-470-5293 <a href="mailto:mario.dominguez@dot.state.fl.us">mario.dominguez@dot.state.fl.us</a>

Notes: The UAO contact list was developed based on letters sent to each UAO or via responses received from the UAO within the Ludlam Trail Corridor.



UTILITIES IDENTIFIED IN SUNSHINE 811 RESEARCH (NOT CONTACTED)			
Miami Dade Expressway Authority - MDX	Fiber, Electric	John Reese	John Reeseday (305) 637 - 3277 X2144
Mastec Inc	Fiber		Julio Marques Day: (305) 431 - 6014

## 2.2 DISPOSITION OF EXISTING UTILITIES IN PROJECT AREA

Refer to **Appendix C** for sets of the Existing Utilities Base Map Mark Up Plans showing the approximate location of the existing utilities within the study area. A description of the existing facilities is provided in the following sections.

### 2.2.1 AT&T FLORIDA

AT&T provided the approximate location of its buried telephone cables within the project. The cables are in the following streets:

- Crossing at SW 72<sup>nd</sup> Street – Buried telephone placed out of service.
- Along SW 12<sup>th</sup> Street – Duct Bank with 18-4" PVC buried telephone copper cable.
- Along W Flagler Street – Duct Bank with 12-4" PVC buried telephone copper cable.

Additional markups from MDC Internal Services Department (ISD) were received showing cables identified as Bellsouth DBA AT&T in the following locations:

- Crossing at SW 72<sup>nd</sup> Street – 4-4" buried duct
- Crossing at SW 40<sup>th</sup> Street – 4-4" buried cables in 12" galvanized steel pipe
- Crossing the Ludlam Trail approximately 150 feet north of SW 21<sup>st</sup> Street – 4" galvanized steel pipe in 4" casing
- Crossing at SW 4<sup>th</sup> Street – 100 feet 6" steel casing

### 2.2.2 AT&T TRANSMISSION

According to the review conducted by AT&T Transmission (PEA), the UAO does not have existing facilities within the limits of this project.

### **2.2.3 AMERICAN TRAFFIC SOLUTIONS**

According to the review conducted by America Traffic Solutions, the UAO does not have existing facilities within the limits of this project.

### **2.2.4 ATLANTIC BROADBAND**

Atlantic Broadband provided the approximate locations of their facilities within the proposed project. It includes buried and aerial lines. The aerial lines are attached to the FPL power poles and are located at the following locations:

- SW 80th Street, SW 72nd Street, SW 60th Street, from SW 56th Street to SW 48th Street, SW 44th Street and from SW 22nd Street to SW 21st Street. The buried line is located at SW 16th Street.
- Both, buried and aerial lines traverse or run parallel to the proposed project.

### **2.2.5 CENTURYLINK (LUMEN) / LEVEL 3 COMMUNICATIONS (LUMEN)**

According to the review conducted by Lumen/CenturyLink and Lumen/Level 3 Communications, the UAO does not have existing facilities within the limits of this project.

### **2.2.6 COMCAST**

Comcast provided the approximate locations of their facilities within the study corridor. It includes subgrade, and aerial lines. The following are the locations of buried and aerial cables:

- SW 80<sup>th</sup> Street – buried cable
- Aerial cable along Ludlam Trail from north of SR 78th Terrace to SW 72nd Street
- Aerial cable along Ludlam Trail from north of SR 60th Street to SW 48th Street
- Buried cable along Ludlam Trail near SW 45th Lane
- SW 40<sup>th</sup> Street – future buried cable
- Aerial cable along Ludlam Trail from N Waterway Drive to SW 24<sup>th</sup> Street
- SW 24<sup>th</sup> Street – buried cable
- Aerial cable along Ludlam Trail from SW 22<sup>nd</sup> Street to SW 21<sup>st</sup> Street
- Aerial cable along Ludlam Trail from north of SW 21<sup>st</sup> Street to north of SW 16<sup>th</sup> Street
- SW 8<sup>th</sup> Street – future buried cable

- SW 4<sup>th</sup> Street – buried cable and aerial cables
- W Flagler Street – buried cable

Additional markups from MDC ISD were received showing cables identified in the following locations:

- SW16<sup>th</sup> Street – 2 cables in 2" galvanized pipe
- SW 8<sup>th</sup> Street – Miami TELE-COMM, Comcast FNA Media One 60' CATV

### **2.2.7 CROWN CASTLE**

Fibernet Direct Florida, LLC, an affiliate of Crown Castle Fiber, has aerial and underground fiber optic facilities within the limits of the project. The fiber optic facilities are located approximately at the following locations:

- Aerial fiber optic – SW 72<sup>nd</sup> Street
- Buried fiber optic – SE 40<sup>th</sup> Street
- Buried fiber optic – SE 24<sup>th</sup> Street
- Aerial and buried fiber optic – SW 16<sup>th</sup> Street
- Buried fiber optic – SW 8<sup>th</sup> Street
- Buried fiber optic – SW 4<sup>th</sup> Street
- Aerial and buried fiber optic – W Flagler Street

### **2.2.8 FIBERLIGHT LLC (ATLANTIC BROADBAND)**

Fiberlight LLC provided the approximate location of their facility within study's limits and it is located north of the proposed improvements along NW 7<sup>th</sup> Street. There is no conflict between the proposed project and their facility.

### **2.2.9 FLORIDA CITY GAS**

Florida City Gas provided the approximate locations of their natural gas mains within the project. The gas mains facilities are located at the following locations:

- Crossing at SW 80<sup>th</sup> Street – 2" STL 60 psig MAOP Gas Main
- Along Ludlam Trail/SW 69<sup>th</sup> Avenue from SW 80<sup>th</sup> Street to SW 78<sup>th</sup> Terrace – 2"PE 60 psig MAOP Gas Main. No records available for this segment
- Crossing at SW 64<sup>th</sup> Street – 2" STL 60 psig MAOP Gas Main

- Crossing at Bird Road – 4” STL psig MAOP Gas Main
- Crossing at Coral Way – 6” STL psig MAOP Gas Main
- Along the trail from SW 8<sup>th</sup> Street to NW 7<sup>th</sup> Street – 6” STL 450 psig MAOP Gas Main

#### **2.2.10 FLORIDA GAS TRANSMISSION**

Florida Gas Transmission (FGT) provided the location of their 8” natural gas high pressure transmission pipeline and it is located crossing the project limits on the south side of US 41 / SR 90 / SW 8<sup>th</sup> Street / Tamiami Trail Calle Ocho.

#### **2.2.11 FLORIDA POWER & LIGHT**

Florida Power & Light (FPL) provided documentation of the approximate location of existing transmission and distribution facilities within the study limits of the PD&E study. FPL’s facilities are overhead and underground lines within the study limits. The following notes were provided by FPL addressing working near FPL’s existing facilities:

1. Contractors must maintain clearances, as required by OSHA, when working in the proximity of FPL’s high-voltage transmission conductors & lower voltage distribution conductors.
2. The roadway contractor must always maintain access to all FPL facilities during construction.
3. All existing facilities must always remain energized during road construction.

The following are the locations of FPL’s transmission lines:

- Overhead 138 kV power line at SW 80<sup>th</sup> Street.
- Overhead 138 kV power line at SW 56<sup>th</sup> Street.
- Overhead 230 kV and 138 kV power lines crossing Ludlam Trail at SW 12<sup>th</sup> Street.
- Overhead 230 kV power line crossing Ludlam Trail at SW 4<sup>th</sup> Street.
- Overhead 138 kV power line crossing Ludlam Trail at SW 4<sup>th</sup> Street.
- Buried 240kV power line at SW 4<sup>th</sup> Street.
- Overhead 138 kV power line at W Flagler Street.
- Overhead 138 kV power line north of W Flagler Street.

The following are the locations of FPL’s distribution lines:

- Underground 13 kV power lines crossing Ludlam Trail along SR 80<sup>th</sup> Street.
- Overhead 13 kV power line crossing Ludlam Trail north of SR 78<sup>th</sup> Terrace.

- Overhead 13 kV power line along Ludlam Trail from north of SR 78<sup>th</sup> Terrace to SW 72<sup>nd</sup> Street.
- Overhead power line crossing Ludlam Trail near SW 76<sup>th</sup> Street.
- Overhead 120 V power line crossing Ludlam Trail at SW 72<sup>nd</sup> Street.
- Overhead 13 kV power line along Ludlam Trail from north of SR 66<sup>th</sup> Street to SW 64<sup>th</sup> Street.
- Overhead 13 kV power line along Ludlam Trail from north of SR 60<sup>th</sup> Street to SW 48<sup>th</sup> Street.
- Overhead 13 kV power line crossing Ludlam Trail at SW 44<sup>th</sup> Street.
- Overhead 13 kV power line crossing Ludlam Trail north of SR 40<sup>th</sup> Street.
- Underground 13 kV power line crossing Ludlam Trail at N Waterway Drive.
- Overhead 13 kV power line along Ludlam Trail from N Waterway Drive to SW 24<sup>th</sup> Street.
- Overhead 120 V power line crossing Ludlam Trail north of SW 24<sup>th</sup> Street.
- Overhead 13 kV power line crossing Ludlam Trail at SW 22<sup>nd</sup> Street.
- Overhead 13 kV power line along Ludlam Trail from SW 22<sup>nd</sup> Street to SW 21<sup>st</sup> Street.
- Overhead 13 kV power line crossing Ludlam Trail at SW 21<sup>st</sup> Street.
- Overhead 13 kV power line along Ludlam Trail from north of SW 21<sup>st</sup> Street to north of SW 16<sup>th</sup> Street.
- Overhead 13 kV power line crossing Ludlam Trail at SW 16<sup>th</sup> Street.
- Overhead 13 kV power line crossing Ludlam Trail at SW 12<sup>th</sup> Street.
- Underground 25 kV power line crossing Ludlam Trail at SW 8<sup>th</sup> Street.
- Overhead 13 kV power line along Ludlam Trail from north of SW 8<sup>th</sup> Street to north of W Flagler Street.

### **2.2.12 HOTWIRE COMMUNICATIONS**

Hotwire Communications provided the approximate location of their overhead fiber optic cable (FOC) and it is located crossing the Ludlam Trail attached to FPL poles at SW 72<sup>nd</sup> Street.

### **2.2.13 MCI / VERIZON BUSINESS**

Verizon and MCI provided documentation of their fiber optic cable (FOC) network within the study limits. The overhead FOCs are crossing the Ludlam Trail at SW 72<sup>nd</sup> Street and SW 16<sup>th</sup> Street.

### **2.2.14 MIAMI-DADE COUNTY IT DEPARTMENT (ITD)**

Miami-Dade County ITD provided documentation of their fiber optic cable (FOC) within the study limits. The underground FOCs are crossing the Ludlam Trail at SW 80<sup>th</sup> Street and SW 64<sup>th</sup> Street.

### **2.2.15 MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS (DTPW)**

Miami-Dade County DTPW provided documentation of their interconnect conduits within the study limits. The underground interconnect conduits are crossing the Ludlam Trail at SW 80<sup>th</sup> Street and SW 56<sup>th</sup> Street.

### **2.2.16 MIAMI-DADE ROADWAY LIGHTING FACILITIES**

Any proposed construction near street lighting needs to be coordinated with Julio Navarro when plans are further developed.

### **2.2.17 MIAMI-DADE TRAFFIC SIGNAL DEPARTMENT**

Any proposed construction near traffic signals will need to be coordinated with Evelin Legcevic (Traffic Signals and Signs Division) when plans are further developed.

### **2.2.18 MIAMI-DADE WATER AND SEWER DEPARTMENT (M-D WASD)**

M-D WASD provided utility records showing water and sanitary sewer mains the study limits.

