



**Austin Transit  
Partnership**

# **Austin Transit Partnership**

Austin Light Rail Phase 1 Project

*Draft Environmental Impact Statement*

*Appendix G: Section 4(f) and*

*Chapter 26 Evaluations*

*Austin, TX*  
January 2025

# Contents

- 1 Introduction..... 1
- 2 Regulatory Framework..... 1
  - 2.1 Section 4(f) “Use” Definition – 23 CFR Section 774.17 ..... 3
  - 2.2 *De Minimis* Impacts – 23 CFR Section 774.17 ..... 3
  - 2.3 Exceptions to Section 4(f) Approval Requirements – 23 CFR Section 774.13 ..... 3
- 3 Description of the Project..... 4
  - 3.1 Purpose and Need..... 4
  - 3.2 Project Description..... 4
  - 3.3 Alternatives Considered ..... 7
- 4 Identification of Section 4(f) Properties ..... 7
- 5 Use of Section 4(f) Properties..... 11
  - 5.1 Public Parks, Trails, and Recreation Areas ..... 11
    - 5.1.1 *De Minimis* Impacts..... 12
    - 5.1.2 Parkland Use..... 23
  - 5.2 Historic Properties..... 28
- 6 Avoidance Alternatives Analysis..... 56
  - 6.1 No Build Alternative..... 57
  - 6.2 Transportation System Management Alternative ..... 58
  - 6.3 Tunnel Alternatives ..... 58
  - 6.4 Alternative River Crossings ..... 59
  - 6.5 Travis Heights Station Design Option..... 59
- 7 Planning Measures to Minimize Harm..... 60
  - 7.1 Waller Beach at Town Lake Metro Park and Ann and Roy Butler Hike and Bike Trail ..... 61
  - 7.2 Norwood Tract at Town Lake Metro Park..... 62
- 8 Least Overall Harm Analysis ..... 63
- 9 Determination of Section 4(f) Use..... 63
- 10 Agency Coordination..... 64
- 11 Chapter 26 Evaluation..... 65
- 12 References..... 66

# Tables

- Table 1: Section 4(f) Park and Trail *De Minimis* Impacts and No Use..... 13
- Table 2: Section 4(f) Parkland Use..... 24
- Table 3: Historic Built Properties *De Minimis* Impacts and No Use..... 30

# Figures

- Figure 1: Austin Light Rail Phase I Project ..... 2
- Figure 2: Build Alternative and Design Options..... 6
- Figure 3: Section 4(f) Parks and Trails Located Within the Limits of Project Construction ..... 9
- Figure 4: Section 4(f) Historic Properties Within the Limits of Project Construction..... 10
- Figure 5: Auditorium Shores ..... 14
- Figure 6: Blunn Creek Trail..... 16
- Figure 7: Aura Riverside Pocket Park and Trail (Design Option) ..... 17
- Figure 8: Country Club Creek Trail..... 18
- Figure 9: Design Option Penick Pocket Park..... 19
- Figure 10: Airport Commerce Pocket Park ..... 20
- Figure 11: South Austin Island ..... 22
- Figure 12: Wooldridge Square (Design Option) ..... 23
- Figure 13: Waller Beach at Town Lake Metro Park..... 26
- Figure 14: Rendering of Proposed Bridge Over Lady Bird Lake at Waller Beach at Town  
 Lake Metro Park..... 27
- Figure 15: Norwood Tract at Town Lake Metro Park..... 28
- Figure 16: Easements at Austin State Hospital Historic District..... 36
- Figure 17: Easements at Former Hershel James Service Center ..... 37
- Figure 18: Easements at Former Bowling Center and 530 W 33rd St..... 37
- Figure 19: Easements at 507 W 33rd St, 3205 Guadalupe St, and 3201 Guadalupe St..... 38
- Figure 20: Easements at 415 W 32nd St, 3120 Wheeler St, and 3117 Guadalupe St..... 38
- Figure 21: Easements at North Austin Fire Station ..... 39
- Figure 22: Easements at 2807 Hemphill Park..... 39
- Figure 23: Easements at Buen Retiro..... 40
- Figure 24: Easements at Hole in the Wall, Former Forty Acres Club, and Jesse H. Jones  
 Communications Center ..... 40
- Figure 25: Easements at University Baptist Church ..... 41
- Figure 26: Easements at Former Carman Apartments..... 41
- Figure 27: Easements at Bertram Building ..... 42
- Figure 28: Easements at 1509 Guadalupe St..... 42
- Figure 29: Easements at 1304 Guadalupe St, Adams-Ziller House, and First Church of  
 Christ Scientist..... 43
- Figure 30: Easements at Former Penthouse Apartments..... 43
- Figure 31: Easements at Central Christian Church ..... 44
- Figure 32: Easements at Travis County Courthouse..... 44
- Figure 33: Easements at Austin Public Library and Austin “Moonlight Tower”..... 45
- Figure 34: Easements at Hale Houston Home and John Bremond Jr. House ..... 45
- Figure 35: Easements at Hale Houston Home and John Bremond Jr. House for the  
 Wooldridge Square Station Design Option..... 46
- Figure 36: Easements at Smith (B.J.) House..... 46
- Figure 37: Easements at Lakeside Apartments ..... 47
- Figure 38: Easements at 314 Le Grande Ave..... 47
- Figure 39: Easements at Residences: 520 Sunny Ln, 522 Sunny Ln, and 608 Academy  
 Dr ..... 48
- Figure 40: Easements at Residence: 903 Edgecliff Terrace..... 48
- Figure 41: Easements at 801 E Riverside Dr, 803 E Riverside Dr, and 807 E Riverside  
 Dr ..... 49



Figure 42: Easements at 801 E Riverside Dr, 803 E Riverside Dr, 807 E Riverside Dr, and 809 E Riverside Dr for the Travis Heights Station Design Option ..... 49

Figure 43: Easements at Cloud Kingsbury House, 1005 E Riverside Dr..... 50

Figure 44: Easements at 1019 E Riverside Dr for the Travis Heights Station Design Option..... 50

Figure 45: Easements at 1405 E Riverside Dr..... 51

Figure 46: Easements at 7107 E Riverside Dr. for the Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option ..... 51

Figure 47: Easements at Martin House ..... 52

Figure 48: Easements at Austin Motel and San Jose Motel/Hotel ..... 52

Figure 49: Easements at J.M. Crawford Building and Bergen – Todd House..... 53

Figure 50: Easements at Congress Avenue Baptist Church, Education Building..... 53

Figure 51: Easements at Austin Fire Station #6..... 54

Figure 52: Easements at 105 E Annie St..... 54

Figure 53: Easements at 1902 S Congress Ave ..... 55

Figure 54: Easements at 2008 S Congress Ave ..... 55

Figure 55: Easements at Walter Tips House ..... 56

Figure 56: Project Design in Waller Beach Park ..... 62

## Attachments

Attachment A. Parks and Trails within the 0.25-mile Study Area .....A-1

Attachment B. Historic Properties within the Area of Potential Effect.....B-1

Attachment C. Design Coordination and OWJ Correspondence..... C-1

## Acronyms and Abbreviations

| <b>Acronym/Term</b> | <b>Definition</b>                             |
|---------------------|---|
| <b>APE</b>          | area of potential effects                     |
| <b>ATP</b>          | Austin Transit Partnership                    |
| <b>BRT</b>          | bus rapid transit                             |
| <b>CapMetro</b>     | Capital Metropolitan Transportation Authority |
| <b>CFR</b>          | Code of Federal Regulations                   |
| <b>City</b>         | City of Austin                                |
| <b>DEIS</b>         | Draft Environmental Impact Statement          |
| <b>FTA</b>          | Federal Transit Administration                |
| <b>I-35</b>         | Interstate 35                                 |
| <b>NRHP</b>         | National Register of Historic Places          |
| <b>OMF</b>          | Operations and Maintenance Facility           |
| <b>OWJ</b>          | official with jurisdiction                    |
| <b>PARD</b>         | City Parks and Recreation Department          |
| <b>Project</b>      | Austin Light Rail Phase 1 Project             |
| <b>ROW</b>          | right-of-way                                  |
| <b>THC</b>          | Texas Historical Commission                   |
| <b>TPWD</b>         | Texas Parks and Wildlife Department           |
| <b>TxDOT</b>        | Texas Department of Transportation            |

# 1 Introduction

Austin Transit Partnership (ATP) proposes to construct the Austin Light Rail Phase 1 Project (the Project), a 9.8-mile light rail transit branched line from points north, south, and east of Downtown Austin (see **Figure 1**). ATP will be seeking federal funding from the Federal Transit Administration (FTA) for the Project.

This report provides documentation necessary to support determinations as required by 49 United States Code § 303 (originally enacted as Section 4(f) of the Department of Transportation Act of 1966), as implemented by 23 Code of Federal Regulations (CFR) Part 774 (collectively referred to as “Section 4(f)”), and the requirements of the Texas Parks and Wildlife Code, Chapter 26. Section 4(f) prohibits FTA from approving the use (as defined in 23 CFR Section 774.17) of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of a historic site of national, state, or local significance unless FTA determines that there is no feasible and prudent alternative to the use of land and all possible planning to minimize harm resulting from the use has been accomplished. Chapter 26 is a similar state-level requirement and is addressed in Section 11 of this report.

This report has been prepared in accordance with 23 CFR Part 774, the annotated outline for Section 4(f) evaluations presented in FTA’s *Standard Operating Procedures for Managing the Environmental Review Process* (2019), and the Federal Highway Administration *Section 4(f) Policy Paper* (2012).

# 2 Regulatory Framework

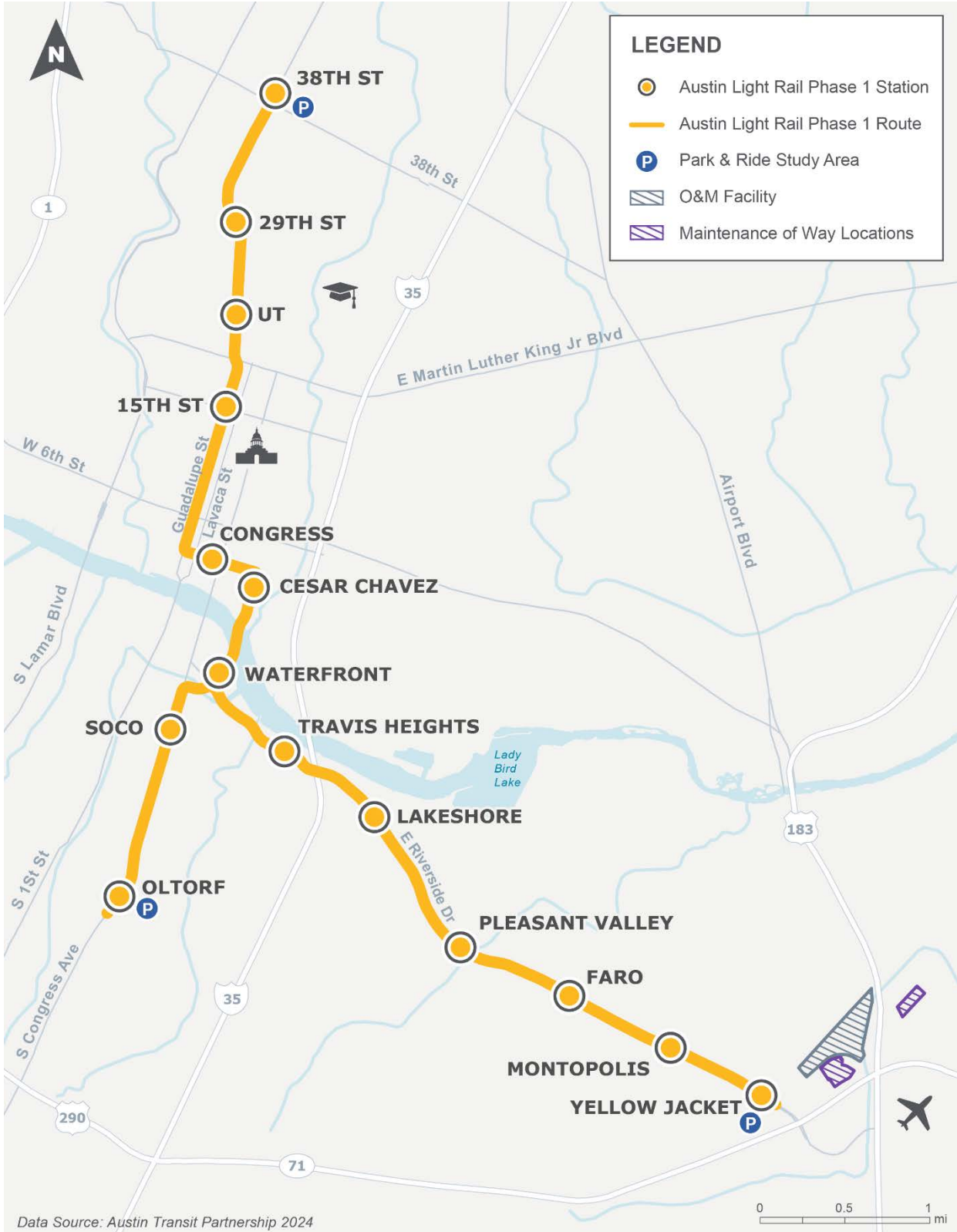
Section 4(f) regulations state that FTA cannot approve a transportation project that uses a Section 4(f) property unless FTA determines that:

- there is no feasible and prudent avoidance alternative to the use of land from the Section 4(f) property, and the action includes all possible planning to minimize harm to the property resulting from such use (see Section 2.1); or
- the use of the Section 4(f) property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a *de minimis* impact on the property (see Section 2.2).

Section 4(f) protects the following properties of local, state, or national significance:

- Publicly owned, publicly accessible parklands and recreational areas;
- Public wildlife/waterfowl refuges, regardless of public access; and
- Historic properties that are either listed in, or are eligible for listing in, the National Register of Historic Places (NRHP) regardless of ownership, including archaeological sites that are important for preservation in place.

Figure 1: Austin Light Rail Phase I Project



## 2.1 Section 4(f) “Use” Definition – 23 CFR Section 774.17

“Use” of Section 4(f) property is defined as follows:

- **Direct Use.** A direct use of a Section 4(f) property occurs when property is permanently incorporated into a proposed transportation project. This may occur as a result of partial or full acquisition of a fee simple interest, permanent easement, or temporary easement, unless the temporary easement meets the criteria for an exception (see Section 2.3 below).
- **Temporary Use.** A temporary use of a Section 4(f) property occurs when there is a temporary occupancy of property that is considered adverse in terms of the preservation purposes of Section 4(f).
- **Constructive Use.** A constructive use of a Section 4(f) property occurs when a transportation project does not incorporate land from the resource, but the proximity of the project results in impacts so severe that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) are substantially impaired.

## 2.2 *De Minimis* Impacts – 23 CFR Section 774.17

A *de minimis* impact is defined as follows:

- For parks, recreation areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that would not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f), and the official with jurisdiction (OWJ) has concurred with this determination after there has been a chance for public review and comment (see 23 CFR Section 774.5(b)(2)).
- For historic sites, a *de minimis* impact means that FTA had determined, in accordance with Section 106 of the National Historic Preservation Act (36 CFR Part 800) that no historic property is affected by the Project, or the Project would have “no adverse effect” on the property in question. The Section 106 process is outlined in **Appendix E-6, Draft Built Environment Survey Report**. The Section 106 consulting parties must be consulted and the OWJ must be notified that FTA intends to make a *de minimis* finding based on the concurrence with the “no adverse effect” determination under 36 CFR Part 800. This is usually done in the effect determination letter sent to the OWJ for concurrence.

## 2.3 Exceptions to Section 4(f) Approval Requirements – 23 CFR Section 774.13

Section 4(f) approval requirements do not apply to a number of resources and conditions, including the following:

- Archaeological sites that are listed in, or eligible for listing in, the NRHP when:
  - FTA concludes that the archeological resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place. This exception applies both to situations where data recovery is undertaken



and where FTA decides, with agreement of the OWJ, not to recover the resource;  
and

- The OWJ over the resource has been consulted and has not objected to FTA's finding (23 CFR Section 774.13(b)).
- National Historic Trails unless the trail is listed in the NRHP (23 CFR Section 774.13(f)(2));
- Trails, paths, bikeways, and sidewalks that are part of the local transportation system and which function primarily for transportation (23 CFR Section 774.13 (f)(4)); and
- Transportation enhancement activities or mitigation measures that are solely for the purpose of preserving or enhancing an activity, feature, or attribute that qualifies the property for Section 4(f) protection and the OWJ agrees (23 CFR Section 774.13(g)).

In addition, a temporary occupancy of property does not constitute use of a Section 4(f) resource when all the following conditions are satisfied:

- The duration is less than the time needed for construction of the project and there is no change in ownership of the land;
- The nature and magnitude of the changes to the Section 4(f) property are minimal;
- There are no anticipated permanent adverse physical effects or interference with the protected activities, features, or attributes of the property on either a temporary or permanent basis;
- The land being used will be fully returned to a condition at least as good as that which existed prior to the project; and
- There is a documented agreement of the OWJs over the Section 4(f) resource regarding the above conditions (23 CFR Section 774.13 (d)).

## 3 Description of the Project

### 3.1 Purpose and Need

The purpose of the Project is to address growing corridor travel demand with a reliable, safe, cost-effective, time-competitive, sustainable, and equitable light rail system that operates in a dedicated guideway. The Project is needed to increase the transportation network capacity to meet existing travel demand, sustainably support Austin's population and employment growth, improve transit access between affordable housing and jobs, and support growth of and connectivity to regional activity centers.

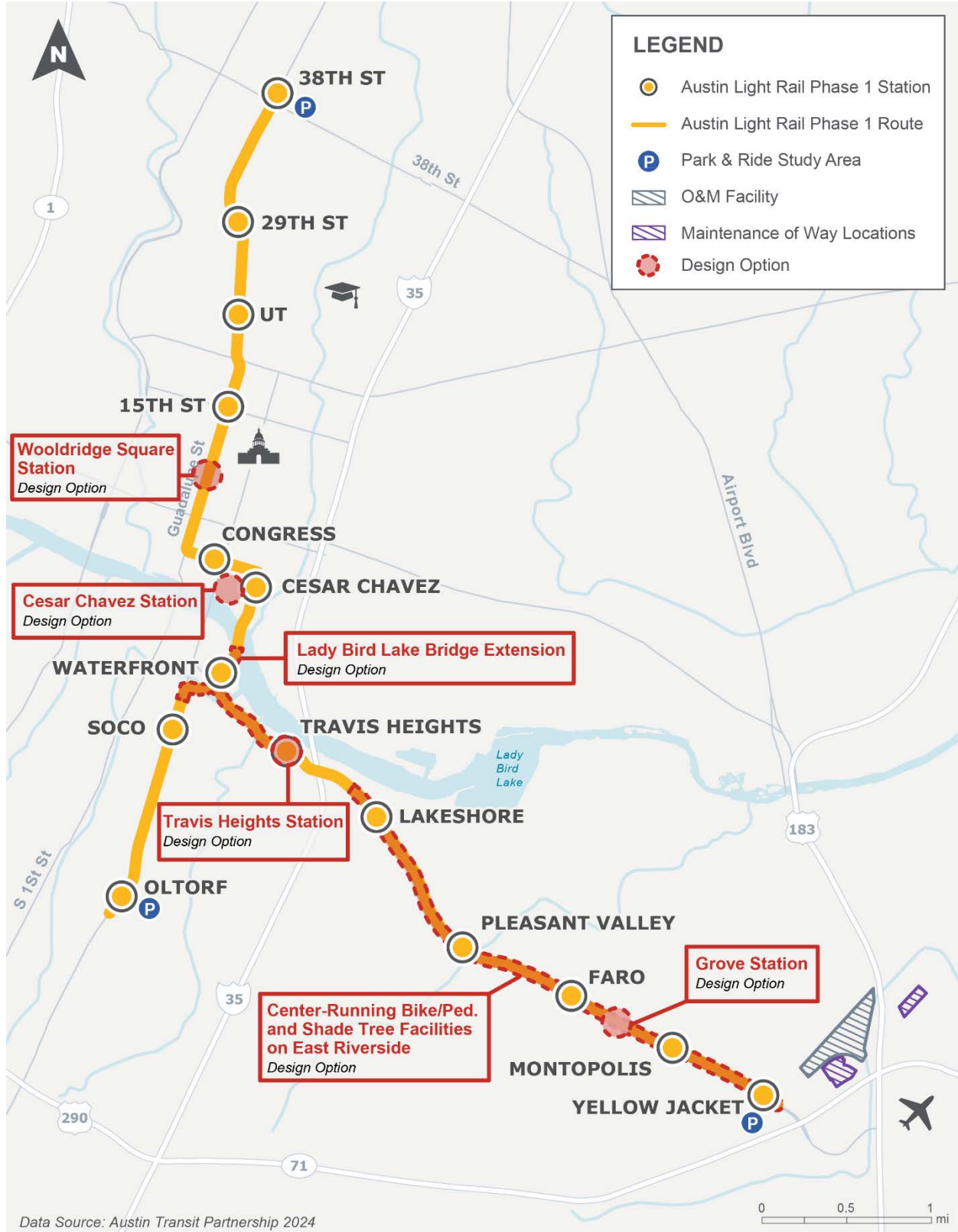
### 3.2 Project Description

The Build Alternative includes a 9.8-mile dedicated light rail guideway, 15 stations, 3 park-and-rides, an operations and maintenance facility (OMF), maintenance of way shops, an overhead contact system, traction power substations, and train control and communications equipment. Through the design process and collaboration with the Capital Metropolitan Transportation

Authority (CapMetro), the City of Austin (City), and the public, ATP identified six Design Options shown on **Figure 2** for evaluation in the Draft Environmental Impact Statement (DEIS):

- **Wooldridge Square Station Design Option** would add a station on Guadalupe Street between West 9th Street and West 10th Street at the historic Wooldridge Square. ATP developed this Design Option in response to public support for improved access to light rail via closer station spacing in Downtown Austin.
- **Cesar Chavez Station Design Option** would locate the station and the guideway off-street on a diagonal through private property, integrated with the transit-oriented development that is being planned for the site. ATP developed this Design Option to explore the potential for a joint development opportunity with a private developer.
- **Lady Bird Lake Bridge Extension Design Option** would include an elevated Waterfront Station and the extension of the elevated structure south of the station toward South Congress Avenue and in the median of East Riverside Drive to Travis Heights Boulevard. ATP developed this Design Option to address the surrounding topography challenges and the vehicular congestion that would result from an at-grade alignment of the junction (connection point) of all three light rail branches at East Riverside Drive.
- **Travis Heights Station Design Option** would eliminate the station at Travis Heights. This Design Option is a feasible and prudent avoidance alternative because it would avoid the use of parkland. It would also address technical challenges with topography and avoid overlapping construction sites with the planned Interstate 35 (I-35) Capital Express Central Project.
- **Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option** would include center-running bicycle and pedestrian lanes next to the light rail east of I-35 on East Riverside Drive. In this part of the Project corridor, the roadway right-of-way (ROW) is relatively wide, and there is a lack of shade and bicycle and pedestrian infrastructure serving the adjacent communities. The Design Option for a center-running configuration recognizes an opportunity to improve mobility options and user experience across all modes of travel in the corridor by providing continuous bicycle and pedestrian infrastructure that minimizes conflict points with driveways. This Design Option is also an opportunity to improve shade cover and plant taller trees on the south side of the bicycle and pedestrian facilities. The separated traffic in this configuration could contribute to better speed management and safer conditions for all users.
- **Grove Station Design Option** would combine the Montopolis and Faro Stations into a single station at Grove Boulevard. ATP is evaluating this Design Option for its connectivity with the bus network and potential for more direct access to planned affordable housing. After review of public comments on the Design Options during the scoping period for the DEIS, a **Variation to the Grove Station Design Option** was developed. The Variation to the Grove Station Design Option would retain Montopolis Station and move Faro Station approximately 800 feet east to better serve the community near Grove Boulevard.

Figure 2: Build Alternative and Design Options



### 3.3 Alternatives Considered

The Project was developed to include cost-effective segments of two previously proposed high-capacity transit projects—the Orange and Blue Lines—as part of the Project Connect program. In 2021 and 2022, the Orange and Blue Lines were the subject of cultural resource studies and information submitted to the City Parks and Recreation Department (PARD), Texas Parks and Wildlife Department (TPWD), and Texas Historical Commission (THC) for review. To address increasing costs, the Orange and Blue Line projects were paused for further development by ATP in summer 2022. Since then, the two lines have been combined and modified into a single proposed project sponsored by ATP as the first phase of the light rail system for Project Connect.

In 2022 and 2023, ATP analyzed alternatives for this Project by evaluating dozens of scenarios testing different endpoint stations; different vertical and horizontal profiles for on-street, elevated, and tunnel sections in Downtown Austin; two river crossing locations; and multiple sites for the OMF. Based on this analysis, five scenarios were developed to represent a reasonable range of alternatives for the first phase of the light rail system for Project Connect. After reviewing technical results and considering feedback received during robust community outreach regarding the scenarios, ATP recommended the Project as a first phase of the light rail system for Project Connect. In June 2023, the ATP Board of Directors, Austin City Council, and CapMetro Board unanimously approved the *Austin Light Rail Implementation Plan*, defining the first phase for the light rail system of the Project Connect program (ATP 2023). The rationale for the decision-making is described in **DEIS Appendix A, Alternatives Development and Analysis**.

## 4 Identification of Section 4(f) Properties

ATP has coordinated with PARD, TPWD, and THC to identify Section 4(f) resources in the Project area. No wildlife and/or waterfowl refuges or archaeological sites that warrant protection under Section 4(f) regulations were identified (see Section 2.3).

The Study Area for the Section 4(f) evaluation of parkland consists of a 0.25-mile buffer from the proposed alignment and facility boundaries. ATP reviewed the following sources:

- PARD’s *Our Parks, Our Future: Austin Parks & Recreation Long Range Plan 2020-2030* (City of Austin 2019);
- City of Austin Open Data Portal (City of Austin 2024);
- U.S. Fish and Wildlife Service National Wildlife Refuge online mapper (U.S. Fish and Wildlife Service 2023);
- TPWD Texas Natural Diversity Database (TPWD 2019); and
- TPWD Rare, Threatened, and Endangered Species of Texas data (TPWD 2023).

The Study Area for the Section 4(f) evaluation of historic resources is the Area of Potential Effect (APE) defined under Section 106 of the National Historic Preservation Act (Section 106) as “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.” In consideration of the

potential effects of the Project, the APE consists of parcels intersected by a 150-foot area from the limits of Project construction. Additionally, to account for potential effects of the proposed bridge over Lady Bird Lake, the APE extends to 0.25 mile from the proposed bridge's footprint across the lake. THC concurred with the boundaries of the APE (see **DEIS Appendix E-6, Draft Built Environment Survey Report**).

In 2022, ATP coordinated with THC and identified historic sites under the Section 106 consultation that occurred for the Orange and Blue Line projects. For the current Project alignment, ATP conducted a survey of the APE and evaluated 187 individual resources that were not evaluated for the Orange and Blue Line projects and recommended 14 additional resources as eligible for listing in the NHRP. In a letter dated October 14, 2024, THC concurred with the determinations of NRHP eligibility. Subsequently, based on Consulting Party consultation, two additional resources have been recommended NRHP eligible by ATP.

ATP identified 22 parks, 7 existing trails, and 7 proposed trails that are Section 4(f) resources and either partially or entirely within the Study Area (see **Attachment A**). Of these, permanent use of a portion of 7 parks, 4 existing trails, and 6 proposed trails would result from the Build Alternative or one or more of the Design Options; and temporary occupancy (no use) would occur at 1 property under one Design Option (see **Figure 3**). Use of the parkland would be allowed under license agreements between ATP and the City.

Two trails (shown in **Attachment A**) are within the limits of Project construction but meet an exception to Section 4(f) requirements. THC concurred with ATP's determination:

- El Camino Real de los Tejas National Historic Trail is a mapped trail that bisects the proposed OMF site. In this location, the trail is not evident, and the property is not designated parkland, publicly owned, or publicly accessible. The trail is not listed in or eligible for listing in the NHRP (see 23 CFR Section 774.13(f)(2));
- 183 Tollway Shared Use Path on U.S. Highway 183 traverses the access drive to the proposed maintenance of way site. This shared use path is part of the local highway system and functions primarily for transportation purposes (see 23 CFR Section 774.13 (f)(4)).

