

ENVIRONMENTAL ASSESSMENT

SPARKS BOULEVARD PROJECT



Sparks, Nevada

FHWA-NV-EA 23-01, NDOT Project ID 61066, TIP ID WA20190041

Lead Agencies

Federal Highway Administration



Nevada Department of Transportation



Regional Transportation Commission
of Washoe County



January 2023

ENVIRONMENTAL ASSESSMENT SIGNATURES

Submitted by:

DocuSigned by:

Dale Keller

9E38EC1EFE224A0...

01/19/2023

Date

Dale Keller, P.E.
Director of Engineering
Regional Transportation Commission of Washoe County

Approved by:

DocuSigned by:

My-Linh Nguyen

599EF9E7EA1D438...

01/27/2023

Date

My-Linh Nguyen, Ph.D., P.E.
Chief Environmental Division
Nevada Department of Transportation

Approved by:

01/31/2023

Date

Abdelmoez Abdalla, Ph.D.
Environmental Program Manager
U.S. Department of Transportation, Nevada Division
Federal Highway Administration

01/31/2023

Date

Andrea Gutierrez
Transportation Engineer
U.S. Department of Transportation, Federal Highway Administration

This Environmental Assessment has been prepared in accordance with the provisions and requirements of Chapter 1, Title 23, 23 CFR Part 771, relating to implementation of the National Environmental Policy Act of 1969. The Federal Highway Administration may publish a notice in the Federal Register, pursuant to 23 United States Code (USC) §139(I), after the Finding of No Significant Impact is approved. If such notice is published, a claim arising under federal law seeking judicial review of a permit, license, or approval issued by a federal agency for a highway or public transportation capital project shall be barred unless it is filed within 150 days after publication of a notice in the Federal Register announcing that the permit, license, or approval is final pursuant to the law under which judicial review is allowed. If no notice is published, then the periods of time that otherwise are provided by the federal laws governing such claims will apply.

FOR INFORMATION, CONTACT

Jeff Wilbrecht, P.E, Project Manager
Regional Transportation Commission of Washoe County
1105 Terminal Way
Reno, Nevada 89502
(775) 335-1872
JWilbrecht@rtewashoe.com

My-Linh Nguyen, Ph.D., P.E.
Chief, Environmental Division
Nevada Department of Transportation
1263 South Stewart Street
Carson City, Nevada 89712
(775) 888-7687
MNguyen@dot.nv.gov

Abdelmoez Abdalla, Ph.D.,
Environmental Program Manager
Federal Highway Administration
705 North Plaza Street, Suite 220
Carson City, Nevada 89701
(775) 687-1231
Abdelmoez.Abdalla@fhwa.dot.gov

MITIGATION MEASURES

The Regional Transportation Commission (of Washoe County) (RTC) will implement the following list of items that describe measures to avoid, reduce, or otherwise mitigate potential impacts associated with the proposed project. In the construction contractor’s contract with RTC, it will specify mitigation measures and requirements for compliance with federal, state, and local laws. The following list of mitigation measures and commitments are not subject to change without prior written approval of the Nevada Department of Transportation (NDOT) and the Federal Highway Administration (FHWA).

Mitigation Category	Impact	Mitigation Commitment from Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
Air Quality	During construction, there may be localized increases of fugitive dust and temporary construction equipment emissions of Carbon Monoxide (CO), nitrogen oxides, Sulfur Dioxide (SO ₂), volatile organic compounds, and particulate matter.	<p>Construction of the project will include site preparation and surface disturbance over an acre, and the project must obtain a dust-control permit from the Washoe County Air Quality Management District (WCAQMD) (Regulation 040.030 of the District Board of Health Regulations). The contractor will submit a Dust Mitigation Plan that includes measures to control fugitive dust and specifications for construction, in accordance with NDOT’s <i>Standard Specifications for Road and Bridge Construction</i> (NDOT, 2014). Construction mitigation measures may include:</p> <ul style="list-style-type: none"> • Minimizing land disturbance by initiating construction in phases when possible. • Using watering trucks to minimize dust. • Covering trucks when hauling dirt and materials. • Minimizing unnecessary vehicular and machinery activities. • Maintaining construction vehicles and equipment in good, operational condition. • Limiting construction vehicle and equipment idling when possible. • Limiting vehicle paths within the temporary construction area. 	Contractor	Construction

Mitigation Category	Impact	Mitigation Commitment from Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
Recreational Section 4(f) Resources	<p>Acquisition of 0.09 acre of permanent right of way (ROW) along East Prater Way and Baring Boulevard to accommodate roadway and sidewalk improvements. Acquisition of approximately 0.81 acre of temporary easements during construction for construction activities along the roads will be adjacent to Reed High School. The temporary and permanent ROW necessary are narrow strips along the sidewalk adjacent to the roadway and the fence of the school property. Acquisition of the ROW will result in a <i>de minimis</i> use of the Section 4(f) property, and it will not impact the recreational use or activities on the property.</p>	<p>RTC will coordinate with the Washoe County School District to ensure the acquisition of the permanent ROW and temporary easements does not require the use of the recreational fields at Reed High School. RTC will notify the high school district and school administrators about temporary construction detours and disruptions prior to the disruption.</p>	RTC/NDOT/ Contractor	Construction
Floodplains and Water Quality	<p>1) The increase in pavement area will generate flooding/ponding concerns on Sparks Boulevard. 2) Reduction in capacity of the NTD causes an increase in its water surface elevation, leading to flooding concerns.</p>	<p>1) During the final design, the drainage design will ensure the drainage system collects runoff from the widened Sparks Boulevard and conveys it to the North Truckee Drain (NTD). Also, the NTD will not see an increase in peak runoff, as the flow from the Sparks Boulevard roadway runoff will pass earlier than the NTD peak flow conveyed from the upstream end. 2) An NTD hydraulic modeling study is underway, which will evaluate different channel improvements (e.g., retaining walls in lieu of fill placement, channel regrading, etc.) to ensure</p>	RTC/Contractor	Final Design/ Construction

Mitigation Category	Impact	Mitigation Commitment from Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
	<p>3) Potential water quality concerns caused by an additional impervious surface area.</p> <p>4) Existing roadside ditches may have slightly reduced capacity.</p> <p>5) The construction phase has the potential to generate sediments that can flow in a water body.</p>	<p>there is no rise in water surface elevation that results in an adverse impact to the floodplain.</p> <p>3) Roadway improvements will not cause an increase in contaminant loading, as the project design will include newer style drop inlets with sumps and sur-traps to maintain and improve water quality.</p> <p>4) Widening is reducing the flow that reaches these ditches because the roadway drainage system will capture the flows. The design process will ensure these roadside ditches maintain adequate capacity.</p> <p>5) Implement Best Management Practices (BMP) during construction. As part of the development of BMPs for the project, RTC's construction contractor must file a Notice of Intent with the Nevada Department of Environmental Protection's (NDEP) Bureau of Water Pollution Control to obtain coverage under the General Permit for Stormwater Discharges Associated with Construction Activity (NVR100000). Before submitting the Notice of Intent, develop a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will outline temporary and permanent erosion and sediment controls, locate stormwater discharge points, and describe BMPs to implement to prevent or reduce stormwater pollutant discharge associated with construction activities, to the maximum extent practical.</p>		

Mitigation Category	Impact	Mitigation Commitment from Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
Wetlands/ Waters of the U.S.	Clearing/grubbing or filling in vegetation areas will impact approximately 0.51 acre of fringe wetlands and open waters along the NTD.	Mitigation of wetlands will require and include the creation of new or expanded wetland areas within the project study area of the NTD watershed. Minimize clearing/grubbing areas. A Section 404 Nationwide Permit #14-Linear Transportation Projects will be mandatory and obtained from the USACE. The Section 404 permit will outline the wetland mitigation plan. Mitigation will occur at a minimum of a 2:1 creation-to-impact ratio. Minimize clearing/grubbing areas. Mark avoidance areas on final design plans. Obtain a Section 401 Water Quality Certification for impacts to waters of the state. Mark avoidance areas on final design plans. Replant/reseed temporarily impacted areas with native wetland species, per Section 404 permit requirements.	RTC/Contractor	Construction
Biological Resources and Threatened/Endangered Species	Removal of vegetation (12.40 acres) will impact native plant species and increase chances of noxious weed disbursal. Removal of trees and shrubs that provide common wildlife habitats. Construction activities have the potential to affect common nesting birds, particularly if activity occurs within nesting bird season (typically February 1 through August 31). Water diversions in the NTD may affect common fish habitats.	Minimize clearing/grubbing areas. Mark avoidance areas on final design plans. Revegetate with native plant species, with both herbaceous and woody plants. Use standard BMPs to reduce the likelihood of noxious weed disbursal. Contractor will develop a noxious weed management plan and use weed-free materials (e.g., straw, wood-strand mulch, etc.). Conduct nesting bird surveys from March 1 through August 31 (migratory bird nesting season) and prior to the removal of trees and vegetation to minimize impacts to active nests. Perform the survey no more than seven days before the proposed tree or vegetation removal date. If active nests are present, protect the nests with a buffer and limit construction until the young birds leave the nest. Identify, and if feasible, avoid, and protect trees and shrubs nearby the NTD. Coordinate with NDOT, Washoe County, or the City of Sparks (City) to investigate repurposing any removed trees to provide wildlife habitat enhancements within the project or elsewhere. Landscape plans will include revegetation with native species.	RTC/ Contractor	Final Design/ Construction

Mitigation Category	Impact	Mitigation Commitment from Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
Social and Economic Conditions	The short-term construction-related activities may disrupt access to some commercial properties and require temporary closures or detours.	Notify affected business owners and the public about temporary construction detours and disruptions prior to the disruption.	RTC/Contractor	Construction
Acquisitions and Relocations	The project would require 0.9 acre of a permanent ROW and temporary easements to construct the project.	RTC will acquire permanent ROW and temporary construction easements from property owners prior to construction, according to the Uniform Relocation Act and NDOT and RTC policies.	RTC	ROW acquisition
Traffic	The short-term construction-related activities may be disruptive to access some commercial properties and require temporary closures or detours.	Notify affected business owners about temporary construction detours and disruptions prior to the disruption.	RTC/Contractor	Construction
Noise	Modeled noise levels at 306 receivers range from 50.9 A-weighted decibels (dBA) to 74.7 dBA. One hundred fifty-nine receptors are likely to meet or exceed the NDOT noise level criteria of 66 dBA for Activity Categories B and C. Construction noise will be temporary and intermittent, and the intensity will vary for different areas of the project and the activity's type and duration.	At four impacted locations, five noise barriers are underway for construction to reduce noise. In Appendix B of the Traffic Noise Technical Report, both Table 4 and Exhibit 3 describe and show the location of the proposed noise barriers. Proposed construction activities will adhere to local construction noise ordinances. All motorized construction equipment will install mufflers, in accordance with the equipment manufacturer's specifications or a system of equivalent noise-reducing capacity. Mufflers and exhaust systems will maintain good, operating condition and be free of leaks and holes. If feasible, new and replacement traffic noise barriers and screening walls will undergo construction early in each phase to mitigate construction noise. Mitigation measures for stationary and mobile equipment will be included in the contract documents, as needed, and	RTC	Construction

Mitigation Category	Impact	Mitigation Commitment from Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
		could address placement, hours of operation, noise level limits, or proper maintenance of equipment.		
Visual Resources/ Aesthetics	The Preferred Alternative will add noise barriers alongside the ones that already exist. There will be one additional lane in each direction added to the roadway. Vegetation will be cleared for construction and then replanted. The visual character of the corridor will maintain its existing urban/suburban aesthetic.	The project will develop a landscape plan that will restore the Project Area to its current aesthetic once the project is complete. Vegetation in the natural areas along the NTD in the median or adjacent to the roadway will need replanting, as directed, in the landscape plans for the project.	RTC/Contractor	Final design/ Construction
Hazardous Materials	The Preferred Alternative would acquire a sliver (0.03 acre) of the 54-acre parcel at Reed High School, where an underground storage tank and a mercury release occurred in the past and have been remediated. The Sparks Boulevard Gas Main Installation Project, completed in 2019, was inside the Sparks Boulevard ROW and may have detours during construction.	Investigate the sites further as part of the ROW acquisition process. Develop construction plans that include gas utility locations to avoid conflict and relocation, to greatest extent possible. Remove, manage, and dispose of any regulated materials, in accordance with applicable regulations.	RTC	ROW acquisition, Final design/ Construction
Land Use	The Preferred Alternative could result in street closures and/or detours during construction, which could impact access to	The RTC will develop a plan to notify the public and property owners regarding construction schedule, street closures, and detours throughout construction. Access to residences and businesses will be maintained during construction. RTC will maintain Americans with Disabilities Act	RTC	Final design/ Construction

Mitigation Category	Impact	Mitigation Commitment from Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
	various land uses throughout the Study Area.	(ADA) compliant pedestrian access, including temporary safe street crossings and sidewalks.		

CONTENTS

Mitigation Measures ii

List of Acronyms and Abbreviations xii

Introduction 1

 Why is the Project Needed?..... 2

 What is the Purpose of the Project?..... 2

 What are the Logical Termini and Independent Utility of the Project? 2

 What Alternatives were Evaluated?..... 2

What is the Proposed Project? 4

 Regrading 5

 Multi-Use Paths and Sidewalks 5

 What Will Happen if the Proposed Project is Not Implemented? 7

 How Well Do the No-Action Alternative and Preferred Alternative Meet the Purpose and Need?..... 8

 Why are FHWA and RTC Recommending the Preferred Alternative? 8

What are the existing environmental conditions and Impacts Associated with the No- Action Alternative and the Preferred Alternative? 9

 What are the Environmental Resources with No Impact in the Study Area?..... 9

 Farmlands..... 9

 Energy Resources and Minerals..... 9

 Section 6(f) Property 9

 What are the Environmental Resources with Potential Impacts in the Study Area? 9

 Air Quality..... 9

 Floodplains and Water Quality 12

 Wetlands and Waters of the US 13

 Biological Resources..... 17

 Cultural Resources..... 18

 Archaeological Resources..... 19

 Land Use..... 20

 Community Social and Economic Conditions..... 21

 Environmental Justice..... 23

 Acquisitions and Relocations..... 27

 Traffic Noise 30

 Recreation and Section 4(f)Resources..... 39

 Traffic..... 42

Visual Impact Assessment..... 42
 Hazardous Materials..... 43
 Indirect and Cumulative Effects 44
 What Mitigation Commitments will be Made for the Preferred Alternative? 45
 What Additional Clearances are Required for this Project?..... 50
 What Permits are Required for this Project?..... 51
 What Outreach and Opportunities for Public and Stakeholder Participation were Provided? 51
 What Additional Opportunities for Stakeholder Participation will be Provided?..... 52
 References 53

TABLES

Table 1. Purpose and Need Summary for the No-Action Alternative and the Preferred Alternative 8
 Table 2. Air Quality Impacts and Mitigation..... 11
 Table 3. Floodplains and Water Quality Impacts and Mitigation 13
 Table 4. Wetlands and Waters of the US Impacts and Mitigation..... 15
 Table 5. Biological Resources Impacts and Mitigation..... 18
 Table 6. Historic Resource Impacts and Mitigation 19
 Table 7. Archaeological Resource Impacts and Mitigation 20
 Table 8. Land Use Impacts and Mitigation..... 21
 Table 9. Community Facilities in the Study Area 22
 Table 10. Community Social and Economic Impacts and Mitigation..... 23
 Table 11. Environmental Justice Analysis..... 25
 Table 12. Environmental Justice Impacts of the No-Action Alternative Impacts and Preferred Alternative, Sparks Boulevard Project 27
 Table 13. Acquisitions and Relocations Impacts and Mitigation..... 28
 Table 14. Noise Abatement Criteria by Land Use Category 31
 Table 15. Traffic Noise Impacts and Mitigation 32
 Table 16. Noise Barrier Evaluation 33
 Table 17. Recreational and Section 4(f) Resources Impacts and Mitigation..... 41
 Table 18. Traffic Operations Impacts of the No-Action Alternative and Preferred Alternative, Sparks Boulevard Project 42
 Table 19. Visual Impacts of the No-Action Alternative and Preferred Alternative, Sparks Boulevard Project 43

Table 20. Hazardous Materials Impacts of the No-Action Alternative and Preferred Alternative, Sparks Boulevard Project..... 44

Table 21. Summary of Impacts and Mitigation for the Preferred Alternative, Sparks Boulevard Project 45

FIGURES

Figure 1 Location Map 1

Figure 2 Preferred Alternative Typical Section for Sparks Boulevard at East Prater Way 6

Figure 3 Preferred Alternative Typical Section for Sparks Boulevard North of East Lincoln Way 6

Figure 4 Preferred Alternative Typical Section for Springland Drive to Baring Boulevard 7

Figure 5 Wetlands and Waters of the US 16

Figure 6 Percentage of Minority Population by Block Group 24

Figure 7 ROW and Temporary Construction Easements 29

Figure 8 Traffic Noise Receptor and Barrier Locations 35

Figure 9 Traffic Noise Receptor and Barrier Locations (cont'd.) 36

Figure 10 Traffic Noise Receptor and Barrier Locations (cont'd.) 37

Figure 11 Traffic Noise Receptor and Barrier Locations (cont'd.) 38

Figure 12 Recreational Section 4(f) Resources Study Area 40

ATTACHMENTS

- ATTACHMENT A ALTERNATIVES ANALYSIS SUMMARY
- ATTACHMENT B TECHNICAL REPORTS
- ATTACHMENT C NEVADA DEPARTMENT OF TRANSPORTATION, NOTICE OF INTENT
- ATTACHMENT D ROADWAY PLANS
- ATTACHMENT E PUBLIC SCOPING SUMMARY

LIST OF ACRONYMS AND ABBREVIATIONS

ACS	American Community Survey	I	Interstate
ADA	Americans with Disabilities Act	LOS	Level of Service
BLM	Bureau of Land Management	LWCF	Land and Water Conservation Fund Act
BMP	Best Management Practice	MAC	Medium Access Control
CO	Carbon Monoxide	MSAT	Mobile Source Air Toxin
City	City of Sparks	MUP	Multi-Use Path
CAA	Clean Air Act	NAAQS	National Ambient Air Quality Standards
CWA	Clean Water Act	NDEP	Nevada Department of Environmental Protection
CFR	Code of Federal Regulations	NDOT	Nevada Department of Transportation
Corridor Study	Sparks Boulevard Multi-Modal Corridor Study	NEPA	National Environmental Policy Act
dBA	A-weighted decibel	NHPA	National Historic Preservation Act
EA	Environmental Assessment	NRHP	National Register of Historic Places
EJ	Environmental Justice	NAC	Noise Abatement Criteria
EPA	Environmental Protection Agency	NTD	North Truckee Drain
EO	Executive Order	PM ₁₀	Particulate Matter 10 Micrometers and Smaller
FHWA	Federal Highway Administration	POM	Polycyclic Organic Matter
FONSI	Finding of No Significant Impacts	PMT	Project Management Team
GHG	Greenhouse Gases	Project	Sparks Boulevard Environmental Assessment
		ROW	Right of Way

RTC	Regional Transportation Commission (of Washoe County)
RTP	Regional Transportation Plan
RTIP	Regional Transportation Improvement Program
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SWPPP	Stormwater Pollution Prevention Plan
USC	United States Code
VMT	Vehicle Miles Travelled
WCAQMD	Washoe County Air Quality Management District

DRAFT

INTRODUCTION

The RTC—in cooperation with the City, and the NDOT, and the FHWA, the lead state and federal agencies, respectively—is exploring alternatives that would increase safety, reduce congestion and traffic delays, and improve bicycle and pedestrian facilities along Sparks Boulevard between Baring Boulevard and the Interstate 80 (I-80) westbound ramps in the City (see Figure 1).