The following are the approximate locations of M-D WASD's water mains:

- Distribution 12" water main crossing the Ludlam Trail at SW 80<sup>th</sup> Street.
- Transmission 36" water main in a 54" casing crossing the Ludlam Trail at SW 72<sup>nd</sup> Street.
- Distribution 4" water main crossing the Ludlam Trail at SW 56<sup>th</sup> Street.
- Transmission 48" water main crossing the Ludlam Trail at SW 56<sup>th</sup> Street.
- Distribution 16" water main in a 36" casing crossing the Ludlam Trail at SW 40<sup>th</sup> Street.
- Distribution 8" water main crossing the Ludlam Trail at SW 40<sup>th</sup> Street.
- Transmission 48" water main crossing the Ludlam Trail at SW 40<sup>th</sup> Street.
- Abandoned water main crossing Ludlam Trail at SW 40<sup>th</sup> Street.
- Distribution 12" water main crossing the Ludlam Trail at N Waterway Drive.
- Distribution 16" water main crossing the Ludlam Trail at SW 24<sup>th</sup> Street.
- Distribution 8" water main in a 21" casing crossing the Ludlam Trail at SW 21<sup>st</sup> Street.
- Distribution 8" water main crossing the Ludlam Trail at SW 16<sup>th</sup> Street.
- Distribution 12" water main in a 20" casing crossing the Ludlam Trail at SW 8<sup>th</sup> Street.
- Distribution 8" water main in a 16" casing crossing the Ludlam Trail at SW 4<sup>th</sup> Street.
- Distribution 8" water main in an 18" casing crossing the Ludlam Trail at W Flagler Street.
- Transmission 20" water main in a 36" casing crossing the Ludlam Trail at W Flagler Street.

The following are the locations of M-D WASD's force mains and gravity mains:

- 8" force main crossing the Ludlam Trail at SW 60<sup>th</sup> Street.
- 4" force main crossing Ludlam Trail at SW 56<sup>th</sup> Street.
- 4" force main crossing Ludlam Trail near SW 53<sup>rd</sup> Street.
- 4" gravity main along Ludlam Trail near SW 45<sup>th</sup> Lane.
- 12" force main crossing the Ludlam Trail at SW 44<sup>th</sup> Street.
- 12" force main crossing the Ludlam Trail at N Waterway Drive.
- 12" force main crossing the Ludlam Trail at SW 24<sup>th</sup> Street.
- 12" force main crossing Ludlam Trail near SW 19<sup>th</sup> Street.
- 16" gravity main crossing the Ludlam Trail at SW 4<sup>th</sup> Street.
- 54" force main crossing the Ludlam Trail at W Flagler Street.
- 60" force main crossing the Ludlam Trail at W Flagler Street.
- 6" gravity main crossing the Ludlam Trail north of W Flagler Street.

#### **2.2.19 SERVICE POINTS**

The UAOs within the Ludlam Trail Corridor were provided aerial photography base maps depicting the project corridor, requesting the potential service point locations for their facilities. Copies of this correspondence provided to the UAOs and their responses are included in **Appendix D**.

### 3 PROPOSED IMPROVEMENTS

For the 5.6- mile corridor, the Ludlam Trail will typically consist of a 12-foot-wide bike path and 8-foot-wide pedestrian path with an adjacent 2-foot wide soft, natural surface path, separated in areas by a grassed buffer up to 14 feet wide. Generally, the paths will run along the center of the trail ROW. The Ludlam Trail will provide access to activity centers (i.e., schools, parks, and transit centers) via 10-foot-wide multi-use paths that can accommodate bicyclists and pedestrians. Connections to neighborhoods and parking facilities will be also be provided via 10-foot-wide multi-use paths.

There are two (2) general configurations for the Ludlam Trail (see **Appendix E** for the proposed typical cross sections) all of which will be located inside the Ludlam Trail ROW:

- **Buffered Separation:** The trail will be a 12-foot-wide bike trail and an 8-foot-wide pedestrian trail separated by a landscape buffer that varies in width from 4 to 14 feet, with a 2-foot-wide soft natural surface path adjacent to the pedestrian trail.
- **No Separation:** The trail will be a 12-foot-wide bike trail and a 5.5- to 8-foot-wide pedestrian trail immediately adjacent to one another with pavement markings, with up to a 2-foot-wide soft natural surface path adjacent to the pedestrian trail.

There also will be two (2) other configurations for the Ludlam Trail, with limited applications throughout the corridor all of which will be located inside the Ludlam Trail ROW or existing Ludlam Trail easements. One (1) will be used within the constrained perpetual easements where the trail crosses through the three (3) development zones; and one (1) includes a landscaped buffer where the trail will have at-grade road crossings. See **Appendix E** for these refined detail cross sections:

- **No Separation (In Development Zones):** In the three, development zone, 18-foot-wide perpetual easements, the trail will be a 10-foot- to 12-foot-wide bike trail and a 5.5-foot-wide pedestrian trail immediately adjacent to one another with pavement markings.
- **Landscape Divider Separation:** For short segments on either side of and adjacent to at-grade road crossings, the trail will be a 12-foot-wide bike trail and an 8-foot- to 10-foot-wide pedestrian trail that will be separated by a 4-foot-wide landscaped divider buffer, with up to a 2-foot-wide soft natural surface path adjacent to the pedestrian trail.

The proposed trail improvements (Preferred Alternative Conceptual Plans) along with compiled UAO information for the corridor are noted on aerial photographs within **Appendix F**.



#### **4 RIGHT OF WAY NEEDS**

No additional ROW is required to construct the Preferred Alternative and no relocations will be required for the project. The ROW information for the corridor is noted within **Appendix F**.

## **5 UTILITY RELOCATION COST ESTIMATE**

Relocation costs, if any, will be developed during the final design phase of the project. The UAOs will be contacted to develop ballpark relocation estimates, if any, that will be further refined by MDPROS and consultant coordination during the final design process in preparation for the construction phase.

## **6 MITIGATION/AVOIDANCE RECOMMENDATIONS**

Avoidance and mitigation of any impacts to utilities, if any, will be developed during the final design phase of the project. The UAOs will be contacted to discuss avoidance and mitigation options, if any, that will be further defined by MDPROS and their consultant during the final design process in preparation for the construction phase.

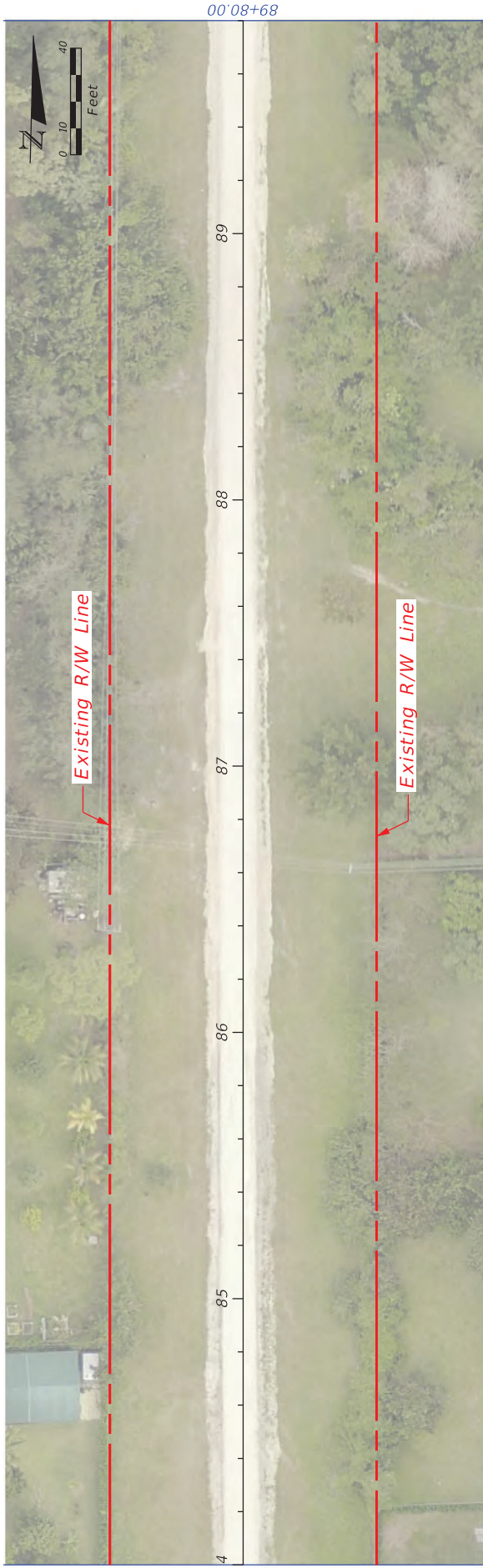
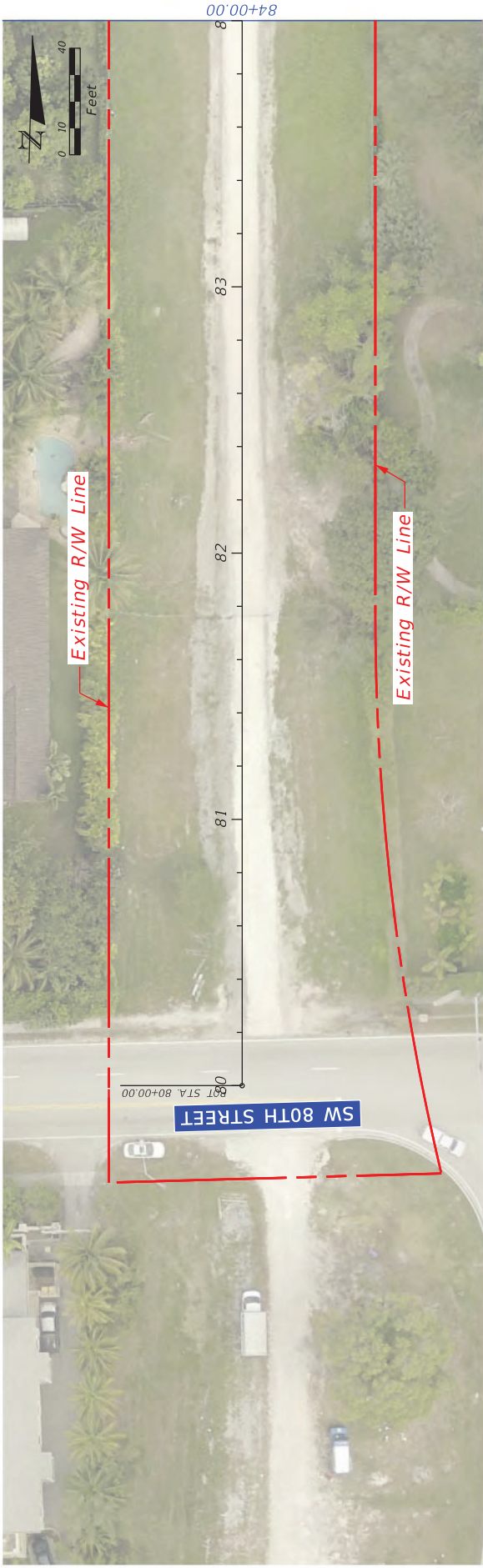
## **7 SUMMARY OF UTILITY FINDINGS**

Further coordination with the utilities along the corridor will be required to develop and finalize the final design of the project. Minimal impacts are expected to the existing utilities from the proposed design based on the utility information available at this time. These will be further outlined by MDPROS and their consultant during the final design process in preparation for the construction phase.