Within the APE, ATP identified 220 resources that are listed in the NRHP, eligible for listing in the NRHP, or recommended eligible for listing in the NRHP. ATP would use portions of the properties within the limits of Project construction in the form of permanent or temporary easements on private property or, if City owned, through a license agreement. ATP evaluated the historic built properties in the APE in accordance with Section 106 requirements and found the following:

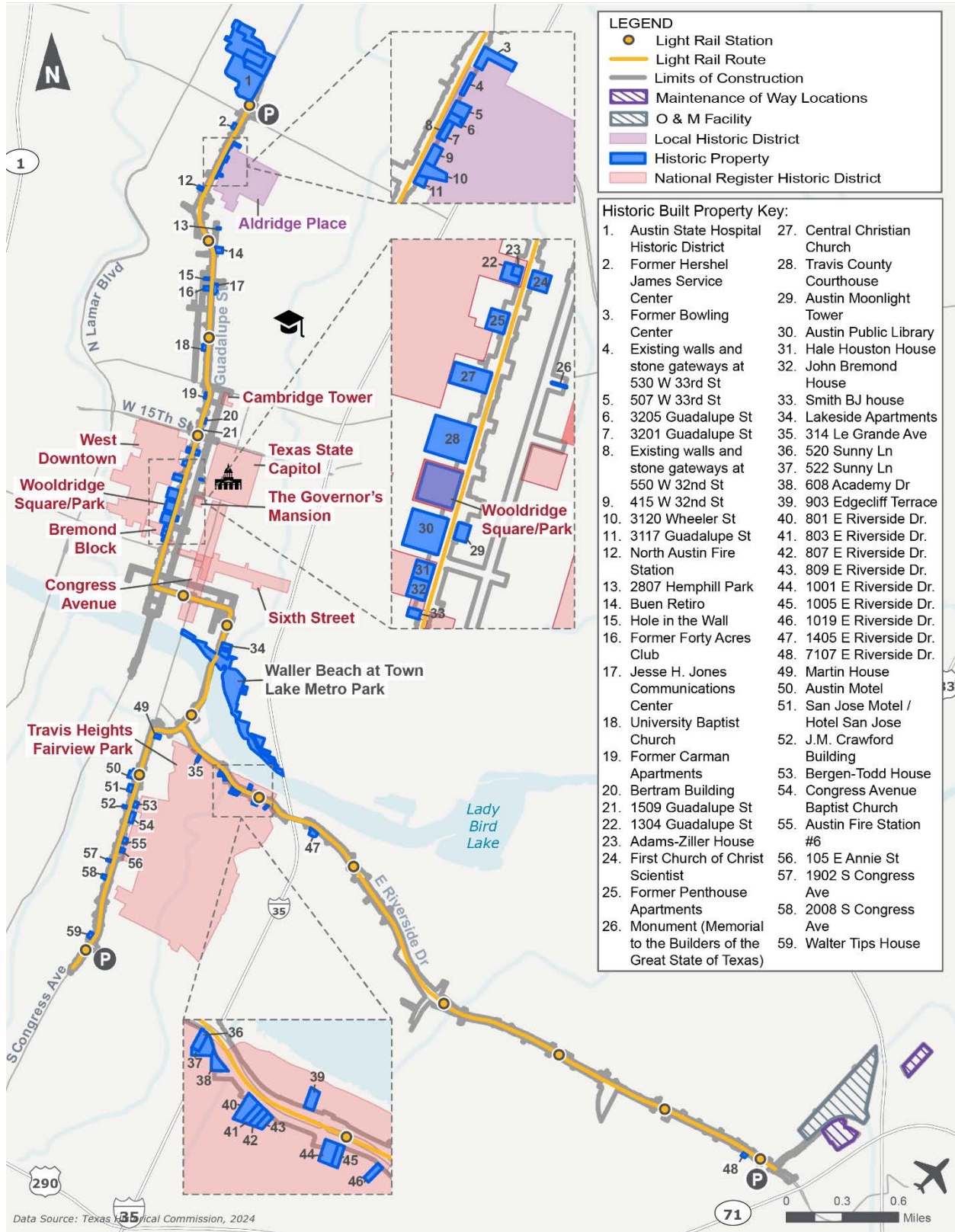
- The Project would have no effect on 102 properties;
- The Project would have no adverse effect on 108 properties, 54 of which would be encumbered by temporary or permanent easements under the Build Alternative and 2 additional under a Design Option;
- Ten properties were identified as no longer extant; and

The historic resources within the APE are shown graphically in **Attachment B**, and the historic resources within the limits of Project construction are shown in **Figure 4**.

Figure 3: Section 4(f) Parks and Trails Located Within the Limits of Project Construction



Figure 4: Section 4(f) Historic Properties Within the Limits of Project Construction



ATP assessed whether there is any constructive use of Section 4(f) resources. Based on the DEIS analyses, the Project would not result in effects so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. As a result, and based on information provided, FTA has preliminarily determined that constructive use of Section 4(f) resources would not occur.

The following sections address the property effects on Section 4(f) resources from the Build Alternative and Design Options. Full property acquisition of Section 4(f) resources would not be required under the Build Alternative or any of the Design Options. Property acquisition would be needed in areas along the alignment where the ROW is too narrow to accommodate the transit guideway and the bicycle and pedestrian lanes planned as part of the Project. Property acquisition would also be required for relocation of the utilities that conflict with the light rail stations and guideway.

## 5 Use of Section 4(f) Properties

### 5.1 Public Parks, Trails, and Recreation Areas

The Build Alternative would result in permanent and/or temporary use of portions of eight parks, five existing trails, and six proposed trails owned by the City and managed by PARD. Only one of the planned trails is addressed below because it is funded, designed, and crosses the light rail alignment. For the proposed trails that have not been funded or designed, ATP would coordinate with PARD to ensure that the Project's bicycle and pedestrian infrastructure integrates seamlessly with the planned trails.

The effect on parks and trails under the Build Alternative and Design Options would be the same except for the Wooldridge Square Station Design Option, Travis Heights Station Design Option, and Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option. The Wooldridge Square Station Design Option would require a small temporary easement for construction of a retaining wall that would be within the roadway ROW directly adjacent to Wooldridge Square. The Travis Heights Station Design Option would avoid Section 4(f) use of the Norwood Tract at Town Lake Metro Park. The Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option would require a greater transportation ROW width and would result in greater permanent and temporary use of portions of the parks and trails along East Riverside Drive compared to the Build Alternative.

ATP would implement the following standard mitigation measures at all affected parks:

- Financial compensation for the loss of parkland in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and based on fair market appraisal;
- Avoidance or conservation of protected and heritage trees wherever practical;
- Replacement trees to be planted in accordance with City requirements;
- Implementation and monitoring of best management practices during construction to minimize noise, vibration, and dust levels;



- Maintenance of bicycle and pedestrian traffic via detour routes around construction sites; and
- Restoration of construction sites to a condition at least as good as that which existed prior to construction.

Based on the measures to minimize adverse effects, FTA has, based on information provided, made preliminary determinations of *de minimis* impact for the Build Alternative and all Design Options on the following parks and trails:

- Auditorium Shores at Town Lake Metro Park
- Blunn Creek Trail
- Aura Riverside Pocket Park and Trail
- Country Club Creek Trail
- Penick Pocket Park
- Airport Commerce Pocket Park
- South Austin Island

FTA has, based on information provided, made a preliminary determination that the Build Alternative and all Design Options would result in Section 4(f) use at Waller Beach at Town Lake Metro Park, including a portion of the Ann and Roy Butler Hike and Bike Trail. Waller Beach at Town Lake Metro Park is also protected under Section 6(f) of the Land and Water Conservation Fund Act (Section 6(f)) and Section 106. FTA has, based on information provided, made a preliminary determination that the Build Alternative would result in Section 4(f) use at Norwood Tract at Town Lake Metro Park, which would be avoided under the Travis Heights Station Design Option.

Under the Wooldridge Square Station Design Option, a temporary easement would be required to build a retaining wall. FTA has, based on information provided, made a preliminary determination that the temporary easement would be so minimal that it would not constitute a Section 4(f) use (23 CFR Section 774.13(d)).

### 5.1.1 *De Minimis* Impacts

**Table 1** lists the parks and trails where FTA has, based on information provided, made preliminary determinations of *de minimis* impacts or “no use” for the Build Alternative and Design Options. Descriptions of the parks and trails and their use, as well as figures showing the areas of property acquisition, are provided below. If a Design Option would result in a larger impact than the Build Alternative, the acquisition area for the Design Option is shown in the figures in lieu of the acquisition area for the Build Alternative.

**Table 1: Section 4(f) Park and Trail *De Minimis* Impacts and No Use**

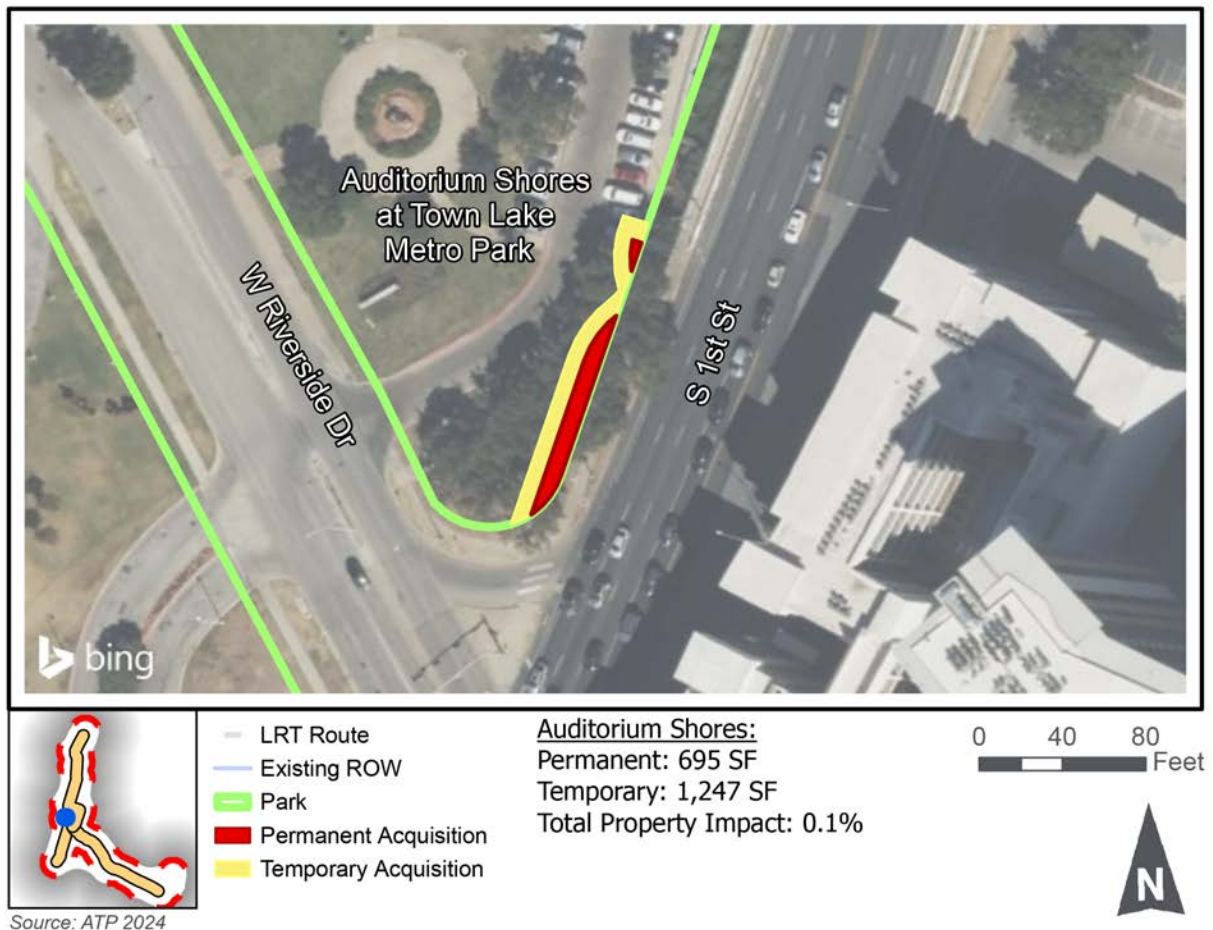
| Property Description   | Property Acquisition (in square feet [SF])                               | Mitigation                   | Associated Alternative   | Preliminary Use Determination |
|--|--|------------------------------|--|-------------------------------|
| <b>Auditorium Shores at Town Lake Metro Park</b><br>Size: 48.6 acres<br>OWJ: PARD and TPWD | Permanent: 695 SF<br>Temporary: 1,247 SF<br>Total area affected: 0.1%    | Standard mitigation measures | Build Alternative and all Design Options   | <i>de minimis</i> impact      |
| <b>Blunn Creek Trail</b><br>Size: 13.7 acres<br>OWJ: PARD, THC                             | Permanent: 555 SF<br>Temporary: 0 SF<br>Total area affected: 0.1%        | Standard mitigation measures | Build Alternative and all Design Options   | <i>de minimis</i> impact      |
| <b>Aura Riverside Pocket Park and Trail</b><br>Size: 2.1 acres<br>OWJ: PARD                | Permanent: 0 SF<br>Temporary: 8 SF<br>Total area affected: 0.01%         | Standard mitigation measures | Build Alternative and all Design Options   | <i>de minimis</i> impact      |
|  | Permanent: 2,735 SF<br>Temporary: 0 SF<br>Total area affected: 3.0%      |                              | Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option | <i>de minimis</i> impact      |
| <b>Country Club Creek Trail</b><br>Size: 3.5 miles<br>OWJ: Transportation and Public Works | Permanent: 297 SF<br>Temporary: 300 SF<br>Total area affected: 0.3%      | Standard mitigation measures | Build Alternative and all Design Options   | <i>de minimis</i> impact      |
| <b>Penick Pocket Park</b><br>Size: 2.8 acres<br>OWJ: PARD                                  | Permanent: 867 SF<br>Temporary: 8,172 SF<br>Total area affected: 7.4%    | Standard mitigation measures | Build Alternative and all Design Options   | <i>de minimis</i> impact      |
|  | Permanent: 867 SF<br>Temporary: 8,427 SF<br>Total area affected: 7.6%    | Standard mitigation measures | Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option | <i>de minimis</i> impact      |
| <b>Airport Commerce Pocket Park</b><br>Size: 0.42 acre<br>OWJ: PARD                        | Permanent: 2,957 SF<br>Temporary: 2,549 SF<br>Total area affected: 30.1% | Standard mitigation measures | Build Alternative and all Design Options   | <i>de minimis</i> impact      |
| <b>South Austin Island</b><br>Size: 0.24 acre<br>OWJ: PARD                                 | Permanent: 1,409 SF<br>Temporary: 1,286 SF<br>Total area affected: 26.2% | Standard mitigation measures | Build Alternative and all Design Options   | <i>de minimis</i> impact      |
| <b>Wooldridge Square</b><br>Size: 1.7 acres<br>OWJ: PARD, THC                              | Permanent: 0 SF<br>Temporary: 1,662 SF<br>Total area affected: 2.2%      | Standard mitigation measures | Wooldridge Square Station Design Option  | No use (temporary occupancy)  |

### 5.1.1.1 Auditorium Shores at Town Lake Metro Park

Auditorium Shores at Town Lake Metro Park is on the south side of Lady Bird Lake and includes open space, parking, and the Long Center for the Performing Arts (approximately 49 acres). The park's primary purpose is recreation; it is significant for its event and landscaped space.

The Project would include a new sidewalk affecting a parking lot median as part of connecting the East Riverside Drive bicycle and pedestrian lanes to facilities on the western side of the South 1st Street Bridge. The Project would result in permanent incorporation of approximately 695 square feet (0.02 acre) and temporary incorporation of 1,247 square feet (0.03 acre) of Auditorium Shores into the transportation ROW (see **Figure 5**). In total, approximately 0.1 percent of the park would be affected by the Project. Other improvements in this portion of the Study Area include roadway restriping, which would not affect Auditorium Shores, Shoal Beach, or the nearby Margaret Hoffman Oak Park.

**Figure 5: Auditorium Shores**



Because Project effects would be modest in scale; would not adversely affect the features, attributes, or activities qualifying the Auditorium Shores for protection under Section 4(f); and would ultimately contribute to the use of the park for recreational purposes, FTA has, based on information provided, made a preliminary determination of *de minimis* impact for the Project.

Auditorium Shores at Town Lake Metro Park was improved with funds from the Texas Local Park Grant Program that is administered by TPWD. Property acquired or developed under this program must be retained for public recreational use and cannot be converted to another use without TPWD approval. FTA and ATP are coordinating with TPWD and expect that the property acquisition at Auditorium Shores would qualify for an exception to TPWD's conversion requirements because it would be retained for public use and would provide an increased access benefit to public recreational opportunities (TPWD 2013).

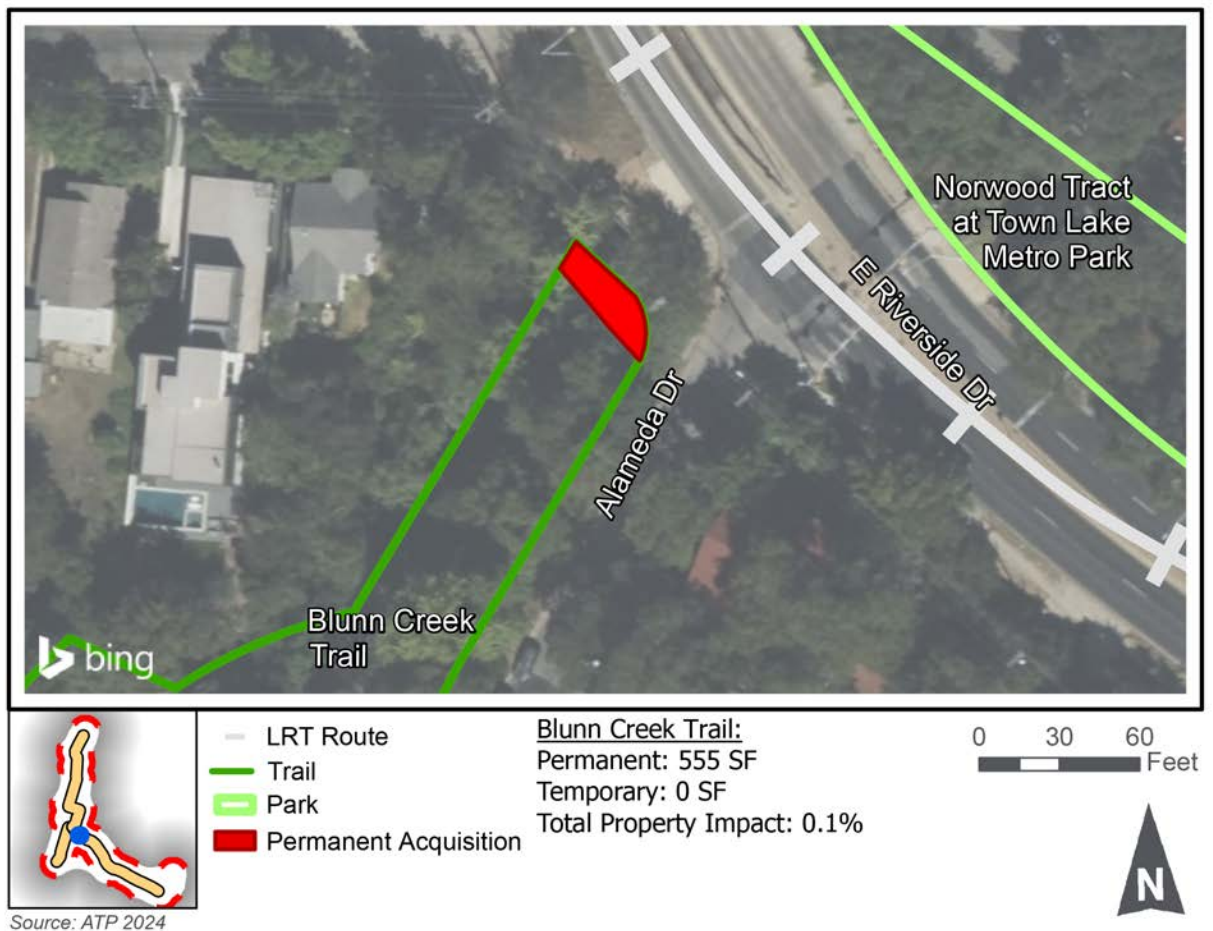
#### 5.1.1.2 Blunn Creek Trail

Blunn Creek Trail traverses the Travis Heights neighborhood between Norwood Tract at Town Lake Metro Park to the north and Big Stacy Park to the south. The 1-mile-long trail and 13.7-acre surrounding parkland is used for biking, hiking, and mountain biking.

The Project would include new bridges over Blunn Creek for eastbound and westbound roadway lanes, with a center-running guideway in the median and shared use paths on the roadway's north and south sides instead of existing sidewalks. The shared use path would result in permanent incorporation of approximately 555 square feet (0.01 acre) of the trail into the transportation ROW (see **Figure 6**). In total, approximately 0.1 percent of the Blunn Creek Trail would be affected by the Project.

Because Project effects would be modest in scale; would not adversely affect the features, attributes, or activities qualifying Blunn Creek Trail for protection under Section 4(f); and would ultimately contribute to the use of the resource for recreational purposes, FTA has, based on information provided, made a preliminary determination of *de minimis* impact for the Project.

Figure 6: Blunn Creek Trail



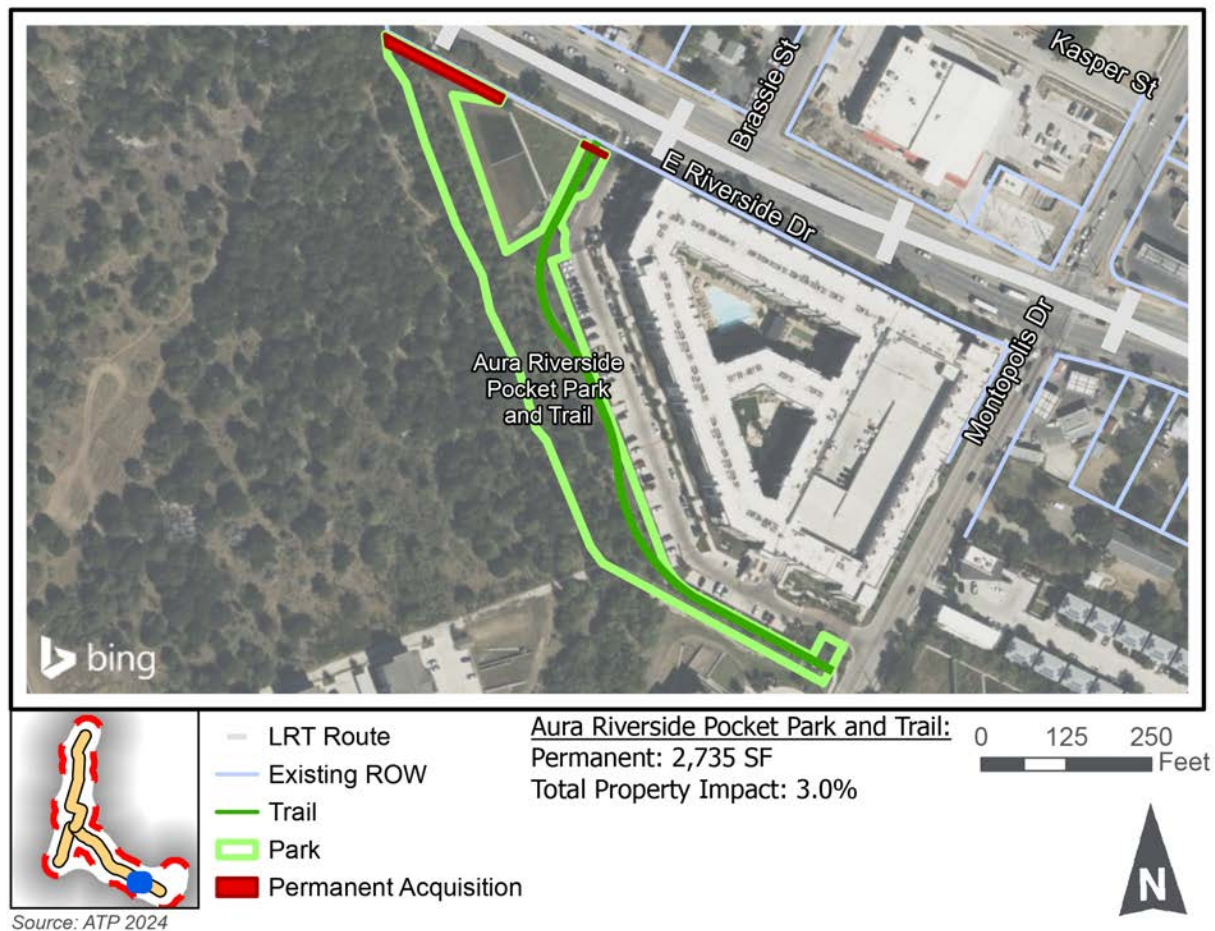
5.1.1.3 Aura Riverside Pocket Park and Trail

Aura Riverside Pocket Park and Trail is along the south side of East Riverside Drive between Grove Boulevard and Montopolis Drive. The 2.1-acre park and trail include benches and bike racks.

The Build Alternative would replace the existing sidewalk with a wider shared use path and would require temporary incorporation of approximately 8 square feet (0.0002 acre) of Aura Riverside Pocket Park and Trail into the transportation ROW. The temporary easement would comprise approximately 0.01 percent of the park and trail.

The Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option would require a wider corridor than the Build Alternative and would result in permanent incorporation of approximately 2,735 square feet (0.06 acre) of Aura Riverside Pocket Park and Trail into the transportation ROW (see **Figure 7**). In total, approximately 3 percent of the park and trail would be affected by the Project.

Figure 7: Aura Riverside Pocket Park and Trail (Design Option)



Because Project effects under either the Build Alternative or the Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option would be modest in scale; would not adversely affect the features, attributes, or activities qualifying the Aura Riverside Pocket Park and Trail for protection under Section 4(f); and would ultimately contribute to the use of the resource for recreational purposes, FTA has, based on information provided, made a preliminary determination of *de minimis* impact for the Project.