Figure 1. Location Map



The Sparks Boulevard Environmental Assessment Project (Project) is the continuation of previous efforts by the RTC to study improvements along Sparks Boulevard. More specifically, it advances improvements along the corridor between Baring Boulevard, and the I-80 westbound ramps that were in the *Sparks Boulevard Multi-Modal Corridor Study* (Corridor Study), prepared by the RTC in June 2015. The Corridor Study was based on the *RTC Regional Transportation Plan (RTP) 2013-2035* (RTC, 2013).

Sparks Boulevard is a major corridor that accommodates north-south travel and is a key link connecting the northern Sparks and southern Reno urban areas. It provides access to several major thoroughfares, including Baring Boulevard, East Prater Way, and I-80. Sparks Boulevard is classified as a Medium Access Control (MAC) arterial in the *RTC 2050 RTP* (RTC, 2021), adopted since the publication of the Corridor Study. It is a four-lane-divided roadway, except between the I-80 ramps and East Lincoln Way, where the configuration is a six-lane-divided roadway. The Project is in the updated *RTC Regional Transportation Improvement Program 2021-2025 (RTIP)* (RTC, 2022), as project number WA20190041.

The corridor embodies mixed-use development, with commercial businesses concentrated on the south end, and mixed retail uses surrounded by high-density housing in the north. Land-use intensity will continue to increase with planned development around the Sparks Marina, at Kiley Ranch north of the Study Area, and at other undeveloped sites along Sparks Boulevard outside of the Study Area. The corridor also consists of a combination of multi-use paths, wide sidewalks (8 to 12 feet), typical-width sidewalks (4 to 5 feet), and on-road bicycle lanes.

This Environmental Assessment (EA) is in compliance with National Environmental Policy Act (NEPA) and the environmental regulations and policies of the FHWA which is acting as the lead federal agency.

Why is the Project Needed?

The Project's purpose, needs, and priorities developed during the Corridor Study were informed by public input and form the foundation for developing and evaluating alternative transportation solutions that provide measurable improvements and have logical termini within the Project study area. The RTC, NDOT, and FHWA reviewed and approved *The Purpose and Need Technical Report*, prepared for the Project in March 2021. The report contains the information summarized here about why the Project is necessary (Atkins, 2021) and is included in Attachment B.

The following critical needs demonstrate why improvements are important for Sparks Boulevard:

- Expected increases to traffic volumes would result in increased travel delays along Sparks Boulevard.
- Traffic safety will degrade further as higher crash rates occur along Sparks Boulevard.
- Several locations lack safe pedestrian and bicycle connectivity and/or are not in compliance with ADA standards.
- The Study Area contains gaps in providing safe access to transit stops along the corridor.

What is the Purpose of the Project?

The purpose of the Project is to address operations and capacity deficiencies and to improve connectivity, safety, and mobility for all modes of transportation, including cars, pedestrians, transit, and bicycles.

What Are the Logical Termini and Independent Utility of the Project?

The I-80 westbound ramps on the south and Baring Boulevard on the north are logical termini for this Project, because RTC is planning to restripe Sparks Boulevard from the I-80 westbound ramps to Veterans Parkway with three continuous lanes in each direction as a separate project. North of Baring Boulevard, the existing roadway capacity meets the capacity and operational needs of travel demand into the future.

The proposed construction limits or termini of the Project include an area that encompasses all the traffic operations and safety issues along the corridor, are of sufficient length to address environmental impacts and cumulative effects of the impacts, provide a section that has independent utility, and would neither require nor preclude other future transportation improvements identified in the RTC's Regional Transportation Plan.

What Alternatives Were Evaluated?

The EA evaluates two alternatives: the No-Action Alternative and the Preferred Alternative. The No-Action Alternative would take no action to address the existing deficiencies and safety concerns within the project limits; it would include only routine maintenance along Sparks Boulevard.

The No-Action Alternative would not meet the purpose and need of the Project, as discussed in Section 1, and is not a reasonable solution; however, it is available for evaluation as a comparison to the Preferred Alternative.

To ensure that the Project considered all reasonable alternatives as required by NEPA guidance, the alternatives evaluated in the Corridor Study ensured they would meet the purpose and need of the Project and located within the Project Area. Additional alternatives were developed and evaluated in response to public and agency comments received during scoping, and in response to other operational and design issues within the corridor. The range of alternatives developed and evaluated included options for Sparks Boulevard, as well as options at intersections.

This Project assessed and compared the performance of 30 alternatives for Sparks Boulevard and intersections throughout the Project corridor based on the evaluation criteria. Criteria graded the alternatives based on performance as compared to existing conditions and other alternatives at the same location. In October 2020, the Project team held a virtual workshop to present concept design alternatives for key locations that satisfy the Project's purpose and need. Stakeholders—including the RTC, the City, FHWA, and NDOT—met to provide comments and ask questions, as well as to identify the Preferred Alternative. The Alternatives Analysis Summary in Attachment A provides a detailed review of the alternatives' evaluation process.

DRAFT

WHAT IS THE PROPOSED PROJECT?

The Preferred Alternative includes reconstructing Sparks Boulevard from I-80 to north of Baring Boulevard in the City, widening the corridor from four lanes to six lanes. Multiple residential and commercial development access locations, as well as the intersections along Sparks Boulevard—specifically, Baring Boulevard, O’Callaghan Drive/Springland Drive, East Prater Way, and East Lincoln Way—will undergo reconfiguration and reconstruction to accommodate the widened roadway section and multi-modal improvements for cars, transit, pedestrians, and bicycles. Additionally, at various locations throughout the corridor, the Project proposes approximately 1.8 miles of 10-foot multi-use paths (MUP), approximately 2.8 miles of 6-foot sidewalks, concrete barriers between the MUPs/sidewalks and the through traffic lanes, retaining walls and regrading work along the NTD, and median curbs. The NTD provides a natural feature on the east side of Sparks Boulevard between I-80 and East Prater Way, where it transitions to the median. Just south of Baring Boulevard, the drain is channelized as it transitions to the west side of Sparks Boulevard approximately 200 feet north of Baring Boulevard. The Project would require 0.90 acre of new ROW and would not result in any commercial or residential displacements. Figures 2, 3, and 4 below show the improvements for the different sections on the corridor. Also, the roadway plans for the Project are included in Attachment D.

The following improvements proposed for each intersection and/or segment of Sparks Boulevard under the Project:

- Baring Boulevard Intersection – At the Baring Boulevard and Sparks Boulevard intersection, the Project proposes adding another through lane in both the northbound and southbound directions and tapering these through lanes down north of the intersection. The eastern existing edge of Sparks Boulevard will remain in place and widening will take place to the west. Additionally, the Project proposes to locate the 10-foot MUP along the western side of the southbound lanes starting south of Baring Boulevard separated from the travel lanes by a concrete barrier, a 6-foot sidewalk along the eastern side of the northbound lanes, and a retaining wall, as well as completing regrading work along the portion of the NTD located along the western side of the southbound lanes north of Baring Boulevard.
- Baring Boulevard to Springland Drive/O’Callaghan Drive Segment – To incorporate the additional through lanes from Baring Boulevard to Springland Drive/O’Callaghan Drive, the Project proposes widening the mainline towards the NTD in the median. The Project will construct a 10-foot MUP along the western side of the southbound lanes, a 6-foot sidewalk along the eastern side of the northbound lanes, and intermittent concrete barriers/retaining walls, as well as completing regrading work between the NTD and both directions of Sparks Boulevard.
- Springland Drive/O’Callaghan Drive Intersection – At the Springland Drive/O’Callaghan Drive intersection, the Project proposes to provide left-turn pockets on the inside of Sparks Boulevard. Removing the existing raised median on the bridge above the NTD will allow the intersection to function as a traditional intersection. The Project also proposes improvements to pedestrian access ramps on all the quadrants of the intersection, 6-foot sidewalks along the eastern side of the northbound lanes, retaining walls, and regrading work along the portion of the NTD located west of the northbound lanes, and median curbs. The 10-foot MUP would cross from west of the southbound lanes to the median of Sparks Boulevard through the intersection.
- Springland Drive/O’Callaghan Drive to East Prater Way Segment – The Project proposes widening the roadway between Springland Drive/O’Callaghan Drive to East Prater Way to the inside, while following the existing roadway alignment. Additionally, the Project proposes a 10-foot MUP on the eastern side of the southbound lanes with a separated concrete barrier/retaining wall between the

southbound lanes and the proposed MUP path. The Project will construct a 6-foot sidewalk along the western side of the southbound lanes and eastern side of the northbound lanes and include regrading work with intermittent retaining walls along a portion of the NTD located on the western side of the northbound lanes.

- East Prater Way Intersection – At the East Prater Way intersection, the Project proposes additional through lanes in both the northbound and southbound directions on Sparks Boulevard, along with the addition of a dedicated right-turn lane from southbound Sparks Boulevard to westbound East Prater Way. East Prater Way will maintain the existing eastbound and westbound directions, and the eastbound East Prater Way to the southbound Sparks Boulevard will remove the right-turn median. The Project also proposes a retaining wall and regrading work along the portion of the NTD located east of the northbound lanes. The 10-foot MUP crosses from the median of Sparks Boulevard to east of the northbound lanes.
- East Prater Way to East Lincoln Way Segment – The Project proposes widening the roadway between East Prater Way and East Lincoln Way to the outsides, while following the existing roadway alignment, and reducing the westward taper approximately 1,000 feet south of East Prater Way. Additionally, the Project proposes a 10-foot-wide MUP separated by concrete barrier along the northbound lanes, a 6-foot sidewalk along the western side of the southbound lanes, retaining walls, and regrading work along the portion of the NTD located along the eastern side of the northbound lanes, and median curbs.
- East Lincoln Way to I-80 Westbound Ramps Segment – The existing roadways already contain three lanes in each of the northbound and southbound directions between East Lincoln Way to the I-80 westbound ramps. An addition of a right-turn lane from northbound Sparks Boulevard to eastbound East Lincoln Way will maintain the three through lanes on northbound Sparks Boulevard. The Project proposes to use the existing raised median within this segment.

Regrading

The proposed regrading work that would occur near and in the NTD must maintain the existing capacity and would not increase the capacity of the NTD. Removing and replanting existing landscaping around these portions of the NTD would occur prior to construction completion, including the removal and replacement of trees.

Multi-Use Paths and Sidewalks

The Project proposes a 10-foot MUP that will run the length of the corridor from north of Baring Boulevard to East Lincoln Way. Also, the Project will add 6-foot minimum sidewalks along both sides of Sparks Boulevard from approximately 500 feet north of Baring Boulevard to East Lincoln Way, except in those locations where the MUP is adjacent to the outside travel lanes. At select locations, the Project proposes to install a concrete barrier between the traffic lanes on Sparks Boulevard and the MUP to protect path users from the vehicular traffic on Sparks Boulevard.

Figure 2. Preferred Alternative Typical Section for Sparks Boulevard at East Prater Way

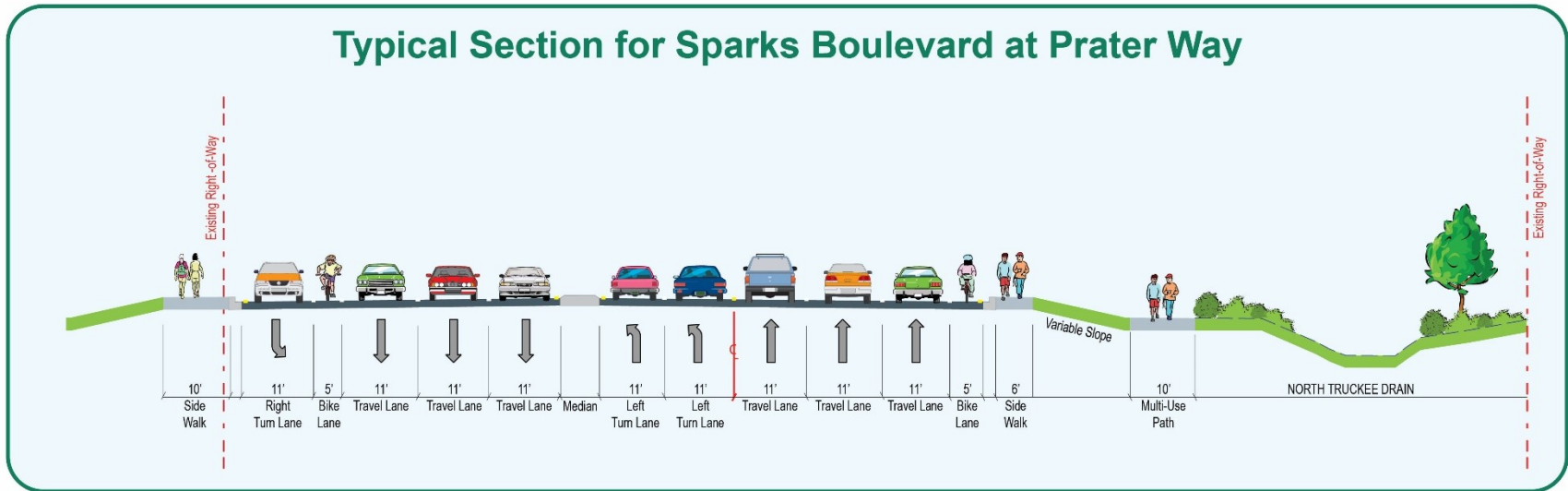


Figure 3. Preferred Alternative Typical Section for Sparks Boulevard North of East Lincoln Way

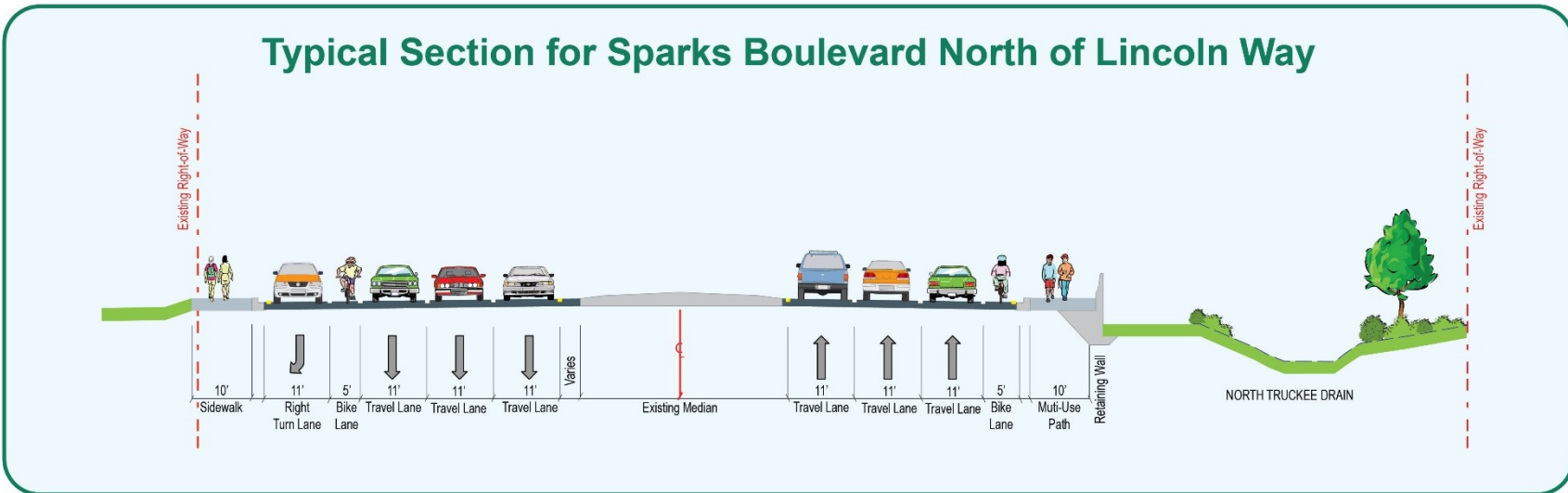
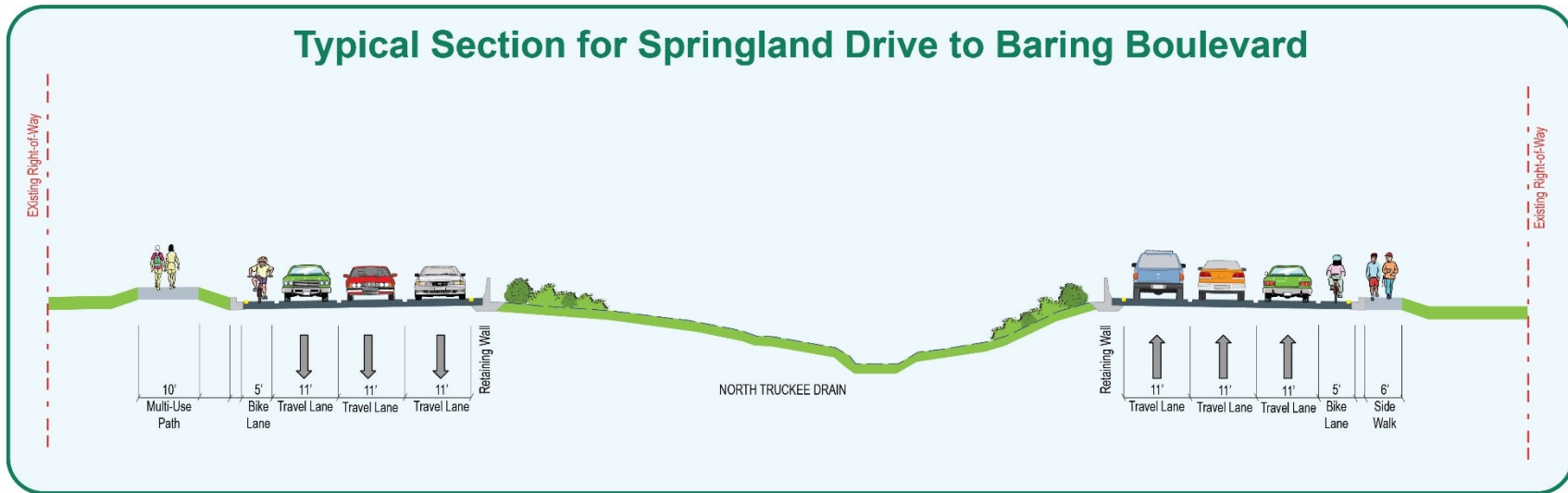


Figure 4. Preferred Alternative Typical Section for Springland Drive to Baring Boulevard



What Will Happen if the Proposed Project is Not Implemented?