- Since the project occurs entirely within the former railroad ROW, there are few longitudinal utilities along the corridor.
- The majority of the existing utilities within the project limits are located along major arterial and local street crossings of the proposed Ludlam Trail.
- Florida Gas Transmission is located within the project footprint along US 41 / SR 90 / SW 8 Street / Tamiami Trail / Calle Ocho and will require further coordination per their Global Agreement with FDOT as the project progresses.
- Proposed bridge locations will be further defined during the design phase with the aid of Subsurface Utility Engineering to determine utility impacts, if any.
- As the trail design is improved or modified, further coordination with the UAOs will be required through further FDOT and County coordination during the final design process in preparation for the construction phase.

# APPENDIX A

## Project Base Maps



DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION



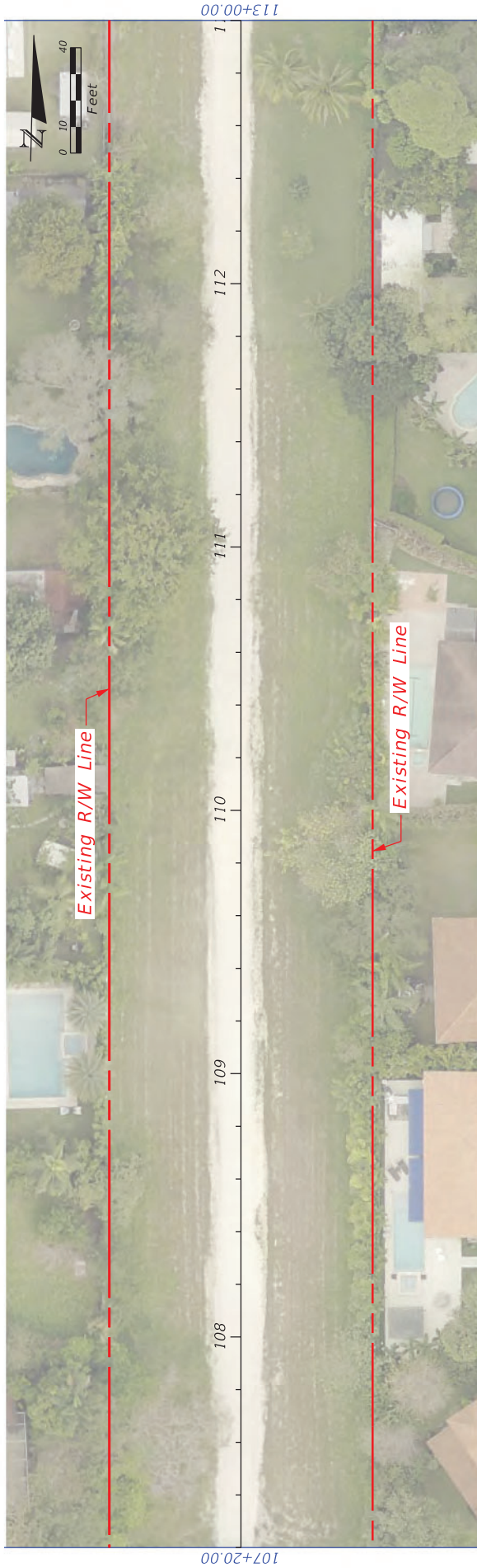
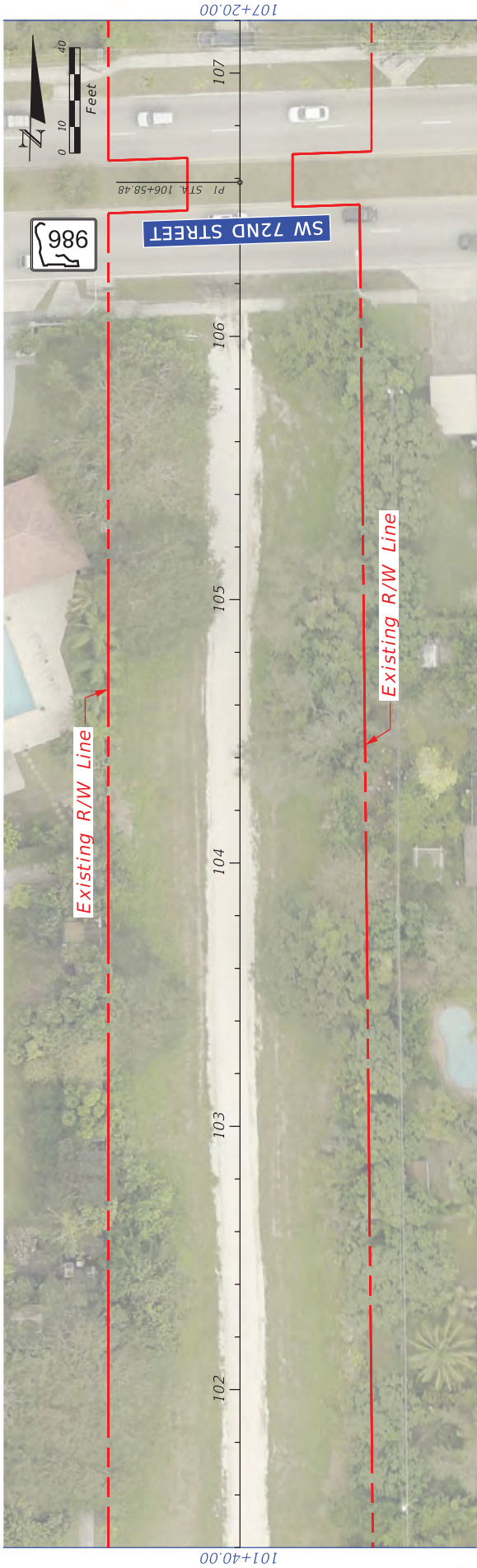
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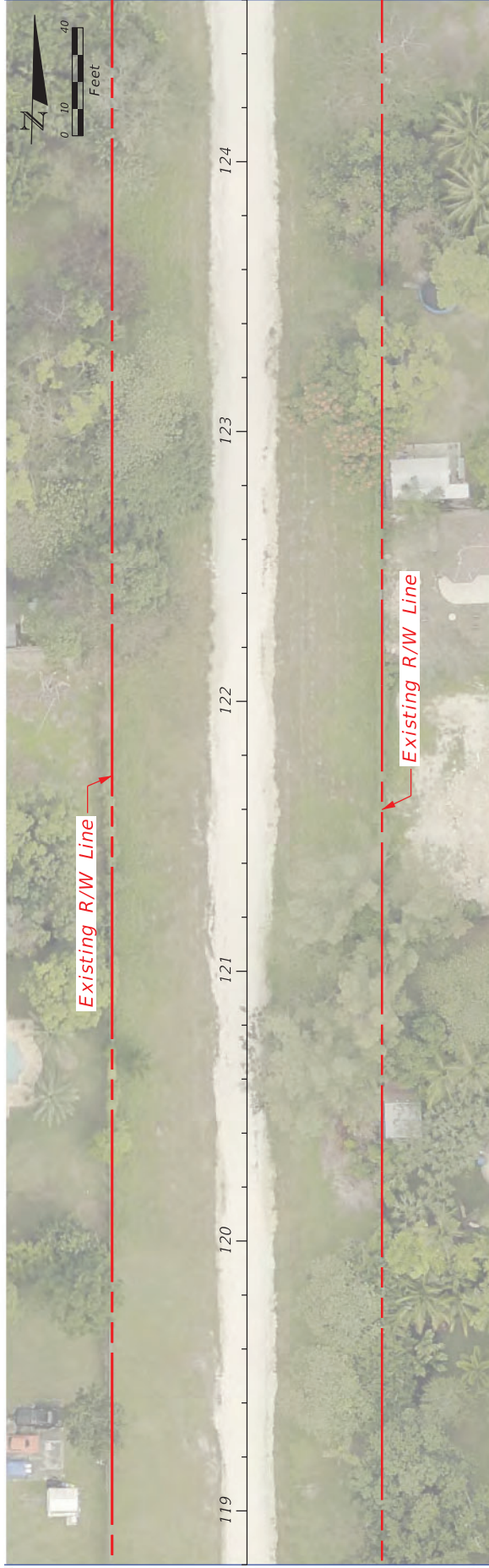
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 275 NW 2nd Street  
 Miami, FL 33128  
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P&R PROJECT NO.  
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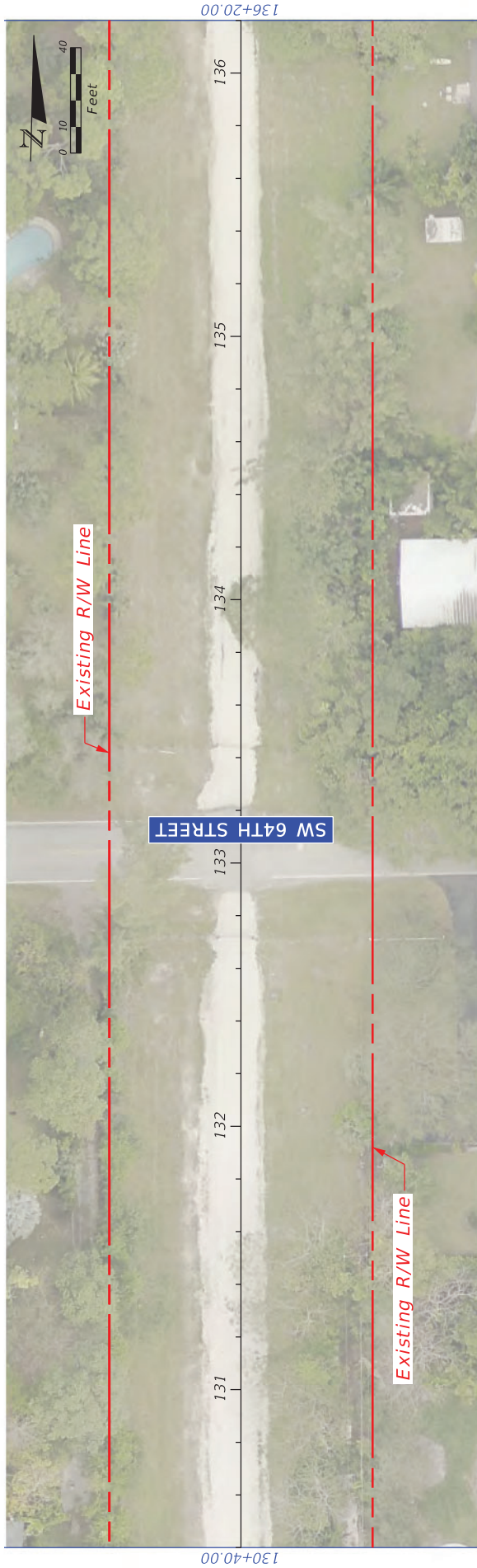
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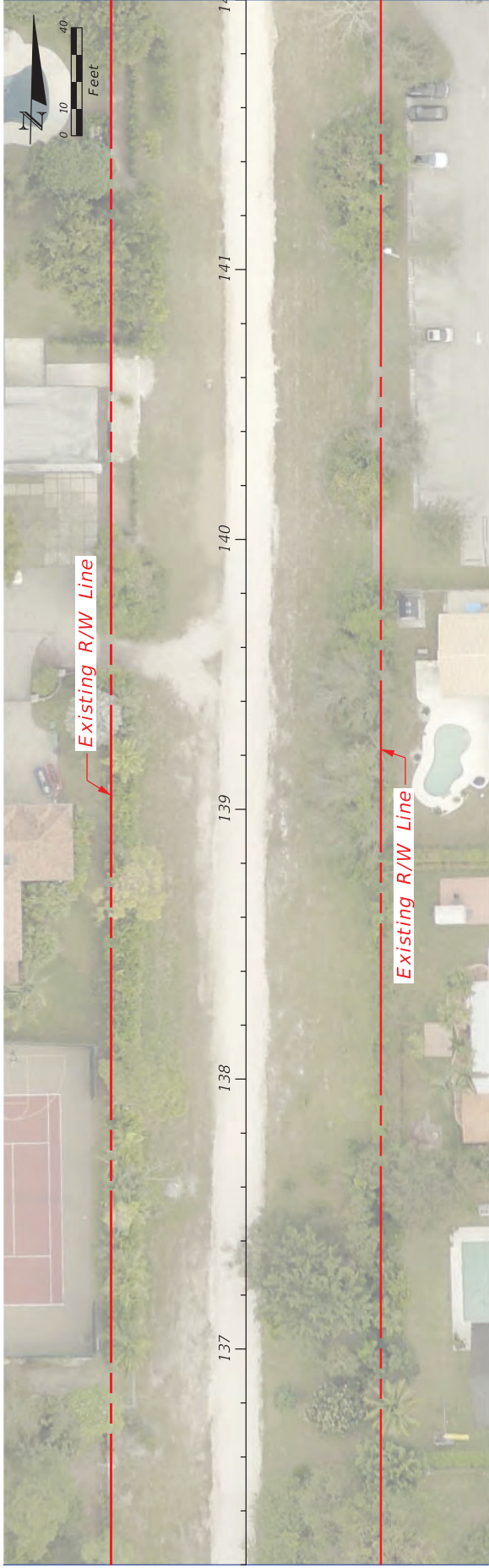
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Miami-Dade County Parks, Recreation, and Open Spaces (MDPROS)	Hickman Building 275 NW 2nd Street Miami, FL 33128 305-755-7800	P&R CONTRACT NO.
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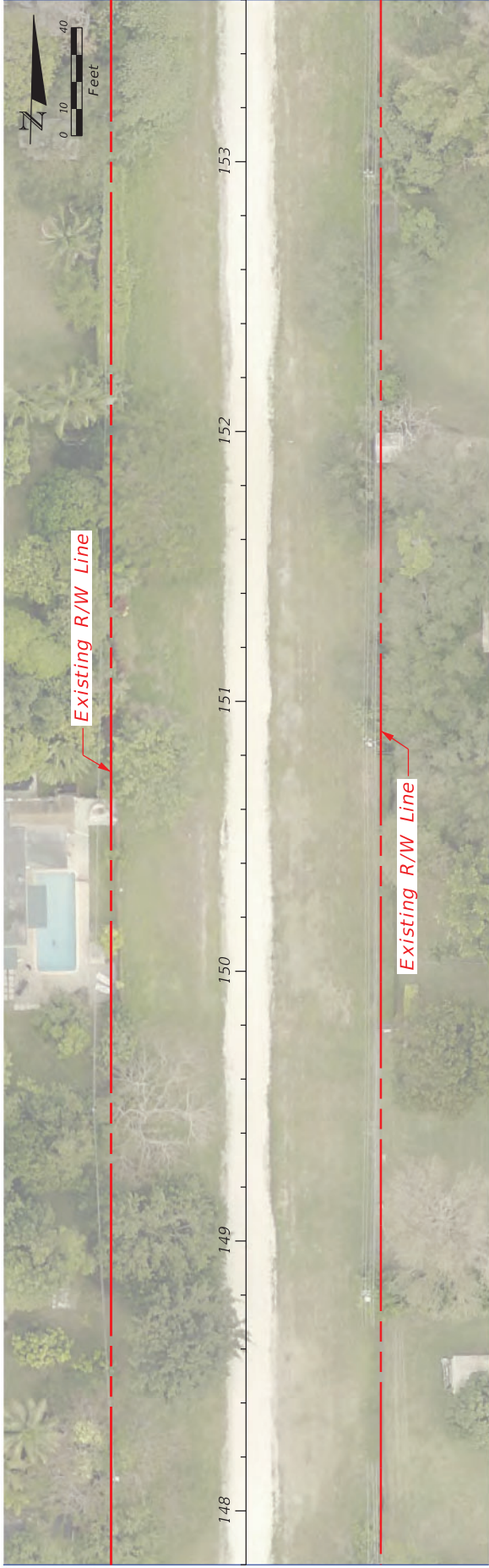
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DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION