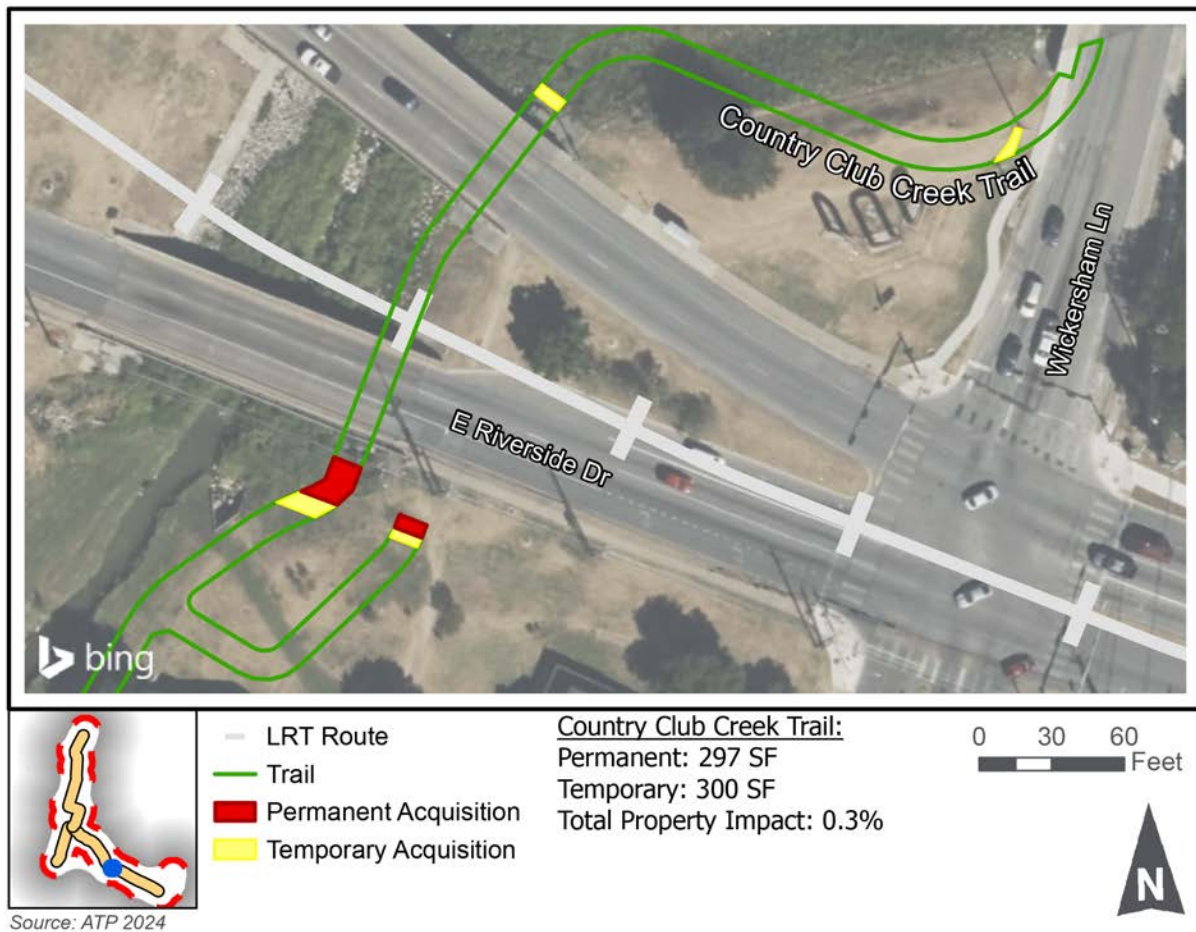
#### 5.1.1.4 Country Club Creek Trail

Country Club Creek Trail is in southeast Austin, north of State Highway 71 near Burleson Road. The 3.5-mile trail is part of the City’s Urban Trails Program and includes a planned trail segment to provide a connection between Lady Bird Lake and Mabel Davis Park. The open sections of the trail are used for biking, hiking, and pet-friendly activities. Mature live oak trees provide some shade along the trail, and benches and water fountains are available.

The Project would cross over Country Club Creek Trail in a perpendicular orientation on an elevated structure. In this location, the elevated light rail structure would be at street level, above the trail, which is below-grade and in an underpass beneath East Riverside Drive. The Project

would include a retaining wall at the crossing of East Riverside Drive and would replace the existing sidewalk with a wider shared use path. The Project would result in permanent incorporation of approximately 297 square feet (0.007 acre) and temporary incorporation of approximately 300 square feet (0.007 acre) of Country Club Creek Trail into the transportation ROW (see **Figure 8**). In total, approximately 0.3 percent of the trail would be affected by the Project. The Project would enhance trail access via a connection between the proposed Pleasant Valley Station and the planned trail.

**Figure 8: Country Club Creek Trail**



Because Project effects would be modest in scale; would not adversely affect the features, attributes, or activities qualifying Country Club Creek Trail for protection under Section 4(f); and would ultimately contribute to the use of the resource for recreational purposes, FTA has, based on information provided, made a preliminary determination of *de minimis* impact for the Project.

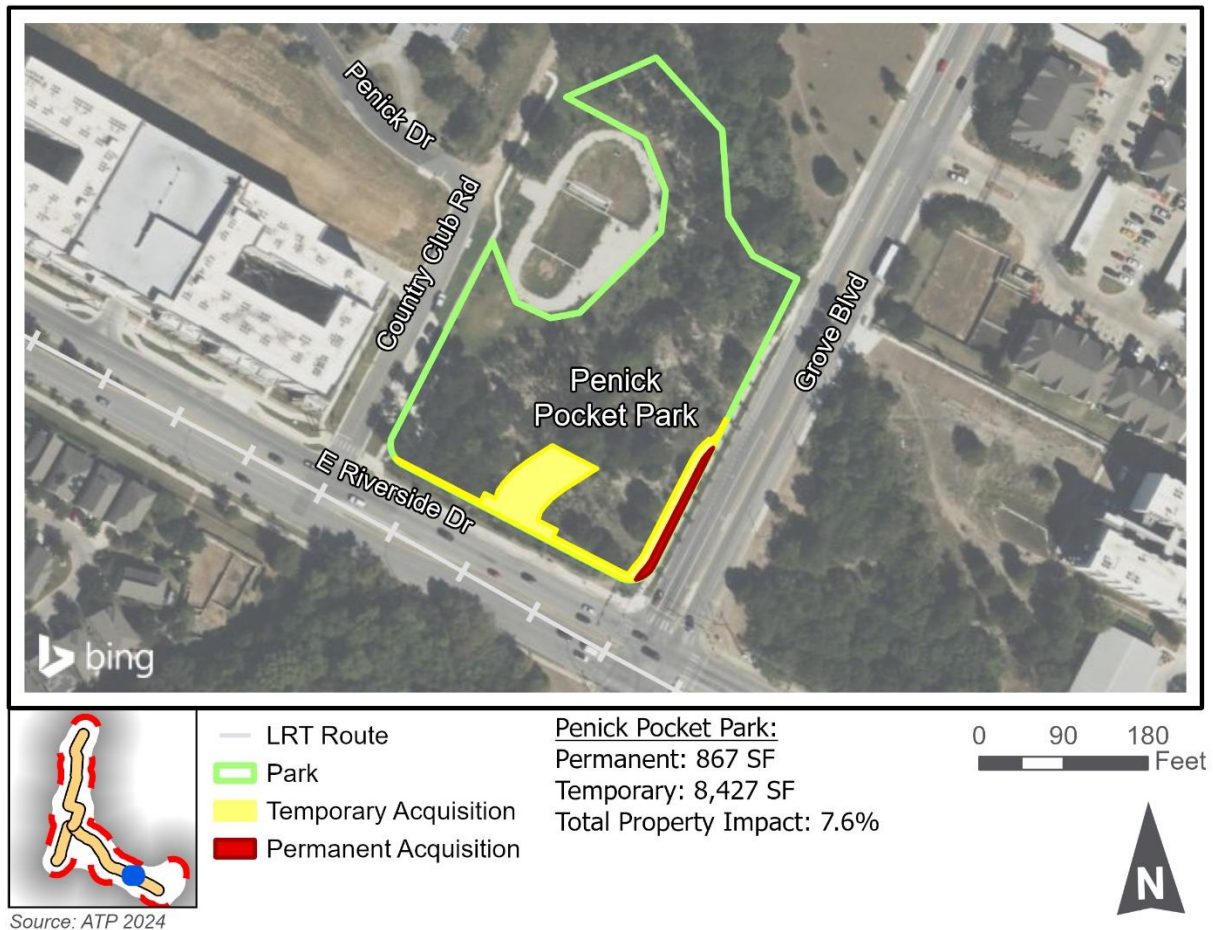
5.1.1.5 Penick Pocket Park

Penick Pocket Park is 2.8 acres located on the north side of East Riverside Drive between Country Club Road and Grove Boulevard. The park includes public trails, shade structures, and a water quality and detention pond.

The Project includes replacing the existing sidewalk with a shared use path in this location. To avoid drainage effects resulting from the roadway widening, a portion of the park would be graded and would require a temporary easement. The Build Alternative would result in permanent incorporation of approximately 867 square feet (approximately 0.02 acre) and temporary incorporation of approximately 8,172 square feet (0.19 acre) into the transportation ROW. In total, approximately 7.4 percent of the park would be affected by the Project.

The Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option would result in permanent incorporation of approximately 867 square feet (approximately 0.02 acre) and temporary incorporation of approximately 8,427 square feet (0.19 acre) into the transportation ROW. In total, approximately 7.6 percent of the park would be affected by the Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option (see Figure 9).

Figure 9: Design Option Penick Pocket Park



Because Project effects would be modest in scale; would not adversely affect the features, attributes, or activities qualifying Penick Pocket Park for protection under Section 4(f); and would ultimately contribute to the use of the resource for recreational purposes, FTA has, based on information provided, made a preliminary determination of *de minimis* impact for the Project.

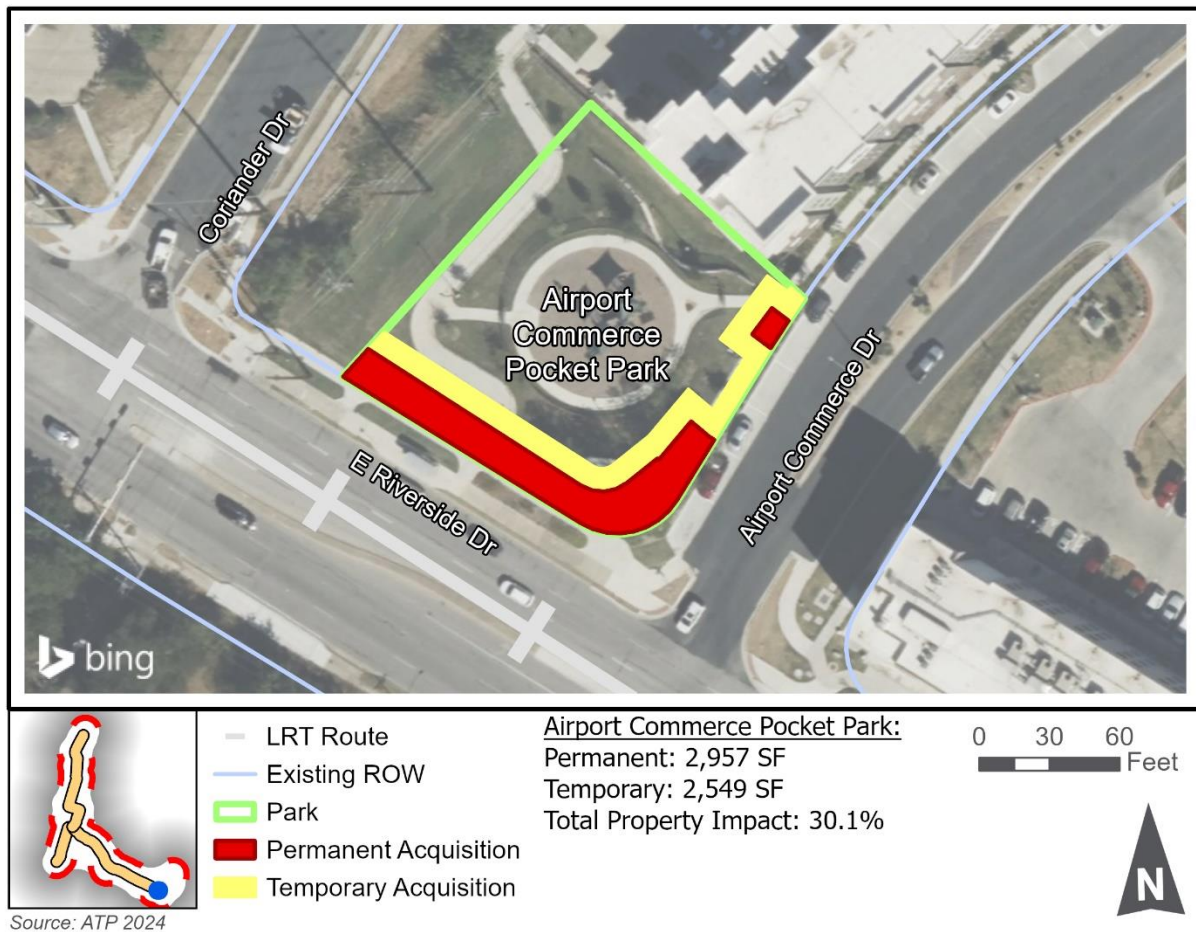


### 5.1.1.6 Airport Commerce Pocket Park

Airport Commerce Pocket Park is along the north side of East Riverside Drive between Coriander Drive and Airport Commerce Drive. The park hosts general recreation activities and includes playscapes, benches, bike racks, and trails.

The Project would replace the existing sidewalk with a wider shared use path and would install a pole and counterweights for a railroad crossing gate. The Project would result in permanent incorporation of approximately 2,957 square feet (0.07 acre) and temporary incorporation of approximately 2,549 square feet (0.06 acre) of Airport Commerce Pocket Park into the transportation ROW (see **Figure 10**). The shared use path would connect to the trail in the park, which continues to the north. The park’s primary use—a fenced-in playground—would not be affected. A bench and several trees would be removed. In total, approximately 30.1 percent of the park would be affected by the Project.

**Figure 10: Airport Commerce Pocket Park**



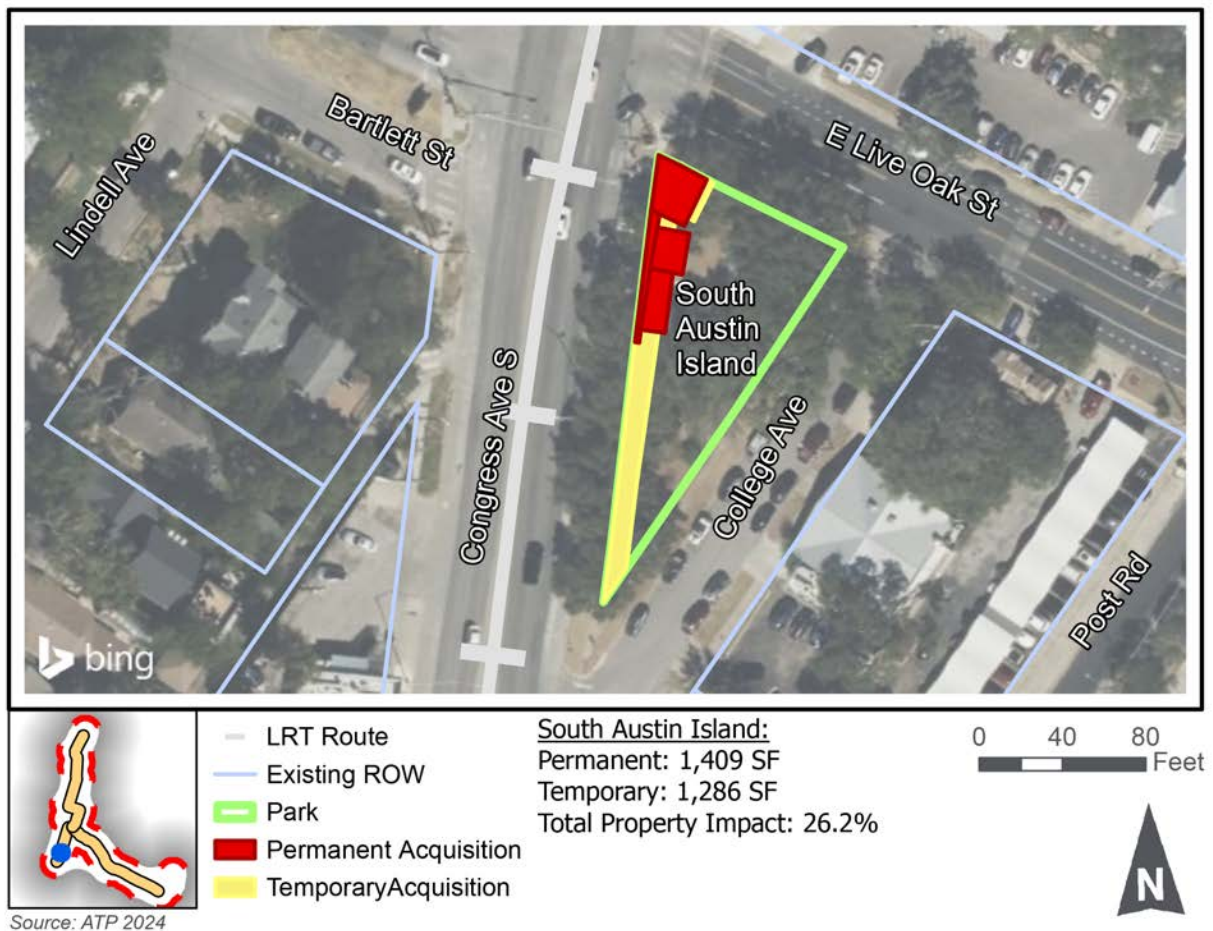
Because Project effects would be modest in scale; would not adversely affect the features, attributes, or activities qualifying Airport Commerce Pocket Park for protection under Section 4(f); and would ultimately contribute to the use of the resource for recreational purposes, FTA has, based on information provided, made a preliminary determination of *de minimis* impact for the Project.

#### 5.1.1.7 South Austin Island

South Austin Island, located at 2205 South Congress Avenue, is approximately 0.24 acre and situated at the intersection of South Congress Avenue, College Avenue, and East Live Oak Street. The park hosts trees, a pavilion, and seating for public use.

The Project would construct a sidewalk along South Congress Avenue within the roadway ROW, and storm drainage and utilities would be installed within the park. The storm drain and utility lines would be below ground with one electric pole and two manhole covers at the surface. The Project would result in permanent incorporation of approximately 1,409 square feet (0.03 acre) and temporary incorporation of approximately 1,286 square feet (0.03 acre) of South Austin Island into the transportation ROW (see **Figure 11**). In total, approximately 26.2 percent of the park would be affected by the Project. The permanent and temporary acquisition areas would be restored to existing conditions or better and usable by the public once construction is complete.

Figure 11: South Austin Island



Because Project effects would be modest in scale; would not adversely affect the features, attributes, or activities qualifying South Austin Island for protection under Section 4(f); and the sidewalk would ultimately contribute to the use of the resource for recreational purposes, FTA has, based on information provided, made a preliminary determination of *de minimis* impact for the Project.

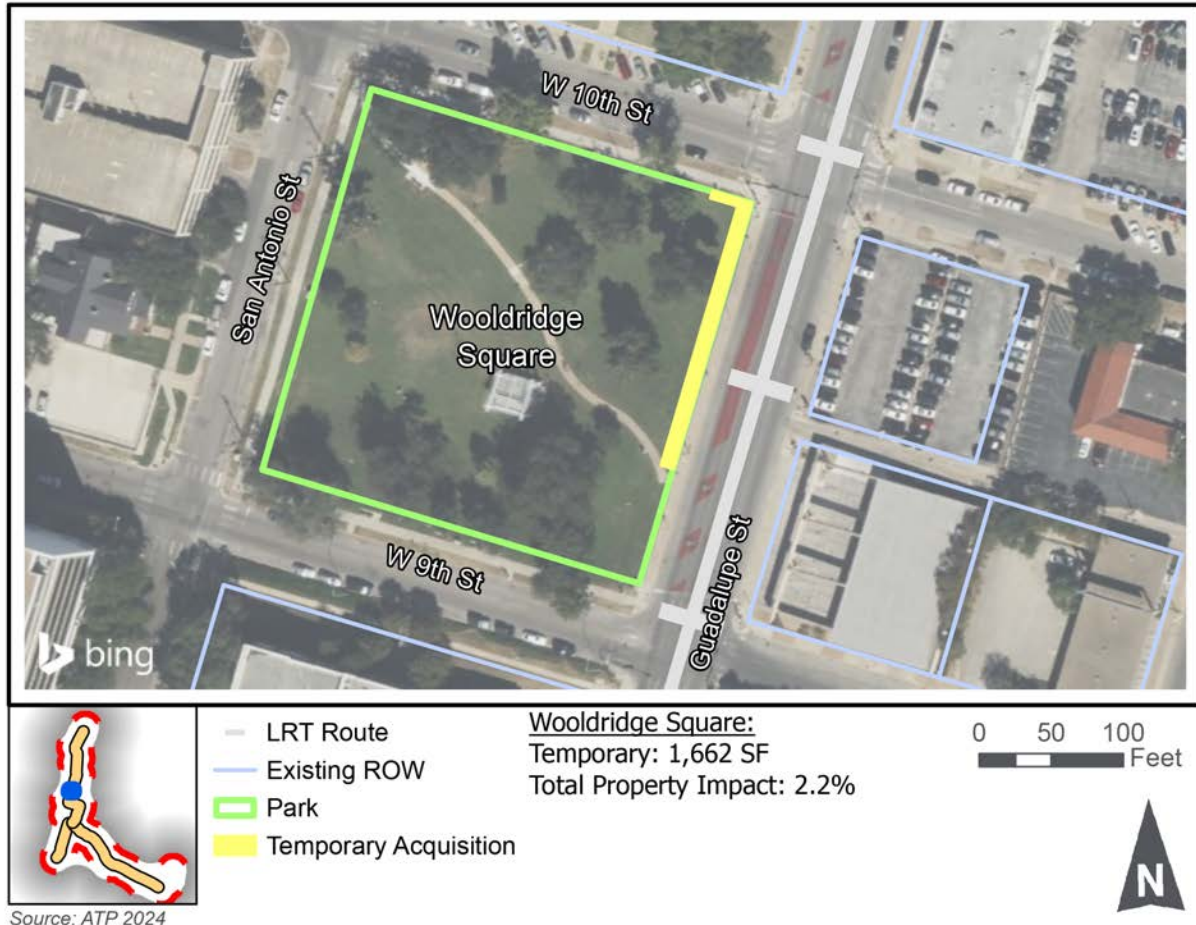
#### 5.1.1.8 Wooldridge Square

Wooldridge Square, at 900 Guadalupe Street, has landscaped space with grass and trees, a walking path, a picnic area, and a gazebo. The park provides passive recreation activities. Wooldridge Square has multiple designations; it is a State Antiquities Landmark and City of Austin Historic Landmark and is listed in the NRHP.

The Wooldridge Square Design Option would require a small retaining wall (approximately 2 to 4 feet in height) within the transportation ROW to accommodate a profile change needed to make the station area level. To construct the retaining wall, the Wooldridge Square Station Design Option would result in temporary incorporation of approximately 1,662 square feet (0.04 acre) of Wooldridge Square into the transportation ROW (see **Figure 12**). Approximately 2 percent of the

park would be affected by construction. The Build Alternative and other Design Options would not require the retaining wall or temporary easement.

Figure 12: Wooldridge Square (Design Option)



This temporary occupancy would not constitute a Section 4(f) use because the duration to construct the retaining wall would be less than the time needed for Project construction, no change in ownership of the land would occur, the nature and magnitude of the changes would be minimal, no interference of protected activities would occur, and the land used would be fully returned to a condition at least as good as existing conditions.

### 5.1.2 Parkland Use

**Table 1** summarizes the Project’s use of parkland where property acquisition would result in effects that are greater than *de minimis*. Descriptions of the parkland and figures showing acquisition areas are provided below. Descriptions of the parks and their use, as well as figures showing the areas of property acquisition, are provided below.

**Table 2: Section 4(f) Parkland Use**

| Property Description   | Property Acquisition (in square feet [SF])  | Mitigation  | Associated Alternative                   |
|--|---|---|--|
| <b>Waller Beach at Town Lake Metro Park and Ann and Roy Butler Hike and Bike Trail</b><br>Park Size: 28.8 acres<br>Trail Length: 14.1 miles<br>OWJs: PARD, TPWD, THC | Permanent: 45,371 SF<br>Temporary: Same as conversion area<br>Total area affected: 3.6% | Standard mitigation measures<br><br>Replacement parkland and relocation of Waller Creek Boathouse in accordance with Section 6(f) requirements (see <b>DEIS Appendix H</b> )<br><br>Improvements to the Ann and Roy Butler Hike and Bike Trail for accessibility under the Americans with Disabilities Act<br><br>Minimization of aesthetic effects through bridge design.<br><br>Coordination with the Texas Department of Transportation (TxDOT) on potential cumulative construction effects with the I-35 Capital Express Central Project | Build Alternative and all Design Options |
| <b>Norwood Tract at Town Lake Metro Park</b><br>Size: 9.5 acres<br>OWJ: PARD   | Permanent: 41,575 SF<br>Temporary: 7,712 SF<br>Total area affected: 11.9%               | Standard mitigation measures<br><br>Additional measures to address Section 4(f) use to be developed in coordination with PARD if Travis Heights Station advances in the design.<br><br>Coordination with TxDOT on potential cumulative construction effects with the I-35 Capital Express Central Project   | Build Alternative                        |

5.1.2.1 Waller Beach at Town Lake Metro Park and Ann and Roy Butler Hike and Bike Trail  
 Waller Beach at Town Lake Metro Park, located at 74 Trinity Street, is approximately 29 acres and is located on the northwest side of the I-35 bridge over Lady Bird Lake, south of Downtown Austin. In addition to Section 4(f), the park is protected under Section 6(f) and Section 106 as a historic property.

The park is well used by joggers, kayakers, cyclists, and wildlife watchers. The park is connected to several others through the Ann and Roy Butler Hike and Bike Trail, a 14.1-mile trail system that circles Lady Bird Lake. The trail is used both recreationally and as an alternative transportation route for the urban core. The Waller Creek Boathouse, located in the park, is a popular recreational facility that serves Austin residents and visitors through its concessionaire, the Austin Rowing Club, and several other organizations.

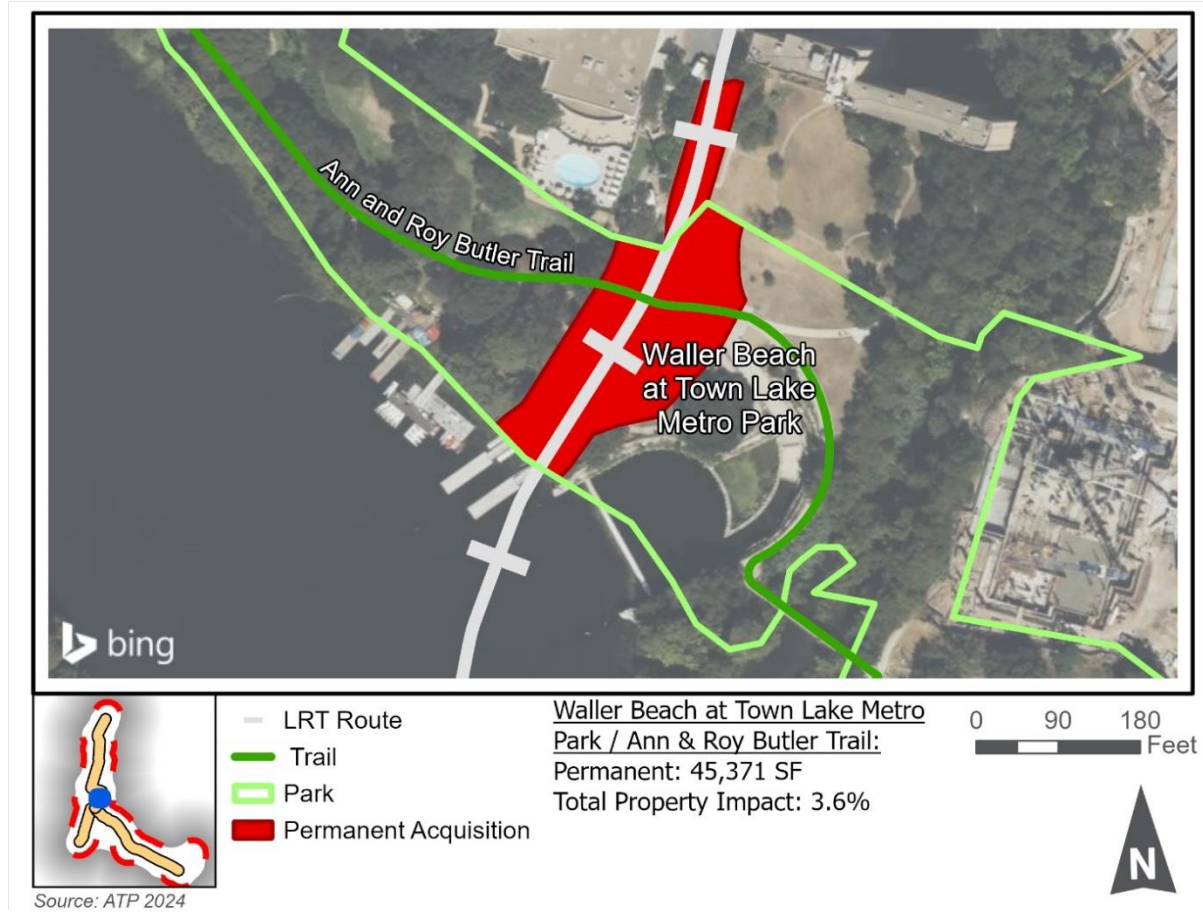
The proposed guideway would cross the property in a perpendicular orientation on an elevated structure. New bicycle and pedestrian paths would be included on the light rail bridge providing access to the park from East and South Austin and connection to the Ann and Roy Butler Hike and Bike Trail. The Project would result in the permanent incorporation of approximately 45,371 square feet (approximately 1.04 acres) of Waller Beach at Town Lake Metro Park into the transportation ROW for construction and maintenance of the bridge (see **Figure 13**).