Without construction of the Project, the evening peak hour level of service (LOS) and delay at all the study intersections would deteriorate by 2035 compared to existing conditions, and four intersections would operate at unacceptable levels of service (LOS E or F) during the PM peak hour in 2035, as discussed in the Sparks Boulevard Purpose and Need Technical Report, in Attachment B. The intersections on Sparks Boulevard expected to operate below LOS standards (LOS F) include Baring Boulevard, Springland Drive, East Prater Way, and East Lincoln Way.

Each intersection expected to operate at LOS F (three of the four interchanges with delays exceeding two minutes each) will cumulatively contribute to very long travel times and a lack of reliability through the corridor unless improvements occur. Travel delays during the PM peak hour between Baring Boulevard and the I-80 westbound ramps were approximately six seconds per vehicle in 2013 but could increase to greater than 100 seconds per vehicle in 2035.

In addition, the safety improvements that would benefit transit users, pedestrians, and bicyclists would not take effect. Until another project took effect, areas of poor sidewalk conditions would worsen, the gaps in sidewalk and trail connectivity would continue to impair the safety of pedestrians, bicyclists would not have dedicated bicycle lanes, and the poor connectivity would hinder transit users from accessing bus stops. The

Level of Service

LOS is a measure used to analyze roadways based on performance measures like vehicle speed, travel time, safety, and congestion, depending on vehicle volumes. LOS A refers to free-flowing traffic at the speed limit, and LOS F refers to traffic at a standstill with long delays.

higher-than-expected crash rates for vehicles traveling in the corridor would remain unchanged, as discussed in the Sparks Boulevard Purpose and Need Technical Report, in Attachment B.

How Well Do the No-Action Alternative and Preferred Alternative Meet the Purpose and Need?

The No-Action Alternative does not meet the purpose and need of the Project because none of the problems identified in the corridor would improve. The Preferred Alternative fully meets the Project’s purpose to reduce predicted delays along Sparks Boulevard from increased traffic, provide safe pedestrian and bicycle connectivity and access to transit stops, and help traffic safety from degrading in the future.

Table 1 summarizes the specific Project’s needs, and how they address the No-Action Alternative and the proposed Project, as described in the Alternative Analysis Summary, located in Attachment A.

Table 1. Purpose and Need Summary for the No-Action Alternative and the Preferred Alternative

Project Needs	No Action Alternative	Preferred Alternative
Expected increases to traffic volumes would result in increased travel delays along Sparks Boulevard.	Does not reduce travel delays or accommodate expected increase in future traffic volumes.	Will reduce travel time delay along the corridor by accommodating expected future traffic volumes at acceptable levels of service.
Traffic safety will degrade further as higher crash rates occur along Sparks Boulevard.	Does not make safety improvements on the corridor.	Will improve safe driving conditions on Sparks Boulevard with improvements to sight distances, curves, curbs and gutters, and intersection improvements.
Several locations lack safe pedestrian and bicycle connectivity and/or are not in compliance with the ADA standards.	Does not fill the gaps in pedestrian and bicycle facility connections.	Will add sidewalks, a MUP, bicycle lanes, and fill in the missing gaps with ADA-compliant facilities.
There is a lack of connectivity for safe access to transit stops along the corridor.	Does not improve connections to transit stops.	Will provide safe connections to transit stops via improved sidewalk and MUP connectivity.

Why are FHWA and RTC Recommending the Preferred Alternative?

The RTC, NDOT, and FHWA are recommending the Preferred Alternative because it would improve roadway capacity, mobility, and safety for all users, and would improve bicycle and pedestrian connectivity based on the addition of a third lane and bicycle and pedestrian connections. The Preferred Alternative includes transportation improvements that meet the purpose and need of the Project, while protecting the human and natural environment.

WHAT ARE THE EXISTING ENVIRONMENTAL CONDITIONS AND IMPACTS ASSOCIATED WITH THE NO-ACTION ALTERNATIVE AND THE PREFERRED ALTERNATIVE?

The No-Action Alternative and Preferred Alternative were evaluated for impacts to various resources within the Study Area. The sections below describe the environmental resources within the Study Area and the potential impacts for the No-Action Alternative and Preferred Alternative. For more detailed information on each of these resources, see the corresponding technical documentation, in Attachment B.

What Are the Environmental Resources with No Impact in the Study Area?

The following resources are not in the Project Area and are therefore, not included in the discussion of impacts.

FARMLANDS

The Farmland Protection Policy Act (FPPA) (7 Code of Federal Regulations (CFR) 658) protects prime and unique farmlands, which requires NDOT to take measures to avoid adverse impacts. The Study Area is entirely in an urbanized setting, and there is no agricultural production among the land uses in the Study Area.

ENERGY RESOURCES AND MINERALS

No energy resources and mineral resources were evaluated because the Study Area is in an urbanized setting, and no energy sources or minerals are within or near the Study Area.

SECTION 6(F) PROPERTY

Section 6(f) of the *Land and Water Conservation Fund Act (LWCF)* protects recreational lands purchased or improved with funding assistance under the LWCF, and the Secretary of the U.S. Department of the Interior must approve any conversion of property to transportation use. There are no resources purchased or improved under the LWCF, as confirmed by consultation with the Department of Conservation and Natural Resources Division of State Parks.

What Are the Environmental Resources with Potential Impacts in the Study Area?

AIR QUALITY

The *Clean Air Act (CAA)*, amended in 1990, requires the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) for certain air pollutants of concern in order to protect human health and the environment from air pollution. These air pollutants, referred to as criteria pollutants, are CO, nitrogen dioxide (NO₂), particulate matter smaller than 10 micrometers in diameter (PM₁₀), particulate matter smaller than 2.5 micrometers in diameter (PM_{2.5}), SO₂, ozone (O₃), and lead (Pb). Table 2 below summarizes the NAAQS for the criteria pollutants.

In addition, the EPA regulates 188 air toxics, including nine with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers or contributors and non-cancer hazard contributors from the 2011 National Air Toxics Assessment. These Mobile

Source Air Toxics (MSATs) are 1,3 butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM), ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter (POM) (FHWA, 2016). In contrast to criteria pollutants, MSATs do not have ambient air standards, making evaluation of their impacts more subjective. It is not possible to determine whether Project specific MSAT emission levels are significant.

Greenhouse gases (GHGs) have no national standards established, nor has the EPA established criteria or thresholds for ambient GHG concentrations pursuant to its authority to establish motor vehicle emission standards for CO₂ under the CAA, though rulemaking proposed in 2022 will mandate states to set targets for GHG reduction.

Traffic, local emission sources, topography, climate, and regional background concentrations affect the local air quality in the Study Area. The principal climatic features of Nevada are bright sunshine, a small amount of annual precipitation, dry air, and a large daily range of temperatures. The prevailing winds are from the west, and as the warm moist air from the Pacific Ocean ascends the western slopes of the Sierra Nevada, the air cools, condenses, and precipitates. As the air descends the eastern slope, compression warms it and very little precipitation occurs.

EXISTING CONDITIONS

The Study Area is in Hydrographic Area 87, Washoe County, Nevada, which is designated as a maintenance area for CO and PM₁₀ and attainment/unclassifiable for all other criteria pollutants (EPA, 2021a). In addition, Washoe County is currently designated as attainment/unclassifiable for the 2015 O₃ NAAQS (WCHD, 2021).

Areas not meeting NAAQS must prepare, submit, and execute State Implementation Plans (SIPs) demonstrating attainment and maintenance of these standards. SIPs are the roadmaps to clean air in Washoe County. The latest SIP documents for the area are on the Washoe County Health District – Air Quality Management Division (WCAQMD) website: <https://www.washoecounty.gov/health/programs-and-services/air-quality/state-implementation-plans.php>. They are in the Second 10-Year Maintenance Plan for the Truckee Meadows 8-Hour Carbon Monoxide Attainment Area, the 8-hour Ozone Maintenance Plan, the PM 2.5 Infrastructure SIP, and the Redesignation Request and Maintenance Plan for the Truckee Meadows 24-Hour PM₁₀ Non-Attainment Area.

The WCAQMD currently has six air quality monitoring stations throughout Washoe County that monitor concentrations of criteria pollutants. The closest monitoring station to the Study Area is in Sparks located at 750 Fourth Street, Sparks, Nevada. From 2016 through 2020, Washoe County had no exceedances of CO NAAQS; however, the PM₁₀ NAAQS exceeded because of extreme wildfires near the basin.

SENSITIVE RECEPTORS IN THE STUDY AREA

Land uses that are sensitive to air quality include residences, schools, daycare centers, nursing homes, and hospitals. The Study Area includes numerous residences along both sides of Sparks Boulevard. Reed High School is at the intersection of Baring Boulevard and Sparks Boulevard at the northern end of the Study Area.

Table 2. Air Quality Impacts and Mitigation

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
<p>No Impacts</p>	<ul style="list-style-type: none"> The Project meets Regional Transportation Conformity. The Project is federally funded and is included in RTC’s 2050 RTP (RTC, 2021a) and the 2021-2025 RTIP (RTC, 2021b). The RTC adopted the 2050 RTP and 2021-2025 RTIP on March 19, 2021. The EPA concurred that the project is not a project of air quality concern (in their email dated June 8, 2022), because the Preferred Alternative improves LOS and reduces congestion which are generally better for air quality. Also, the Project would not have a significant number of diesel vehicles; does not include new bus and rail terminals and transfer points that would have a significant number of diesel vehicles congregating at a single location; and the project is not in the region’s SIP as a site of possible violation of PM₁₀. Therefore, the Project is not likely to cause or contribute to new localized PM₁₀ violations or increase the severity of any existing violations, and a project-level PM₁₀ analysis is not mandatory. The CO model results shown in the Air Quality Technical Memo, in Attachment B demonstrate there would not be any exceedances of the one-hour or eight-hour NAAQS at any of the worst-case intersections analyzed. Therefore, presumably no intersections within the Project Area would cause or contribute to any new localized violations or delay timely attainment of the CO NAAQS. The amount of MSATs emitted would be proportional to the vehicle miles travelled (VMT), assuming that other variables such as fleet mix are the same. The increase in VMT in the Build Alternative will likely increase MSAT emissions in the vicinity of nearby residences or businesses; therefore, there may be localized areas where ambient concentrations of MSATs would be higher than under the No Build Alternative. Additionally, emissions in the design year will likely be lower than present levels because of the EPA’s national control programs that are likely to reduce annual MSAT emissions by over 90 percent between 2010 and 2050. The magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the Study Area are likely to be lower in the future. 	<p>No</p>	<ul style="list-style-type: none"> The contractor must obtain a dust control permit from the Washoe County Air Quality Management District (WCAQMD) (Regulation 040.030 of the District Board of Health Regulations). The contractor must submit a Dust Mitigation Plan that will include measures to control fugitive dust and specifications for construction, in accordance with NDOT’s <i>Standard Specifications for Road and Bridge Construction</i> (NDOT, 2014). Construction mitigation measures may include: <ul style="list-style-type: none"> Minimizing land disturbance by initiating construction in phases when possible. Using watering trucks to minimize dust. Covering trucks when hauling dirt and materials. Minimizing unnecessary vehicular and machinery activities. Maintaining construction vehicles and equipment in good, operational condition. Limiting construction vehicle and equipment idling when possible. Limiting vehicle paths within the temporary construction area.

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
	<ul style="list-style-type: none"> Based on the nature of GHG emissions and the exceedingly small potential GHG impacts of Preferred Alternative, GHG emissions from the Project will not result in "reasonably foreseeable significant adverse impacts on the human environment" (40 CFR 1502.22(b)). The GHG emissions from the Preferred Alternative would be insignificant during construction of the project and would be similar to the No-Build Alternative during operation. Therefore, the GHG emissions from the project would not play a meaningful role in determining the environmentally preferable alternative or selecting the Preferred Alternative. For these reasons, no alternatives-level GHG analysis has been mandatory for this Project. The project is in the RTC's 2050 RTP and 2021-2025 RTIP. Therefore, the project meets the project-level conformity requirements. Construction of the project will include site preparation and surface disturbance over an acre, and there may be localized increases of fugitive dust and temporary construction equipment emissions of CO, nitrogen oxides, SO₂, volatile organic compounds, and particulate matter. 		

FLOODPLAINS AND WATER QUALITY

The *Clean Water Act (CWA)*, enforced by the EPA, requires states to publish an annual list of water bodies not meeting their beneficial uses because of excess pollutants. These pollutants can occur naturally or result from human activity. In Nevada, a water body is also on the Section 303(d) list, if a fishing, drinking, or swimming advisory were in effect for the water body during the listing.

Floodplains provide many functions and benefits, including flood retention and storage, habitat, and filtering of pollutants from stormwater runoff, and they are managed by the Federal Emergency Management Agency (FEMA). Executive Order (EO) 11988 requires federal agencies to avoid, to the extent possible, the long-term and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development, wherever there is a practicable alternative.

EXISTING CONDITIONS

Surface waters within the Study Area are bound to the NTD ditch. The NTD flows alongside Sparks Boulevard throughout the Project site and is responsible for draining much of the Sparks catchment area south towards the Truckee River. Existing drop inlets and storm drains are responsible for draining the roadway during storm events. Development and roads with a very straight alignment and several road crossings confine the NTD. Vegetation along the channel ranges from sparse to very robust in isolated areas. The channel transitions to a concrete trapezoidal channel near

I-80. The Sparks Boulevard Floodplains and Water Quality Technical Memo in Attachment B contains the full description and impact analysis for the resources.

Table 3. Floodplains and Water Quality Impacts and Mitigation

No-Action Alternative Impacts	Preferred Alternative	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
<p>No Impacts</p>	<ul style="list-style-type: none"> The Project may have a minor impact to the floodplains because the improvements result in additional impervious area of about 9.5 acres. The increased pavement will generate higher runoff, which will have to flow into the drainage system. Overall, the minor increase in runoff from Sparks Boulevard will not cause any flooding/ponding impacts on Sparks Boulevard, as the design will ensure adequate facilities for draining the roadway runoff to the NTD. Also, the flows from the roadway runoff and the peak flow from the NTD will not combine because of separate arrival times, so it will not affect the NTD peak flow. The Project will cause a negligible impact to water quality, with the minor contaminant loading from additional pavement. The Project may reduce or replace the existing roadside ditches. The construction phase has the potential to generate sediments that can flow in a water body. 	<p>No. The addition of curbs and gutters to channel additional runoff to stormwater treatment at drop inlets will avoid any cumulative effects to water quality.</p>	<ul style="list-style-type: none"> Final drainage design will ensure that runoff from the widened Sparks Boulevard collects by the drainage system and conveys to the NTD. In the proposed condition, all street flow will concentrate along curbs and gutters or barrier rail and will collect by newer style drop inlets with a sump and sur-trap to maintain and improve water quality. This will mitigate against pollutants generated from the pavement degradation, vehicular traffic, and winter road maintenance that collects on the additional impervious surface. Widening is reducing the flows that reach roadside ditches because the roadway drainage system will capture the flows. The design process will maintain adequate capacity for these roadside ditches. The Project will implement BMPs during construction. As part of the development of BMPs for the Project, RTC's construction contractor must file a Notice of Intent with NDEP's Bureau of Water Pollution Control to obtain coverage under the General Permit for Stormwater Discharges Associated with Construction Activity (NVR100000). Before submitting the Notice of Intent, develop a SWPPP. The SWPPP will outline temporary and permanent erosion and sediment controls, locate stormwater discharge points, and describe BMPs to implement to prevent or reduce stormwater pollutant discharge associated with construction activities, to the maximum extent practical.

WETLANDS AND WATERS OF THE U.S.

Impacts to wetlands and other aquatic habitats may be subject to regulation under Section 404 of the CWA, or other state and federal statutes. The USACE administers the regulatory program.