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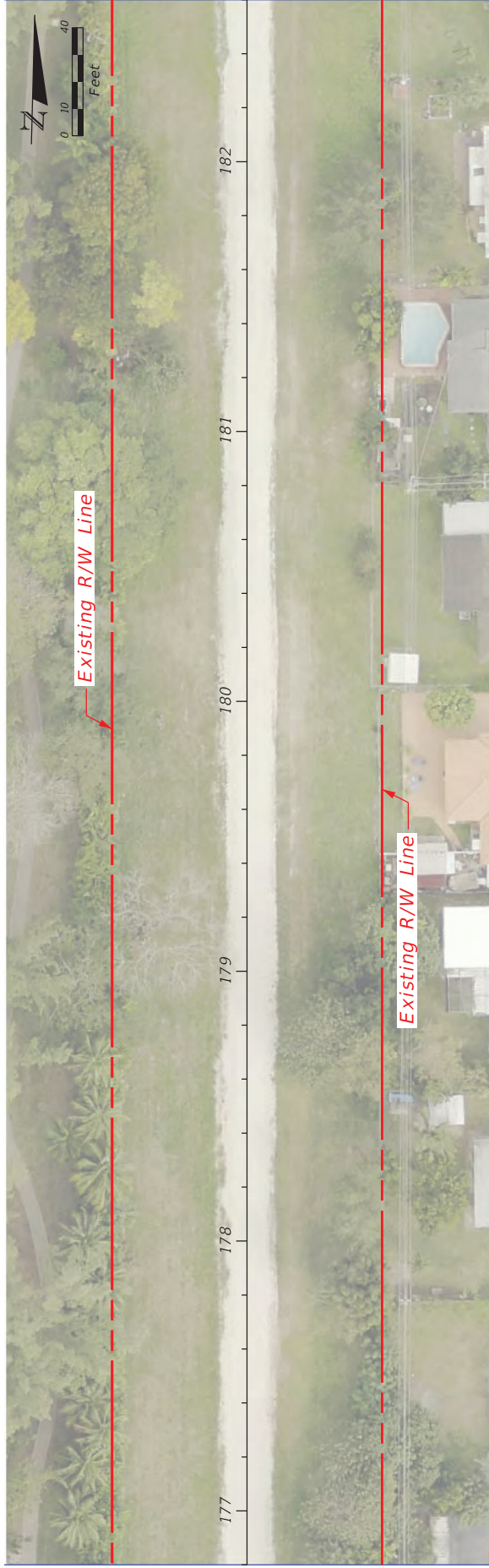
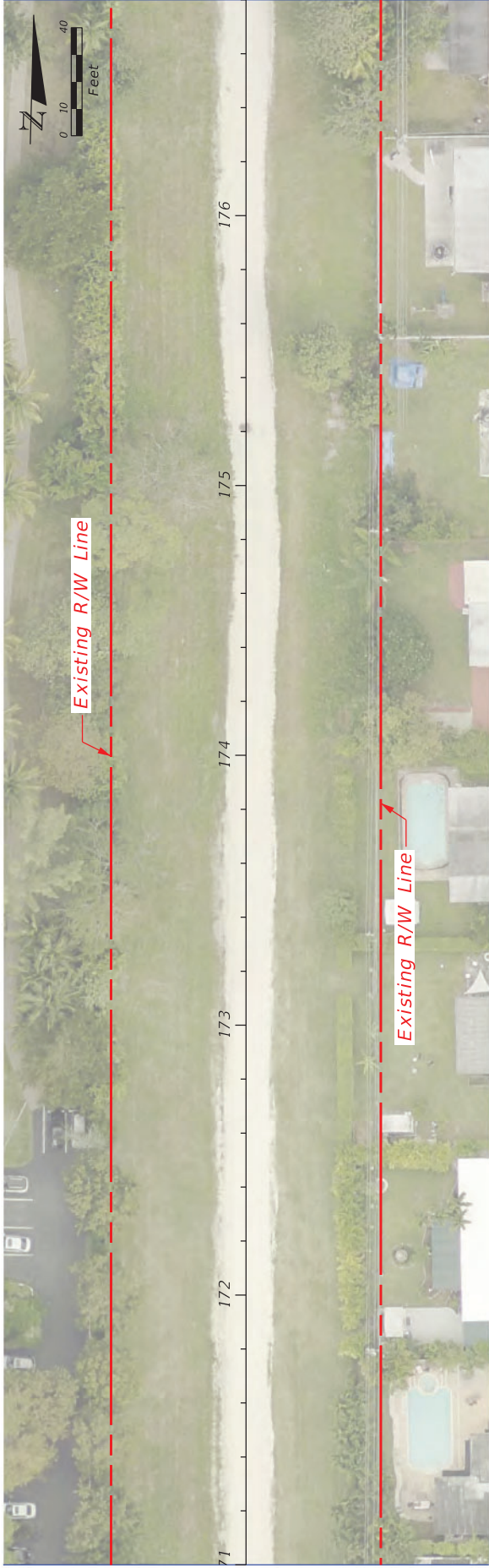
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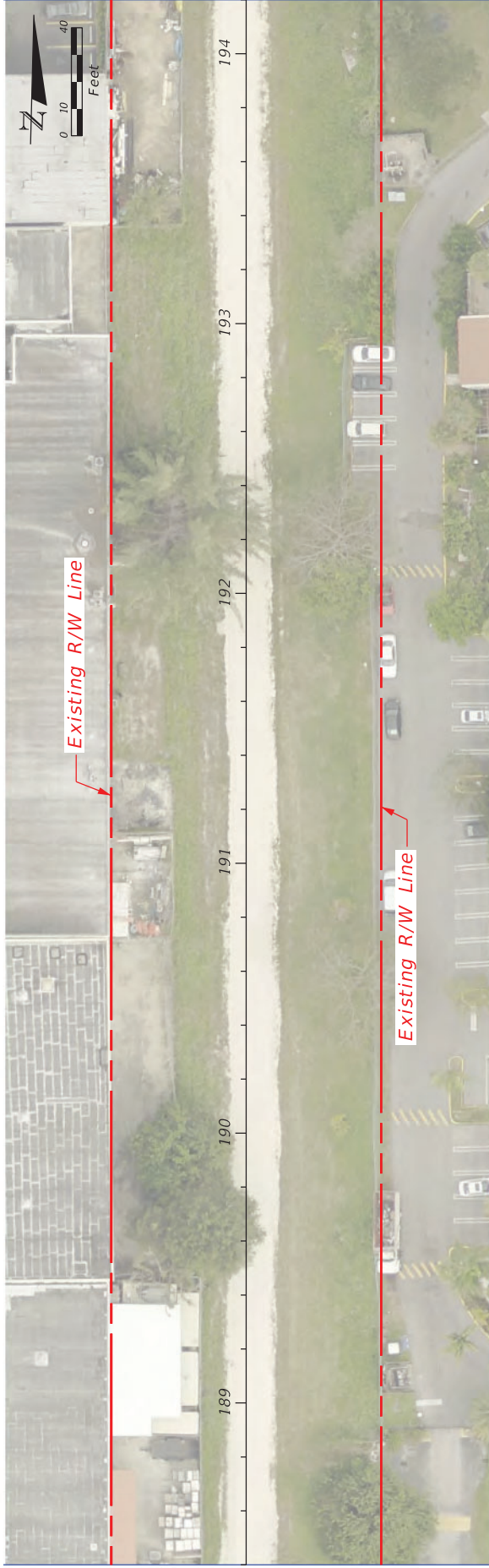
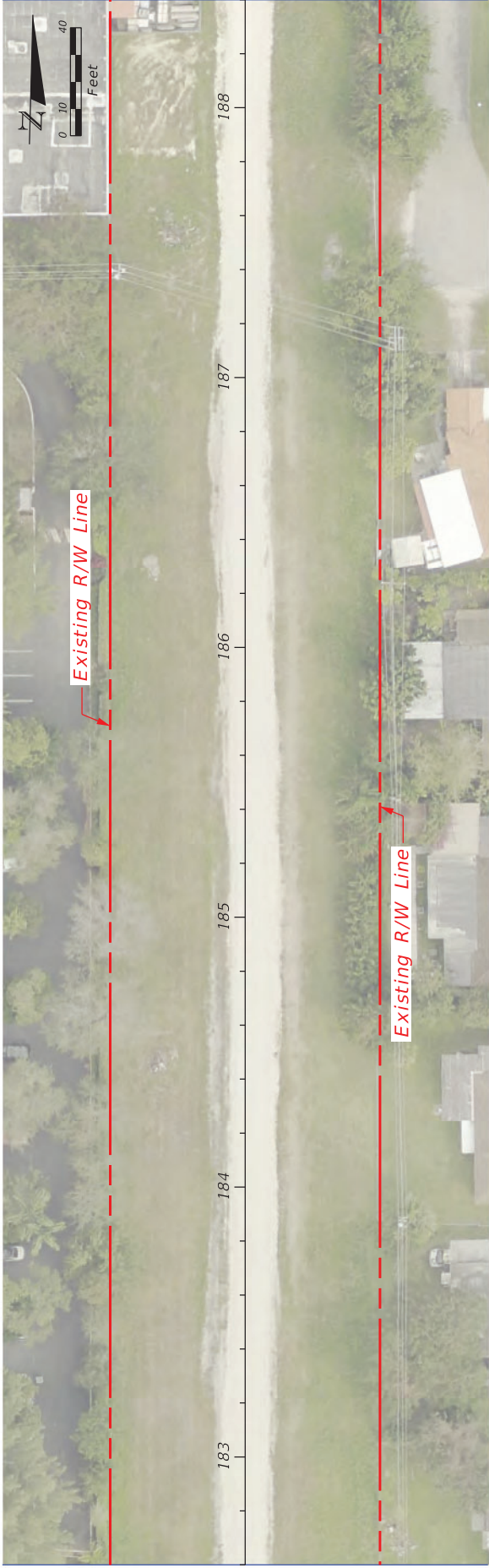
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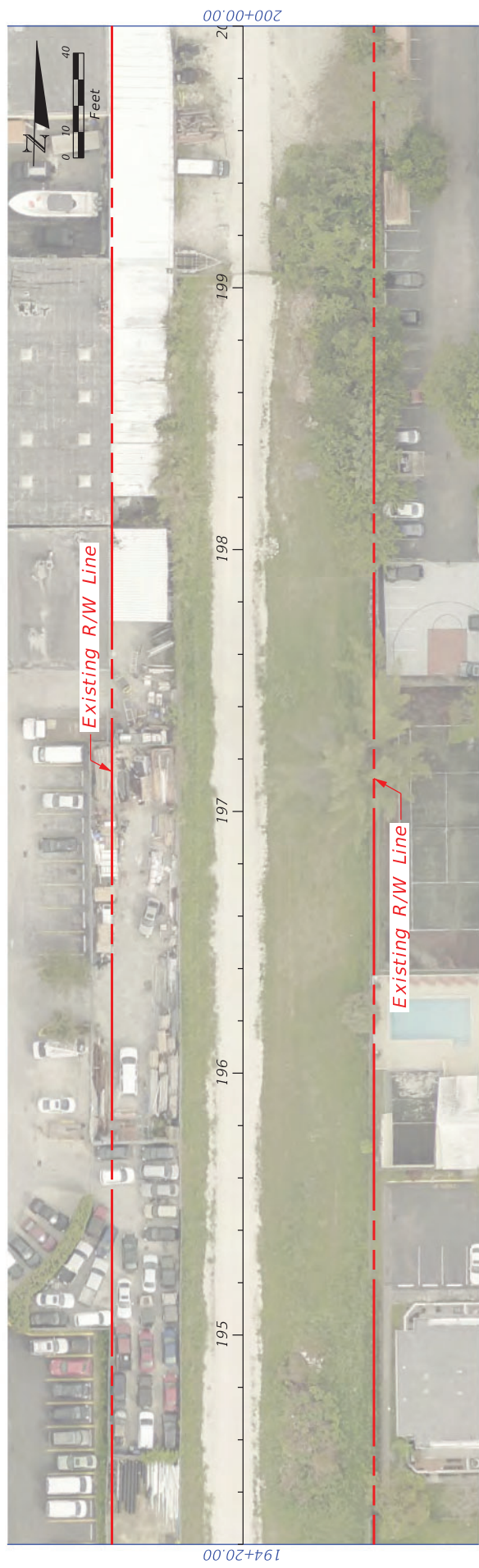
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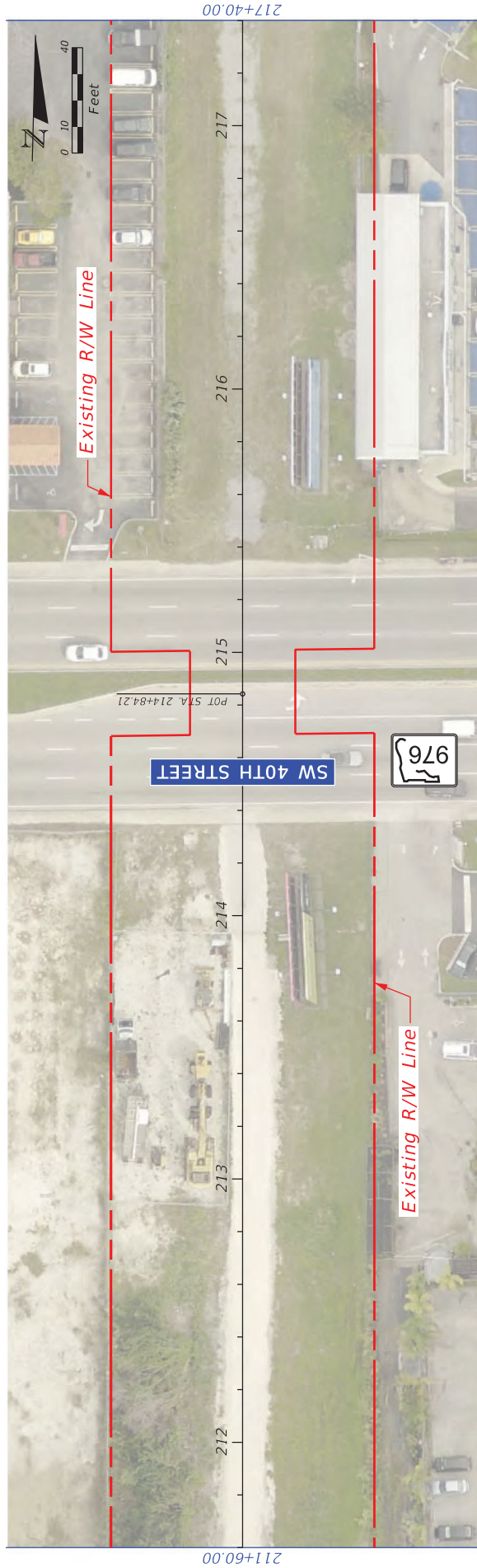
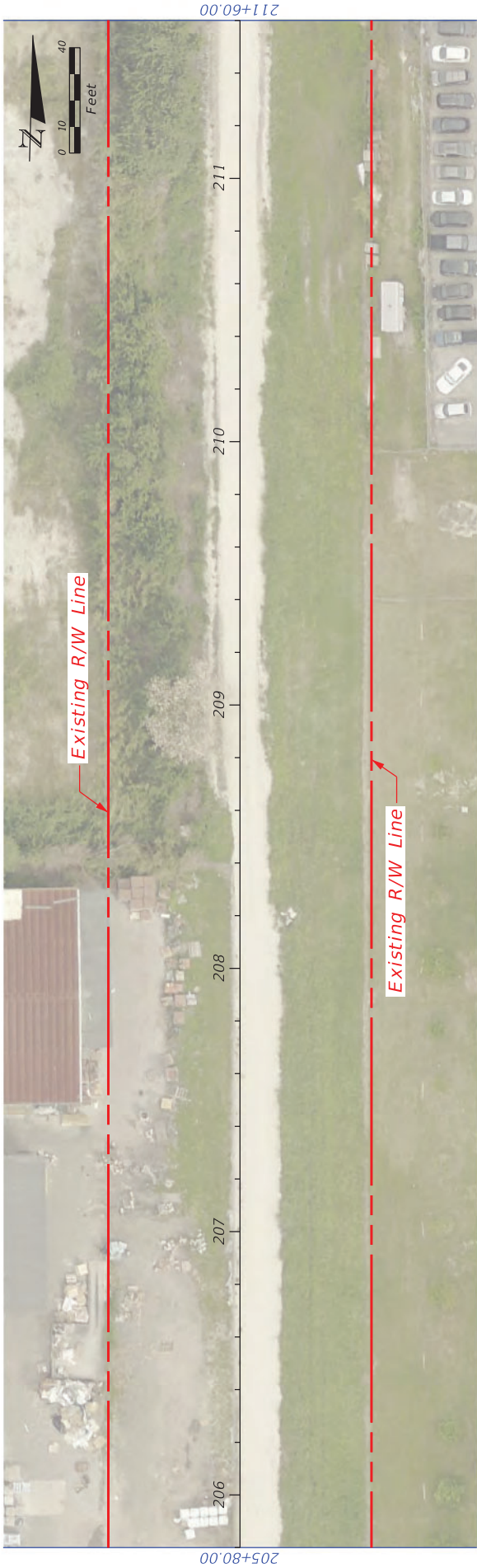