The access road to the Waller Creek Tunnel Outlet facility would be realigned to accommodate construction and maintenance of the bridge. Pump equipment for the water tunnel occupies a portion of the basement level of the Waller Creek Boathouse and would be relocated prior to construction. In total, approximately 3.6 percent of the park would be affected by the Project.

Beneficial effects of the Project include enhanced access to the park from East and South Austin as a result of the new bicycle and pedestrian facilities on the bridge, which would connect to the Ann and Roy Butler Hike and Bike Trail. The existing trail would be re-established beneath the bridge once bridge construction was complete, and ATP would improve portions of the existing trail near the bridge. A section of the trail is not currently in compliance with the Americans with Disabilities Act and would be made compliant by the Project.

Because the area would be used for the light rail bridge supports and future maintenance of the light rail viaduct structure in perpetuity, and because construction activities would extend over the 7-year construction period, FTA has, based on information provided, made a preliminary determination of Section 4(f) use for Waller Beach at Town Lake Metro Park and the Ann and Roy Butler Hike and Bike Trail. An analysis of avoidance alternatives and the measures to minimize harm to these resources are provided in Sections 6 and 7, respectively. Analysis and documentation regarding compliance with Section 6(f) for Waller Beach at Town Lake Metro Park, including progress made on the identification of replacement property, is provided in **DEIS Appendix H, Section 6(f) Evaluation**.

Figure 13: Waller Beach at Town Lake Metro Park



The Project would result in adverse visual effects on park and trail users at Waller Beach at Town Lake Metro Park (see **Figure 14**), which ATP would address through design to minimize bulk and enhance the visual aesthetics of the bridge columns and elevated structure. FTA has determined that this adverse visual effect would not constitute a constructive use under Section 4(f) because it would not substantially impair the features, attributes, or activities that qualify the resource for Section 4(f) protection. The Ann and Roy Butler Hike and Bike Trail passes under several similar structures on both sides of the river, and the aesthetic effect of the new bridge on trail users would be similar to what is experienced today. FTA and ATP have also made a preliminary determination of no adverse effect under Section 106, are in consultation with THC as part of the Section 106 process, and will confirm this determination for the Project effects at Waller Beach.

**Figure 14: Rendering of Proposed Bridge Over Lady Bird Lake at Waller Beach at Town Lake Metro Park**



The 7-year construction period for the Project would overlap with the construction of the I-35 Capital Express Central Project being advanced by the Texas Department of Transportation (TxDOT). The I-35 Capital Express Central Project will result in approximately 1.3 acres of Section 4(f) use and additional temporary incorporation of parkland during construction. ATP would coordinate with TxDOT to determine whether construction would occur in the park at the same time and would coordinate detour routes and construction planning to minimize the potential cumulative effects.

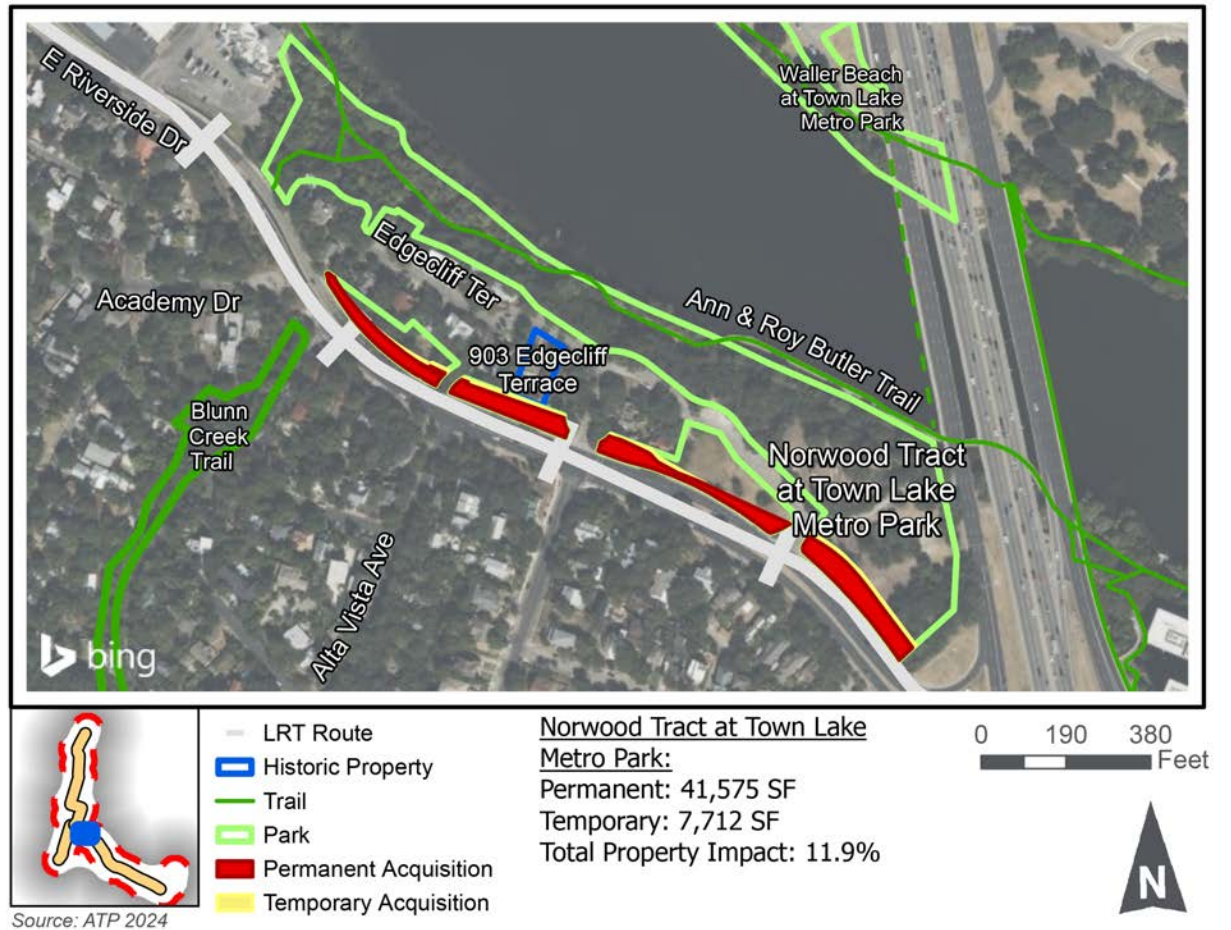
#### 5.1.2.2 Norwood Tract at Town Lake Metro Park

Norwood Tract is a 9.5-acre section of the Town Lake Metro Park located along the south shore of Lady Bird Lake, between I-35 and East Riverside Drive. The park is located within the Travis Heights-Fairview Park Historic District (although it is not a contributing element to the District's designation) and provides access to the Norwood Estate historic landmark, scenic views of the Downtown Austin skyline, access to trails, and an off-leash area for dogs. To meet light rail station design criteria, realignment of East Riverside Drive to the north of the existing ROW would be required to provide a straight approach to the Travis Heights Station under the Build Alternative. The roadway realignment would affect the dog park in the Norwood Tract and would result in permanent incorporation of approximately 41,575 square feet (0.95 acre) and temporary incorporation of approximately 7,712 square feet (0.18 acre) of the Norwood Tract into the transportation ROW (see **Figure 15**). In total, approximately 11.9 percent of the dog park would be affected by the Project. The use of Norwood Tract at Town Lake Metro Park would be



avoided under the Travis Heights Station Design Option, which would remove the station from the design.

Figure 15: Norwood Tract at Town Lake Metro Park



The I-35 Capital Express Central Project would also result in Section 4(f) use of Norwood Tract at Town Lake Metro Park throughout its 8- to 10-year construction period. ATP would closely coordinate construction mitigation planning with TxDOT to mitigate the potential cumulative effects from construction activities on both projects. Additional mitigation would be developed in coordination with PARD if the Travis Heights Station is included in the Project’s design.

Because the roadway realignment and retaining wall would be a permanent encroachment on the park, FTA has, based on information provided, made a preliminary determination of Section 4(f) use of Norwood Tract at Town Lake Metro Park. An analysis of avoidance alternatives and the measures to minimize harm to Norwood Tract at Town Lake Metro Park are provided in Sections 6 and 7, respectively.

## 5.2 Historic Properties

FTA and ATP have preliminarily determined that the use of historic properties under the Build Alternative and all Design Options would be a *de minimis* impact. The preliminary determination

is based on ATP's Section 106 determination of effects (see **DEIS Appendix E-6, Draft Built Environment Survey Report**), which is currently under review by THC and the consulting parties. The Project would require property acquisition, via easements, at 56 historic built properties along the alignment and the historic Waller Beach at Town Lake Metro Park, Blunn Creek / Stacy Park Greenbelt, and Wooldridge Square.

The effects of the Project on historic built properties would be modest in scale and would not adversely affect the properties. **Table 3** lists the properties where property acquisition would be required for the Build Alternative and Design Options. FTA has, based on information provided, made preliminary determinations of *de minimis* impacts for the known historic built properties affected by the Build Alternative and will make final determinations based on Section 106 consultation with THC and consulting parties. Should there be additional properties eligible for listing in the NRHP, the agencies will address potential effects through the Section 106 process and amend the Section 4(f) analysis as necessary.

As shown in **Table 3**, property acquisition would be the same under the Build Alternative and all Design Options at 44 of the built properties, with minor differences in acquisition at the remaining 10 properties. The Travis Heights Station Design Option would affect two residential historic properties on East Riverside Drive that would not be affected under the Build Alternative because small easements would be required to the south of the alignment in order to avoid the Norwood Tract at Town Lake Metro Park. The Lady Bird Lake Bridge Extension Design Option would reduce proposed ROW width and the need for some easements on East Riverside Drive because columns would be built in the roadway median and the existing roadway would not be expanded. This Design Option, however, would result in an elevated structure traversing the Travis Heights-Fairview Park Historic District. Although the Design Option would introduce a substantial new visual element to the district's setting, as a whole the district would retain sufficient integrity to communicate its historic significance, and no adverse effect would result (see **DEIS Appendix E-6, Draft Built Environment Survey Report**).

The Build Alternative and all Design Options would require conversion of a portion of Waller Beach at Town Lake Metro Park to accommodate the light rail bridge and bicycle and pedestrian facilities and connections. Waller Beach is eligible for listing in the NHRP for historical importance in the areas of entertainment/recreation, community planning and development, social history, and landscape architecture.

Through design progression and coordination with PARD and TPWD, ATP has identified measures to minimize harm on Waller Beach at Town Lake Metro Park and is developing mitigation measures in compliance with Section 6(f) requirements (see **DEIS Appendix H**). ATP is coordinating with THC on Section 106 determinations, measures to minimize harm, and mitigation measures for these resources.

The Wooldridge Square Station Design Option would result in temporary occupancy of a portion of Wooldridge Square for construction of a retaining wall within the transportation ROW. Wooldridge Square was established in 1840 and is listed in the NHRP for historical importance in the area of design. This temporary occupancy would not constitute a Section 4(f) use because the duration to construct the retaining wall would be less than the time needed for Project construction, no change in ownership of the land would occur, the nature and magnitude of the

changes would be minimal, no interference of protected activities would occur, and the land used would be fully returned to a condition at least as good as existing conditions.

In addition to the 56 historic properties that would require partial property acquisition, 3 historic resources are located within the limits of Project construction: existing walls and stone gateways at 530 West 33rd Street and 550 West 32nd Street, which are contributing resources to the Aldridge Place Historic District; and a monument in the median of West 12th Street at Lavaca Street (i.e., Memorial to the Builders of the Great State of Texas). These resources would be protected during construction based on specifications developed through the Section 106 consultation process with THC and consulting parties, and temporary use under Section 4(f) would not occur. Work near these resources would include reconstruction of curbs and driveways and roadway restriping that would have no direct effect on the resources.

**Table 3: Historic Built Properties *De Minimis* Impacts and No Use**

| Facility Description   | Impact (in square feet [SF])  | Anticipated Adverse Effect? | Alternative / Design Option              | Preliminary Determination |
|--|---|-----------------------------|--|---------------------------|
| Austin State Hospital Historic District<br>Address: 4110 Guadalupe St<br>Size: 57.9 acre                     | Permanent: 49,935 SF<br>Temporary: 26 SF<br>Total Property Impact: 2.8%   | No                          | Build Alternative and all Design Options | <i>de minimis</i>         |
| Former Hershel James Service Center<br>Address: 3510 Guadalupe St<br>Size: 0.4 acre                          | Permanent: 2,253 SF<br>Temporary: 598 SF<br>Total Property Impact: 17.1%  | No                          | Build Alternative and all Design Options | <i>de minimis</i>         |
| Former Bowling Center<br>Address: 3407 Guadalupe St<br>Size: 0.5 acre  | Permanent: 602 SF<br>Temporary: 328 SF<br>Total Property Impact: 4.0%   | No                          | Build Alternative and all Design Options | <i>de minimis</i>         |
| Existing Walls and Stone Gateways contributing to Aldridge Place Historic District<br>Address: 530 W 33rd St | Proposed plans call for conservation of existing walls from 33rd Street to 31st Street and stone gateways at West 32nd Street and West 33rd Street. | No                          | Build Alternative and all Design Options | No use                    |
| Sloss House<br>Address: 507 W 33rd St<br>Size: 0.3 acre  | Permanent: 557 SF<br>Temporary: 0 SF<br>Total Property Impact: 4.4%   | No                          | Build Alternative and all Design Options | <i>de minimis</i>         |
| McCandless House<br>Address: 3205 Guadalupe St<br>Size: 0.2 acre   | Permanent: 276 SF<br>Temporary: 0 SF<br>Total Property Impact: 4.1%   | No                          | Build Alternative and all Design Options | <i>de minimis</i>         |
| House<br>Address: 3201 Guadalupe St<br>Size: 0.2 acre  | Permanent: 669 SF<br>Temporary: 0 SF<br>Total Property Impact: 7.4%   | No                          | Build Alternative and all Design Options | <i>de minimis</i>         |

| Facility Description   | Impact<br>(in square feet [SF])   | Anticipated<br>Adverse<br>Effect? | Alternative /<br>Design Option           | Preliminary<br>Determination |
|--|---|-----------------------------------|--|------------------------------|
| Existing Walls and Stone Gateways contributing to Aldridge Place Historic District<br>Address: 550 W 32nd St | Proposed plans call for conservation of existing walls from 33rd Street to 31st Street and stone gateways at West 32nd Street and West 33rd Street. | No                                | Build Alternative and all Design Options | No use                       |
| Reed House<br>Address: 415 W 32nd St<br>Size: 0.3 acre   | Permanent: 939 SF<br>Temporary: 0 SF<br>Total Property Impact: 8.5%   | No                                | Build Alternative and all Design Options | <i>de minimis</i>            |
| Keeling (Walter) House<br>Address: 3120 Wheeler St<br>Size: 0.4 acre   | Permanent: 640 SF<br>Temporary: 0 SF<br>Total Property Impact: 3.9%   | No                                | Build Alternative and all Design Options | <i>de minimis</i>            |
| House<br>Address: 3117 Guadalupe St<br>Size: 0.1 acre  | Permanent: 355 SF<br>Temporary: 0 SF<br>Total Property Impact: 6.3%   | No                                | Build Alternative and all Design Options | <i>de minimis</i>            |
| North Austin Fire Station<br>Address: 3002 Guadalupe St<br>Size: 0.3 acre                                    | Permanent: 57 SF<br>Temporary: 785 SF<br>Total Property Impact: 6.0%  | No                                | Build Alternative and all Design Options | <i>de minimis</i>            |
| House<br>Address: 2807 Hemphill Park<br>Size: 0.1 acre   | Permanent: 0 SF<br>Temporary: 448 SF<br>Total Property Impact: 9.5%   | No                                | Build Alternative and all Design Options | <i>de minimis</i>            |
| Buen Retiro<br>Address: 300 W 27th St<br>Size: 0.7 acre  | Permanent: 1,180 SF<br>Temporary: 535 SF<br>Total Property Impact: 5.5%   | No                                | Build Alternative and all Design Options | <i>de minimis</i>            |
| Hole in the Wall<br>Address: 2538 Guadalupe St<br>Size: 0.2 acre   | Permanent: 0 SF<br>Temporary: 25 SF<br>Total Property Impact: 0.3%  | No                                | Build Alternative and all Design Options | <i>de minimis</i>            |
| Former Forty Acres Club<br>Address: 2500 Guadalupe St<br>Size: 0.4 acre                                      | Permanent: 0 SF<br>Temporary: 35 SF<br>Total Property Impact: 0.2%  | No                                | Build Alternative and all Design Options | <i>de minimis</i>            |
| Jesse H. Jones Communications Center, Building B<br>Address: 2504 Whitis Avenue<br>Size: 0.8 acre            | Permanent: 684 SF<br>Temporary: 0 SF<br>Total Property Impact: 1.9%   | No                                | Build Alternative and all Design Options | <i>de minimis</i>            |
| University Baptist Church<br>Address: 2130 Guadalupe St<br>Size: 0.45 acre                                   | Permanent: 489 SF<br>Temporary: 724 SF<br>Total Property Impact: 6.1%   | No                                | Build Alternative and all Design Options | <i>de minimis</i>            |

| Facility Description  | Impact<br>(in square feet [SF])   | Anticipated<br>Adverse<br>Effect? | Alternative /<br>Design Option                    | Preliminary<br>Determination |
|---|---|-----------------------------------|---|------------------------------|
| Former Carman Apartments<br>Address: 1800 Guadalupe St<br>Size: 0.3 acre  | Permanent: 0 SF<br>Temporary: 1,047 SF<br>Total Property Impact: 7.3%                   | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| Bertram Building<br>Address: 1601 Guadalupe St<br>Size: 0.2 acre  | Permanent: 0 SF<br>Temporary: 72 SF<br>Total Property Impact: 0.9%                      | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| Lemens Finance Building<br>Address: 1509 Guadalupe St<br>Size: 0.1 acre   | Permanent: 0 SF<br>Temporary: 39 SF<br>Total Property Impact: 1.2%                      | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| House<br>Address: 1304 Guadalupe St<br>Size: 0.3 acre   | Permanent: 187 SF<br>Temporary: 401 SF<br>Total Property Impact: 4.7%                   | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| Adams-Ziller House<br>Address: 1306 Guadalupe St<br>Size: 0.1 acre  | Permanent: 0 SF<br>Temporary: 724 SF<br>Total Property Impact:<br>14.3%                 | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| First Church of Christ<br>Scientist<br>Address: 1309 Guadalupe St<br>Size: 0.4 acre   | Permanent: 0 SF<br>Temporary: 767 SF<br>Total Property Impact: 4.2%                     | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| Former Penthouse<br>Apartments<br>Address: 1212 Guadalupe St<br>Size: 0.5 acre  | Permanent: 0 SF<br>Temporary: 99 SF<br>Total Property Impact: 0.5%                      | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| Memorial to the Builders of<br>the Great State of Texas<br>Address: W 12th St median<br>at Lavaca St<br>Monument Size: 170 SF | Impacts on the monument<br>located in the median of<br>12th Street would be<br>avoided. | No                                | Build<br>Alternative and<br>all Design<br>Options | No use                       |
| Central Christian Church<br>Address: 1110 Guadalupe St<br>Size: 1.01 acres  | Permanent: 93 SF<br>Temporary: 818 SF<br>Total Property Impact: 2.1%                    | No                                | Build<br>Alternative                              | <i>de minimis</i>            |
|   | Permanent: 169 SF<br>Temporary: 127 SF<br>Total Property Impact: 0.7%                   | No                                | Wooldridge<br>Square Station<br>Design Option     | <i>de minimis</i>            |
| Travis County Courthouse<br>Address: 1000 Guadalupe St<br>Size: 2.0 acres   | Permanent: 204 SF<br>Temporary: 3,345 SF<br>Total Property Impact: 4.1%                 | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| Austin "Moonlight Tower"<br>Address: SE corner of W 9th<br>St / Guadalupe St<br>Size: 0.3 acre                                | Permanent: 0 SF<br>Temporary: 268 SF<br>Total Property Impact: 2.3%                     | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |

| Facility Description   | Impact<br>(in square feet [SF])  | Anticipated<br>Adverse<br>Effect? | Alternative /<br>Design Option                    | Preliminary<br>Determination |
|--|--|-----------------------------------|---|------------------------------|
| Austin Public Library and<br>Austin Central Library<br>Address: 810 Guadalupe St,<br>800 Guadalupe St<br>Size: 1.7 acres | Permanent: 1,103 SF<br>Temporary: 2,197 SF<br>Total Property Impact: 4.3%  | No                                | Build<br>Alternative                              | <i>de minimis</i>            |
|  | Permanent: 2,049 SF<br>Temporary: 1,251 SF<br>Total Property Impact: 4.3%  | No                                | Wooldridge<br>Square Station<br>Design Option     | <i>de minimis</i>            |
| Hale Houston Home<br>Address: 706 Guadalupe St<br>Size: 0.4 acre   | Permanent: 1,696 SF<br>Temporary: 166 SF<br>Total Property Impact: 9.6%    | No                                | Build<br>Alternative                              | <i>de minimis</i>            |
|  | Permanent: 1,704 SF<br>Temporary: 158 SF<br>Total Property Impact: 9.6%    | No                                | Wooldridge<br>Square Station<br>Design Option     | <i>de minimis</i>            |
| John Bremond Jr. House<br>Address: 700 Guadalupe St<br>Size: 0.4 acre  | Permanent: 2,018 SF<br>Temporary: 39 SF<br>Total Property Impact:<br>10.8% | No                                | Build<br>Alternative                              | <i>de minimis</i>            |
|  | Permanent: 2,076 SF<br>Temporary: 39 SF<br>Total Property Impact:<br>11.1% | No                                | Wooldridge<br>Square Station<br>Design Option     | <i>de minimis</i>            |
| Smith (B.J.) House<br>Address: 610 Guadalupe St<br>Size: 0.1 acre  | Permanent: 88 SF<br>Temporary: 519 SF<br>Total Property Impact:<br>10.2%   | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| Lakeside Apartments<br>Address: 85 Trinity St<br>Size: 2.4 acre  | Permanent: 4,901 SF<br>Temporary: 2,145 SF<br>Total Property Impact: 6.7%  | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| Residence<br>Address: 314 Le Grande Ave<br>Size: 0.3 acre  | Permanent: 178 SF<br>Temporary: 0 SF<br>Total Property Impact: 1.4%        | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| Residence<br>Address: 520 Sunny Ln<br>Size: 0.2 acre   | Permanent: 112 SF<br>Temporary: 544 SF<br>Total Property Impact: 8.2%      | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| Residence<br>Address: 522 Sunny Ln<br>Size: 0.3 acre   | Permanent: 76 SF<br>Temporary: 408 SF<br>Total Property Impact: 3.7%       | No                                | Build<br>Alternative and<br>all Design<br>Options | <i>de minimis</i>            |
| Residence<br>Address: 608 Academy Dr<br>Size: 0.2 acre   | Permanent: 355 SF<br>Temporary: 546 SF<br>Total Property Impact: 9.8%      | No                                | Build<br>Alternative                              | <i>de minimis</i>            |
|  | Permanent: 355 SF<br>Temporary: 0 SF<br>Total Property Impact: 3.8%        | No                                | Travis Heights<br>Station Design<br>Option        | <i>de minimis</i>            |

| Facility Description   | Impact<br>(in square feet [SF])  | Anticipated<br>Adverse<br>Effect? | Alternative /<br>Design Option                         | Preliminary<br>Determination |
|--|--|-----------------------------------|--|------------------------------|
| Residence<br>Address: 903 Edgecliff<br>Terrace<br>Size: 0.3 acre           | Permanent: 0 SF<br>Temporary: 128 SF<br>Total Property Impact: 1.1%        | No                                | Build<br>Alternative and<br>all Design<br>Options      | <i>de minimis</i>            |
| Residence<br>Address: 801 E Riverside Dr<br>Size: 0.4 acre                 | Permanent: 2,171 SF<br>Temporary: 28 SF<br>Total Property Impact:<br>12.9% | No                                | Build<br>Alternative                                   | <i>de minimis</i>            |
|  | Permanent: 206 SF<br>Temporary: 435 SF<br>Total Property Impact: 3.8%      | No                                | Lady Bird Lake<br>Bridge<br>Extension<br>Design Option | <i>de minimis</i>            |
|  | Permanent: 2,055 SF<br>Temporary: 0 SF<br>Total Property Impact:<br>12.0%  | No                                | Travis Heights<br>Station Design<br>Option             | <i>de minimis</i>            |
| Residence<br>Address: 803 E Riverside Dr<br>Size: 0.2 acre                 | Permanent: 550 SF<br>Temporary: 4 SF<br>Total Property Impact: 6.3%        | No                                | Build<br>Alternative                                   | <i>de minimis</i>            |
|  | Permanent: 0 SF<br>Temporary: 66 SF<br>Total Property Impact: 0.8%         | No                                | Lady Bird Lake<br>Bridge<br>Extension<br>Design Option | <i>de minimis</i>            |
|  | Permanent: 660 SF<br>Temporary: 0 SF<br>Total Property Impact: 7.5%        | No                                | Travis Heights<br>Station Design<br>Option             | <i>de minimis</i>            |
| Duplex<br>Address: 807 E Riverside Dr<br>Size: 0.2 acre                    | Permanent: 71 SF<br>Temporary: 47 SF<br>Total Property Impact: 1.6%        | No                                | Build<br>Alternative                                   | <i>de minimis</i>            |
|  | Permanent: 325 SF<br>Temporary: 0 SF<br>Total Property Impact: 4.3%        | No                                | Travis Heights<br>Station Design<br>Option             | <i>de minimis</i>            |
| Residence<br>809 E Riverside Dr<br>Size: 0.1 acre                          | Permanent: 36 SF<br>Temporary: 0 SF<br>Total Property Impact: 0.6%         | No                                | Travis Heights<br>Station Design<br>Option             | <i>de minimis</i>            |
| Cloud-Kingsbury House<br>Address: 1001 E Riverside<br>Dr<br>Size: 0.4 acre | Permanent: 1,001 SF<br>Temporary: 0 SF<br>Total Property Impact: 6.0%      | No                                | Build<br>Alternative                                   | <i>de minimis</i>            |
|  | Permanent: 0 SF<br>Temporary: 650 SF<br>Total Property Impact: 3.9%        | No                                | Travis Heights<br>Station Design<br>Option             | <i>de minimis</i>            |
| Residence<br>Address: 1005 E Riverside<br>Dr<br>Size: 0.2 acre             | Permanent: 501 SF<br>Temporary: 0 SF<br>Total Property Impact: 6.0%        | No                                | Build<br>Alternative and<br>all Design<br>Options      | <i>de minimis</i>            |

| Facility Description   | Impact<br>(in square feet [SF])   | Anticipated<br>Adverse<br>Effect? | Alternative /<br>Design Option  | Preliminary<br>Determination |
|--|---|-----------------------------------|---|------------------------------|
| Residence<br>Address: 1019 E Riverside<br>Dr<br>Size: 0.2 acre   | Permanent: 0 SF<br>Temporary: 137 SF<br>Total Property Impact: 1.9%       | No                                | Travis Heights<br>Station Design<br>Option  | <i>de minimis</i>            |
| Residence<br>Address: 1405 E Riverside<br>Dr<br>Size: 0.8 acre   | Permanent: 1,714 SF<br>Temporary: 1,720 SF<br>Total Property Impact: 9.8% | No                                | Build<br>Alternative and<br>all Design<br>Options   | <i>de minimis</i>            |
| Commercial Buildings<br>Address: 7107 E Riverside<br>Dr<br>Size: 0.4 acre                                  | Permanent: 0 SF<br>Temporary: 580 SF<br>Total Property Impact: 3.5%       | No                                | Build<br>Alternative  | <i>de minimis</i>            |
|  | Permanent: 4,828 SF<br>Temporary: 0 SF<br>Total Property Impact:<br>29.2% | No                                | Center-Running<br>Bike/Pedestrian<br>and Shade Tree<br>Facilities on<br>East Riverside<br>Design Option | <i>de minimis</i>            |
| Martin House<br>Address: 907 S Congress<br>Ave<br>Size: 0.5 acre   | Permanent: 590 SF<br>Temporary: 711 SF<br>Total Property Impact: 6.5%     | No                                | Build<br>Alternative and<br>all Design<br>Options   | <i>de minimis</i>            |
| Austin Motel<br>Address: 1220 S Congress<br>Ave<br>Size: 1.3 acres   | Permanent: 0 SF<br>Temporary: 1,355 SF<br>Total Property Impact: 2.4%     | No                                | Build<br>Alternative and<br>all Design<br>Options   | <i>de minimis</i>            |
| San Jose Motel/Hotel<br>Address: 1316 S Congress<br>Ave<br>Size: 0.6 acre                                  | Permanent: 0 SF<br>Temporary: 1,083 SF<br>Total Property Impact: 4.0%     | No                                | Build<br>Alternative and<br>all Design<br>Options   | <i>de minimis</i>            |
| J.M. Crawford Building<br>Address: 1412 S Congress<br>Ave<br>Size: 0.2 acre                                | Permanent: 0 SF<br>Temporary: 36 SF<br>Total Property Impact: 0.5%        | No                                | Build<br>Alternative and<br>all Design<br>Options   | <i>de minimis</i>            |
| Bergen – Todd House<br>Address: 1403 S Congress<br>Ave<br>Size: 0.5 acre                                   | Permanent: 308 SF<br>Temporary: 636 SF<br>Total Property Impact: 4.4%     | No                                | Build<br>Alternative and<br>all Design<br>Options   | <i>de minimis</i>            |
| Congress Avenue Baptist<br>Church, Education Building<br>Address: 1511 S Congress<br>Ave<br>Size: 1.0 acre | Permanent: 0 SF<br>Temporary: 1,993 SF<br>Total Property Impact: 4.8%     | No                                | Build<br>Alternative and<br>all Design<br>Options   | <i>de minimis</i>            |
| Austin Fire Station #6<br>Address: 1705 S Congress<br>Ave<br>Size: 0.5 acre                                | Permanent: 0 SF<br>Temporary: 2,088 SF<br>Total Property Impact:<br>10.1% | No                                | Build<br>Alternative and<br>all Design<br>Options   | <i>de minimis</i>            |



| Facility Description   | Impact (in square feet [SF])   | Anticipated Adverse Effect? | Alternative / Design Option              | Preliminary Determination |
|--|--|-----------------------------|--|---------------------------|
| Residence<br>Address: 105 E Annie St<br>Size: 0.3 acre                       | Permanent: 299 SF<br>Temporary: 1,563 SF<br>Total Property Impact: 15.1%   | No                          | Build Alternative and all Design Options | <i>de minimis</i>         |
| Commercial Building<br>Address: 1902 S Congress Ave<br>Size: 0.2 acre        | Permanent: 0 SF<br>Temporary: 69 SF<br>Total Property Impact: 1.0%         | No                          | Build Alternative and all Design Options | <i>de minimis</i>         |
| Former Renfro's Drug Store<br>Address: 2008 S Congress Ave<br>Size: 0.3 acre | Permanent: 0 SF<br>Temporary: 1,519 SF<br>Total Property Impact: 10.5%     | No                          | Build Alternative and all Design Options | <i>de minimis</i>         |
| Walter Tips House<br>Address: 2336 S Congress Ave<br>Size: 0.5 acre          | Permanent: 1,064 SF<br>Temporary: 2,377 SF<br>Total Property Impact: 17.3% | No                          | Build Alternative and all Design Options | <i>de minimis</i>         |

Note: The permanent impact square footage represents permanent easements, utility easements, and license agreement (if applicable).