EXISTING CONDITIONS

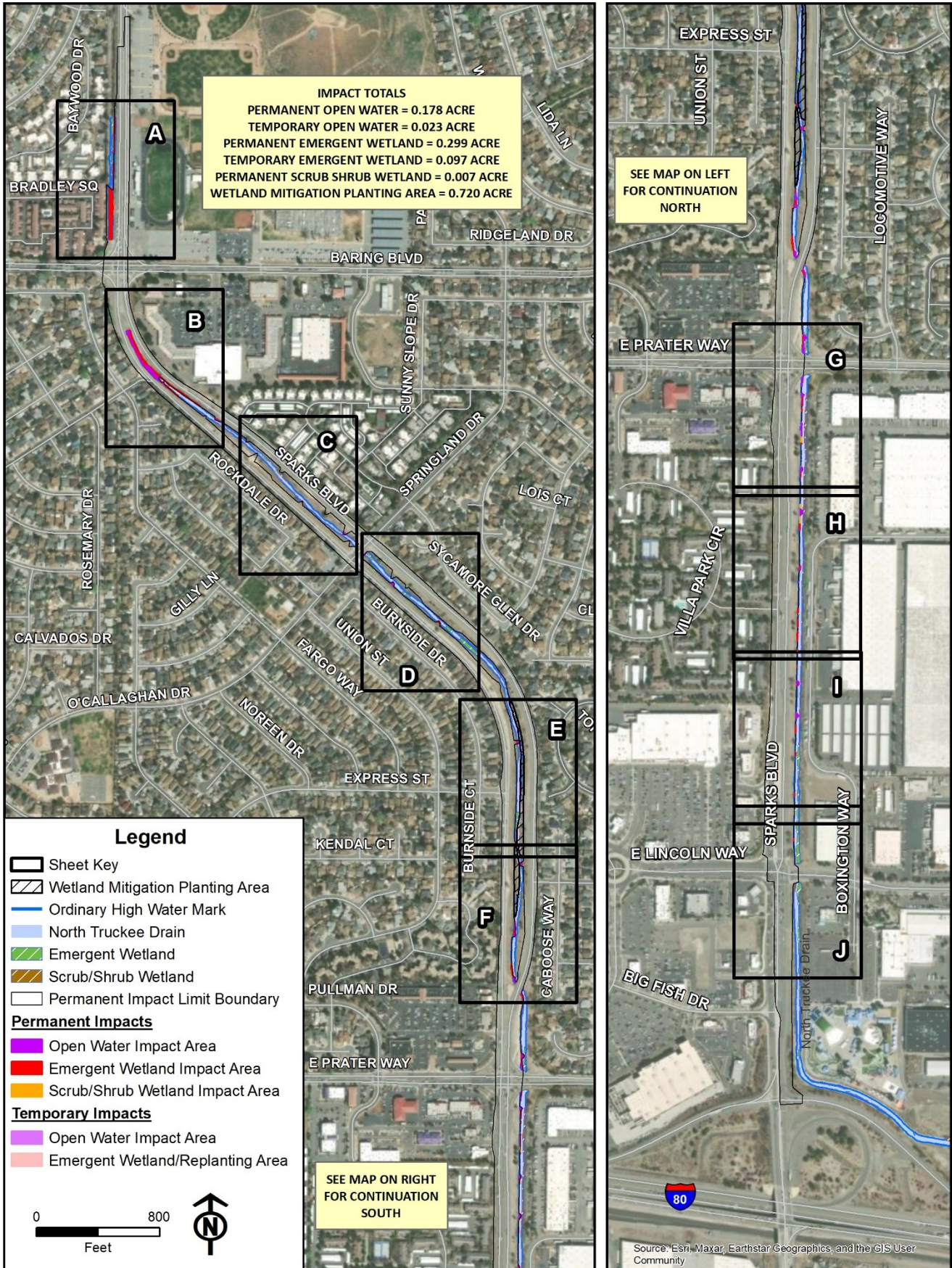
The wetland community in the Study Area is the dominant fringe wetland type found along both banks of the NTD and occasionally within the stream channel, as shown in Figure 5, and described in the Wetland Delineation Report included as part of the Biological Resources Technical Report, in Attachment B. There are 2.89 acres of wetlands along the NTD, including both emergent and scrub/shrub, are contiguous on each side of the channel with few breaks. The habitat provided by this community type is marginal, and the USACE has to decide on a jurisdictional determination for the wetlands.

The impacts to the wetlands in the NTD will require the RTC to obtain a 404 Nationwide 14 permit from the USACE and a 401 Water Quality Certification permit from the State of Nevada Division of Environmental Protection. The permit takes up to 45 days of the approval of the Finding of No Significant Impacts (FONSI) for the EA.

Table 4. Wetlands and Waters of the US Impacts and Mitigation

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
<p>No Impacts</p>	<ul style="list-style-type: none"> • Re-grading the NTD channel to accommodate the roadway reconstruction will impact 0.299 acre of wetlands that are primarily herbaceous vegetation along the NTD, as shown in the Biological Resources Technical Report, in Attachment B, and in Figure 5. • Re-grading the NTD channel to accommodate the roadway reconstruction will would impact 0.007 acre of wetland areas dominated by sandbar willow or similar wetland shrub species. • Re-grading the NTD channel to accommodate the roadway reconstruction will would impact 0.178 acre of open water areas in the NTD. • Construction activities may require the clearing and grubbing of wetland vegetation and temporary fill in the waters of the U.S. 	<p>No</p>	<ul style="list-style-type: none"> • Mitigation for wetlands will include creation of new or expanded wetland areas within the Project Study Area within the NTD. The Draft Wetland Mitigation Plan is in Appendix E of the Biological Technical Report, in Attachment B. • A Section 404 Nationwide Permit #14 Linear Transportation Projects is mandatory and obtained from the USACE. The 404 permit will outline the final mitigation plan. Mitigation will occur at a minimum of a 2:1 creation-to-impact ratio. • Obtain a Section 401 Water Quality Certification for impacts to waters of the state. Replant/reseed temporarily impacted areas with native wetland species, per Section 404 permit requirements. The 401 permit will include the final mitigation plan. Mitigation will occur at a minimum of a 2:1 creation-to-impact ratio. • Mark avoidance areas on final design plans. Minimize clearing/grubbing areas. Mark avoidance areas on final design plans. • Replant/reseed temporarily impacted areas with native wetland species, per Section 404 permit requirements.

1 Figure 5. Wetlands and Waters of the U.S.



1 **BIOLOGICAL RESOURCES**

2 Federal statutes to protect biological resources include the Endangered Species Act of 1973, the Migratory Bird Act of 1918, and the Bald and
3 Golden Eagle Protection Act of 1940, among others. Several state agencies, including the Nevada Division of Natural Heritage (NDNH), the Nevada
4 Department of Wildlife (NDOW), and the Nevada Division of Forestry (NDF) maintain lists and/or records of state protected species. The Study
5 Area surveyed for the presence of the vegetation communities, wildlife habitat, and special status species with the potential to occur within its
6 area. The survey included state and federally protected threatened, endangered, proposed, and candidate species, along with general wildlife.

7 **EXISTING CONDITIONS**

8 Most of the Study Area contains developed land that includes all man-made features associated with roadways, sidewalks, paths, buildings, and
9 ornamental or non-native landscaping (e.g., Kentucky bluegrass [*Poa pratensis*] and ornamental trees like maple species [*Acer* spp.]). Small areas of
10 natural vegetation and wildlife habitat in the Study Area include grasslands, scrub/shrub forest, fringe wetlands, stream, and drainage swale.
11 These habitat types are found along the NTD channel that runs from north of Baring Boulevard, then south to the I-80/Sparks Boulevard
12 interchange.

13 No critical habitat for any threatened or endangered species occurs within the Study Area. The vegetation communities in the Study Area provide a
14 variety of habitat types for nesting birds and a variety of common fish and wildlife species. Detailed information is in the Biological Resources
15 Technical Report, in Attachment B.

1 **Table 5. Biological Resources Impacts and Mitigation**

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for Preferred Alternative
No Impacts	<ul style="list-style-type: none"> The Preferred Alternative will have both direct and indirect impacts on biological resources within and adjacent to the NTD due to clearing and grubbing activities, lane widening, and drainage improvements. Removal of vegetation (12.40 acres) will impact native plant species and increase chances of noxious weed disbursal. Biological resources could impact the removal of trees and shrubs that provide common wildlife habitat. Vegetated areas disturbed during construction will be revegetated with native plants, according to landscaping plans for the Project. No sensitive habitats, vegetation communities, or special-status plant species occur within the Study Area and thus, the Proposed Action will not impact them. Construction activities have the potential to affect common nesting birds, particularly if activity occurs within nesting bird season (typically February 1 through August 31). Removal of vegetation (12.40 acres) will impact native plant species and increase chances of noxious weed disbursal. Water diversions in the NTD may affect common fish habitats. 	No	<ul style="list-style-type: none"> The RTC will require the contractor to minimize clearing/grubbing areas; mark avoidance areas on final design plans; revegetate with native plant species, with both herbaceous and woody plants; and use standard BMPs to reduce the likelihood of noxious weed disbursal. The contractor will develop a noxious weed management plan and use weed-free materials (e.g., straw, wood-strand mulch, etc.). The RTC will require the contractor to conduct nesting bird surveys between March 1 and August 31 (migratory bird nesting season) and prior to the removal of trees and vegetation to minimize impacts to active nests and perform the surveys no more than seven days before the proposed tree or vegetation removal date. If active nests are present, protect the nests with a buffer and limit construction until the young birds leave the nest. The RTC will require the contractor to identify, and if feasible, avoid and protect trees and shrubs adjacent to the NTD or repurpose those removed. The RTC will require the contractor to coordinate with NDOT, Washoe County, or the City to investigate repurposing any removed trees to provide wildlife habitat enhancements within the project or elsewhere. Landscape plans will include revegetation with native species.

2
3 **CULTURAL RESOURCES**

4 RTC, NDOT, and FHWA followed the consultation process for historic properties in accordance with the 2020 Programmatic Agreement to comply
5 with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. NDOT, on behalf of FHWA, consulted with the following
6 interested parties by either email, phone, or in person:

- 7
8
- State Historic Preservation Office
 - City of Sparks

- DII Maintenance

There were no concerns regarding public interest of the NHPA surrounding this project. NDOT, FHWA, BLM, and SHPO identified no additional interested parties.

EXISTING CONDITIONS

The architectural survey identified a total of 15 historic-age resources within the Project’s Area of Potential Effect (APE)—inclusive to a segment of the NTD, the Park Place Neighborhood Resource Group, and 13 buildings. The recorded portions of the NTD were ineligible for listing in the National Register of Historic Places (NRHP) by the SHPO. The Park Place Neighborhood Resource Group (D397), an example of a late mid-century residential development that began construction in approximately 1970, the D397 is ineligible for listing in the NRHP under Criteria A, B, C, or D. The 13 buildings surveyed do not possess historical associative significance, nor are they architecturally significant. Therefore, the 13 buildings are not individually eligible for listing in the NRHP under Criteria A, B, C, or D.

NDOT consulted with the Nevada SHPO and received concurrence in November 2020 on the proposed APE. The SHPO consulted on the determination of eligibility and effects in March 2022 and received no response within 30 days. Therefore, NDOT assumes concurrence on the determination of No Historic Properties Affected, and the Project has been cleared for cultural resources, per the 2020 Programmatic Agreement Stipulation V(E)(1)(b).

Table 6. Historic Resource Impacts and Mitigation

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
No Impacts	No historic properties affected.	No	N/A

ARCHAEOLOGICAL RESOURCES

RTC, NDOT, and FHWA followed the consultation process for archaeological resources in accordance with the Programmatic Agreement to comply with Section 106 of the NHPA of 1966, as amended. NDOT, on behalf of FHWA, consulted with the following interested parties by either email, phone, or in person:

- State Historic Preservation Office
- City of Sparks
- DII Maintenance

Four pre-contact sites identified within the project’s proposed area of potential effects: WA3013, 3014, 3015, and 3016. These sites were mostly isolated pre-contact lithic scatters, although one also contained historic artifacts. Since 1982, each of the four previously recorded sites has seen heavy urban development. These development activities most likely destroyed any cultural deposits. The sites are presumably nonexistent. No

1 concerns regarding public interest of NHPA surrounding this project were apparent. NDOT, FHWA, Bureau of Land Management (BLM), or SHPO
 2 identified no additional interested parties.

3 **EXISTING CONDITIONS**

4 The area of potential effect contains four previously recorded archaeological sites. All sites are now noticeably nonexistent due to human activities
 5 that disturbed the sites over the past decades.

6 NDOT consulted with the Nevada SHPO in March 2022 and received no response within 30 days. In addition, FHWA initiated formal government-
 7 to-government consultation with the following tribes, through letters dated February 14, 2022:

- 8 • Washoe Tribe of Nevada and California
- 9 • Reno-Sparks Indian Colony
- 10 • Pyramid Lake Paiute Tribe

11
 12 FHWA determined that the consulted tribes had a reasonable opportunity to identify their concerns about historic properties [36 CFR 800.2
 13 (c)(2)(ii)(A)], and there are no Native American concerns regarding the NHPA issues surrounding the Project, as proposed. If additional
 14 consultation occurs, FHWA will contact the SHPO and interested parties, as appropriate.

15 Therefore, NDOT assumes concurrence on the determination of No Historic Properties Affected, per 2020 PA Stipulation V(E)(1)(b), and the Project
 16 has been cleared for cultural resources.

17 **Table 7. Archaeological Resource Impacts and Mitigation**

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
No Impacts	No archaeological properties affected.	No	N/A

18
 19 **LAND USE**

20 There are six plans from state and local agencies that address land use and roadways in the Study Area. The plans state the need for efficient
 21 transportation facilities, improved access to all modes of travel, and an integrated approach to land use and transportation.

22 **EXISTING CONDITIONS**

23 Land use in the Study Area differs north and south at East Prater Way. North, between Baring Boulevard and East Prater Way, is a predominately
 24 suburban, single-family residential development with a range of densities between three to eight dwelling units per acre. There is also a multi-
 25 family residential development located south of East Prater Way and south of Baring Boulevard. A low-density commercial development and Reed
 26 High School are at Baring Boulevard. In the south, between East Prater Way and the I-80 westbound ramps, land uses are predominately

1 industrial, warehouse, and commercial. This portion of the Study Area contains the Legends shopping and entertainment district, Sparks Marina
 2 Park, and Wild Island Water Park.

3 **Table 8. Land Use Impacts and Mitigation**

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
No Impacts	<ul style="list-style-type: none"> Provides efficient transportation facilities, improves access to all modes of travel and supports better access to existing land uses throughout the Study Area. The Project is consistent with local and regional plans. There would be no impact on development trends and no foreseeable impacts of development by the Project. Construction of the Preferred Alternative could result in street closures and/or detours, which could impact access to various land uses throughout the Study Area. 	No	<ul style="list-style-type: none"> RTC will require the contractor to develop a plan for communicating all temporary construction detours and disruptions to affected business owners prior to the disruption. Residences and businesses will maintain access during construction. RTC will maintain ADA-compliant pedestrian access, including temporary safe street crossings and sidewalks.

4 **COMMUNITY SOCIAL AND ECONOMIC CONDITIONS**

5 Communities are places where people reside and share daily activities. The northern portion of the Study Area contains single-family residential
 6 and low-density commercial developments. South of East Prater Way, the development transitions primarily to warehouse and commercial land
 7 uses. U.S. Census data was available to evaluate the social and economic characteristics of the Study Area. While Census data for the City, Washoe
 8 County, and the State of Nevada was for comparison purposes, Washoe County data was the primary comparison to the block groups because it
 9 represents the widest community of travelers who use Sparks Boulevard. Data was obtained from the American Community Survey (ACS) 5-year
 10 Estimates (2015-2019) and other state and local resources.

11 **EXISTING CONDITIONS**

12 As of 2019, there were approximately 11,699 residents living in the demographic Study Area. Approximately 55.8 percent of the population was
 13 White, and 44.2 percent was part of a minority population. People who identify as Latino and Asian consist of the largest group of minority
 14 residents in the demographic Study Area.

15 The corridor exhibits mixed-use planning, with commercial and multi-family dwellings on the south end, and Reed High School surrounded by low-
 16 density housing to the north. There are many community-serving facilities (e.g., churches, schools, parks, etc.) among these uses in the Study Area,
 17 as listed in Table 9.

1 **Table 9. Community Facilities in the Study Area**

Facility Name	Type	Public or Private?	Serves a Specific Population?	Adjacent to the Project?	Address
Pah Rah Mountain Park	Recreation	Public	No	No	3545 Vista Boulevard
Korean Group of Jehovah's Witnesses	Church	Private	Yes – Korean population	No	3400 Spanish Springs Road
Church of Jesus Christ of Latter-Day Saints	Church	Private	No	No	7625 Shadow Lane
Shadow Mountain Park Complex	Recreation	Public	No	Yes	330 Sparks Boulevard
Edward C. Reed High School	Education	Public	Yes – children	Yes	1350 Baring Boulevard
Alf Sorensen Community Center	Recreation	Public	No	Yes	1400 Baring Boulevard
Church of Jesus Christ Spirit Filled	Religious	Private	No	No	3175 Goldy Way
Freedom Fellowship Foursquare	Religious	Private	No	No	1273 Baring Boulevard
A Child's World Preschool	Education	Private	Yes – children	Yes	2301 Sparks Boulevard
Van Meter Park	Recreation	Public	No	No	1300 O'Callaghan Drive
Diedrichsen Elementary School	Education	Public	Yes – children	No	1735 Del Rosa Way
Katherine Dunn Elementary School	Education	Public	Yes – children	No	1135 O'Callaghan Drive
Willow Creek Park	Recreation	Public	No	No	East Prater Way and Parlanti Lane
Sparks Police Department	Public safety	Public	No	No	1701 East Prater Way
Sparks Justice Court	Municipal	Public	No	Yes	1675 Prater Way
Alpine Academy	Education	Private	Yes – children	Yes	605 Boxington Way
Faith Community Church	Religious	Private	No	Yes	605 Boxington Way #112
Horizon Christian Church	Religious	Private	No	No	1995 East Prater Way
Sparks Marina Park	Recreation	Public	No	No	300 Howard Drive

2

1 **Table 10. Community Social and Economic Impacts and Mitigation**

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
No impacts	<ul style="list-style-type: none"> Provides efficient transportation facilities and improves access to all modes of travel for all members of the community. The short-term construction-related activities could disrupt access to some commercial property and require temporary closures or detours. However, these impacts would be temporary and would not occur at any location for the entire duration of construction. 	No	<ul style="list-style-type: none"> RTC will notify affected business owners and residents about all temporary construction detours and disruptions prior to the disruption.