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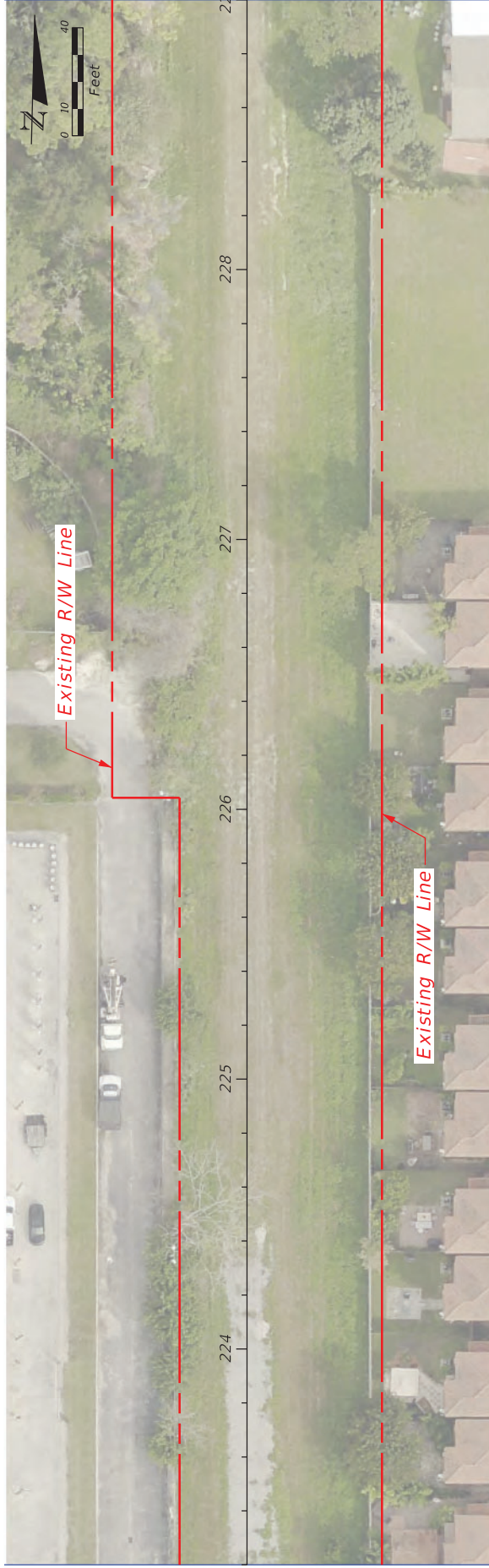
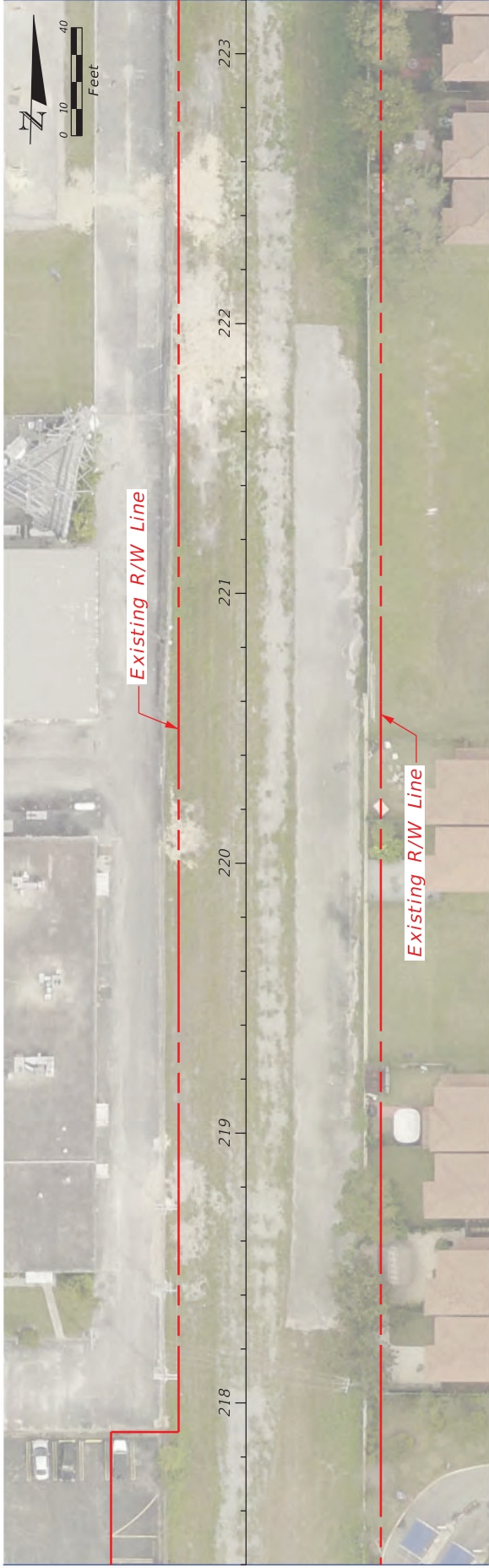
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**MIAMI-DADE COUNTY**