The easement locations for the historic built properties are shown in **Figure 16** through **Figure 55** for the Build Alternative or a Design Option, whichever is greater.

Figure 16: Easements at Austin State Hospital Historic District

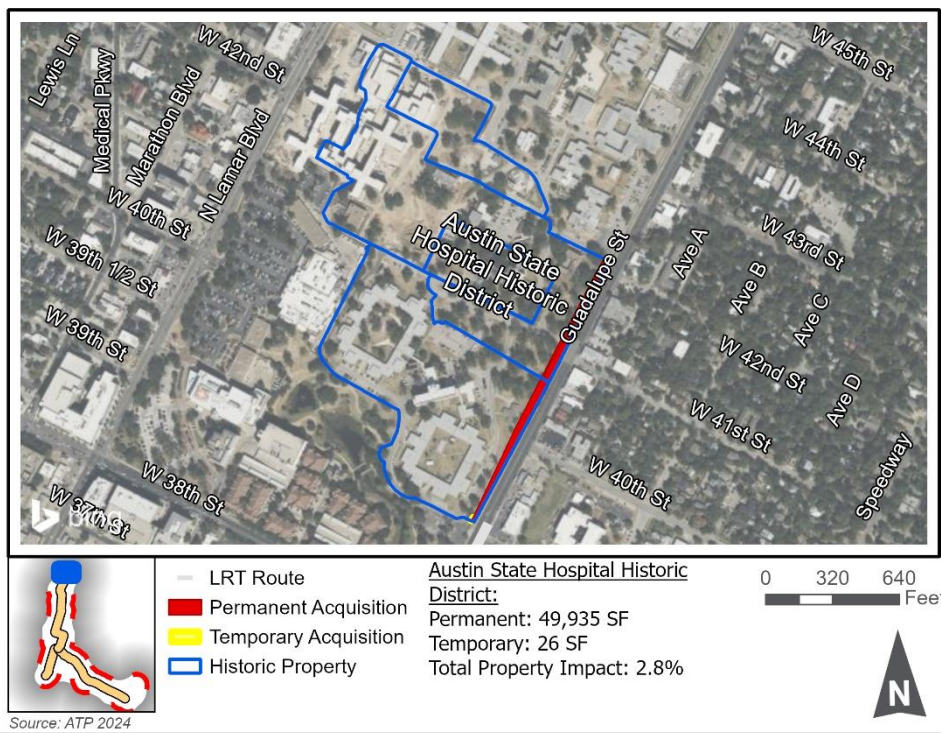


Figure 17: Easements at Former Hershel James Service Center

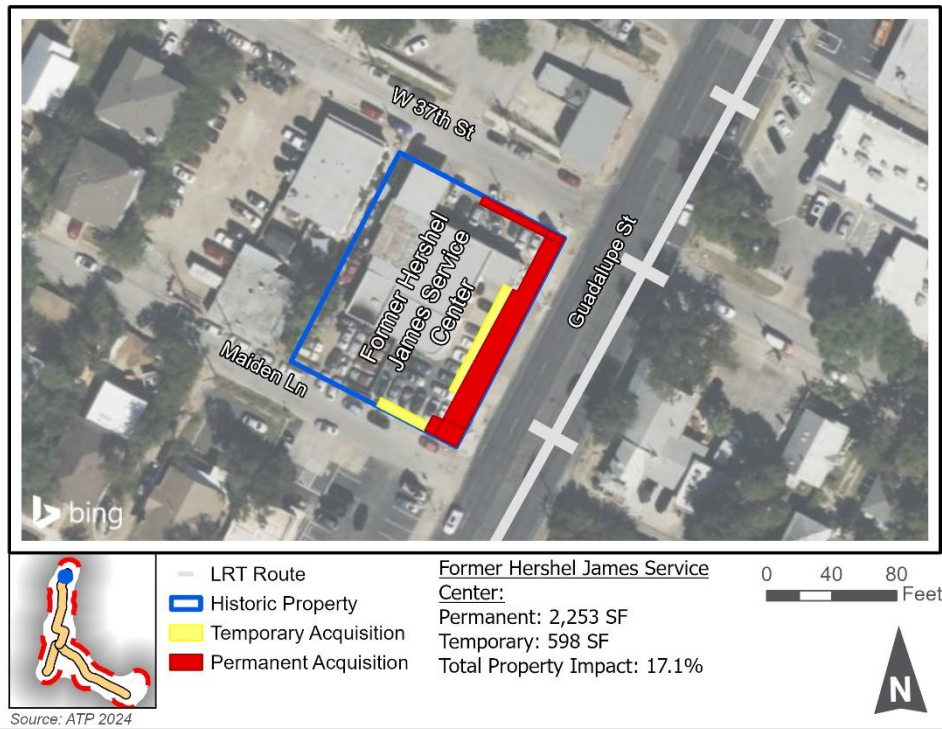


Figure 18: Easements at Former Bowling Center and 530 W 33rd St

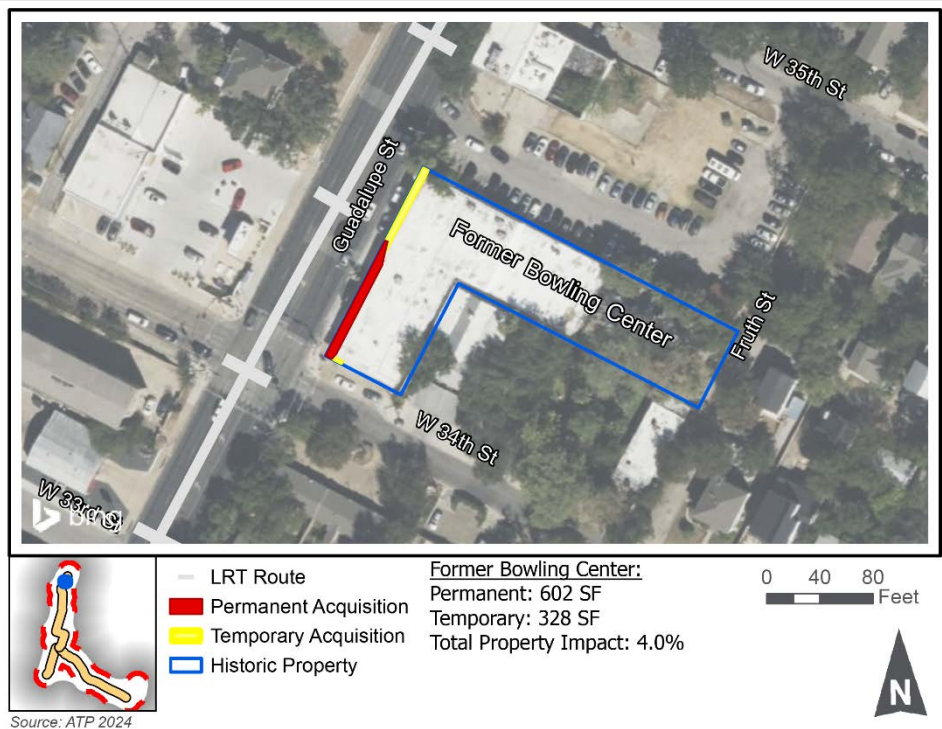


Figure 19: Easements at 507 W 33rd St, 3205 Guadalupe St, and 3201 Guadalupe St

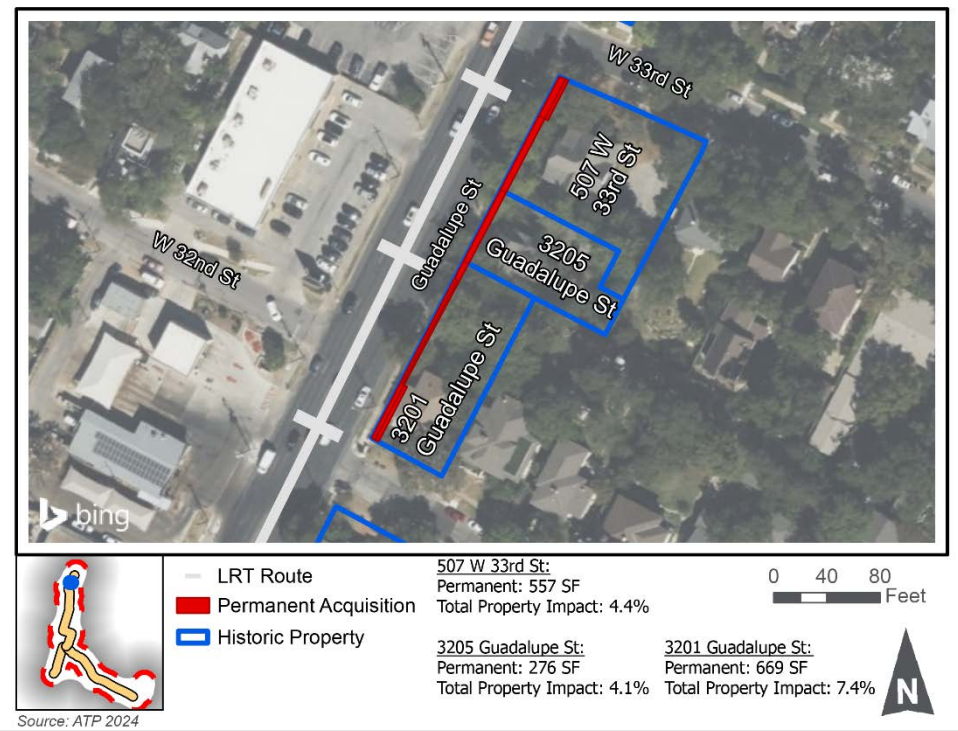


Figure 20: Easements at 415 W 32nd St, 3120 Wheeler St, and 3117 Guadalupe St

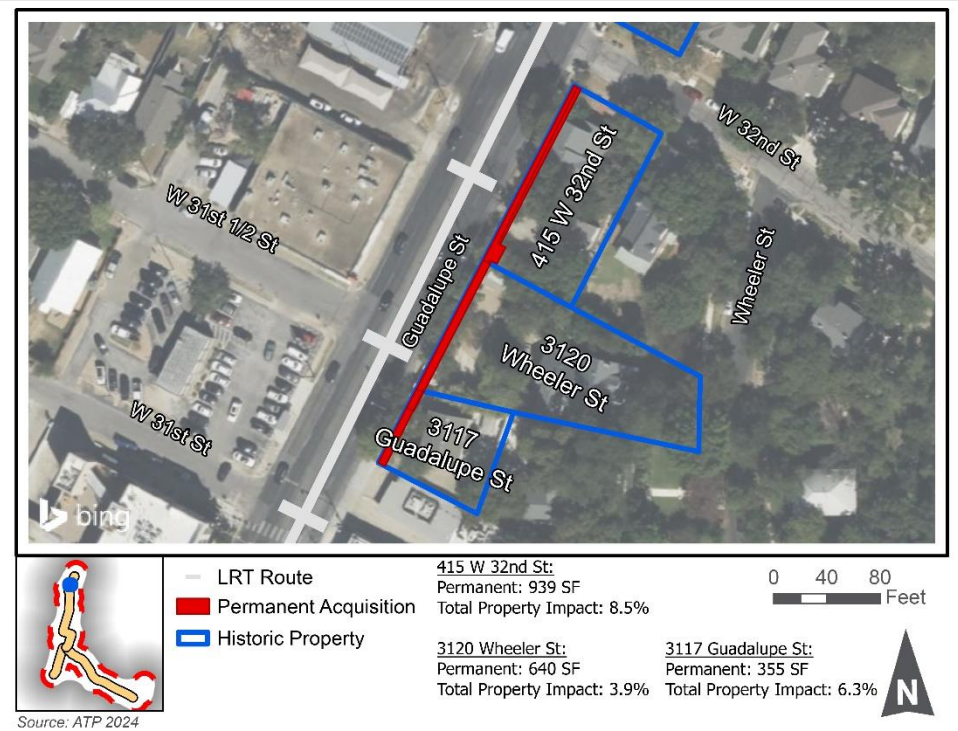


Figure 21: Easements at North Austin Fire Station



Figure 22: Easements at 2807 Hemphill Park

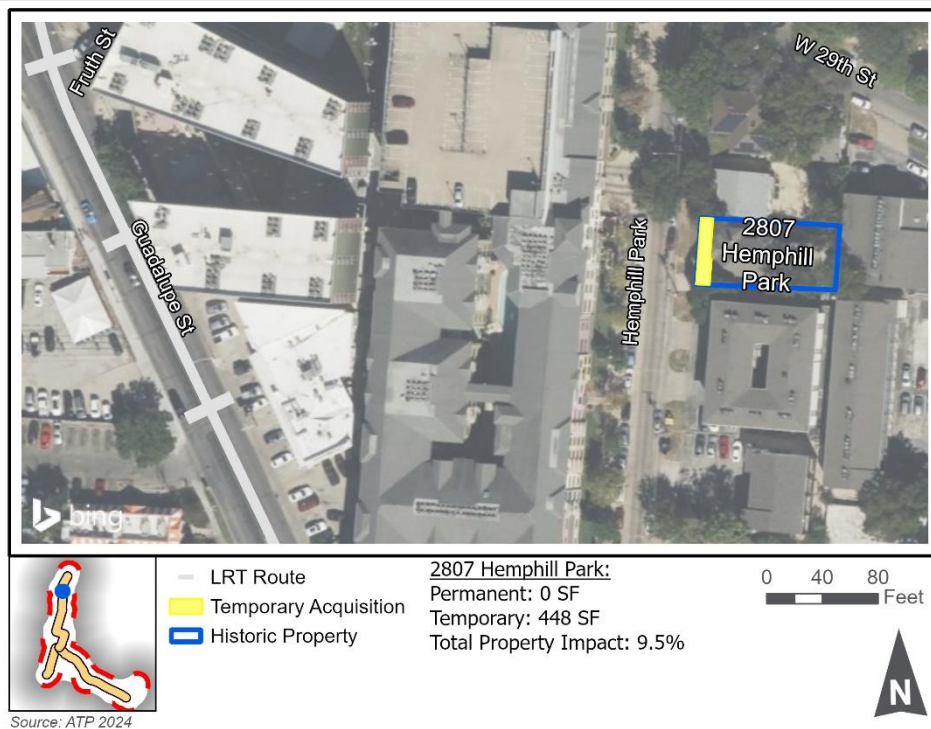


Figure 23: Easements at Buen Retiro



Figure 24: Easements at Hole in the Wall, Former Forty Acres Club, and Jesse H. Jones Communications Center



Figure 25: Easements at University Baptist Church

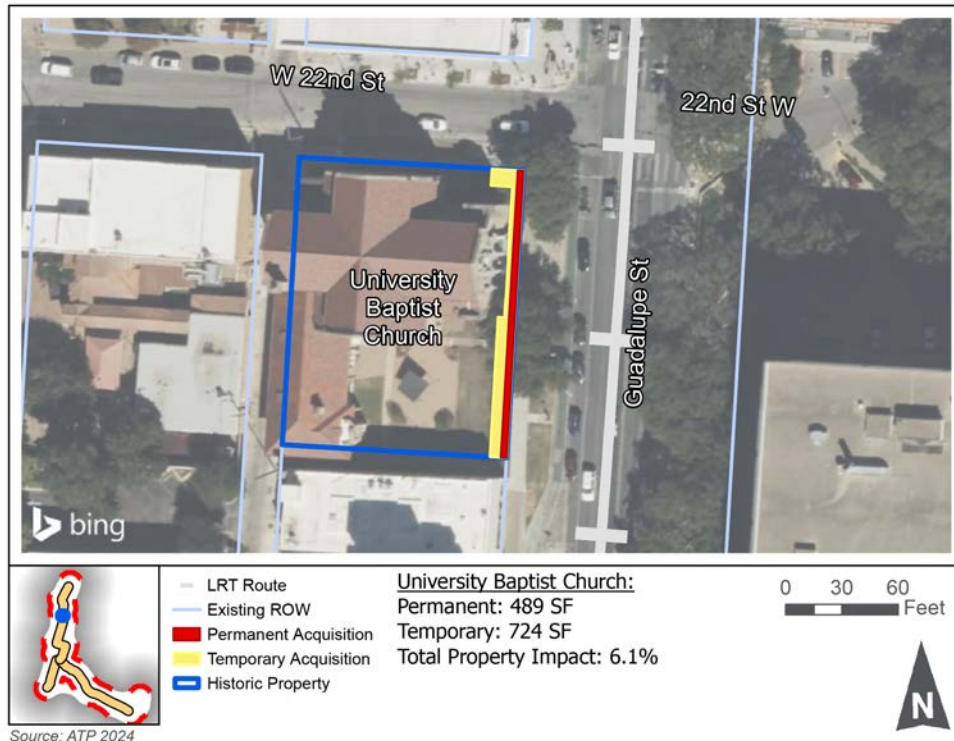


Figure 26: Easements at Former Carman Apartments

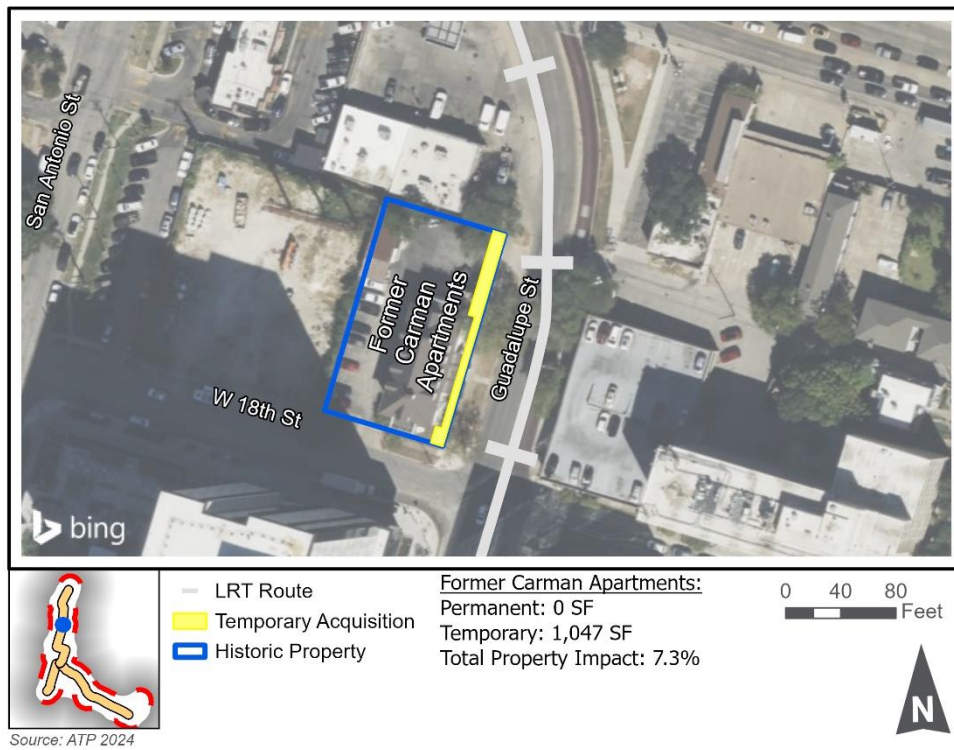


Figure 27: Easements at Bertram Building

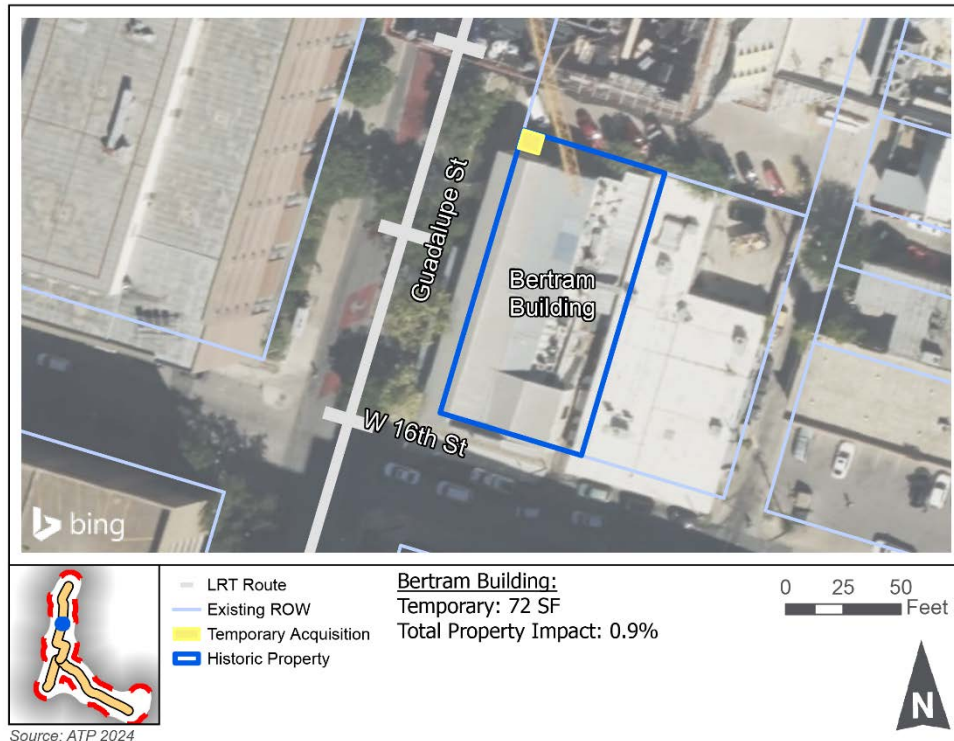


Figure 28: Easements at 1509 Guadalupe St

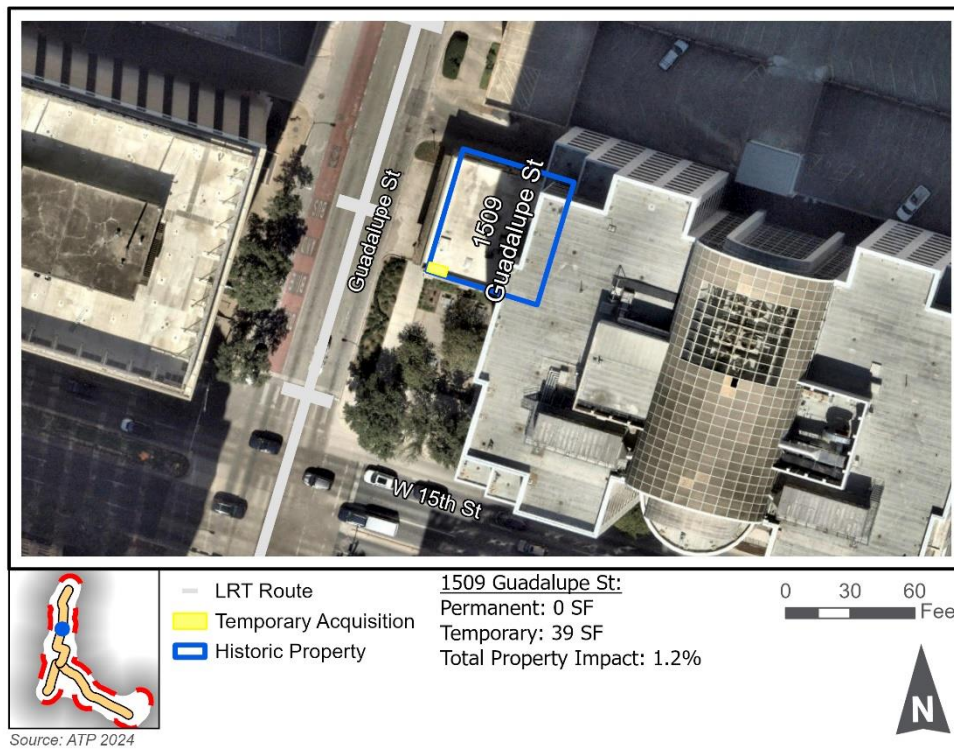


Figure 29: Easements at 1304 Guadalupe St, Adams-Ziller House, and First Church of Christ Scientist