2

3 **ENVIRONMENTAL JUSTICE**

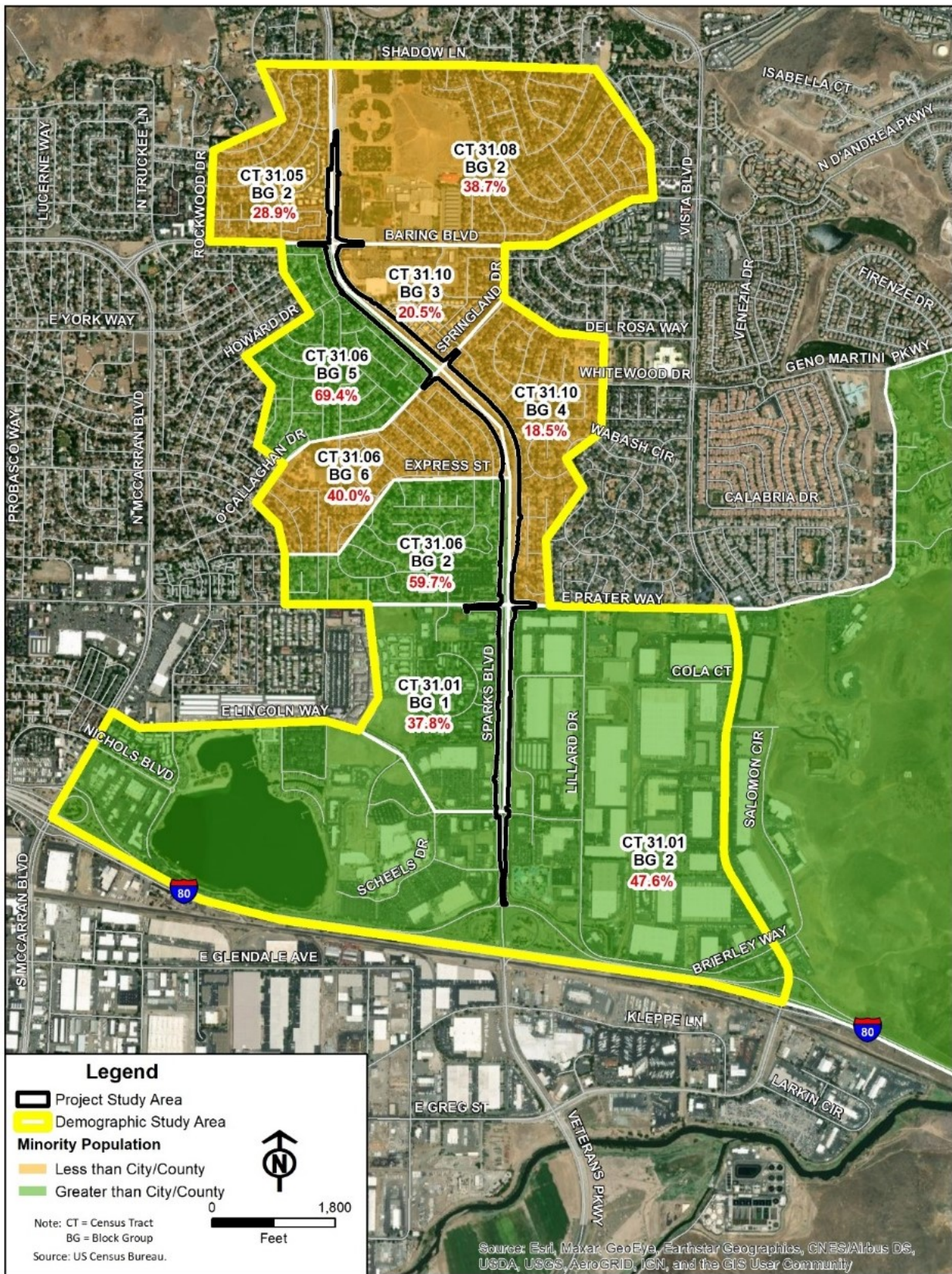
4 Environmental justice (EJ) involves procedures to identify and address disproportionately high and adverse human health or environmental effects
 5 of Preferred Alternatives on minority and low-income populations. Analysis involves identifying affected low-income or minority populations, and if
 6 present, targeted outreach, and assessment of adverse effects on these populations. For the purposes of identifying an EJ population, an EJ
 7 minority community exists when either the minority population is more than 50 percent or the percentage of the minority population of the affected
 8 area is meaningfully greater than the City or county. To determine if a low-income EJ community exists in an area, NDOT’s Environmental
 9 Services Procedures Guide states that while there is no set threshold, many EJ analyses use a threshold of 10 percent higher than the county
 10 average to determine the location of a low-income population in the Study Area (NDOT, 2018). When determining the locations of minority
 11 populations in the demographic Study Area, the Project team decided to use Census block group data instead of examining data at the block level.
 12 The most recent block level data is from 2010; although, data from 2010 did not likely portray the minority populations accurately in this area. As
 13 such, 2019 block group level data was used.

14 While Census data for the City, Washoe County, and the State of Nevada was also for comparison purposes, Washoe County data was the primary
 15 comparison to the block groups in the demographic Study Area. The ACS 5-year Estimates (2015-2019) and other state and local resources provided
 16 the data.

17 **EXISTING CONDITIONS**

18 Census data indicate that five of the nine block groups in the demographic Study Area have a total minority population that is greater than
 19 Washoe County (37.8 percent), as shown in Figure 6. As shown in Table 11, three of the nine block groups (CT 31.01, BG 22; CT 31.06, BG 2, and
 20 BG 5) are considerably greater than the City and/or Washoe County. These block groups are likely EJ communities based on the minority status of
 21 the populations.

1 Figure 6. Percentage of Minority Population by Block Group



2

1 **Table 11. Environmental Justice Analysis**

2019 Census Geography		Total Population	Total Minority Population ¹	Percentage Minority Population	Percent Hispanic or Latino Ethnic Population	Threshold for EJ Status for Minority Population Met? ²	Total Households	Households Under Poverty Level	Percentage of Households Under Poverty Level	Threshold for EJ Status for Low-Income Population Met? ²
Census Tract	Block Group									
31.01	1	1,308	495	37.8%	30.0%	No	775	106	13.7%	No
	2	1,344	640	47.6%	27.0%	Yes	652	62	9.5%	No
31.05	2	979	283	28.9%	17.7%	No	411	41	10.0%	No
31.06	2	1,486	887	59.7%	33.8%	Yes	593	17	2.9%	No
	5	2,094	1,454	69.4%	50.5%	Yes	644	46	7.1%	No
	6	923	369	40.0%	21.9%	No	414	66	15.9%	No
31.08	2	1,864	721	38.7%	24.7%	No	658	25	3.8%	No
31.10	3	605	124	20.5%	3.5%	No	311	17	5.5%	No
	4	1,096	203	18.5%	0.0%	No	439	0	0.0%	No
City of Sparks		105,011	48,382	46.1%	34.7%		38,887	3,457	8.9%	
Washoe County		471,519	178,181	37.8%	25.0%		191,091	19,513	10.2%	
Nevada		2,972,382	1,509,145	50.8%	28.7%		1,098,602	137,986	12.6%	

1. Per CEQ and FHWA guidance, the total minority population is comprised of the following population groups: Black; Hispanic or Latino; Asian American; American Indian or Alaskan Native; and Native Hawaiian and Other Pacific Islander. However, the U.S. Census recognizes Hispanic or Latino as an ethnic category can include persons of any race. As a result, the Hispanic or Latino population is considered exclusive of race in Exhibit 8. As identified in Exhibit 8, the Hispanic or Latino population in one block group in the demographic Study Area meets the guidance criteria in identifying EJ populations.

2. The minority population percentage of the affected area is meaningfully greater than the appropriate unit (city or county) of geographic analysis. It has become generally accepted in environmental planning practice for federal projects that “meaningfully greater” is 10 percent or greater than the jurisdiction against which the social and economic data is compared.

2 Low-income households are defined as households with a median household income at or below the Department of Health and Human Services
 3 (DHHS) 2022 poverty level. The 2022 poverty guidelines for the 48 contiguous states and the District of Columbia state the low-income threshold is
 4 \$27,500 for a family of four (DHHS, 2022). There are no Census block groups in the Study Area that have a median household income below the
 5 DHHS poverty level. Two block groups contain a higher percentage of people living below the poverty level than the City (8.9 percent), Washoe
 6 County (10.2 percent), and the State of Nevada (12.6 percent), as shown in Table 11 above. However, these block groups may not contain a
 7 meaningfully greater percentage of low-income, because they are less than 10 percent higher than the City or county, and the Study Area is not
 8 likely a low-income community.

- 1 During the construction period, the Preferred Alternative would cause noise in residences nearby Sparks Boulevard. Additional noise impacts
2 would occur after the construction period due to increased traffic on Sparks Boulevard. However, the construction of five noise barriers at four
3 locations along Sparks Boulevard will mitigate the impacts. The locations are the Springland Village Condominiums on the east side of Sparks
4 Boulevard south of Baring Boulevard; at the Willow Creek Villas on the west side of Sparks Boulevard north of East Prater Way; at the Park Vista
5 Apartments on the west side of Sparks Boulevard south of East Prater Way; and at the residences south of Baring Boulevard at southbound Sparks
6 Boulevard. These noise barriers would reduce the noise levels in affected locations. As such, the proposed Project would not result in noise impacts
7 that disproportionately affect EJ block groups in the demographic Study Area. There will be no residential or commercial displacements or
8 relocations with the Project, and therefore, there will be no displacements or relocations among the minority or low-income communities in the
9 Study Area.
- 10 Additionally, all communities—including the minority community—would receive the benefits of the Project. Upon completion of the Project,
11 vehicles, bicyclists, and pedestrians will be safer as they travel the corridor. Improvements to sidewalks will provide a safer experience for
12 pedestrians with improved sidewalks along the entire length of Sparks Boulevard; improved connections to transit stops; and compared to today,
13 the MUP will have safer, well-marked access points from Sparks Boulevard. Bicycle lanes in each direction along Sparks Boulevard will provide
14 additional safety and access for non-motorized transportation.

1 **Table 12. Environmental Justice Impacts of the No-Action Alternative Impacts and Preferred Alternative, Sparks Boulevard**
 2 **Project**

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
<p>No improved access to transportation facilities that support community connections and access to community resources.</p>	<ul style="list-style-type: none"> • Provides efficient transportation facilities, improves access to all modes of travel, and supports the integration of the communities identified in the demographic Study Area with all modes of transportation. • Additional noise generated throughout the construction would occur during and after construction. However, the construction of five noise barriers at four locations along Sparks Boulevard will reduce the noise levels in those impacted locations. • The Project would not result in disproportionate impacts or high and adverse impacts endured by the communities in the demographic Study Area. • The short-term construction-related activities could disrupt access to some commercial properties and require temporary closures or detours. However, these impacts would be temporary and would not occur at any location for the entire duration of construction. 	<p>No</p>	<ul style="list-style-type: none"> • Five noise barriers at four impacted locations are underway for construction to reduce noise. In the Traffic Noise section, Table 16 and Figure 8 describe and show the location of the proposed noise barriers. • Notify the communities about temporary construction detours and disruptions prior to the disruption.

3

4 **ACQUISITIONS AND RELOCATIONS**

5 The corridor exhibits mixed-use planning, with commercial and multi-family dwellings on the south end, and Reed High School surrounded by high-
 6 density housing to the north. The Preferred Alternative was developed to minimize any ROW impacts to the corridor.

7 **EXISTING CONDITIONS**

8 Both residential and commercial properties, as well as NDOT ROW, are nearby the Project’s existing ROW. The width of the Sparks Boulevard
 9 ROW varies between 145 feet north of Baring Boulevard to 240 feet where the NTD is in the median of the roadway and approximately 165 feet at
 10 the south end of the Study Area. Between Baring Boulevard and East Prater Way, the uses adjacent to the ROW is predominately a suburban,
 11 single-family residential development with a range of densities between three to eight dwelling units per acre. There is also a multi-family
 12 residential development located south of East Prater Way and south of Baring Boulevard. A low-density commercial development and Reed High
 13 School are at Baring Boulevard. In the south, between East Prater Way and the I-80 westbound ramps, land uses are predominately industrial,

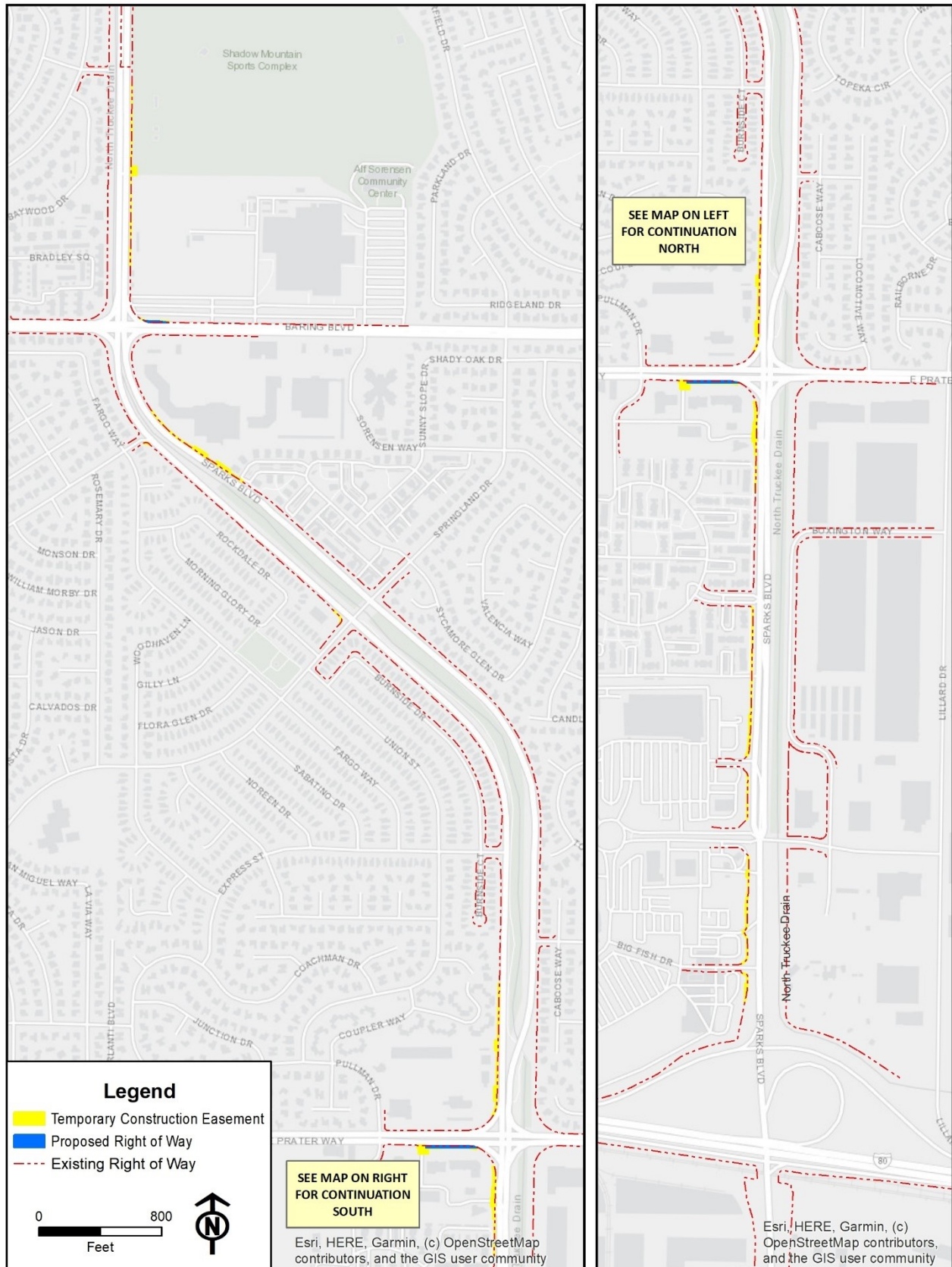
1 warehouse, and commercial. This portion of the Study Area contains the Legends shopping and entertainment district, Sparks Marina Park, and
 2 Wild Island Water Park.

3 **Table 13. Acquisitions and Relocations Impacts and Mitigation**

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
No impacts	<ul style="list-style-type: none"> • The Project would require 0.1 acre of permanent ROW to construct the Project on three parcels. Two of the areas are nearby commercial areas, and the other area is adjacent to the Reed High School parking lot along Baring Boulevard. These impacts take the form of small slivers of parcels nearby the roadway ROW needed to accommodate safety and operational improvements. The acquisition of the small portions of the parcels do not affect the existing use of any of the properties affected. See Figure 7 for the general locations and the ROW maps in Attachment B for detailed locations. For the property acquired from Reed High School, please see Recreation and Section 4(f) Resources section below. • The Project would require 0.8 acre of temporary construction easements at 23 different locations in the Study Area to construct the Project. These construction easements would be primarily along the southbound side of Sparks Boulevard on sidewalks and driveways adjacent to commercial areas. There are a few locations in the northern portion of the Study Area, where temporary easements would border residential land uses. • No relocations would be required. 	No	<ul style="list-style-type: none"> • RTC will acquire permanent ROW or easements and temporary construction easements from property owners prior to construction, according to the Uniform Relocation Act and NDOT and RTC policies.