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MDPROS  
P&E PROJECT NO.  
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P&R CONTRACT NO.  
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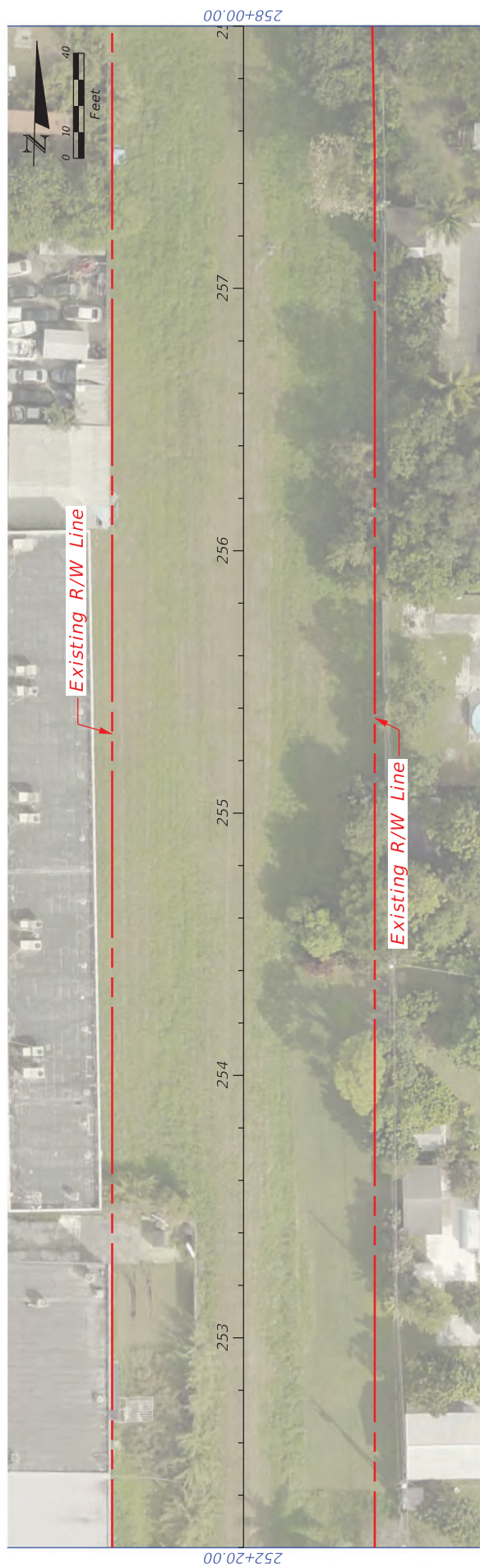
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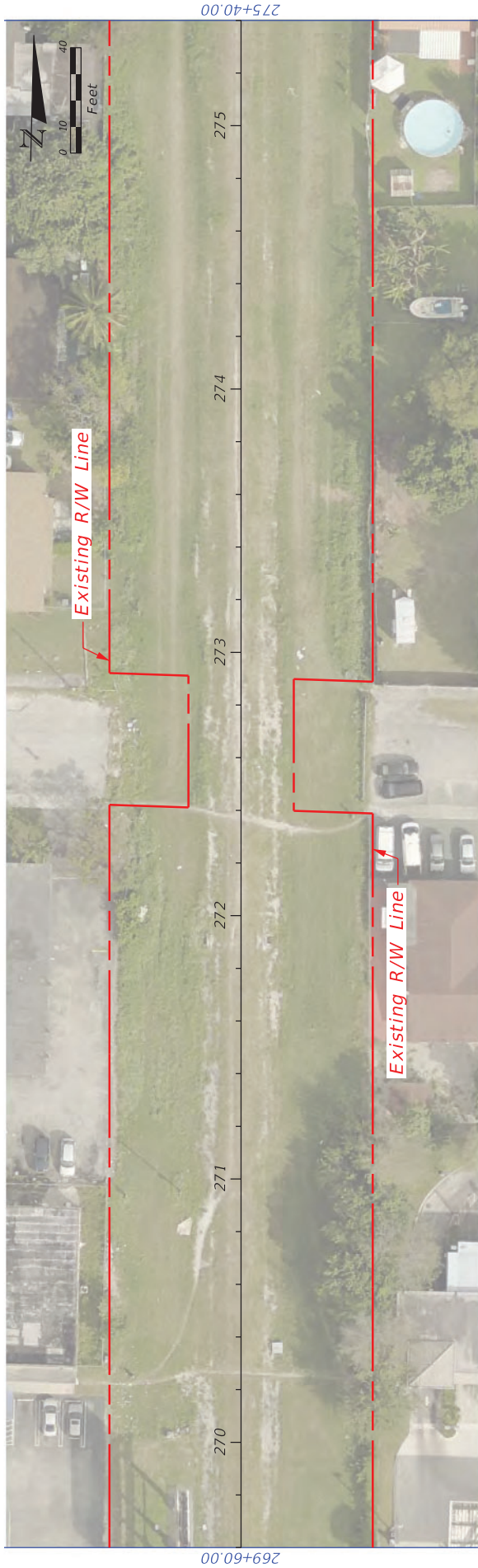
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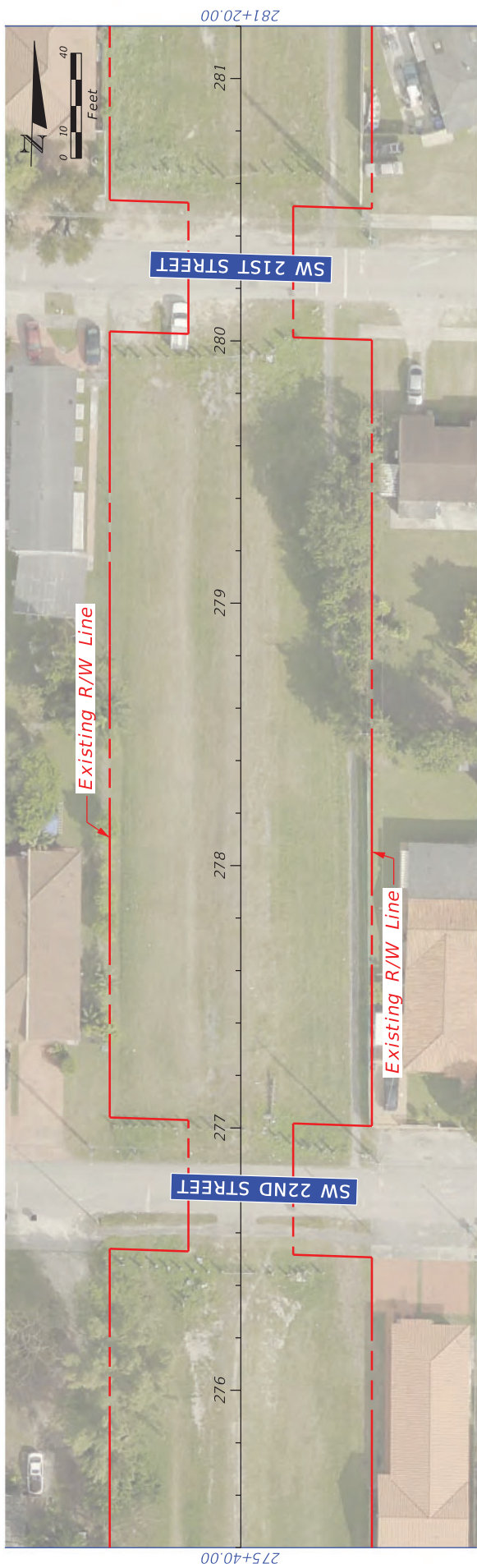




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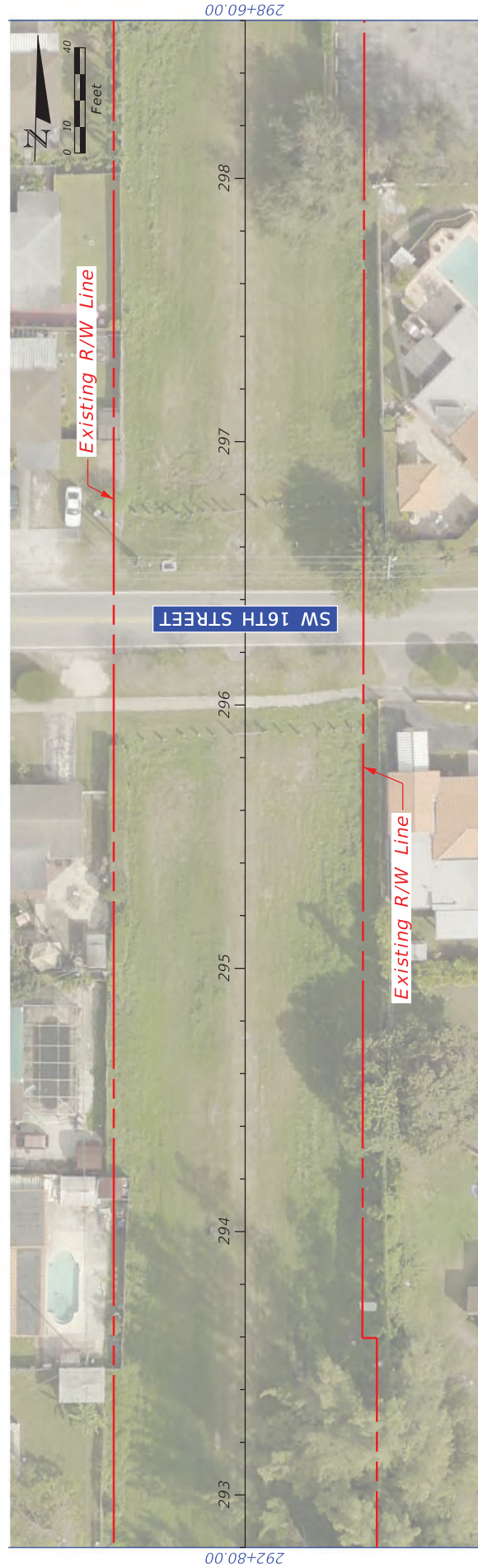