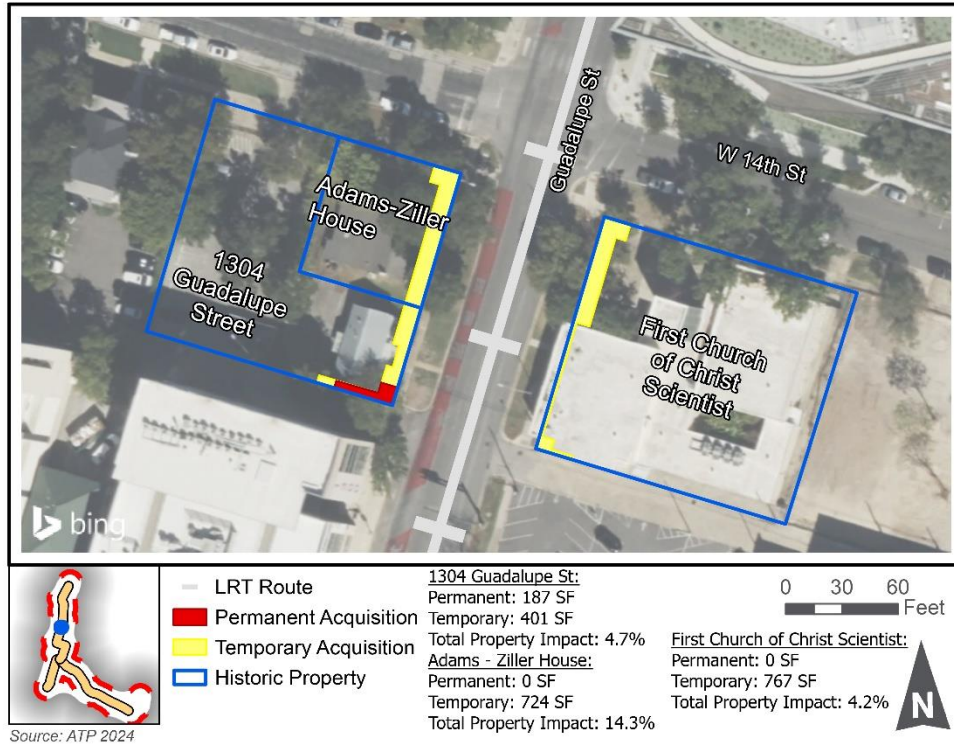


Figure 30: Easements at Former Penthouse Apartments

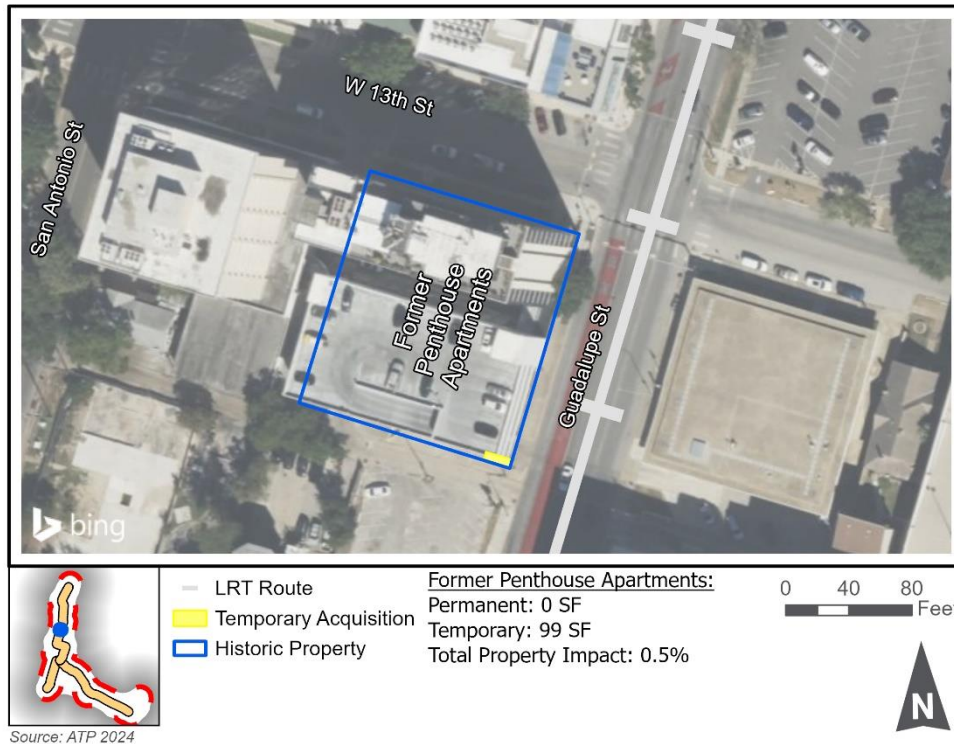




Figure 31: Easements at Central Christian Church

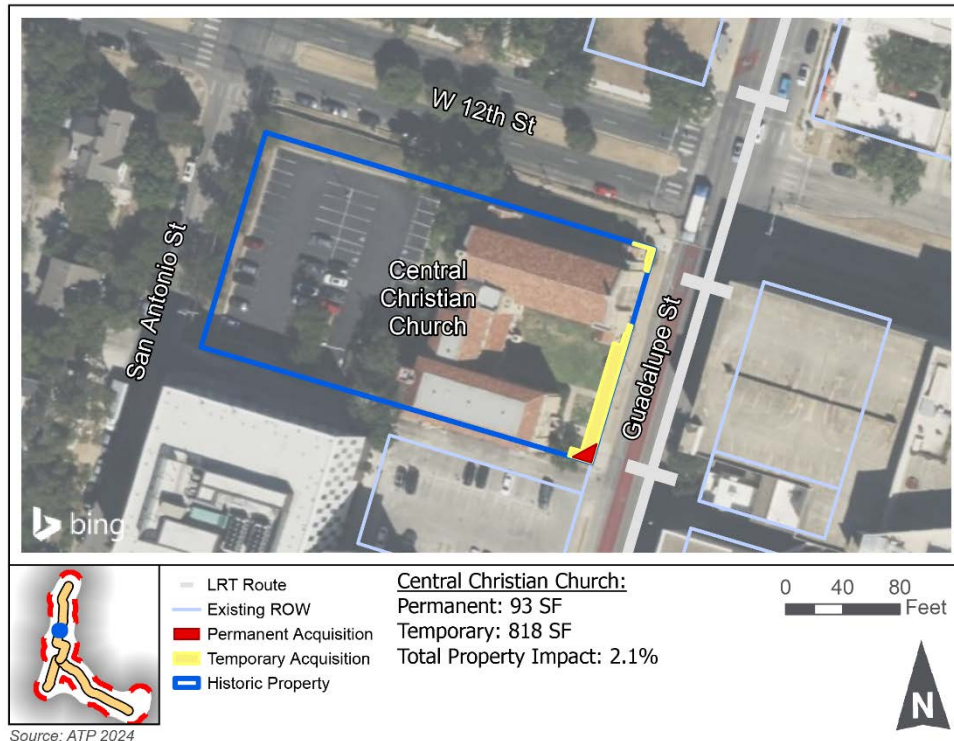


Figure 32: Easements at Travis County Courthouse

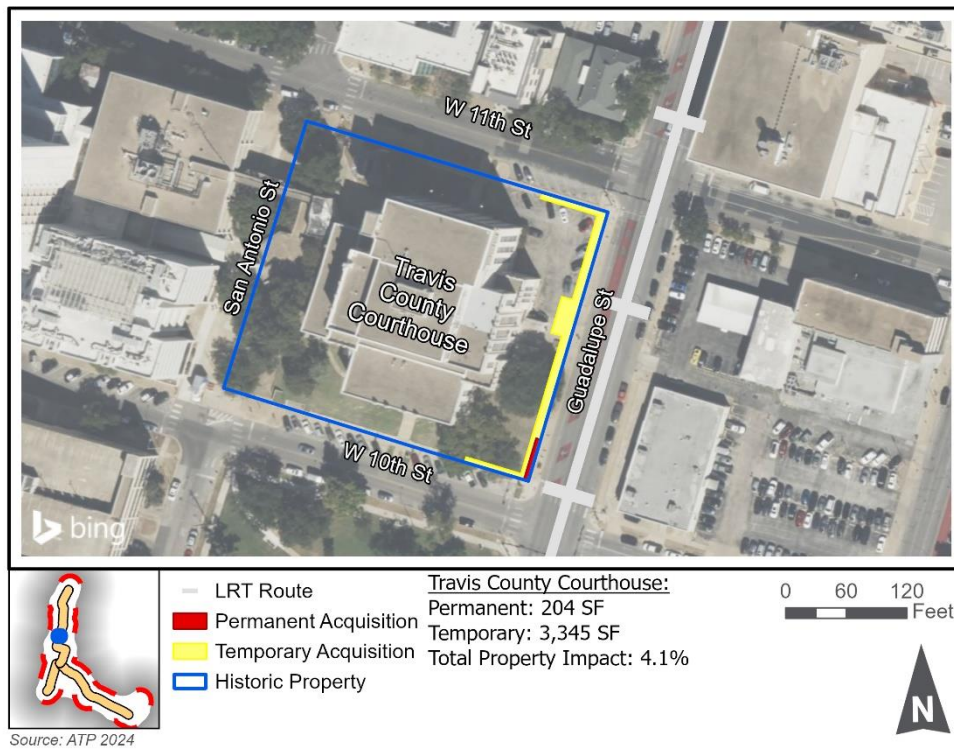


Figure 33: Easements at Austin Public Library and Austin “Moonlight Tower”

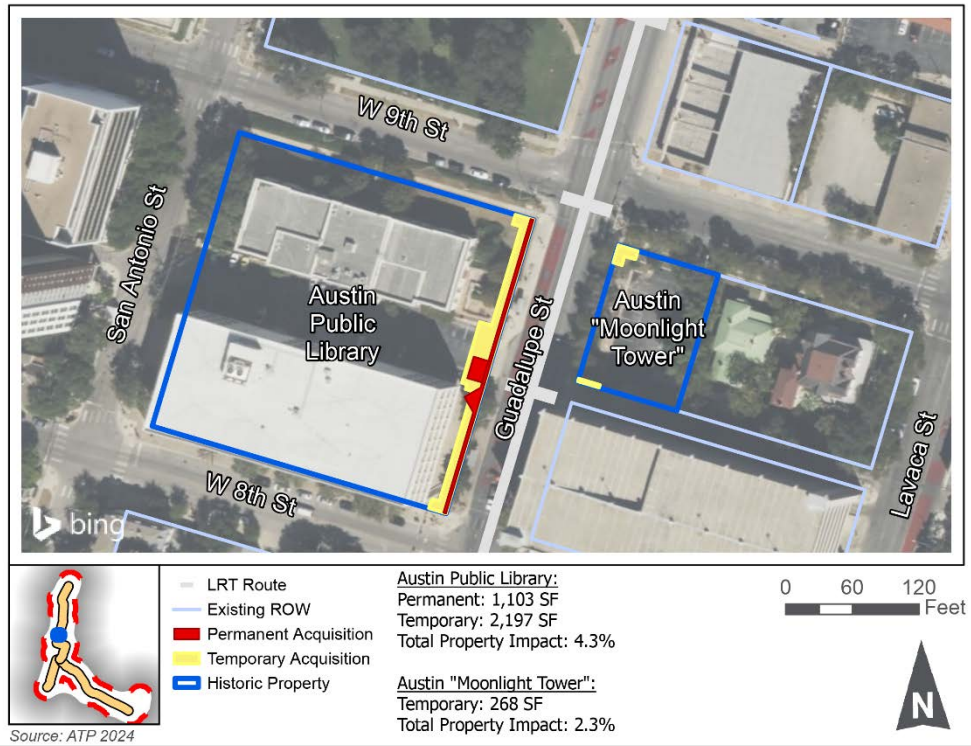


Figure 34: Easements at Hale Houston Home and John Bremond Jr. House



Figure 35: Easements at Hale Houston Home and John Bremond Jr. House for the Wooldridge Square Station Design Option

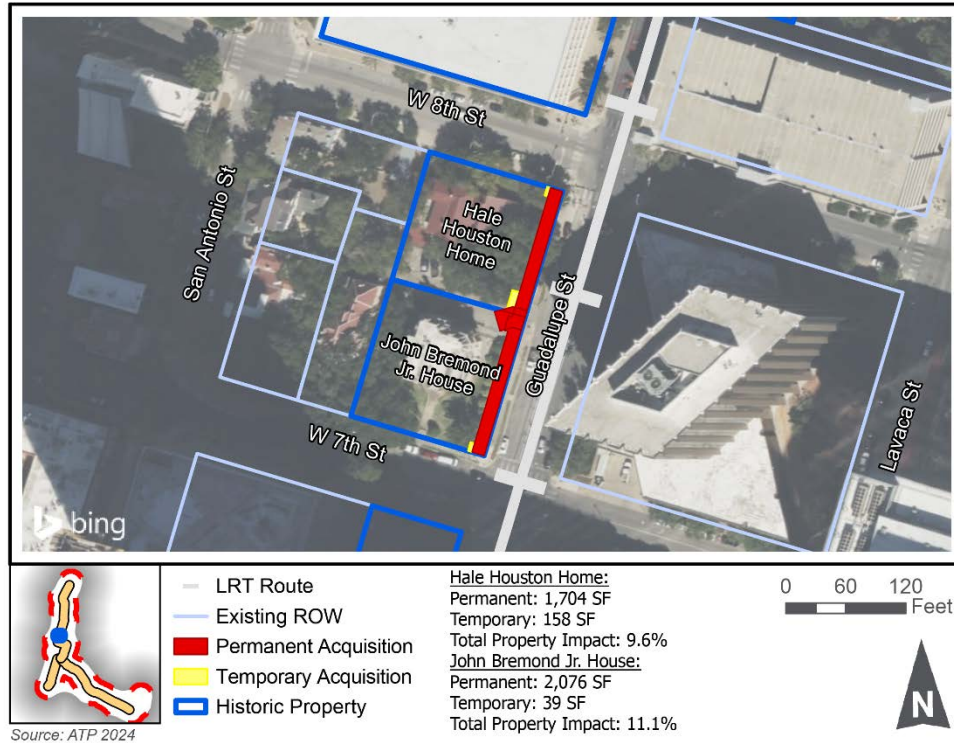


Figure 36: Easements at Smith (B.J.) House

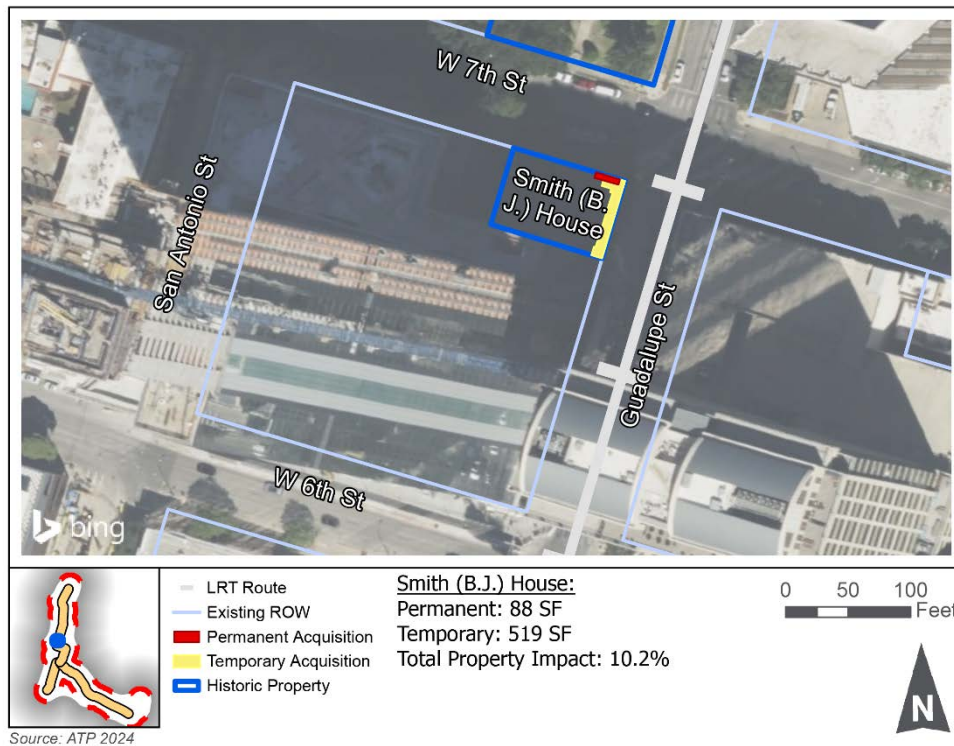


Figure 37: Easements at Lakeside Apartments

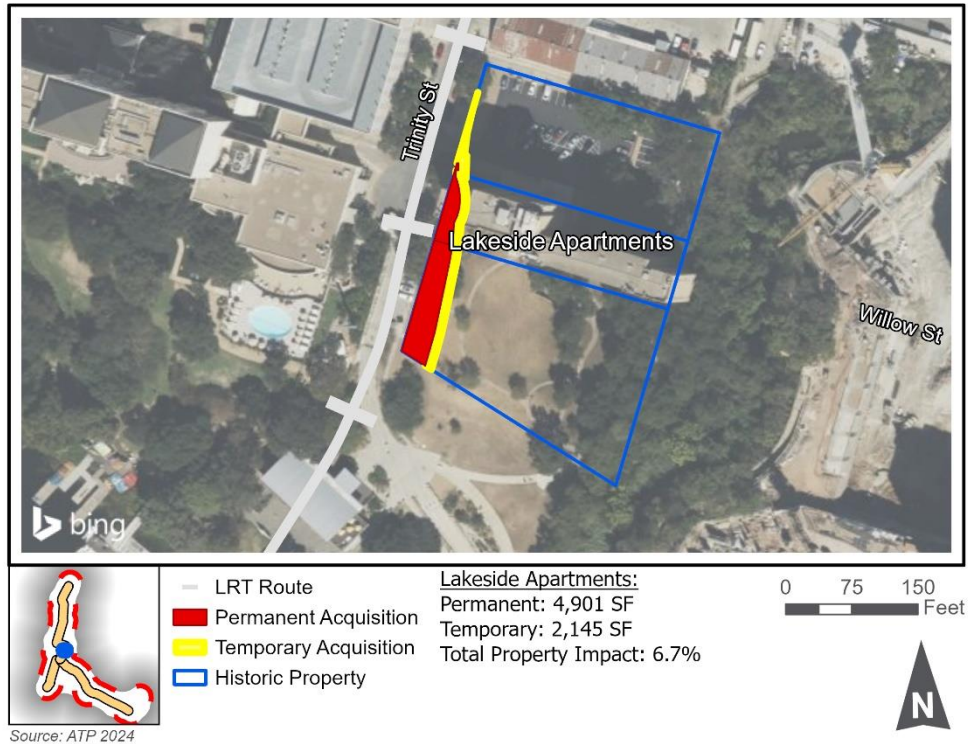


Figure 38: Easements at 314 Le Grande Ave

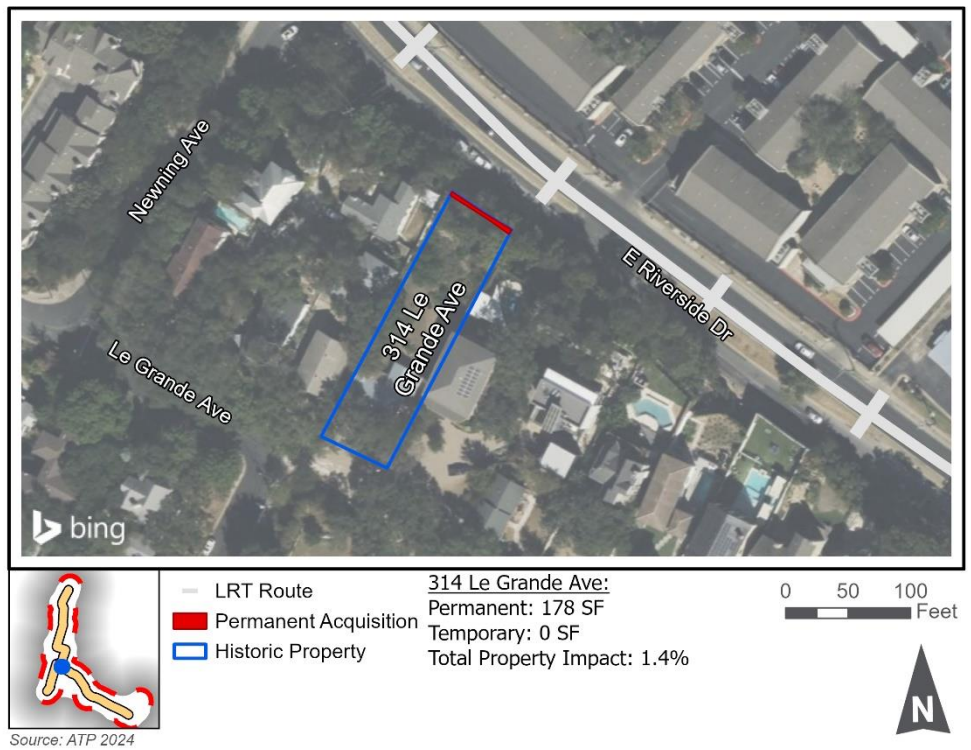


Figure 39: Easements at Residences: 520 Sunny Ln, 522 Sunny Ln, and 608 Academy Dr

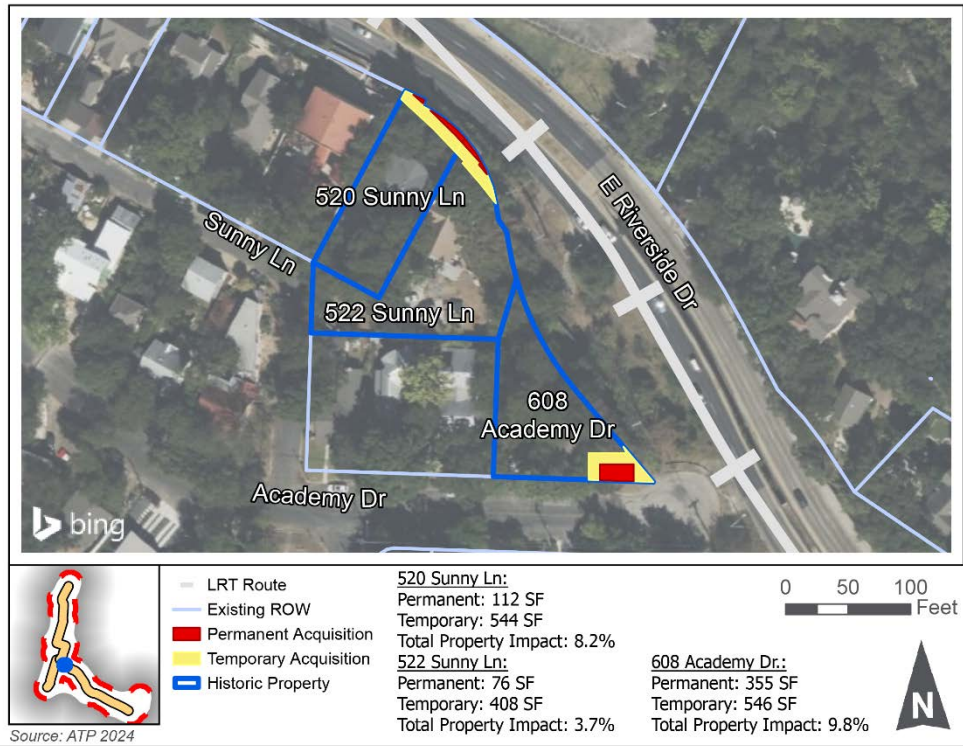


Figure 40: Easements at Residence: 903 Edgecliff Terrace

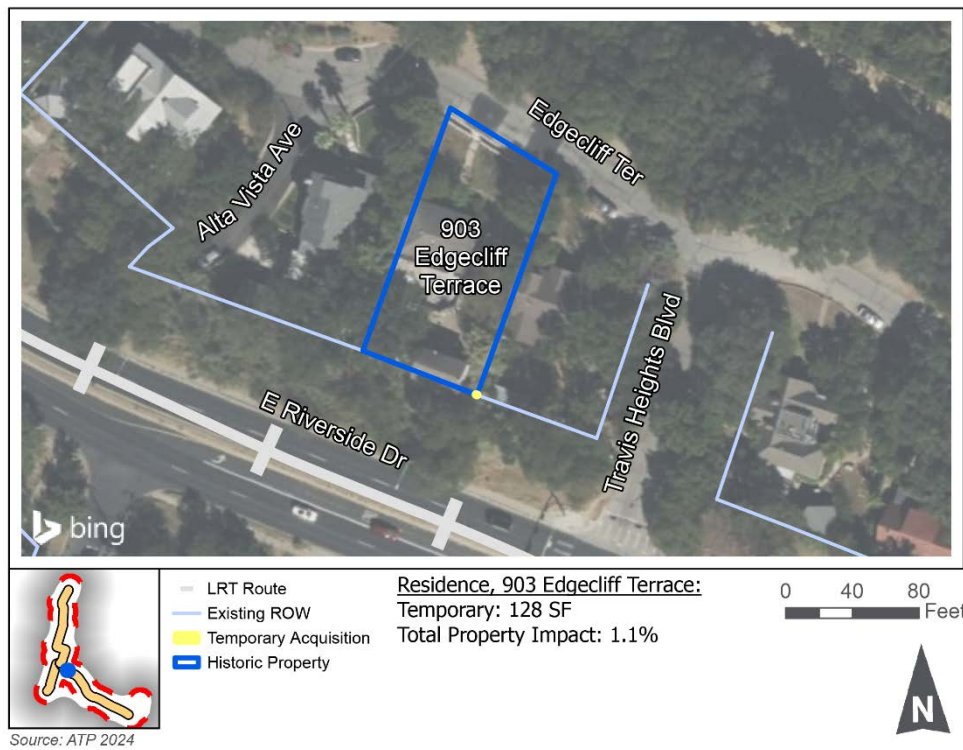


Figure 41: Easements at 801 E Riverside Dr, 803 E Riverside Dr, and 807 E Riverside Dr

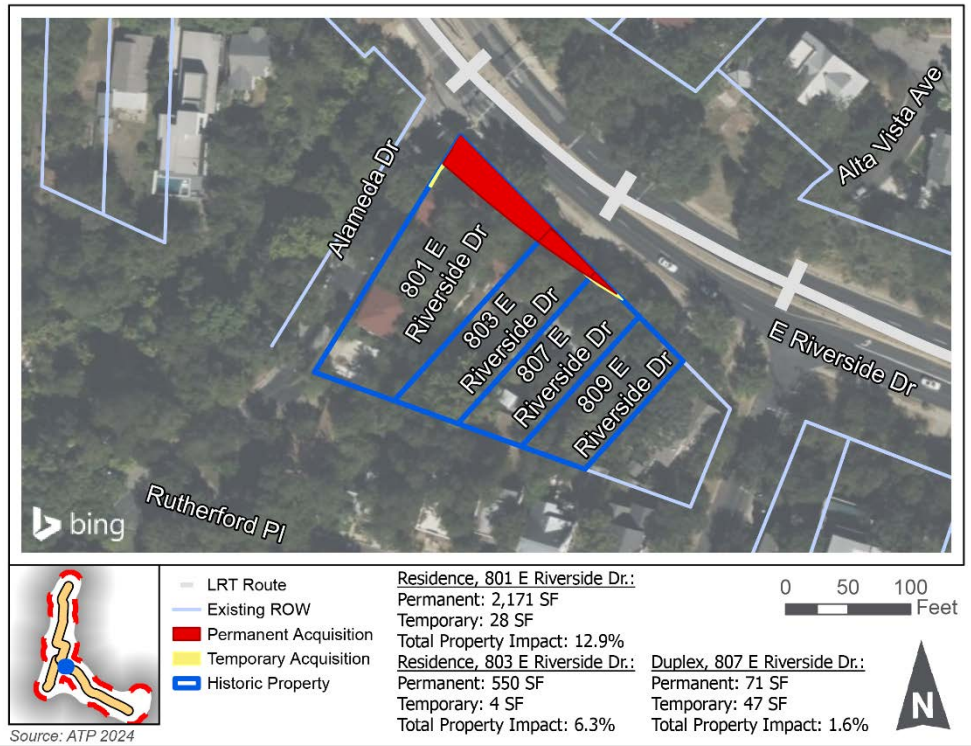


Figure 42: Easements at 801 E Riverside Dr, 803 E Riverside Dr, 807 E Riverside Dr, and 809 E Riverside Dr for the Travis Heights Station Design Option