4

1 Figure 7. ROW and Temporary Construction Easements



1 TRAFFIC NOISE

2 The criteria used for evaluating noise impacts as part of this analysis were from the FHWA’s “Procedures for Abatement of Highway Traffic Noise
3 and Construction Noise” (FHWA, 2010) and NDOT’s “Traffic and Construction Noise Abatement Policy” (NDOT, 2018). The traffic noise analysis
4 evaluated the change in noise conditions that could result from expanding the capacity of Sparks Boulevard between the I-80 westbound ramps and
5 Baring Boulevard. Attachment B contains the full Traffic Noise Technical Report.

6 FHWA guidelines (FHWA, 2015) state that a traffic noise abatement must be considered when a traffic noise impact occurs at a particular land use
7 or activity category, as shown in Table 14. FHWA traffic noise abatement criteria (NAC), under Activity Categories B and C of 67 dBA, apply to
8 residences, churches, schools, recreation areas, and similar land-use activities. Other developed lands (e.g., hotels/motels or other business areas)
9 are in Activity Category E, with an NAC of 72 dBA. NDOT determines a traffic noise impact to occur when predicted future traffic noise levels
10 approach or exceed the established FHWA NAC for a given Activity Category. NDOT defines “approach” as within 1 dBA of the NAC [66 dBA for
11 Activity Categories B and C or 71 dBA for Category E].

12 EXISTING CONDITIONS

13 Vehicular traffic on Sparks Boulevard is the main source of noise in the Project Area. The area north of East Prater Way is primarily single-family
14 and multi-family residential (Activity Category B). In the southern portion of the Project Area, between East Prater Way and the I-80 westbound
15 ramps, land uses are predominately industrial, warehouse, and commercial. In this area, noise sensitive land uses include a school (Activity
16 Category C), restaurant outdoor areas (Activity Category E), and a multi-family residential development (Activity Category B) located south of East
17 Prater Way. Industrial and warehouse uses (Activity Category F) are not noise sensitive. Additionally, trail crossing (Activity Category C) uses are
18 present along the Truckee Meadows Trail in the Project Area. There are currently two permits in the Project Area, including a tenant remodel on
19 East Prater Way and a Conditional Use Permit for a car wash on Sparks Boulevard. They are not shown because the permitted uses are not noise
20 sensitive.

21 The following is a summary of the modeled receivers (337 receivers, representing 371 locations) under both Existing Conditions (2020) and Design
22 Year (2040) scenarios:

- 23 • Activity Category B: 323 receivers, representing 357 residences
- 24 • Activity Category C: 12 receivers, representing seven park locations; two schools (Alpine Academy and Reed High School’s sports field); a day
25 care center; and two community recreational areas
- 26 • Activity Category E: Two receivers, representing two restaurants

27 Under Existing Conditions (2020), modeled noise levels at 337 receivers range from 43.7 to 73.3 dBA. Of these, 76 receivers, representing 95
28 receptors are likely to meet or exceed the NDOT noise level criteria of 66 dBA for Activity Categories B and C. These impacted receptors are in
29 areas where there are no existing barriers between the residences and Sparks Boulevard, or the barriers are below the level of second floor
30 apartments. The locations are the Springland Village Condominiums on the east side of Sparks Boulevard south of Baring Boulevard; at the Willow
31 Creek Villas on the west side of Sparks Boulevard north of East Prater Way; and at the Park Vista Apartments on the west side of Sparks
32 Boulevard south of East Prater Way. No receiver exceeded the NDOT noise level criteria of 71 dBA for Activity Category E.

1 **Table 14. Noise Abatement Criteria by Land Use Category**

Activity Category	Activity Leq (dBA)	Evaluation Location	Activity Description
A	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need, and where the preservation of those qualities is essential, if the area is to continue to serve its intended purpose
B	67	Exterior	Residential
C	67	Exterior	Active sport areas, amphitheatres, auditoriums, campgrounds, cemeteries, daycare centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios
E	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F
F	—	—	Agriculture, airports, bus yards, emergency services, industrial, logging maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing
G	—	—	Undeveloped lands that are not permitted

2
3

1 **Table 15. Traffic Noise Impacts and Mitigation**

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
<ul style="list-style-type: none"> Under the No-Action Alternative (2040), modeled noise levels at 337 receivers range from 45.2 to 74.7 dBA. Of these, 101 receivers, representing 129 receptors, are likely to meet or exceed the NDOT noise level criteria of 66 dBA for Activity Categories B and C. No receiver exceeded the NDOT noise level criteria of 71 dBA for Activity Category E. 	<ul style="list-style-type: none"> Under the Proposed Action (2040), modeled noise levels at 337 receivers range from 45.7 to 74.7 dBA. Table 3 in the Traffic Noise Technical Report, in Attachment B shows the modeled noise level at each receiver for the Proposed Action. Of these, 129 receivers, representing 163 receptors, are likely to meet or exceed the NDOT noise level criteria of 66 dBA for Activity Categories B and C. No receiver exceeded the NDOT noise level criteria of 71 dBA for Activity Category E. No receivers or receptors would experience a substantial noise increase of at least 12 dBA. Therefore, a total of 129 receivers, representing 163 receptors, would encounter impacts by increased noise levels under the Proposed Action (2040). Construction noise will be temporary and intermittent, and the intensity would vary for different areas of the Project and the type and duration of activity. 	<p>No</p>	<ul style="list-style-type: none"> Five noise barriers at four impacted locations are planned for construction to reduce noise. In the Traffic Noise Technical Report, in Appendix B, Table 4 and Exhibit 3 describe and show the location of the proposed noise barriers. One evaluated wall, located at the northwest corner of Sparks and Baring Boulevards, would not meet reasonableness requirements because an 8 dBA reduction was unsuccessful at any of the receptors. Proposed construction activities will adhere to local construction noise ordinances. All motorized construction equipment will install mufflers, in accordance with the equipment manufacturer's specifications or a system of equivalent noise-reducing capacity. Mufflers and exhaust systems will maintain good, operating condition and be free of leaks and holes. If feasible, new and replacement traffic noise barriers and screening walls will undergo construction early in each phase to mitigate construction noise. Mitigation measures for stationary and mobile equipment will be in the contract documents, as needed, and could address placement, hours of operation, noise level limits, or proper maintenance of equipment.

2

3 Under the No Action Alternative (2040), modeled noise levels at 337 receivers range from 45.2 to 74.7 dBA. Of these, 101 receivers, representing
 4 129 receptors, are likely to meet or exceed the NDOT noise level criteria of 66 dBA for Activity Categories B and C. These impacted receptors are in
 5 areas where there are no existing barriers between the residences and Sparks Boulevard, or the barriers are below the level of second floor
 6 apartments. The locations are the Springland Village condominiums on the east side of Sparks Boulevard south of Baring Boulevard; at the Willow

1 Creek Villas on the west side of Sparks Boulevard north of East Prater Way; and at the Park Vista Apartments on the west side of Sparks
 2 Boulevard south of East Prater Way. No receiver exceeded the NDOT noise level criteria of 71 dBA for Category E.

3 Under the Proposed Action (2040), modeled noise levels at 337 receivers range from 45.7 to 74.7 dBA, as shown in Exhibit 8. Of these, 129
 4 receivers, representing 163 receptors, are likely to meet or exceed the NDOT noise level criteria of 66 dBA for Activity Categories B and C. No
 5 receiver exceeded the NDOT noise level criteria of 71 dBA for Category E. No receivers or receptors would experience a substantial noise increase of
 6 at least 12 dBA. These impacted receptors are in areas where there are no existing barriers between the residences and Sparks Boulevard, or the
 7 barriers are below the level of second floor apartments. The locations are the Springland Village Condominiums on the east side of Sparks
 8 Boulevard south of Baring Boulevard; at the Willow Creek Villas on the west side of Sparks Boulevard north of East Prater Way; at the Park Vista
 9 Apartments on the west side of Sparks Boulevard south of East Prater Way; and at the Bradley Square Condominiums at the northwest corner of
 10 the Sparks Boulevard and Baring Boulevard intersection.

11 Because of NDOT’s feasibility and reasonableness requirements, barriers for impacted trail crossings are not feasible due to possible loss of access
 12 to the trail. Barriers for dispersed, impacted houses are not feasible because they will not meet cost-benefit requirements. Five impacted areas were
 13 analyzed with noise barriers. The analysis considered barrier placement for impacted receptors in multiple locations. The best location determined
 14 for each set of impacted receivers was optimized, and those results are in Table 16. These five barriers, shown in Table 16, are reasonable, feasible,
 15 and recommended to be in the Project. A fifth impacted area was at the Bradley Square Condominiums was analyzed with a noise barrier, but the
 16 barrier is not feasible because an 8 dBA reduction was unsuccessful at any of the receptors. See Figure 8 below for mapped locations of the analyzed
 17 receptors and barriers.

18 **Table 16. Noise Barrier Evaluation**

Barrier ID	Noise Wall 1	Noise Wall 2	Noise Wall 3	Noise Wall 4	Noise Wall 5
Impacted Area (general)	South of Baring Boulevard at southbound Sparks Boulevard	Springland Villas at northbound Sparks Boulevard	Willow Creek Villas at southbound Sparks Boulevard	Park Vista Apartments at southbound Sparks Boulevard	Park Vista Apartments at southbound Sparks Boulevard
Barrier Location (optimized)	Modeled along the proposed MUP within the ROW	Modeled along the proposed sidewalk within the ROW	Modeled at the existing noise wall #4 location by increasing the wall height	Modeled along the proposed sidewalk within the ROW North of McCabe Part Street	Modeled along the proposed sidewalk within the ROW south of McCabe Part Street
Recommended Barrier Height & Length (feet)	10 high x 727 long	12 high x 1,296 long	14 high x 600 long	8 high x 864 long	8 high x 413 long
Barrier Area (square feet)	7,273	15,552	8,400	6,912	3,304

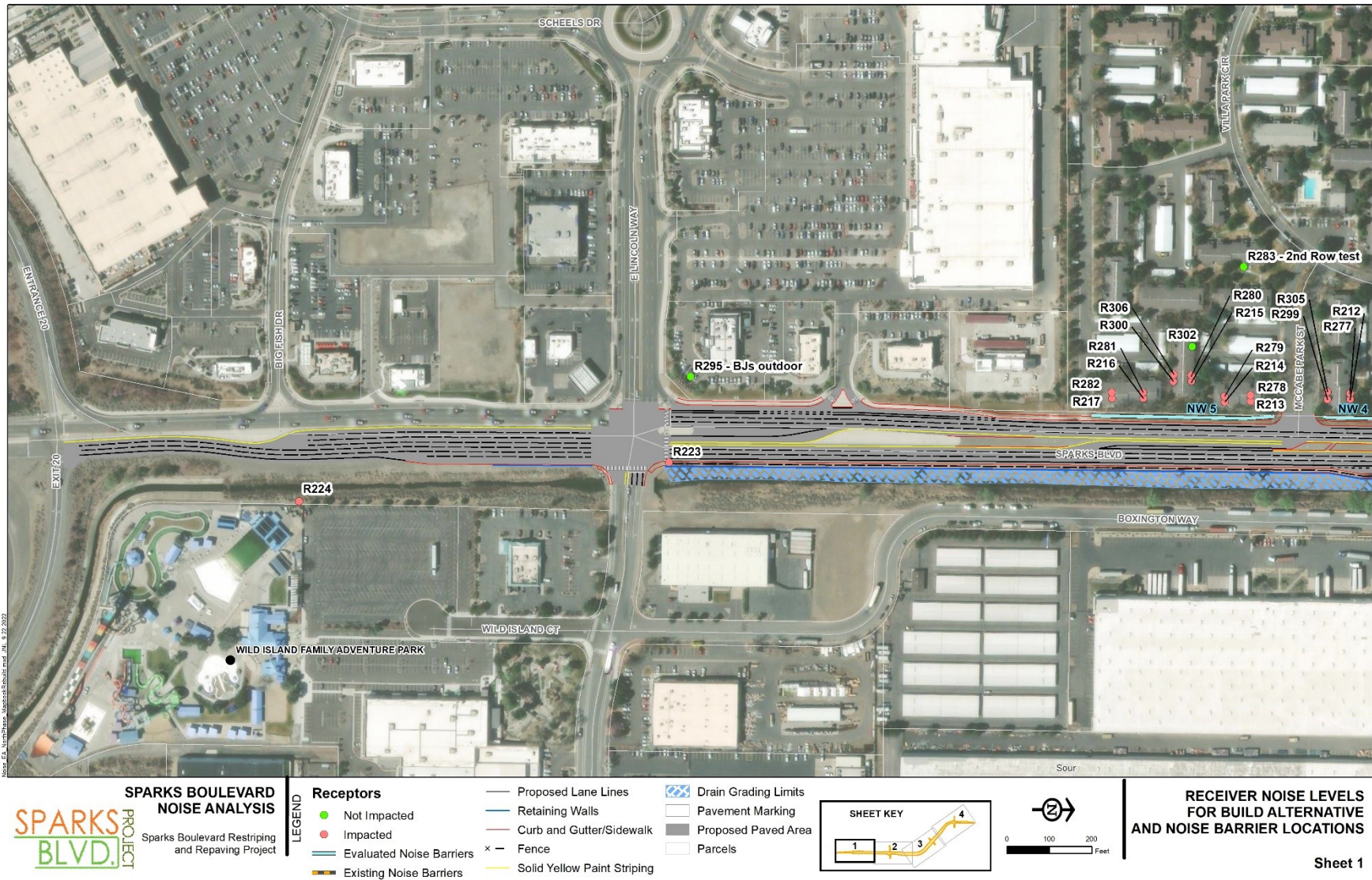
Barrier ID	Noise Wall 1	Noise Wall 2	Noise Wall 3	Noise Wall 4	Noise Wall 5
Unit Cost	\$35/ft ²	\$35/ft ²	\$35/ft ²	\$35/ft ²	\$35/ft ²
Total Cost	\$254,548	\$544,111	\$293,550	\$363,084	\$280,342
No. Benefited Receptors ¹	11	59	18	20	22
Cost Benefit (\$/benefited receptor)	\$23,141	\$9,222	\$12,334	\$12,096	\$5,260
Meet Feasibility Criteria?	Yes	Yes	Yes	Yes	Yes
Cost Effectiveness	Yes	Yes	Yes	Yes	Yes

1 Notes:

- 2 1. A benefited receptor, whether it's impacted or not, is one that receives at least 5 dBA of noise reduction. This 5 dBA reduction is based on the
 3 addition of the noise barrier only and is considered after any shielding effects, such as for existing noise walls and rows of buildings, are considered.
- 4 2. The total benefits listed in this table are rounded.