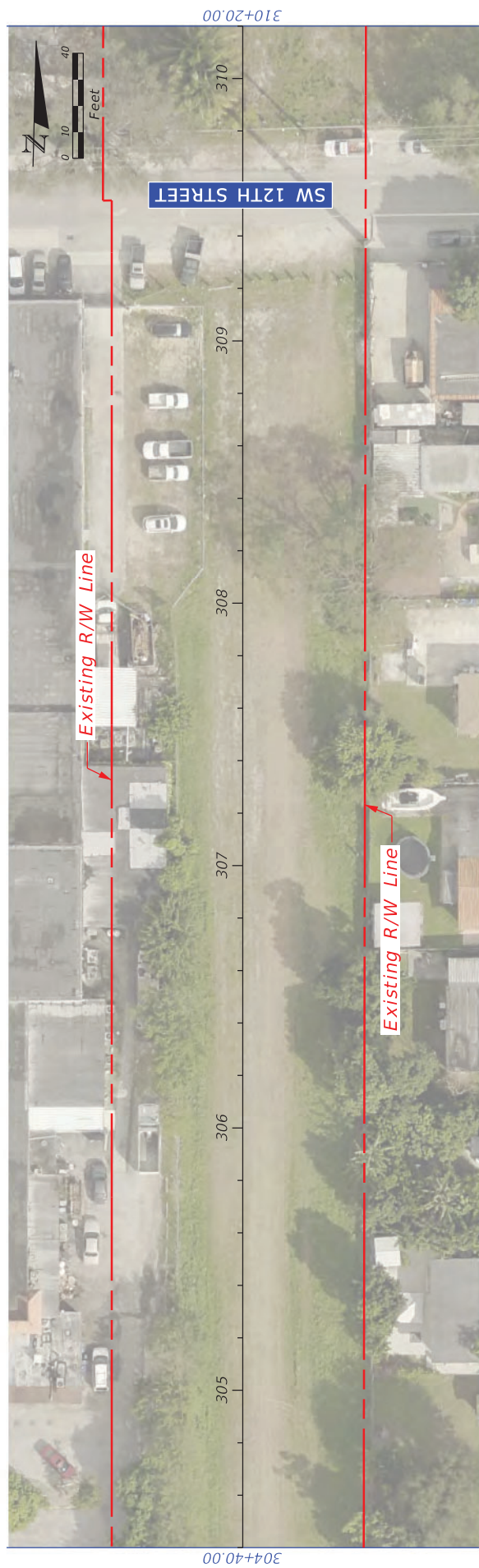
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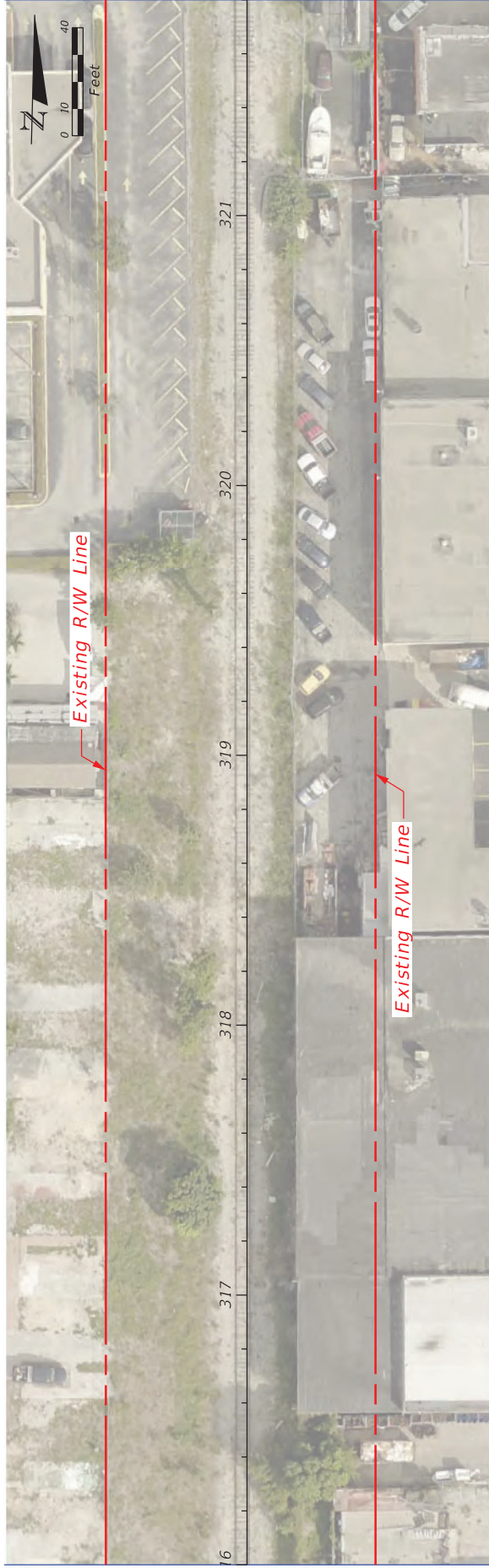
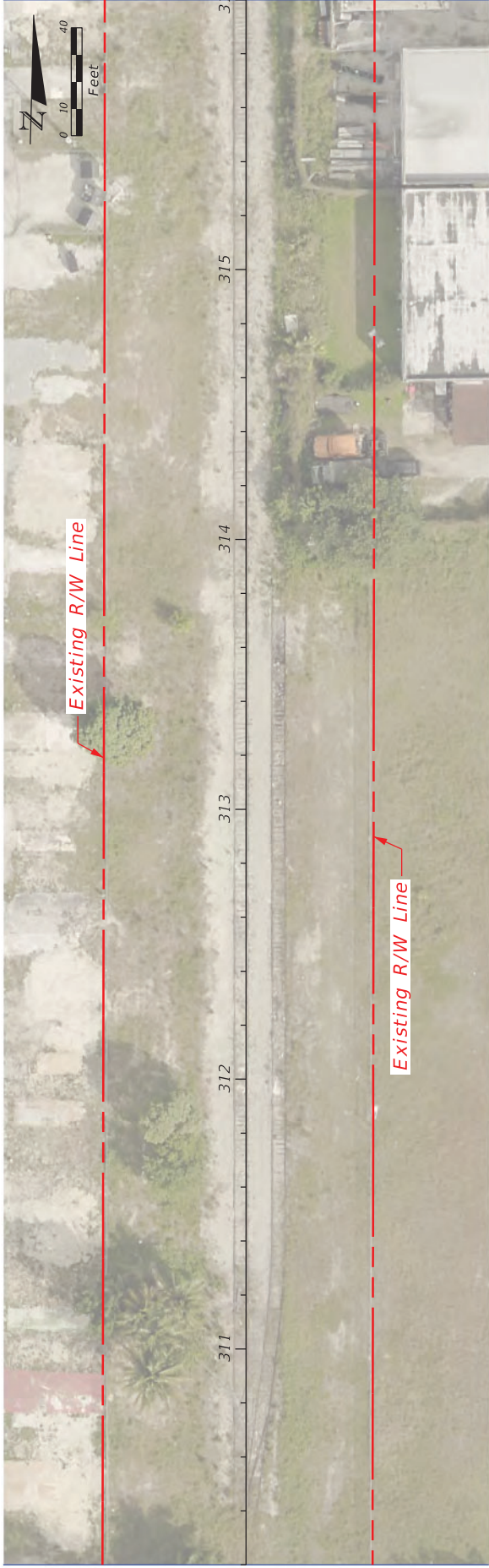
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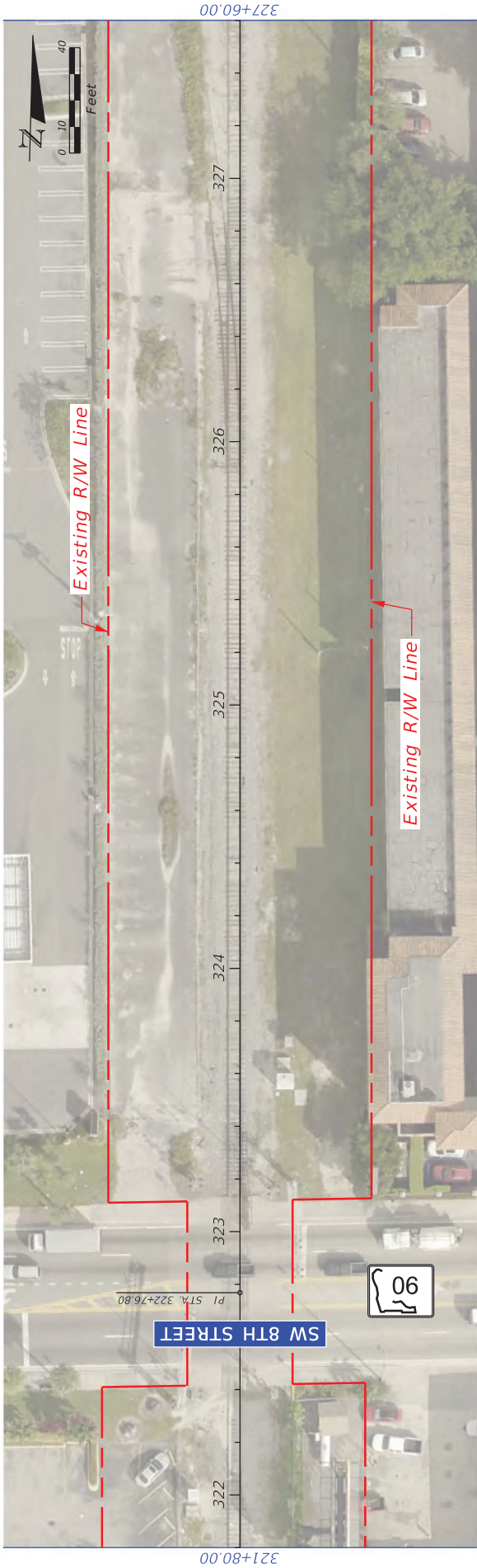
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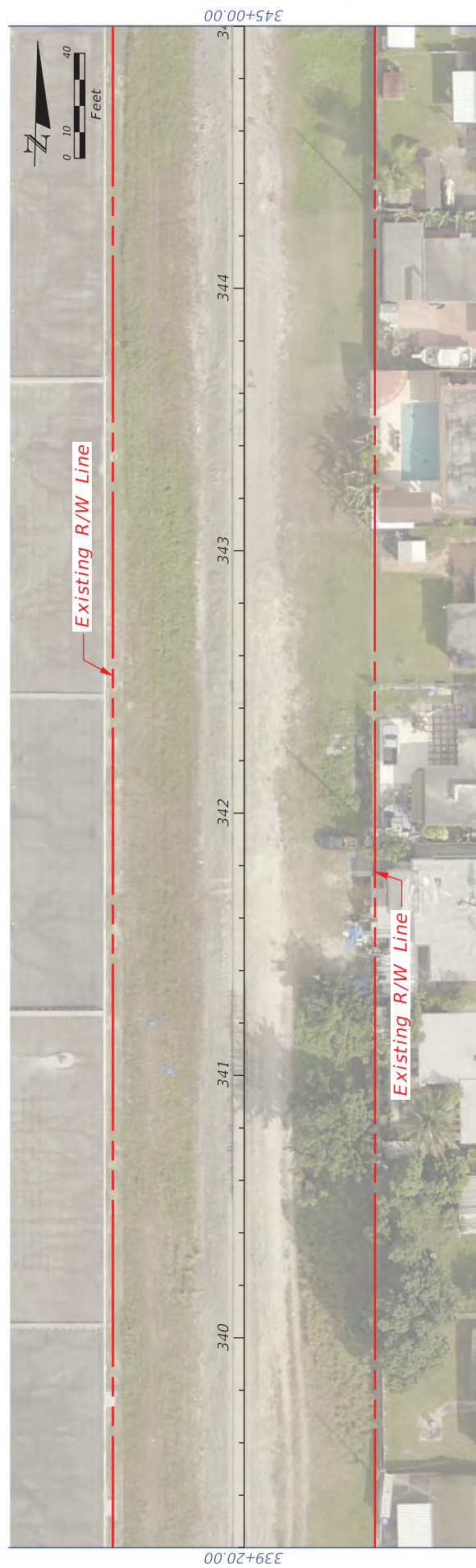