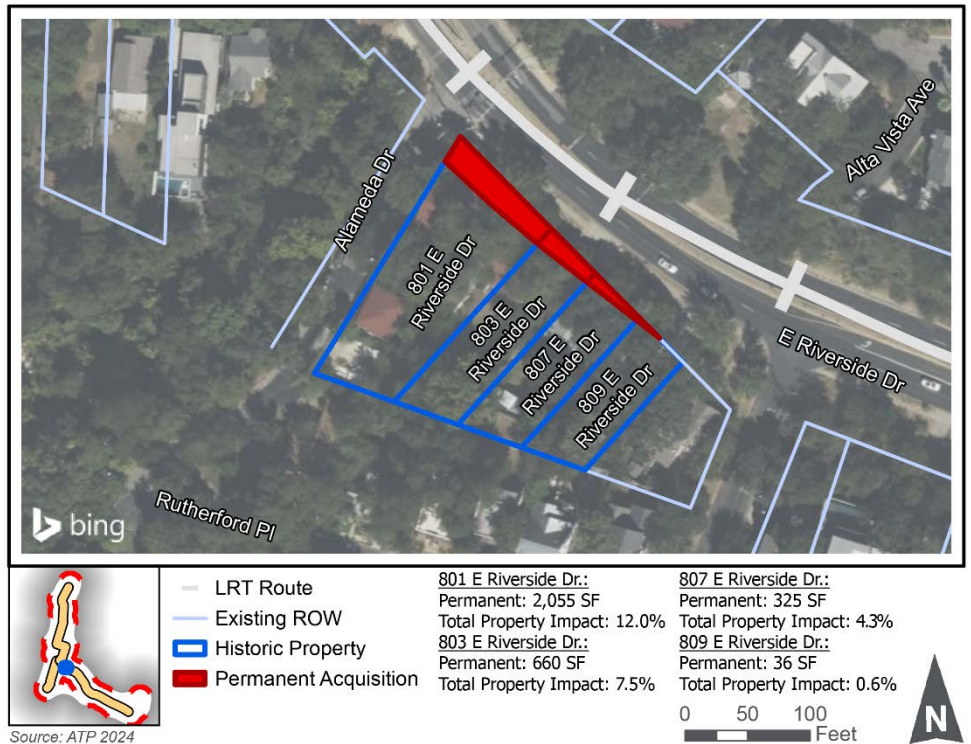


Figure 43: Easements at Cloud Kingsbury House, 1005 E Riverside Dr

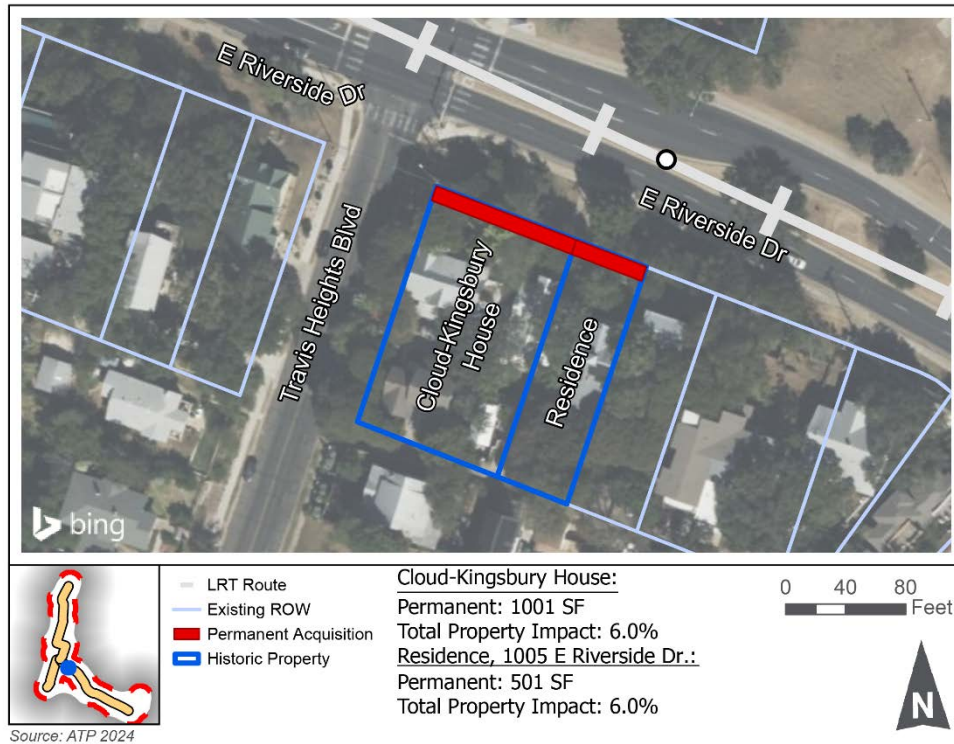


Figure 44: Easements at 1019 E Riverside Dr for the Travis Heights Station Design Option

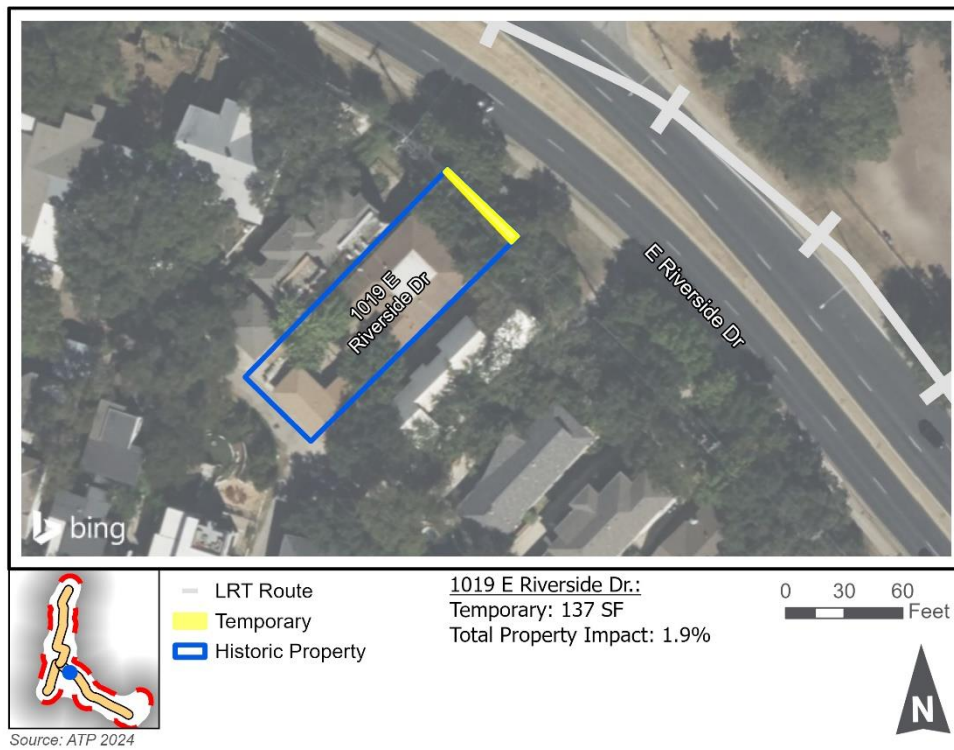


Figure 45: Easements at 1405 E Riverside Dr

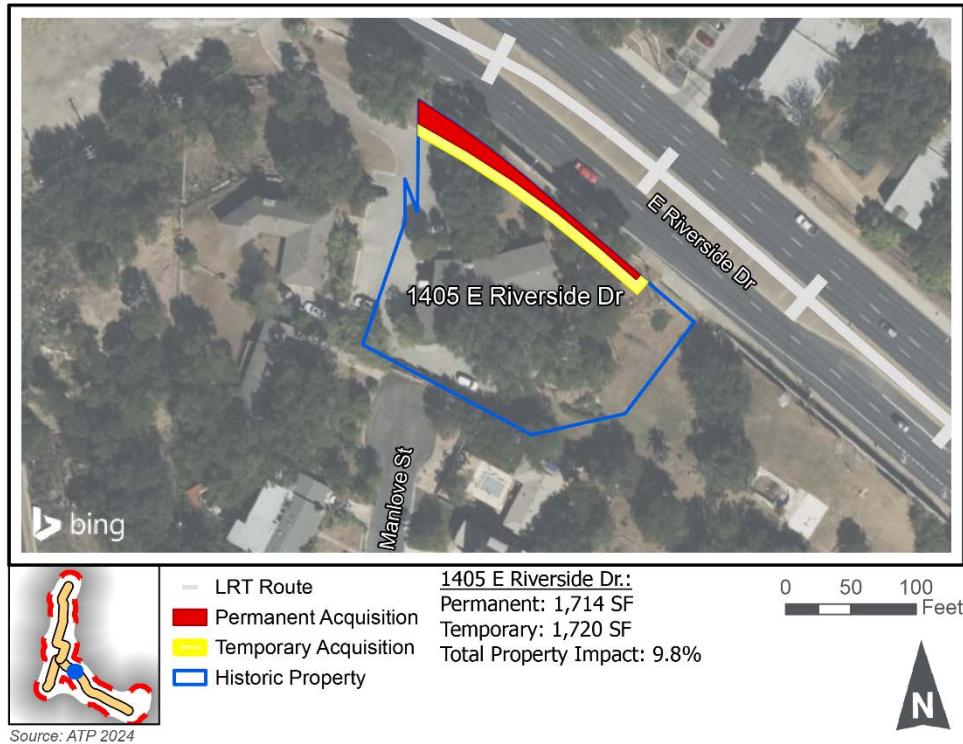


Figure 46: Easements at 7107 E Riverside Dr. for the Center-Running Bike/Pedestrian and Shade Tree Facilities on East Riverside Design Option

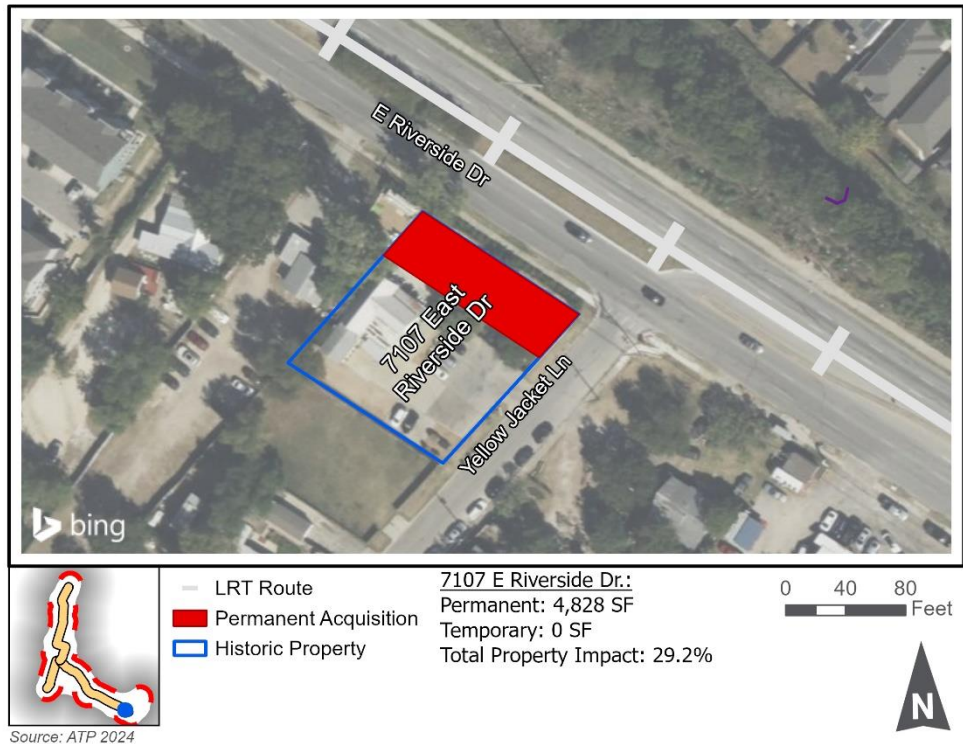




Figure 47: Easements at Martin House

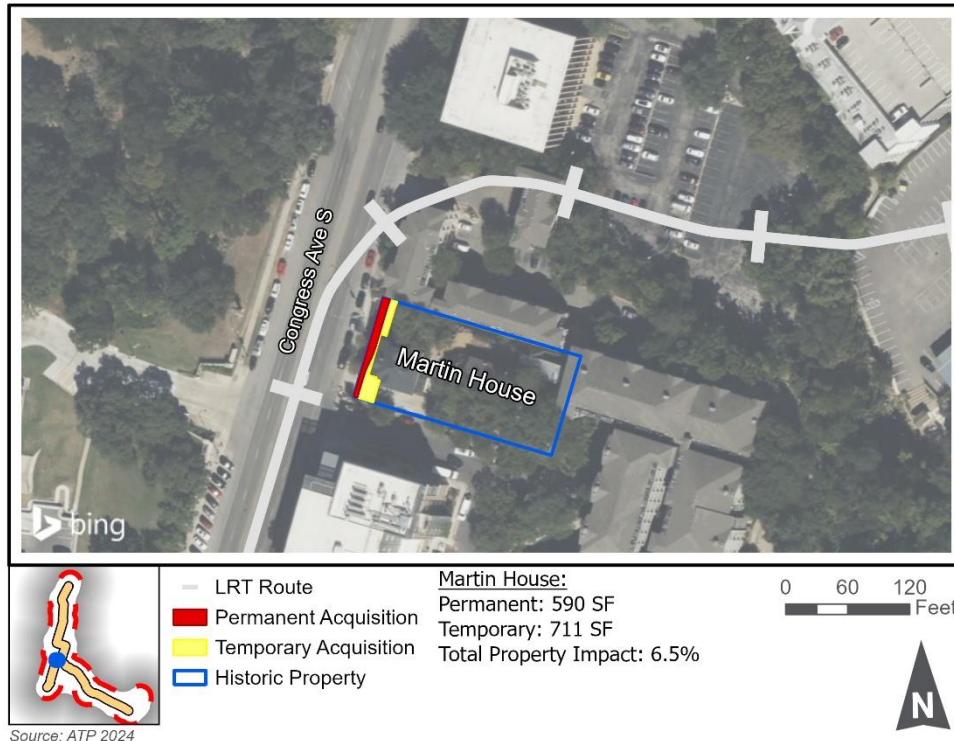


Figure 48: Easements at Austin Motel and San Jose Motel/Hotel

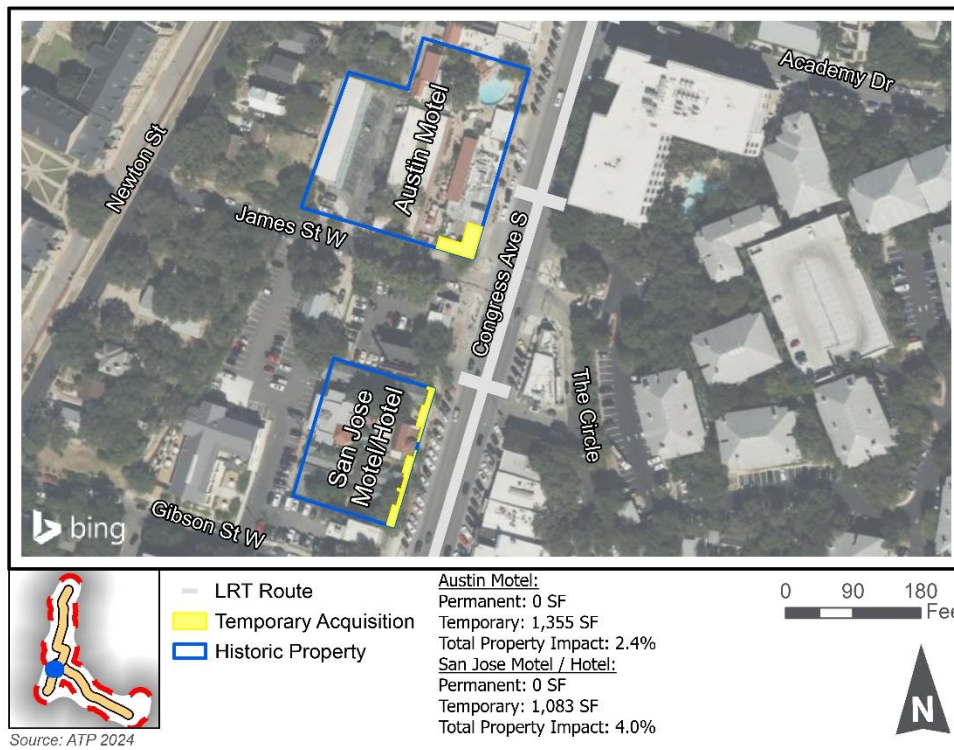


Figure 49: Easements at J.M. Crawford Building and Bergen – Todd House



Figure 50: Easements at Congress Avenue Baptist Church, Education Building

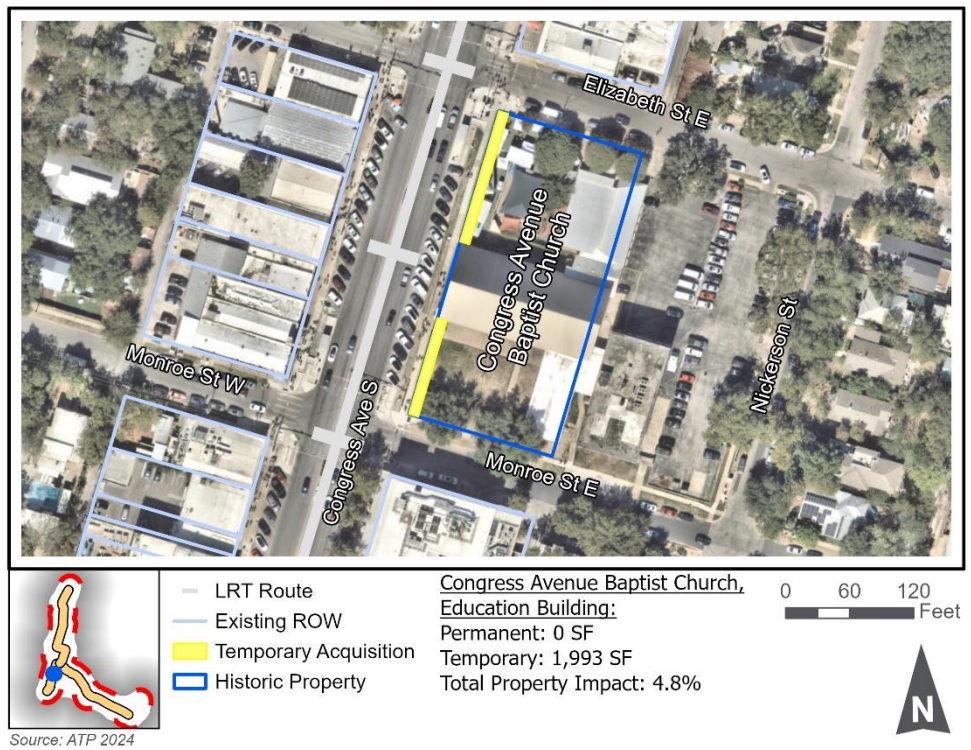


Figure 51: Easements at Austin Fire Station #6

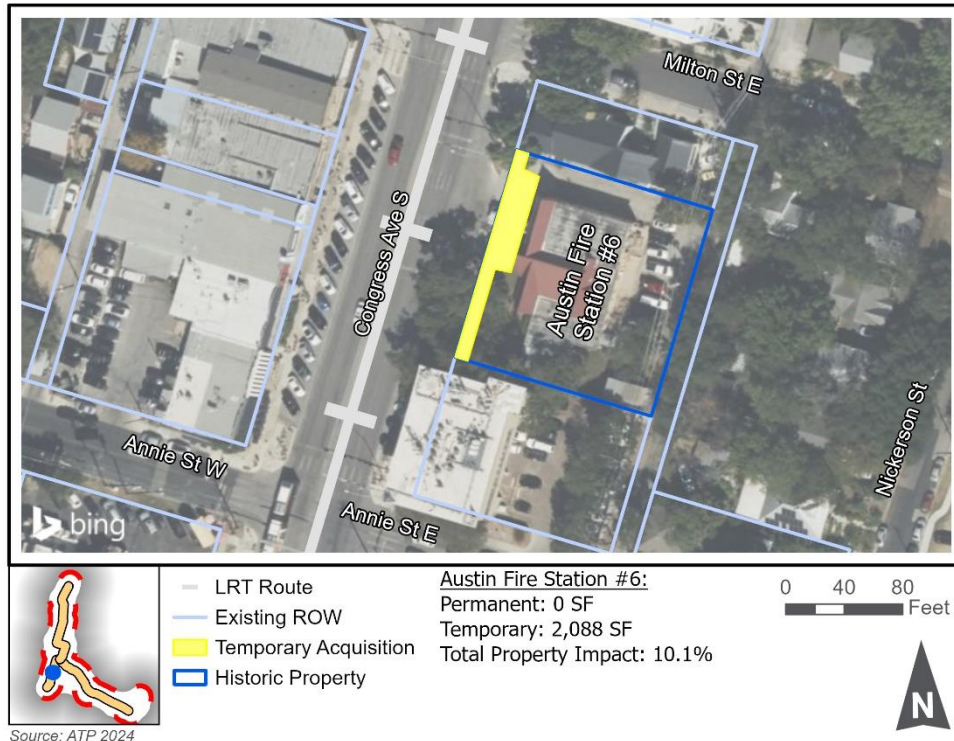


Figure 52: Easements at 105 E Annie St

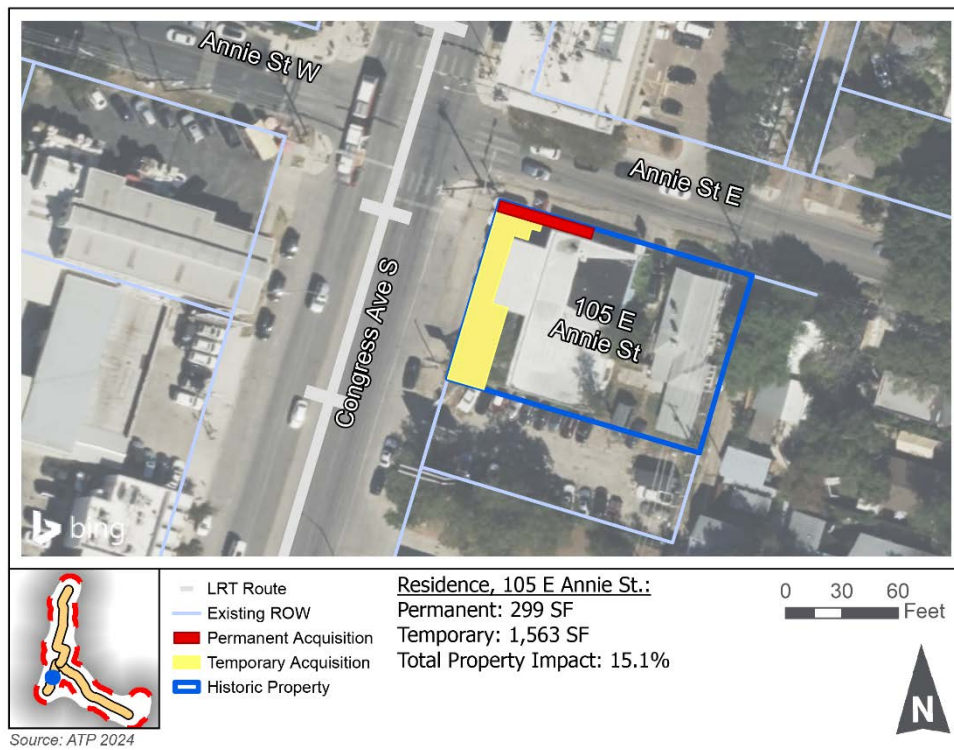


Figure 53: Easements at 1902 S Congress Ave

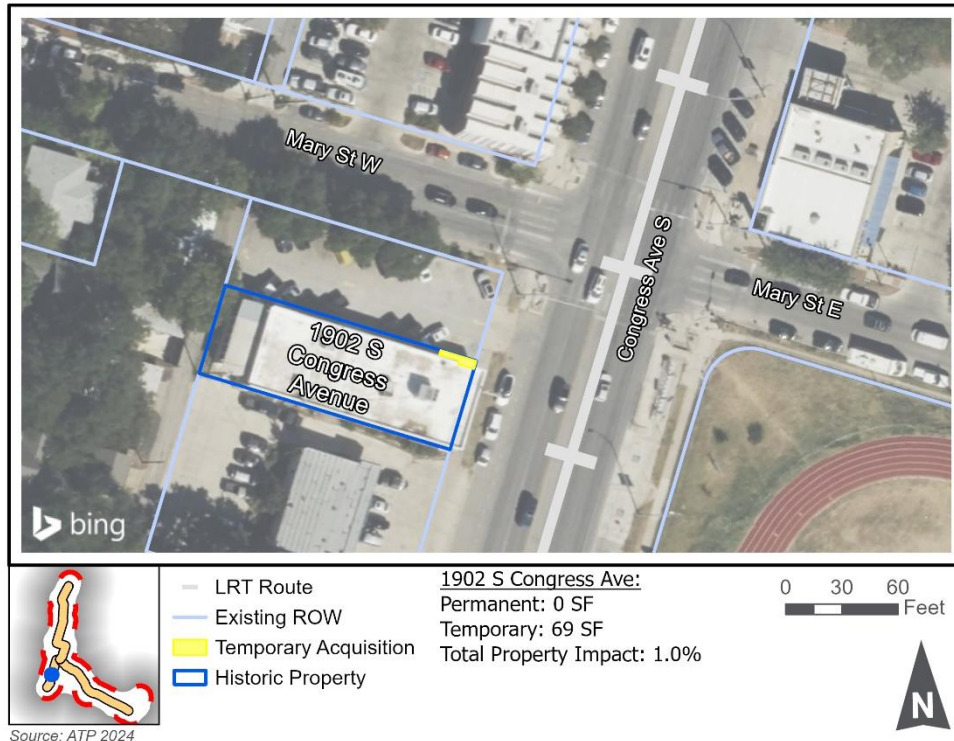


Figure 54: Easements at 2008 S Congress Ave

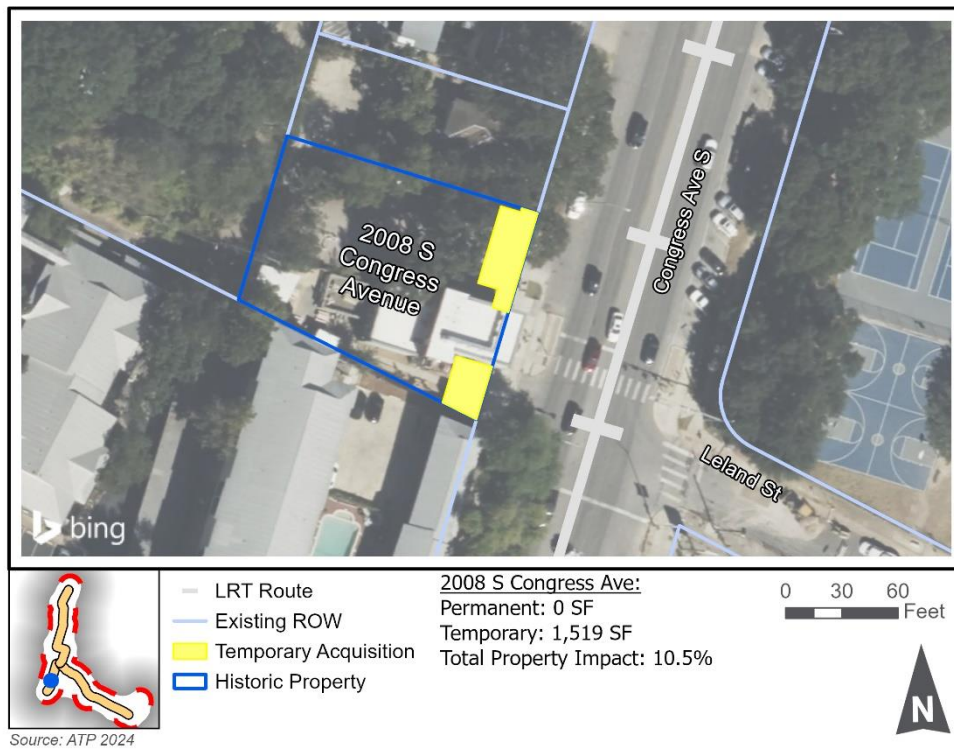
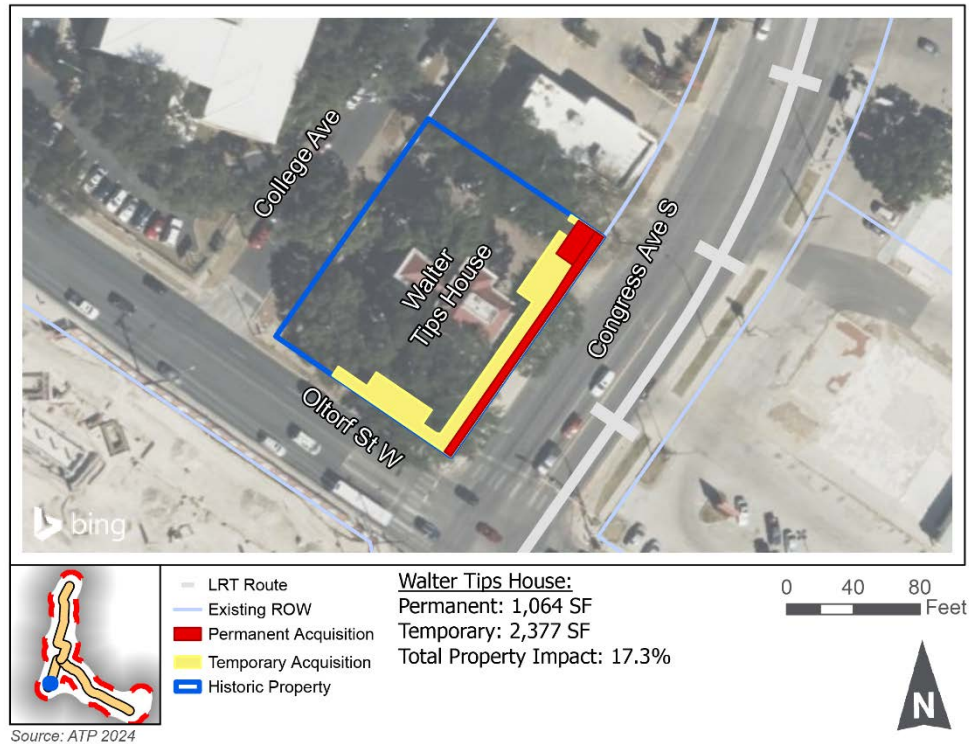


Figure 55: Easements at Walter Tips House



## 6 Avoidance Alternatives Analysis

Avoidance alternatives are analyzed for Section 4(f) resources when the use of the resource is greater than a *de minimis* impact. ATP analyzed avoidance alternatives for the two parks (Waller Beach at Town Lake Metro Park and Norwood Tract at Town Lake Metro Park) where Section 4(f) use would occur as a result of the Project.