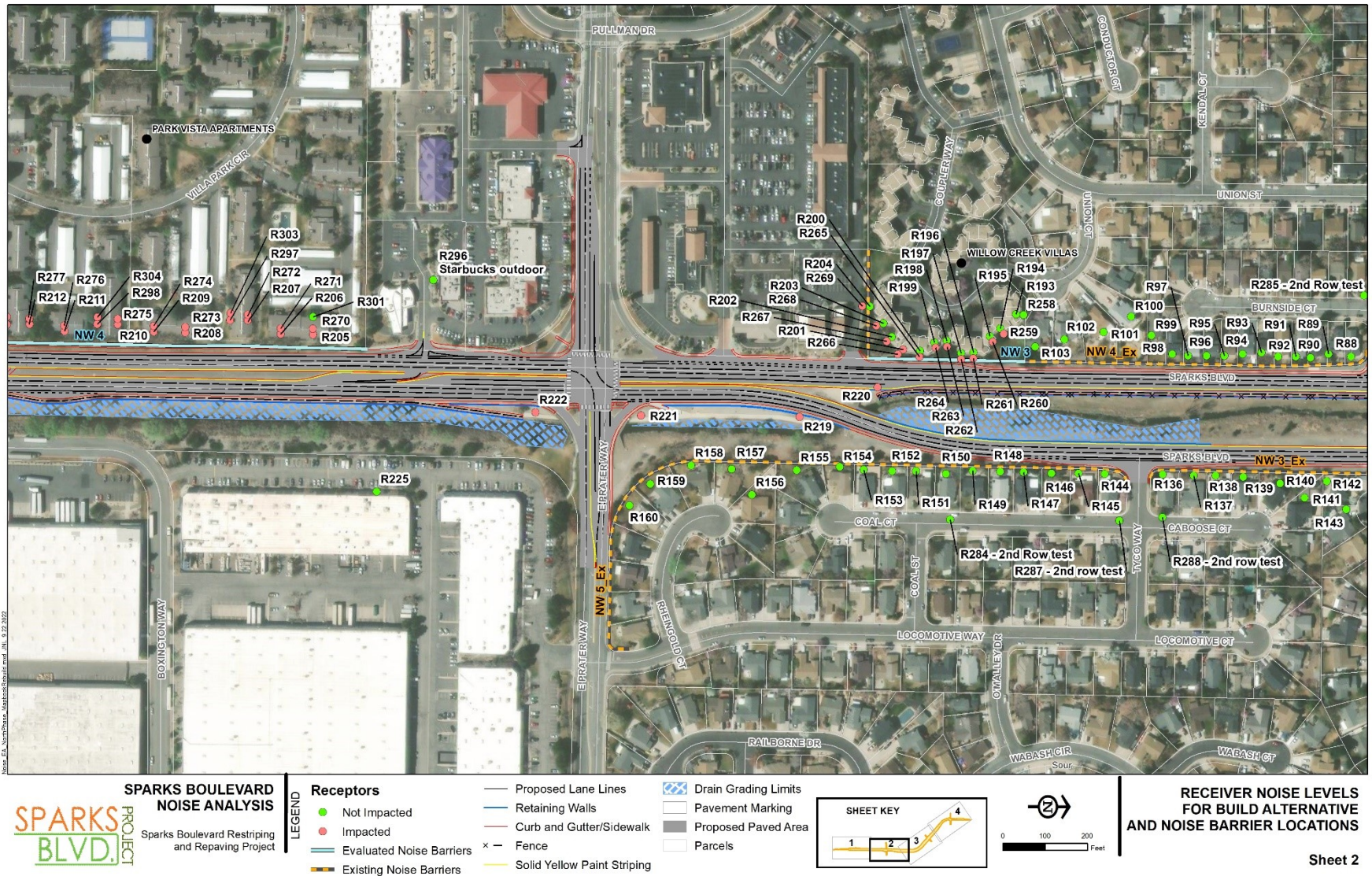
5

1 Figure 8. Traffic Noise Receptor and Barrier Locations



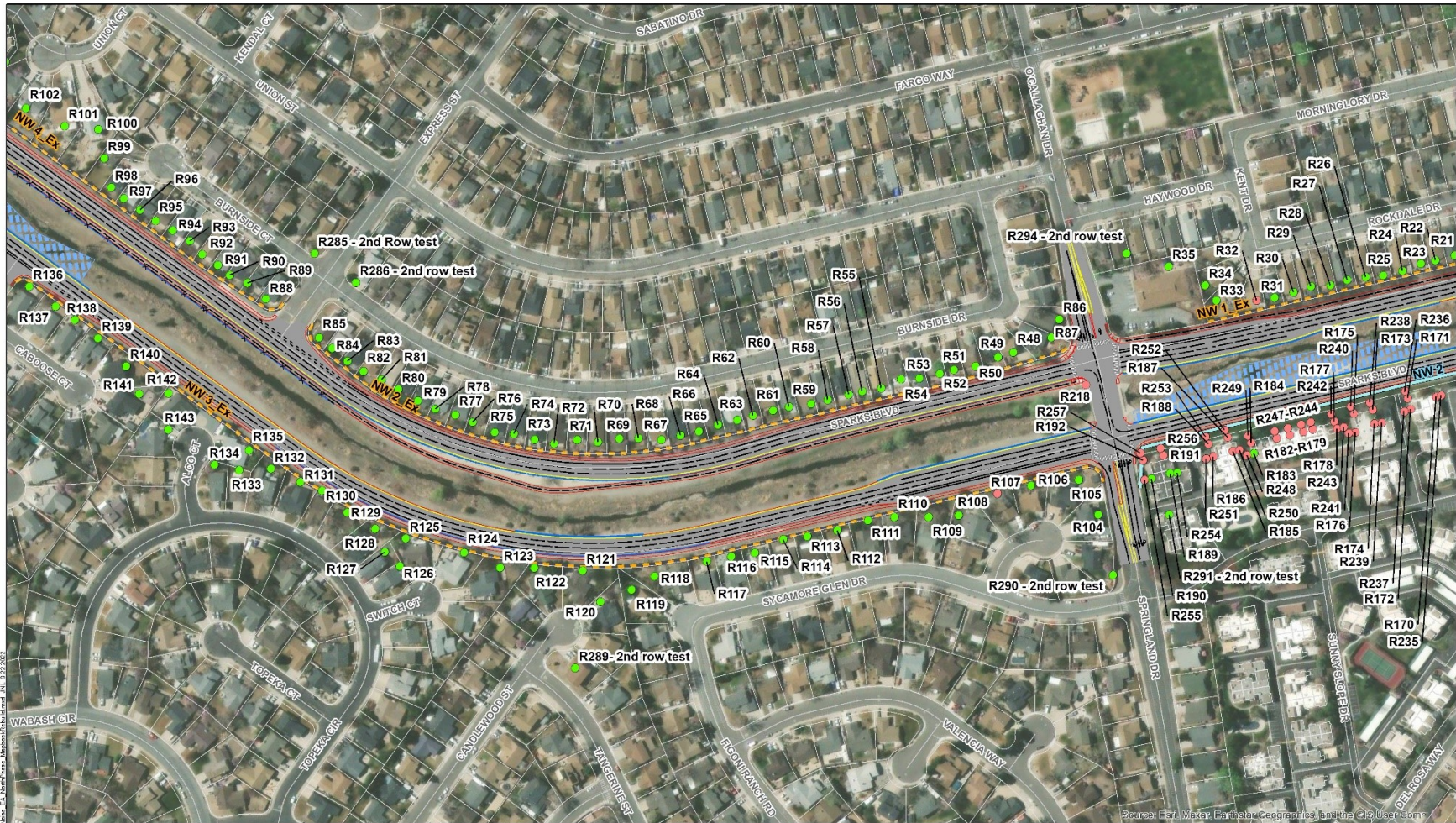
2

1 Figure 9. Traffic Noise Receptor and Barrier Locations (cont'd.)



1 Figure 10. Traffic Noise Receptor and Barrier Locations (cont'd.)

2



SPARKS BOULEVARD NOISE ANALYSIS

SPARKS BLVD. PROJECT

Sparks Boulevard Restriping and Repaving Project

LEGEND

<p>Receptors</p> <ul style="list-style-type: none"> ● Not Impacted ● Impacted — Evaluated Noise Barriers — Existing Noise Barriers 	<ul style="list-style-type: none"> — Proposed Lane Lines — Retaining Walls — Curb and Gutter/Sidewalk × Fence — Solid Yellow Paint Striping 	<ul style="list-style-type: none"> ▨ Drain Grading Limits ▨ Pavement Marking ▨ Proposed Paved Area ▨ Parcels
---	--	--

SHEET KEY

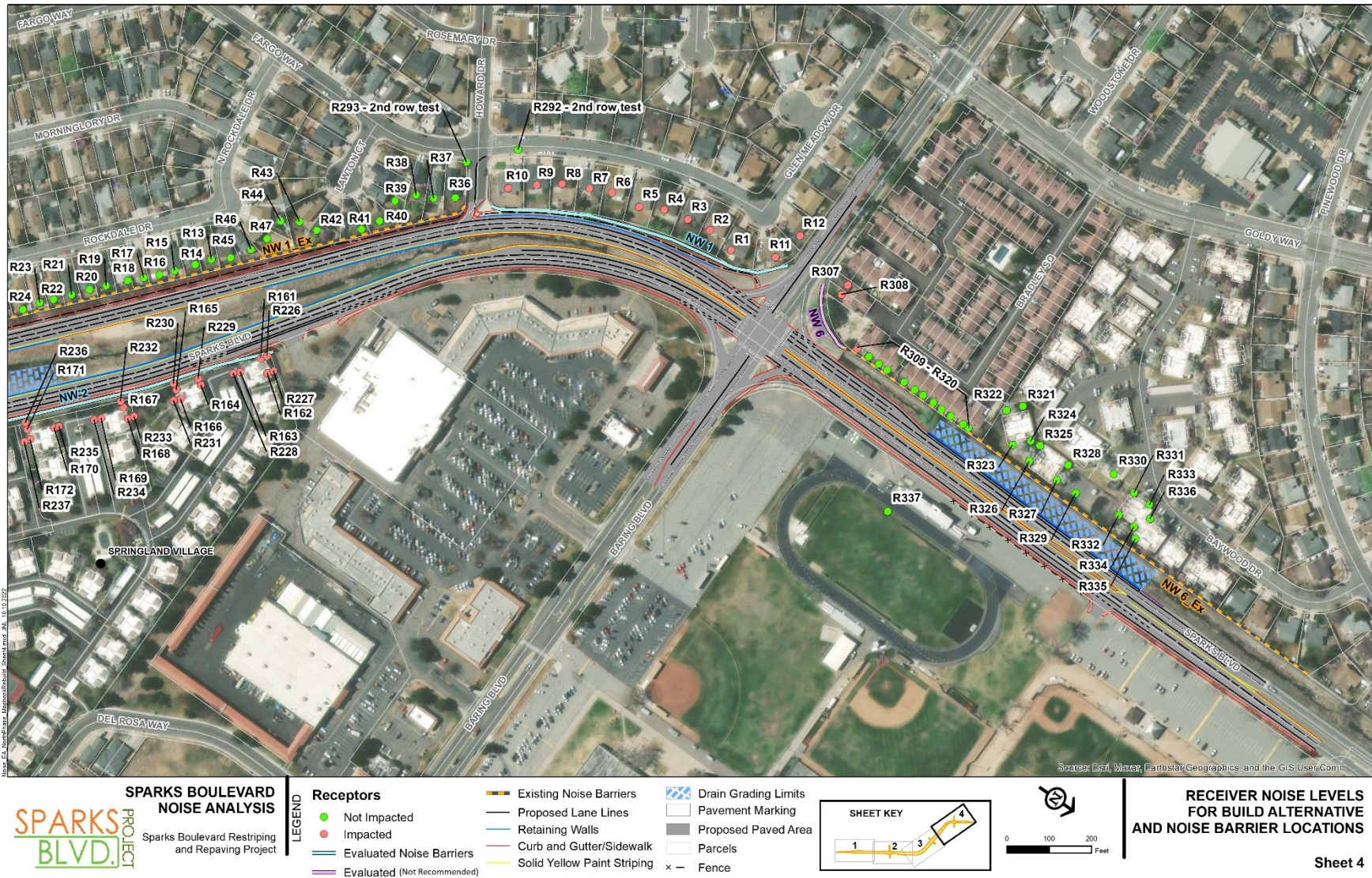
RECEIVER NOISE LEVELS FOR BUILD ALTERNATIVE AND NOISE BARRIER LOCATIONS

Sheet 3

3

1 Figure 11. Traffic Noise Receptor and Barrier Locations (cont'd.)

2



Sheet 4

3

RECREATION AND SECTION 4(F) RESOURCES

Section 4(f) of the Department of Transportation Act of 1966 (23 United States Code (USC) §138 and 49 USC §303) states that the FHWA and other U.S. Department of Transportation agencies cannot approve the use, in a transportation project, of land from historic properties, publicly owned parks, recreational areas, or wildlife and waterfowl refuges unless there is no feasible and prudent avoidance alternative to the use of the land. In addition, the action must include all possible planning to minimize harm to the property resulting from the use.

Section 4(f) applies to publicly owned and accessible parks and recreation areas. Pursuant to 23 CFR 774.11, the Officials with Jurisdiction presume which publicly owned and accessible recreation properties are significant over the site conclude that the entire site is not significant. For this report, all parks and recreational properties have been considered if the property is publicly owned, open to the public, and has a primary purpose of recreation (FHWA, 2012). There are no eligible historic properties in the Study Area.

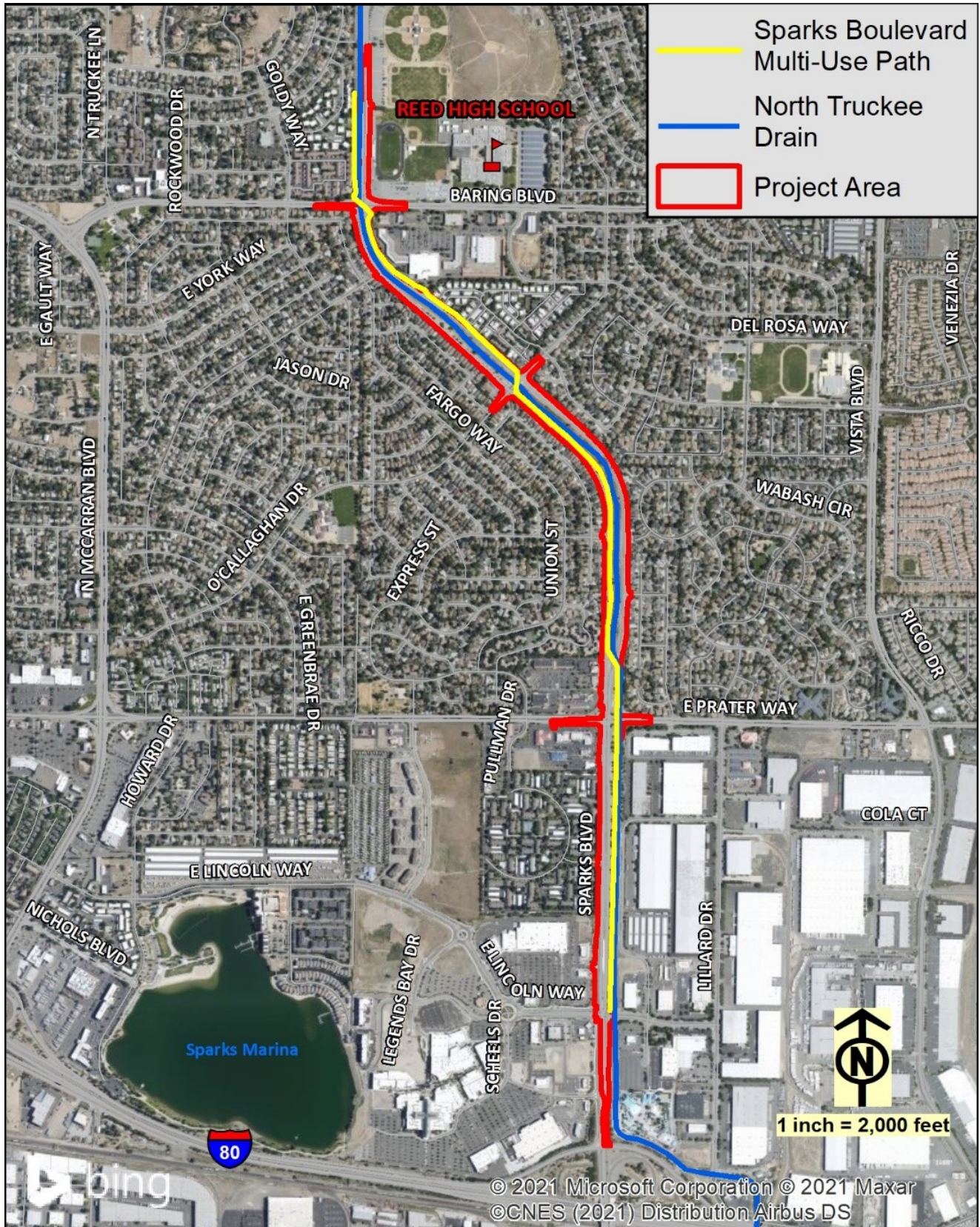
EXISTING CONDITIONS

The following two recreational resources: Sparks Boulevard MUP and Reed High School are located within or adjacent to the Study Area and are in the *City of Sparks Comprehensive Parks & Recreation Plan* (City of Sparks, 2013).

The Sparks Boulevard MUP starts at East Lincoln Way and ends north of the Study Area at Disc Drive. In the Study Area, the MUP meanders between Sparks Boulevard and the NTD. Starting at East Lincoln Way, the MUP is east of the northbound lane and then crosses under Sparks Boulevard just after East Prater Way running east of the southbound lanes in the median of Sparks Boulevard. Then it crosses back over to the outside of the northbound lanes at O'Callaghan Drive, and finally, it crosses back to the western side of the southbound lanes at Baring Boulevard. The MUP is within City-owned ROW, with the primary purpose of transportation and not confined to a specific location. FHWA identified various exemptions to the requirement for Section 4(f) approval, including trails, paths, bikeways, and sidewalks that occupy a transportation facility ROW without limitations to any specific location within the ROW, so long as the continuity maintains the trail, path, bikeway, and sidewalk (23 CFR 774.13 (f)(3)). The MUP is a greenbelt in the City of Sparks, 2013 plan, is in the median of the road for much of its course, and maintained as a natural area. Therefore, Section 4(f) does not apply to the Sparks Boulevard MUP.

Reed High School is at the northern boundary of the Study Area, at the northeast corner of the Sparks Boulevard and Baring Boulevard intersection. The portions of Reed High School nearby Sparks Boulevard include a parking lot, track, and football field. Reed High School is a public secondary school owned and operated by the Washoe County School District. The primary function of the property is educational; and the secondary function is recreational. The school district encourages the community use of the school building and grounds for educational, recreational, civic, and cultural activities, when it does not conflict with the use of these facilities for school district purposes and activities (Washoe County School District, 2021). Reed High School is on publicly owned land that is open to the public outside of school hours, with the primary purpose of recreation. As such, it is given protection under Section 4(f).

1 Figure 12. Recreational Section 4(f) Resources Study Area



2

Table 17. Recreational and Section 4(f) Resources Impacts and Mitigation

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation for the Preferred Alternative
<p>No impacts.</p>	<ul style="list-style-type: none"> • Acquisition of permanent ROW or permanent ROW easement along Baring Boulevard of 0.03 acre to accommodate roadway and sidewalk improvements on Baring Boulevard east of Sparks Boulevard adjacent to Reed High School, for adequate operations of the intersection. • Acquisition of temporary easements of approximately 0.11 acre during construction for construction activities along the Sparks Boulevard and Baring Boulevard adjacent to Reed High School. The temporary and permanent ROW needed are narrow strips adjacent to the roadways and the fence of the school property. • The acquisition of ROW will result in a <i>de minimis</i> impact of the Section 4(f) property. Based on the scope of the proposed Project and type of work, there will be no adverse effects to the protected recreational activities, features, or attributes associated with Reed High School. Proposed measures to minimize harm and resulting in mitigation. In regard to protecting the 4(f) property and maintaining access and safety, they are considered reasonable and acceptable. • The RTC consulted the owner with jurisdiction and the Washoe County School District concurred with this conclusion in correspondence dated May 11, 2022. The correspondence and documentation for a <i>de minimis</i> determination is in the Section 4(f) Technical Memo, in Attachment B. FHWA will make the <i>de minimis</i> determination for this NEPA action once the EA is signed. 	<p>No</p>	<ul style="list-style-type: none"> • Maintain access to the Reed High School and Athletic Field during construction activities via flagging operations and/or an approved detour. • Install temporary construction fencing along proposed construction limits prior to the start of construction activities to protect the existing 4(f) property and the public. • Install appropriate signage to alert users of Reed High School of construction activities, access restrictions, or closures, and to direct users to secondary access points. • The staging and/or storage of construction equipment or materials must not occur outside proposed construction limits that are within the defined boundaries of the 4(f) property. • Require the Contractor to closely coordinate the construction schedule with RTC, Washoe County School District, and the City prior to the start of construction activities. • The Contractor must remove and replace landscaping and vegetation on school property at the northwest corner of Baring and Sparks Boulevard during construction of the Project. • The Contractor must install utilities underground located between the school property and Sparks Boulevard and north of Baring Boulevard.