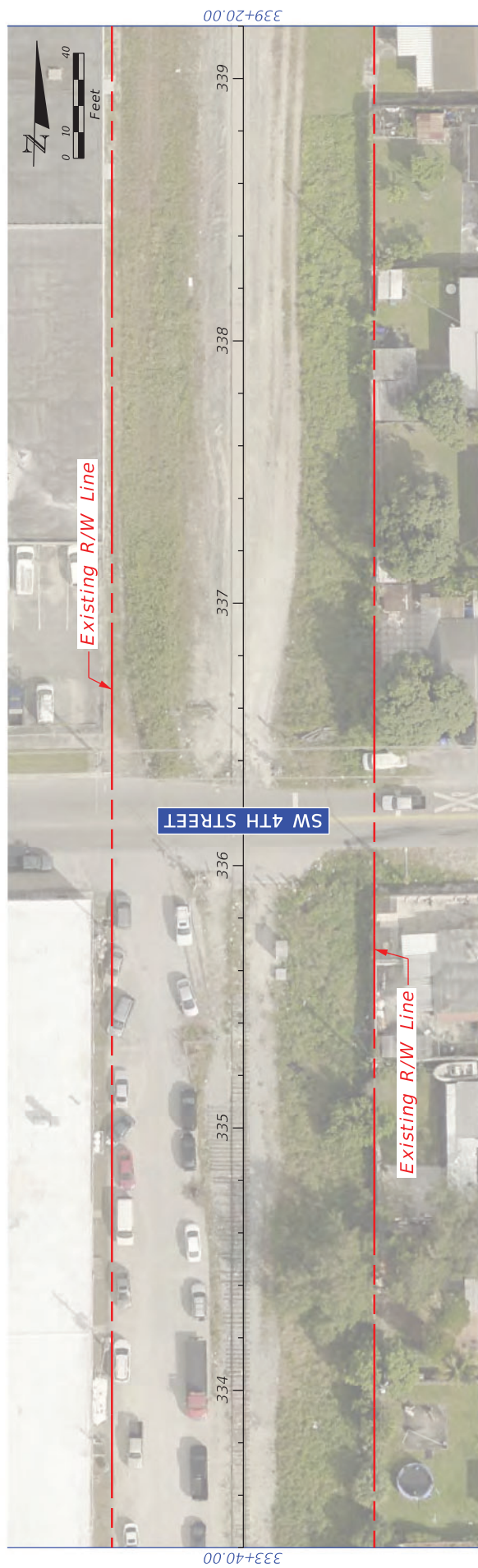
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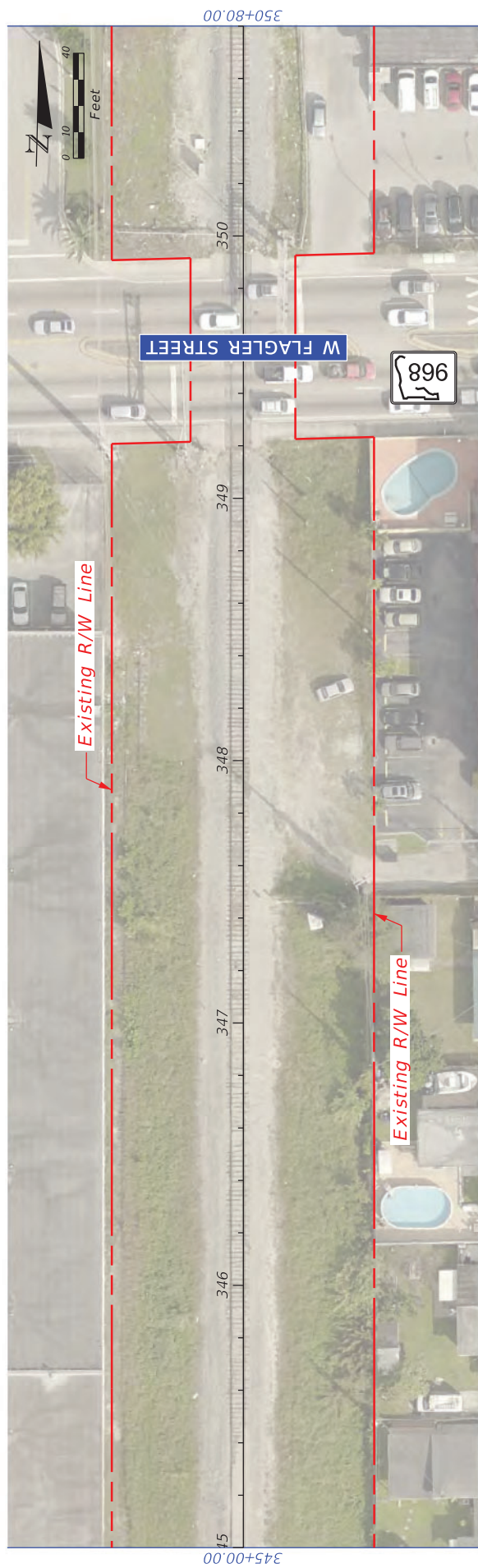
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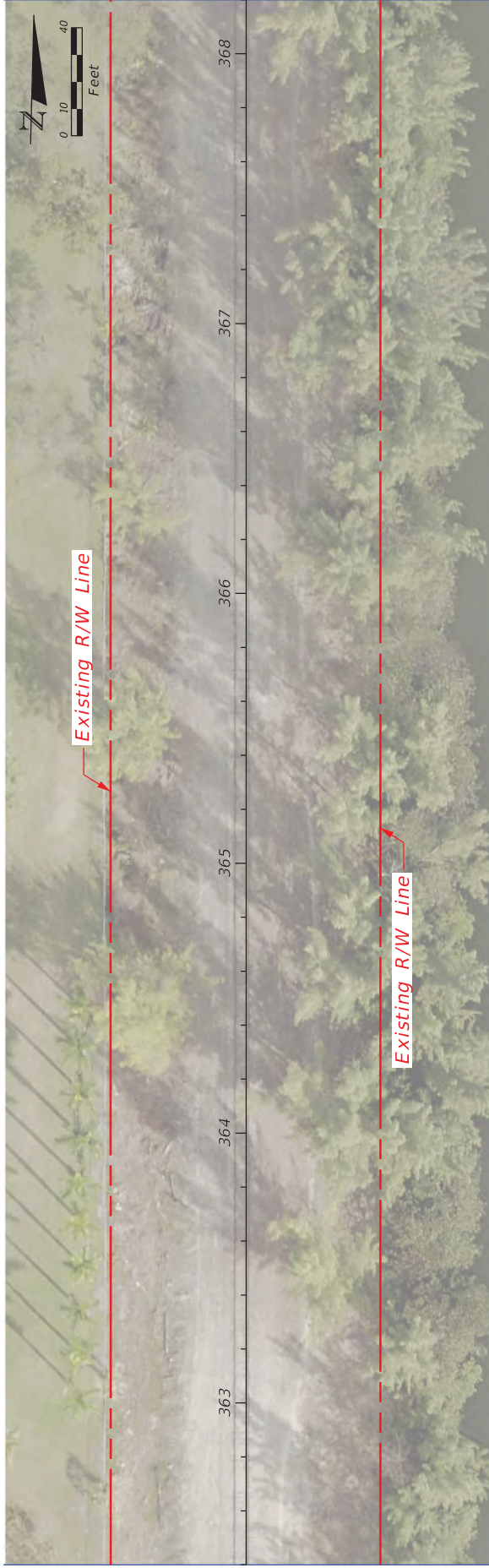
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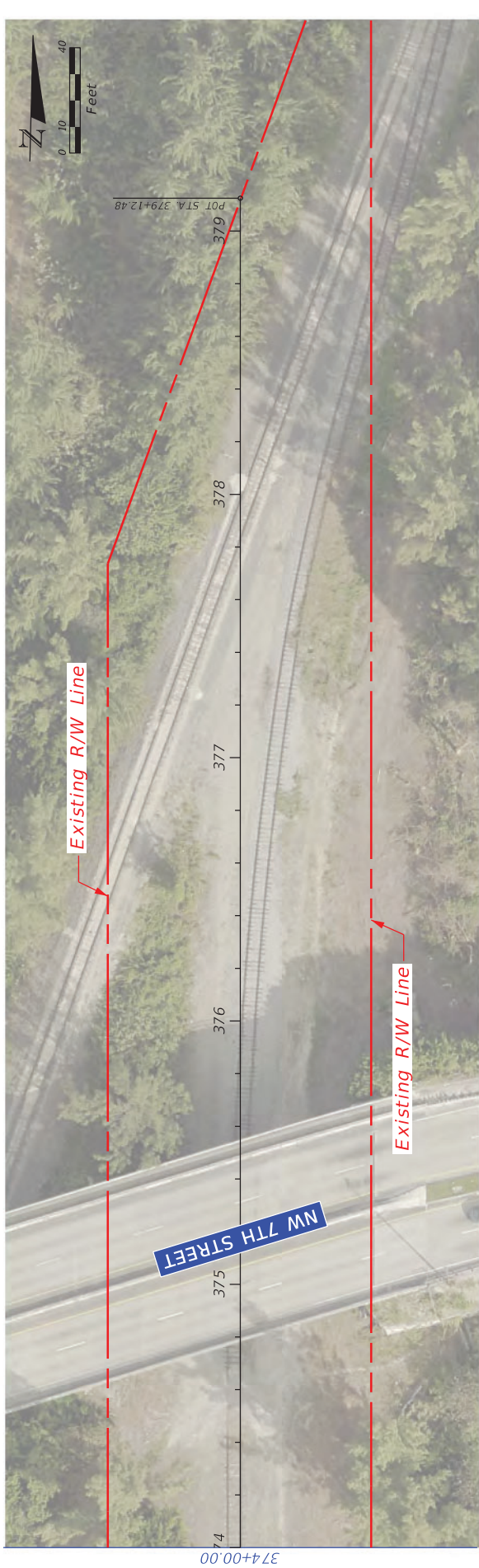
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