In accordance with Section 4(f) requirements, before approving the use of Section 4(f) property, FTA must determine that there is no feasible and prudent alternative that avoids such use. A feasible and prudent avoidance alternative avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property (see 23 CFR Section 774.17). An alternative is infeasible if it cannot be built as a matter of sound engineering judgment (see 23 CFR Section 774.17). An alternative is not prudent if:

1. It would compromise the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
2. It would result in unacceptable safety or operational problems;
3. After reasonable mitigation, it would still cause:
  - o Severe social, economic, or environmental effects;
  - o Severe disruption to established communities;

- Severe, disproportionate effects on low-income or minority populations; or
  - Severe effects on environmental resources protected under other federal statutes.
4. It would result in additional construction, maintenance, or operational costs of an extraordinary magnitude;
  5. It would cause other unique problems or unusual factors; or
  6. It would involve multiple factors in 1 through 5 above that, while individually minor, could cumulatively cause unique problems or effects of extraordinary magnitude (see 23 CFR Section 774.17).

As indicated in **DEIS Appendix A**, the alternatives analyses for the Orange and Blue Line projects (CapMetro 2020a, 2020b) evaluated No Build, Transportation System Management, bus rapid transit (BRT), and light rail alternatives.

BRT was defined as high frequency service and included a dedicated guideway and several amenities including off-board ticketing, multipoint vehicle access, and articulated vehicles.<sup>1</sup> BRT stations would be in the same locations as the Light Rail Alternative with similar footprint. The BRT Alternative would not avoid the use of the Section 4(f) properties affected by the Project. The BRT guideway would require a bridge structure and alignment similar to that of the light rail, resulting in the same use identified for the Project. As a result, the BRT Alternative does not qualify as an avoidance alternative.

Alternatives that would avoid the permanent use of all Section 4(f) resources in the Study Area include the No Build, Transportation System Management, and tunnel alternatives. An alternative alignment crossing Lady Bird Lake would avoid use of Waller Beach; however, it would also require Section 4(f) use of parkland because Town Lake Metro Park extends in both directions along the shores of Lady Bird Lake. The Travis Heights Station Design Option would avoid the use of Norwood Tract at Town Lake Metro Park. These alternatives are discussed below.

## 6.1 No Build Alternative

The No Build Alternative assumes completion of planned and programmed transportation projects that would be constructed by 2045, except for the Project. The No Build Alternative would avoid the use of Section 4(f) resources affected by the Project. The No Build Alternative is not a prudent avoidance alternative because it would not address the growing corridor travel demand or support growth of and connectivity to regional activity centers designated in local land use plans and would cause other severe problems of a magnitude that substantially outweighs

---

<sup>1</sup> As discussed in **DEIS Chapter 1 and Appendix A**, FTA and CapMetro completed Planning and Environmental Linkages studies for two high-capacity transit projects that were components of the Project Connect program (that is, the Orange and Blue Lines, referred to in Chapter 1 as the “2020 Proposed Projects”). These studies, which evaluated mode and corridor alternatives, included public outreach (CapMetro 2020a, 2020b). The combination of the BRT capacity limitations and public preference determined from these Planning and Environmental Linkages studies appropriately resulted in the selection of light rail as the preferred mode. While BRT on dedicated guideway could support the projected horizon year ridership, the distance between buses (headways) would be only a few minutes, and the system would operate at maximum capacity with no room for future growth. Light rail would provide for increases in ridership an estimated 10 to 20 years beyond the horizon year.

the importance of protecting the Section 4(f) property. Under the No Build Alternative, traffic and air quality would worsen, the historic pattern of urban sprawl would continue, and the region would not be able to sustainably accommodate the expected population and employment growth (City of Austin 2024).

## 6.2 Transportation System Management Alternative

The Transportation System Management Alternative is designed to investigate the level of benefit that can be captured by using low-capital techniques to improve transportation services through better management of existing resources and facilities. The Transportation System Management Alternative would upgrade local bus service by introducing a new CapMetro Rapid route with transit priority treatments in the Project corridor without constructing a dedicated guideway. CapMetro developed the Transportation System Management Alternative by maximizing transit service within the existing and programmed transportation ROW.

The Transportation System Management Alternative assumes 10-minute frequency, higher-capacity vehicles (likely 60-foot articulated three-door buses), transit signal priority at all intersections except downtown (from Cesar Chavez Street to East Martin Luther King Jr. Boulevard), and consolidated stops with enhanced amenities similar to today's CapMetro Rapid stations but without level boarding or off-board fare payment) with estimated one-third-mile stop spacing.

To obtain frequencies shorter than 10 minutes, additional ROW for dedicated busway infrastructure would be required. ATP found that travel time on buses under the Transportation System Management Alternative was generally twice as long compared to the guideway options (light rail and BRT), and the system would support only about one-third of the ridership of the guideway options. The Transportation System Management Alternative would not provide the mobility benefits needed to accommodate the expected growth in the region and would not meet the Project goals and objectives.<sup>2</sup> FTA and ATP have determined that the Transportation System Management Alternative would not be a prudent alternative because it would compromise the Project to a degree that it is unreasonable to proceed considering the Project's stated purpose and need.

## 6.3 Tunnel Alternatives

A tunnel segment was evaluated for the Orange and Blue Line projects to extend service north of Lady Bird Lake and minimize effects on traffic congestion in the downtown area. The high cost of the tunnel was principally responsible for the cost overruns that rendered the Orange and Blue Lines financially infeasible. Average capital costs per route mile of tunnel light rail through downtown from East Martin Luther King Jr. Boulevard to Lady Bird Lake were three times the cost of the typical cost per mile of an at-grade alignment.

ATP evaluated additional tunnel options during the Alternatives Development and Alternatives Analysis phase of the *Austin Light Rail Implementation Plan* (ATP 2023). Five scenarios were developed to capture a reasonable range of alternatives for evaluation in the DEIS. Financial

---

<sup>2</sup> Ridership forecasts for the year 2040 range from 30,500 to 52,300 daily riders (CapMetro 2020a).

feasibility was a key determinant of the length of the light rail line defined for each scenario, which varies based on the length of at-grade, viaduct, and tunnel segments along the route. The “Partial Underground: UT-Austin to Yellow Jacket” scenario included a tunnel segment between 21st and 7th Streets and an elevated section between 7th Street and East Riverside Drive on Guadalupe Street, crossing Lady Bird Lake by bridge at 1st Street. Due to the high cost per mile of tunnels, this scenario would provide an alignment of 6.6 miles, with the fewest stations among the five scenarios, and would not reach South Austin. It would capture the lowest ridership and serve the fewest key destinations, affordable housing units, and minorities. The community response to the five scenarios strongly favored advancing a system that moves Austinites where they need to go and prioritized the mobility options with greater coverage.

While underground segments of the transit system would avoid the Section 4(f) use of some of the resources in the Project corridor, the high cost would compromise the Project to a degree that it would be unreasonable to proceed considering the Project’s purpose and need. As a result, FTA and ATP have determined that tunnel alternatives would not be prudent alternatives.

## 6.4 Alternative River Crossings

ATP evaluated an alternative to the Trinity Street river crossing at South 1st Street that would avoid the effects at Waller Beach at Town Lake Metro Park. However, this river crossing alignment would affect protected resources on both shores of Lady Bird Lake, including Section 4(f) parkland. In addition, after reasonable mitigation, including the addition of turn lanes and signal optimization, the South 1st Street river crossing would result in substantial unmitigable effects on vehicular and bus traffic in Downtown Austin. Compared to the South 1st Street river crossing, the Trinity Street river crossing would serve more riders and provide greater access to affordable housing units, more key destinations, and the planned development near the Cesar Chavez Station, which is focusing on meeting equity goals in a disadvantaged community. FTA and ATP have determined that the South 1st Street River crossing would not be a prudent alternative because it would compromise the Project’s mobility goals to a degree that it is unreasonable to proceed considering the Project’s purpose and need.

In addition to the South 1st Street and Trinity Street river crossings, other river crossing alignments to the east and west were reviewed and eliminated from consideration due to fatal flaws. An alignment was considered to be fatally flawed if it increased travel times and did not provide for optimal station locations, or if limited ROW would result in residential displacements and difficulty in connecting to Guadalupe Street in Downtown Austin. Due to the extent of protected parkland on both shores of Lady Bird Lake, none of these alignments would avoid Section 4(f) resources.

Based on the foregoing analysis, provided information, and in accordance with the requirements of Section 4(f), FTA determines that there is no feasible and prudent avoidance alternative to Section 4(f) use of resources affected by the Project.

## 6.5 Travis Heights Station Design Option

The Travis Heights Station Design Option would avoid Section 4(f) use of Norwood Tract at Town Lake Metro Park, although it would still result in *de minimis* impacts on other Section 4(f) resources. FTA and ATP recommended the advancement of this Design Option because it is a



feasible and prudent alternative that avoids the Section 4(f) use of Norwood Tract at Town Lake Metro Park. However, Section 4(f) use (permanent acquisition) at Waller Beach at Town Lake Metro Park would still occur under this Design Option.

## 7 Planning Measures to Minimize Harm

In accordance with 23 CFR Section 774.3(a)(2), before approving the use of Section 4(f) property for the Project, FTA must determine that the Project includes all possible planning to minimize harm. Throughout alternatives development and the National Environmental Policy Act process, ATP has applied the following strategies to avoid, minimize, and mitigate effects on Section 4(f) resources:

- Using existing transportation and utility corridors as much as reasonably feasible to keep additional ROW needs to a minimum;
- Coordinating with OWJs to identify Section 4(f) resources to inform design decisions;
- Seeking input from stakeholders and the public regarding the effects of the Project on Section 4(f) resources; and
- Avoiding or reducing effects on Section 4(f) resources using design refinements in coordination with PARD and TPWD.

The Project elements, including the guideway, reconfigured roadways, tree and landscape zones, bicycle and pedestrian facilities, and safety buffers/barriers, vary by location throughout the Study Area based on the needs and available ROW of each segment. In areas with constrained ROW that would result in residential displacements and difficulty in connecting to Guadalupe Street in Downtown Austin, ATP would reduce the width of the proposed ROW to limit property effects and acquisitions where possible. ATP used the following general measures to avoid or minimize property effects in locations of constrained ROW:

- Separate bicycle and pedestrian facilities are included in the design wherever possible, with shared use paths proposed for the areas with constrained ROW (which reduces the Project footprint by 5 feet in each location);
- Tree and furniture/landscaping zones between the bike lanes and sidewalk or between the roadway and shared use paths have been eliminated in constrained ROW locations (which reduces the Project footprint between 5 and 7 feet). Tree and furniture zones are provided wherever possible to provide shade and comfort to the traveling public; and
- The setback distance between property lines and the light rail alignment was reduced to 1 foot in locations of constrained ROW rather than the standard 2 feet.

Measures to minimize harm for the parks where Section 4(f) use would occur include the standard mitigation measures described in Section 5.1 and the additional measures discussed in the following sections.

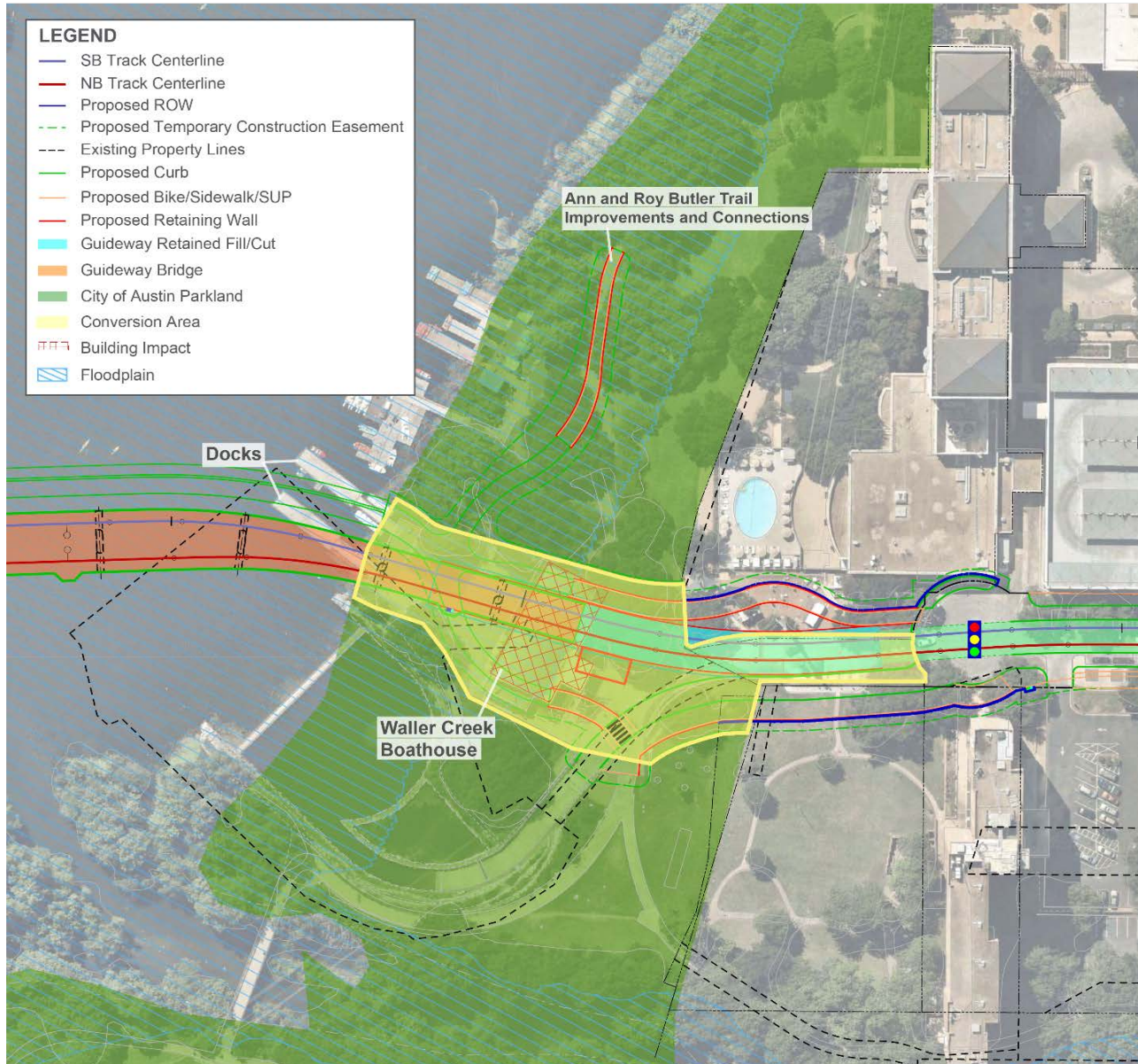
## 7.1 Waller Beach at Town Lake Metro Park and Ann and Roy Butler Hike and Bike Trail

Throughout the design process, ATP coordinated with PARD and TPWD to limit the ROW requirements at Waller Beach at Town Lake Metro Park. ATP has identified design refinements to minimize the Project's footprint to ensure that the main functionality of the park and the Ann and Roy Butler Hike and Bike Trail would not be impaired or unusable because of loss of space.<sup>3</sup> Through design coordination with PARD and TPWD, ATP has reduced the ROW requirements from 58,544 square feet to 45,371 square feet (see earlier plans and meeting minutes in **Attachment C**). ATP coordinated with the City and TPWD on new connections to the Ann and Roy Butler Hike and Bike Trail and reduced both the temporary and permanent parkland effect, which resulted in the current design shown in **Figure 56**. In addition, the original Blue Line project required a larger footprint in the park than the current Project to accommodate a transition from viaduct to a tunnel with the tunnel portal located in the park.

---

<sup>3</sup> ATP would make improvements to the existing trail to enhance use of the park for people with disabilities in accordance with the Americans with Disabilities Act.

Figure 56: Project Design in Waller Beach Park



As discussed above, Waller Beach at Town Lake Metro Park is also protected under Section 6(f) and Section 106. Therefore, the loss of parkland would also be mitigated in accordance with Section 6(f) for the conversion of parkland to an alternate use, which is addressed in **DEIS Appendix H, Section 6(f) Evaluation**. Section 6(f) directs the National Park Service to ensure that replacement parkland is of equal value, location, and usefulness. The relocation of the Waller Creek Boathouse concessionaires and the removal of the docks would meet the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

## 7.2 Norwood Tract at Town Lake Metro Park

Through the design review process, during which ATP coordinated with PARD for the Build Alternative, the effect on Norwood Tract was minimized by including a retaining wall to address

the slope of the hill instead of regrading, which would result in a larger impact, and a shared use path was advanced instead of separate bicycle and pedestrian lanes, reducing the required width by approximately 4 feet.

## 8 Least Overall Harm Analysis

In situations where the Section 4(f) analysis concludes that there is no feasible and prudent alternative to the use of Section 4(f) property for the Project, FTA may approve only the alternative that causes the least overall harm in light of the statute's preservation purpose. The least overall harm is determined by balancing the following factors:

- The ability to mitigate adverse impacts on each Section 4(f) property (including any measures that result in benefits to the property);
- The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection;
- The relative significance of each Section 4(f) property;
- The views of the OWJ(s) over each Section 4(f) property;
- The degree to which each alternative meets the purpose and need for the project;
- After reasonable mitigation, the magnitude of any adverse impacts on resources not protected by Section 4(f); and
- Substantial differences in costs among the alternatives.

The alternative selected must include all possible planning, as defined in 23 CFR Section 774.17, to minimize harm to Section 4(f) property.

ATP's Preferred Alternative would result in the least overall harm because it would avoid the use of Norwood Tract at Town Lake Metro Park. All alternatives would result in the same footprint at Waller Beach at Town Lake Metro Park. As a result, there would be no difference among the alternatives in relation to the seven factors of Least Overall Harm.

## 9 Determination of Section 4(f) Use

Considering the foregoing discussion of the Project's potential use of Section 4(f) properties, avoidance alternatives, and measures to minimize harm, FTA has, based on information provided, made preliminary determinations of:

- use of two Section 4(f) properties, including 2 parks and 1 trail, under the Build Alternative; and
- *de minimis* impacts at 8 parks/trails and 56 historic built properties under the Build Alternative and all Design Options.

Based on the above considerations, there is no feasible and prudent avoidance alternative to the use of Waller Beach at Town Lake Metro Park under the Build Alternative or any of the Design Options. The proposed action includes all possible planning to minimize harm resulting from the use of Waller Beach at Town Lake Metro Park. The Travis Heights Station Design Option would avoid the use of Norwood Tract at Town Lake Metro Park.

There would be no constructive use of Section 4(f) properties under the Build Alternative or any of the Design Options.

FTA and ATP are coordinating with the OWJs for concurrence on the preliminary determinations made for the Project, including those made for the Wooldridge Square Station and Lady Bird Lake Bridge Extension Design Options, and will present final determinations in the Final Environmental Impact Statement and Record of Decision.

Project construction would occur near a number of historic resources in Downtown Austin, especially in locations where the transportation ROW is narrow. At Norwood Tract, retaining wall construction for the Build Alternative would occur approximately 130 feet from 903 Edgecliff Terrace in the Travis Heights-Fairview Park Historic District. FTA and ATP would develop specific mitigation measures in consultation with THC and consulting parties to protect these historic resources during construction. Mitigation measures may include the need for construction protection plans, development of noise and vibration control plans, and vibration monitoring during construction.

## 10 Agency Coordination

Section 4(f) requires coordination with the OWJs over the resources described above (see 23 CFR Section 774.5). Coordination with PARD, TPWD, and THC began during the earlier project development phase as part of the Planning and Environmental Linkages studies for the Orange and Blue Line projects (CapMetro 2020a, 2020b). PARD, the City, and TPWD provided information on parks and trails, and THC was consulted on historic property eligibility. PARD shared information about Land and Water Conservation Fund Act-funded parks, including files from TPWD documenting Land and Water Conservation Fund monies having been allocated to the City for development of Town Lake Metro Park and a map showing the portions of Town Lake Metro Park that were developed by the City using Land and Water Conservation Fund monies.

During the development of this DEIS, ATP met with PARD regularly via bimonthly meetings to review the Project's effects on parkland and trails and to develop measures to minimize harm and mitigate the effects. In a letter dated December 2, 2024, PARD concurred with the *de minimis* impact determinations made by FTA and ATP (see **Attachment C**). Also, ATP met several times with TPWD to review the requirements of the Section 6(f) conversion process.

Regarding historic properties, FTA and ATP initiated consultation with THC under Section 106 for the Project on April 3, 2024, and THC concurred with the APE on May 16, 2024. FTA and ATP will seek concurrence from THC on the determination of effects on historic resources for the Project. In addition, FTA and ATP will engage with Section 106 consulting parties in reviewing

reports, determining the eligibility of the historic properties for listing in the NRHP, and assessing the effects of the Project on those properties.

FTA's and ATP's coordination with OWJs concerning Section 4(f) properties will continue throughout the National Environmental Policy Act process. Based on these coordination activities, and any Section 106 consultation with consulting parties, commitments to avoid or minimize and mitigate effects on the Section 4(f) properties will be reported in the combined Final Environmental Impact Statement and Record of Decision.

## 11 Chapter 26 Evaluation

This section summarizes the effects of the Build Alternative and Design Options on resources protected by Chapter 26 of the Texas Parks and Wildlife Code. Chapter 26 was established to protect public parks, recreational and scientific areas, wildlife refuges, and historic sites from being used or taken by the local or state public agencies for public projects. Chapter 26 protects the same resources as Section 4(f) and also includes land recognized as "scientific areas."

Based on consultation with PARD, ATP did not identify any scientific areas in the Study Area.

While the public involvement requirements under Section 4(f) will be satisfied by the public notice and comment period established for this DEIS, Chapter 26 requires a separate notice and public hearing for any use or taking of protected land, and the entity with jurisdiction over the Chapter 26 resource must consider clearly enunciated local preferences. Chapter 26 does not completely prohibit the use of a protected resource if the findings justify its use. Before taking or changing the use of a protected resource, there must be no feasible and prudent alternative to the use or taking of such land, and the Project would have to include all reasonable planning to minimize harm to the land.

Based on the analysis in this document, FTA and ATP made a preliminary determination that there is no feasible and prudent avoidance alternative to the use of a portion of Waller Beach at Town Lake Metro Park. The permanent use of land from Waller Beach at Town Lake Metro Park, including a portion of the Ann and Roy Butler Hike and Bike Trail, would constitute a Chapter 26 taking or use of publicly owned parkland. Because the Build Alternative and all Design Options would have the same footprint in the park, anticipated effects would be the same for all alternatives.

In accordance with Texas Parks and Wildlife Code, Title 3, Chapter 26, Section 26.001 and Section 26.002, FTA and ATP provide notice that a public hearing will be held to receive input from the public and affected stakeholders on this determination. The public hearing will be held prior to the Final Environmental Impact Statement and Record of Decision. Following public review and input, the City will be asked to approve the use of a portion of Waller Beach at Town Lake Metro Park under Chapter 26 regulations.

## 12 References

- ATP. 2023. *Austin Light Rail Implementation Plan*. May. Accessed April 17, 2024. [https://www.atptx.org/wp-content/uploads/2023/09/20230522\\_RecRpt\\_V14\\_Digital.pdf](https://www.atptx.org/wp-content/uploads/2023/09/20230522_RecRpt_V14_Digital.pdf).
- CapMetro. 2020a. Planning & Environmental Linkages Study. Project Connect Orange Line Corridor. October 1. Accessed May 2024. <https://project-connect-data-portal-atptx.hub.arcgis.com/documents/48837be8eb48403b9876a3c6569bf14f/explore>.
- CapMetro. 2020b. Blue Line / Gold Line Planning and Environmental Linkages Technical Memo. October. Accessed May 2024. <https://project-connect-data-portal-atptx.hub.arcgis.com/documents/d4ba31afbe564d47afee1edcf4b9f53f/explore>.
- City of Austin. 2019. *Our Parks, Our Future: Austin Parks & Recreation Long Range Plan 2020-2030*. Adopted November 14. Accessed March 28, 2024. <https://www.austintexas.gov/sites/default/files/files/Parks/longrangeplan/Our%20Parks%20Our%20Future%20FINAL%20Plan%202019-12-27.pdf>.
- City of Austin. 2024. City of Austin Open Data Portal. Accessed March 28, 2024. <https://data.austintexas.gov/>.
- Federal Highway Administration. 2012. *Section 4(f) Policy Paper*. July 20. Accessed September 3, 2024. <https://www.environment.fhwa.dot.gov/legislation/section4f/4fpolicy.pdf>.
- FTA. 2019. *Standard Operating Procedures for Managing the Environmental Review Process*. December. Accessed April 17, 2024. <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-programs/environmental-programs/55806/fta-sops-managing-environmental-review-process-dec-2019.pdf>.
- TPWD. 2013 TPWD Local Park Grant Program General Information. Accessed August 8, 2024 <https://services.austintexas.gov/edims/document.cfm?id=305337>
- TPWD. 2019. "Texas Natural Diversity Database." *Wildlife Diversity Program*. March 20. Accessed March 29, 2024. [https://tpwd.texas.gov/huntwild/wild/wildlife\\_diversity/txndd/](https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/txndd/).
- TPWD. 2023. Rare, Threatened, and Endangered Species of Texas. Texas Parks and Wildlife Department, Wildlife Division, Diversity and Habitat Assessment Programs. September 1. Accessed March 29, 2024. <https://tpwd.texas.gov/gis/rtest/>.
- U.S. Fish and Wildlife Service. 2023. National Wildlife Refuge System & Fish Hatcheries. Accessed March 29, 2024. <https://www.arcgis.com/apps/webappviewer/index.html?id=e379b7e1fff54f00b826ce18183458bd&extent=-18139024.5238%2C2047562.8107%2C-5615581.8096%2C8377771.7452%2C102100>.

# Attachment A. Parks and Trails within the 0.25-mile Study Area



# Attachment B. Historic Properties within the Area of Potential Effect

# Attachment C. Design Coordination and OWJ Correspondence