TRAFFIC

Sparks Boulevard is a major corridor that accommodates north-south travel and is a key link connecting the northern Sparks and southern Reno urban areas. It provides access to several major thoroughfares, including County Route 659 (also known as Greg Street), I-80, East Prater Way, and Baring Boulevard. Sparks Boulevard was a MAC arterial in the 2035 RTP (RTC, 2013). It currently is a four-lane-divided roadway, except between the I-80 ramps and East Lincoln Way. Between the I-80 westbound ramps and East Lincoln Way, the configuration is a six-lane-divided roadway. Between the I-80 eastbound and westbound ramp intersections, it is a five-lane-divided roadway with three northbound lanes and two southbound lanes.

EXISTING CONDITIONS

Considering planned improvements, land-use development assumptions, and traffic volume forecasts, the Corridor Study, prepared by RTC in June 2015, identified locations on Sparks Boulevard where the roadway system would fail to sustain travel times and reliability for the 2035 travel demands (RTC, 2015). All segments of Sparks Boulevard north of East Prater Way operate at LOS C which is above the RTC Level of Service policy for an arterial roadway. Level of Service ratings range from LOS A which represents free-flow traffic to LOS F which represents congested conditions with severe travel time impairment and delay.

Table 18. Traffic Operations Impacts of the No-Action Alternative and Preferred Alternative, Sparks Boulevard Project

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
<ul style="list-style-type: none"> The segments between the I-80 westbound ramps and East Prater Way are likely to degrade to LOS F by 2035. There would be no construction impacts. 	<ul style="list-style-type: none"> Reduces travel time delay along the corridor, with accommodating expected future traffic volumes at acceptable levels of service, ranging from LOS B to LOS D. The short-term construction-related activities may disrupt access to some commercial properties and require temporary closures or detours. 	<p>No</p>	<ul style="list-style-type: none"> Notify affected business owners and residents about temporary construction detours and disruptions prior to the disruption. Maintain access to residences and business during construction.

VISUAL IMPACT ASSESSMENT

Visual impacts of the Project were analyzed following the FHWA guidelines (FHWA, 2015). This visual assessment methodology requires that visual impacts be determined by assessing changes to the landscape, as seen both by people traveling on the roadway—to determine how people traveling on the proposed Project might be affected; and by neighbors adjacent to it—to determine how people would be affected near the proposed Project. Changes to the visual environment are measured by determining how the proposed Project would alter the visual quality for selected representative views.

EXISTING CONDITIONS

The Area of Visual Effect (AVE) for Sparks Boulevard is the along the roadway itself, with most viewers experiencing a dynamic viewshed as they travel north or south along the corridor. The Project study area is with commercial businesses on the south end and single-family and multi-family housing on the north end. The viewsheds are fairly similar along the corridor, with views that are typical for an urban setting. The viewshed is primarily by the roadway and its features, with the natural area of the NTD alongside the roadway. The viewshed of the roadway has surrounding developments on both sides of Sparks Boulevard, and do not lead to expansive, distant views. In addition, walls separate the roadway environment from the surrounding community through much of the residential portion of the corridor. Roadway lighting is visible from within the Project Area and to travelers on Sparks Boulevard. Existing lighting along Sparks Boulevard within the study area includes light poles at the intersections that are visible from cross streets and the surrounding community.

Table 19. Visual Impacts of the No-Action Alternative and Preferred Alternative, Sparks Boulevard Project

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
No impacts	<ul style="list-style-type: none"> The Preferred Alternative will include noise barriers alongside the ones that already exist. There will be one additional lane in each direction added to the roadway. Vegetation in the natural areas that occur in the median or adjacent to the roadway may be cleared for construction and then replanted. The visual character of the corridor will maintain its existing urban/suburban aesthetic. The short-term construction-related activities may be disruptive to views during construction. 	No	<ul style="list-style-type: none"> The Project will include a landscape plan that will restore the Project Area to its current aesthetic once the project is complete. Vegetation in the natural areas, along the NTD in the median, or adjacent to the roadway will be replanted as directed in the landscape plans for the Project.

HAZARDOUS MATERIALS

GeoSearch conducted a hazardous materials database search on August 13, 2020, for an area up to one mile beyond the Study Area. The database search meets the records search requirements of 40 CFR Part 312.26 and American Society for Testing and Materials (ASTM). The records and databases of records used to compile this report were from various federal, state, and local governmental entities. The Study Area had only 46 sites and a total of 126 records.

A site assessment was conducted for hazardous materials and environmental conditions on September 23, 2021, to identify any changes from the original database search report dated August 13, 2020. The site assessment verified the existing land uses for the recorded sites, and no new project-related hazardous materials or environmental concerns were identified within the Study Area.

EXISTING CONDITIONS

Only two sites of hazardous materials concern are in the ROW acquisition or ROW areas. Reed High School and ROW acquisition at Reed High School would consist of a 0.03-acre strip of land from area that contains landscaping adjacent to a parking lot. In addition, the Project would require 0.11 acre of temporary construction easements along Sparks Boulevard and Baring Boulevard. The site is on the Resource Conservation & Recovery Act – Non-Generator database with no violations or enforcements reported. The school had a mercury release on November 02, 2005, that was removed and marked as complete on November 15, 2005. The site is also on the underground storage tank database because of a used oil tank that was closed on January 1, 2000. As a result, the site is not a likely concern. Additionally, the site would be further investigated as part of the ROW acquisition process. Sparks Boulevard Gas Main Installation Project is near the O’Callaghan/Springland intersection. The gas main installation project, completed in 2019, was avoided as part of utility relocation efforts prior to construction.

Table 20. Hazardous Materials Impacts of the No-Action Alternative and Preferred Alternative, Sparks Boulevard Project

No-Action Alternative Impacts	Preferred Alternative Impacts	Cumulative Effects Likely?	Mitigation Measures for the Preferred Alternative
No impacts	<ul style="list-style-type: none"> The project would permanently acquire a sliver of 0.03 acre and temporary construction easements of 0.11 acre , at Reed High School that contained an underground storage tank removed in 2000. The parcel was also the site of a mercury release that was closed in 2005. The Sparks Boulevard Gas Main Installation Project, completed in 2019, was located inside the Sparks Boulevard ROW and avoided during construction. The short-term construction-related activities may uncover unrecorded sites. 	No	<ul style="list-style-type: none"> Investigate the sites further as part of the ROW acquisition process. Develop construction plans that include gas utility locations to avoid conflict and relocation, to greatest extent possible. Remove, manage, and dispose of any regulated materials, in accordance with applicable regulations.

INDIRECT AND CUMULATIVE EFFECTS

Indirect effects are those impacts that may occur outside of the Study Area, or later in time after the construction of the Project is complete. Cumulative effects are impacts from the Project—that in conjunction with other projects in the region—would create additional impacts to the natural or human environment. The NEPA defines cumulative effects as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR ~ 1508.7).

No identified or anticipated cumulative or indirect impacts related to other actions that would have a significant adverse impact. An analysis indicated no significant impacts on the Study Area or the community. The physical and community effects are limited to the Sparks Boulevard ROW. Cumulative or indirect effects are unlikely, and no further mitigation is needed.

WHAT MITIGATION COMMITMENTS WILL BE MADE FOR THE PREFERRED ALTERNATIVE?

Additional details regarding the methodology and analysis of impacts and mitigations are in their respective technical memoranda, in Attachment B.

Table 21. Summary of Impacts and Mitigation for the Preferred Alternative, Sparks Boulevard Project

Mitigation Category	Impact	Mitigation Commitment From Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
Air Quality	During construction, there may be localized increases of fugitive dust and temporary construction equipment emissions of CO, nitrogen oxides, SO ₂ , volatile organic compounds, and particulate matter.	<p>Construction of the Project will include site preparation and surface disturbance over an acre, and the project must obtain a dust control permit from the WCAQMD (Regulation 040.030 of the District Board of Health Regulations). Submit a Dust Mitigation Plan that will include measures to control fugitive dust and specifications for construction, in accordance with NDOT's <i>Standard Specifications for Road and Bridge Construction</i> (NDOT, 2014). Construction mitigation measures may include:</p> <ul style="list-style-type: none"> • Minimizing land disturbance by initiating construction in phases when possible. • Using watering trucks to minimize dust. • Covering trucks when hauling dirt and materials. • Minimizing unnecessary vehicular and machinery activities. • Maintaining construction vehicles and equipment in good, operational condition. • Limiting construction vehicle and equipment idling when possible. • Limiting vehicle paths within the temporary construction area. 	Contractor	Construction

Mitigation Category	Impact	Mitigation Commitment From Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
Recreational Section 4(f) Resources	Acquisition of permanent ROW along East Prater Way and Baring Boulevard of 0.09 acre to accommodate roadway and sidewalk improvements. Acquisition of temporary easements of approximately 0.81 acre during construction for construction activities along the roads adjacent to Reed High School. The temporary and permanent ROW needed are narrow strips along the sidewalk adjacent to the roadway and the fence of the school property. The acquisition of ROW will result in a <i>de minimis</i> use of the Section 4(f) property, and it will not impact the recreational use or activities on the property.	<p>RTC will coordinate with the Washoe County School District to ensure the acquisition of permanent ROW and temporary easements does not require the use of the recreational fields at Reed High School. Notify the school district and school administrators about temporary construction detours and disruptions prior to the disruption.</p> <p>The RTC consulted the owner with jurisdiction and the Washoe County School District concurred with this conclusion in correspondence dated May 11, 2022. The correspondence and documentation for a <i>de minimis</i> determination is in the Section 4(f) Technical Memo, in Attachment B. FHWA will make the <i>de minimis</i> determination for this NEPA action once the EA is signed.</p>	RTC/Contract or	Construction

Mitigation Category	Impact	Mitigation Commitment From Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
Floodplains and Water Quality	<p>1) The increase in pavement area will generate flooding/ponding concerns on Sparks Boulevard.</p> <p>2) Reduction in capacity of the NTD causes an increase in its water surface elevation, leading to flooding concerns.</p> <p>3) Potential water quality concerns caused by an additional impervious surface area.</p> <p>4) Existing roadside ditches may have slightly reduced capacity.</p> <p>5) The construction phase has the potential to generate sediments that can flow in a water body.</p>	<p>1) During the final design, the drainage design will ensure that the drainage system collects the runoff from the widened Sparks Boulevard and conveys to the NTD. Also, the NTD will not anticipate an increase in peak runoff, as the flow from the Sparks Boulevard roadway runoff will pass earlier than the NTD peak flow conveyed from the upstream end.</p> <p>2) An NTD hydraulic modeling study is underway, which will evaluate different channel improvements (e.g., retaining walls in lieu of fill placement, channel regrading, etc.) to ensure no rise in water surface elevation results in an adverse impact to the floodplain.</p> <p>3) Roadway improvements will not cause an increase in contaminant loading, as the Project design will include newer style drop inlets with sumps and sur-traps to maintain and improve water quality.</p> <p>4) Widening is reducing the flow that reaches these ditches because the roadway drainage system will capture the flows. The design process will maintain adequate capacity for these roadside ditches.</p> <p>5) Implement BMPs during construction. As part of the development of BMPs for the project, RTC's construction contractor must file a Notice of Intent with NDEP's Bureau of Water Pollution Control to obtain coverage under the General Permit for Stormwater Discharges Associated with Construction Activity (NVR100000). Before submitting the Notice of Intent, develop a SWPPP. The SWPPP will outline temporary and permanent erosion and sediment controls, locate stormwater discharge points, and describe BMPs to implement to prevent or reduce stormwater pollutant discharge associated with construction activities, to the maximum extent practical.</p>	RTC/Contract or	Final Design/ Construction

Mitigation Category	Impact	Mitigation Commitment From Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
Wetlands/waters of the U.S.	Clearing/grubbing or filling in vegetation areas will impact approximately 0.51 acre of fringe wetlands and open waters along the NTD.	Mitigation of wetlands impacts will require and include the creation of new or expanded wetland areas within the Project Study Area within the NTD watershed. Minimize clearing/grubbing areas. A Section 404 Nationwide Permit #14-Linear Transportation Projects will be mandatory and obtained from the USACE. The 404 permit will outline the final mitigation plan. Mitigation will occur at a minimum of a 2:1 creation-to-impact ratio. Minimize clearing/grubbing areas. Mark avoidance areas on final design plans. Obtain a Section 401 Water Quality Certification for impacts to waters of the state. Mark avoidance areas on final design plans. Replant/reseed temporarily impacted areas with native wetland species, per Section 404 permit requirements.	RTC/Contractor	Construction
Biological Resources and Threatened/Endangered Species	Removal of vegetation (12.40 acres) will impact native plant species and increase chances of noxious weed disbursal. Removal of trees and shrubs that provide common wildlife habitats. Construction activities have the potential to affect common nesting birds, particularly if activity occurs within nesting bird season (typically February 1 through August 31). Water diversions in the NTD may affect common fish habitat.	Minimize clearing/grubbing areas. Mark avoidance areas on final design plans. Revegetate with native plant species, with both herbaceous and woody plants. Use standard BMPs to reduce the likelihood of noxious weed disbursal. Contractor will develop a noxious weed management plan and use weed-free materials (e.g., straw, wood-strand mulch, etc.). Conduct nesting bird surveys between March 1 and August 31 (migratory bird nesting season) and prior to the removal of trees and vegetation to minimize impacts to active nests. Perform the survey no more than seven days before the proposed tree or vegetation removal date. If active nests are present, protect the nests with a buffer and limit construction until the young birds leave the nest. Identify, and if feasible, avoid, and protect trees and shrubs adjacent to the NTD. Coordinate with the NDOT, Washoe County, or the City to investigate repurposing any removed trees to provide wildlife habitat enhancements within the project or elsewhere. Landscape plans will include revegetation with native species.	RTC/Contractor	Final Design/Construction

Mitigation Category	Impact	Mitigation Commitment From Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
Social and Economic Conditions	The short-term construction-related activities may disrupt access to some commercial properties and require temporary closures or detours.	Notify affected business owners and the public about temporary construction detours and disruptions prior to the disruption.	RTC/Contract or	Construction
Acquisitions and Relocations	The Project would require 0.9 acre of permanent ROW and temporary easements to construct the Project.	RTC will acquire permanent ROW and temporary construction easements from property owners prior to construction, according to the Uniform Relocation Act and NDOT and RTC policies.	RTC	ROW acquisition
Traffic	The short-term construction-related activities could disrupt access to some commercial properties and residences and require temporary closures or detours.	Notify affected business owners and the public about temporary construction detours and disruptions prior to the disruption.	RTC/Contract or	Construction
Noise	Modeled noise levels at 306 receivers range from 50.9 to 74.7 dBA. One hundred fifty-nine receptors are likely to meet or exceed the NDOT noise level criteria of 66 dBA for Activity Categories B and C. Construction noise will be temporary and intermittent, and the intensity would vary for different areas of the project and the type and duration of activity.	Five noise barriers at four impacted locations are underway for construction to reduce noise. In the Traffic Noise Technical Report in Appendix B, Table 4 and Exhibit 3 describe and show the location of the proposed noise barriers. Proposed construction activities will adhere to local construction noise ordinances. All motorized construction equipment will have mufflers, in accordance with the equipment manufacturer's specifications or a system of equivalent noise-reducing capacity. Mufflers and exhaust systems will maintain good, operating condition and be free of leaks and holes. If feasible, new and replacement traffic noise barriers and screening walls will undergo construction early in each phase to mitigate construction noise. Mitigation measures for stationary and mobile equipment will be in the contract documents, as needed, and could address placement, hours of operation, noise level limits, or proper maintenance of equipment.	RTC	Construction

Mitigation Category	Impact	Mitigation Commitment From Source Document	Responsible Branch	Timing/Phase in which Mitigation will be Implemented
Visual Resources/ Aesthetics	The Preferred Alternative will add noise barriers alongside the ones that already exist. There will be one additional lane in each direction added to the roadway. Vegetation will need replanting, and the character of the corridor will maintain its existing urban/suburban aesthetic.	The RTC will develop a landscape plan for the Project that will restore the Project area to its current aesthetic once the project is complete. Vegetation in the natural areas along the NTD in the median or nearby the roadway will need replanting, as directed, in the landscape plans for the Project.	RTC/Contract or	Final design/ Construction
Hazardous Materials	The Preferred Alternative would acquire a sliver of the parcel at Reed High School, where an underground storage tank and a mercury release occurred in the past and have been remediated. The Sparks Boulevard Gas Main Installation Project, completed in 2019, was inside the Sparks Boulevard ROW and avoided during construction.	Investigate the sites further as part of the ROW acquisition process. Develop construction plans that include gas utility locations to avoid conflict and relocation, to greatest extent possible. Remove, manage, and dispose of any regulated materials, in accordance with applicable regulations.	RTC	ROW acquisition, Final design/ Construction
Land Use	The Preferred Alternative could result in street closures and/or detours during the construction period, which could impact access to various land uses throughout the Study Area.	RTC will develop a plan to communicate with the public and property owners regarding construction schedule, street closures, and detours throughout construction. Maintain access to residences and businesses during construction. RTC will maintain ADA-compliant pedestrian access, including temporary safe street crossings and sidewalks.	RTC	Final design/ Construction

WHAT ADDITIONAL CLEARANCES ARE REQUIRED FOR THIS PROJECT?

In regard to the Project, SHPO concurs there are no adverse effects to historic properties.

WHAT PERMITS ARE REQUIRED FOR THIS PROJECT?

The following permits are likely mandatory prior to construction, but this list may change during and after final design:

- RTC is currently preparing material and will obtain a Section 404 Nationwide Permit #14-Linear Transportation Projects from the USACE that includes a wetland mitigation plan.
- RTC is currently preparing material and will obtain a Section 401 Water Quality Certification for impacts to waters of the state from the NDEP.
- RTC's construction contractor must file a Notice of Intent with NDEP's Bureau of Water Pollution Control to obtain coverage under the General Permit for Stormwater Discharges Associated with Construction Activity (NVR10000).
- The Project may require a dust control permit from WCAQMD (Regulation 040.030 of the District Board of Health Regulations). If the Project disturbs more than an acre during construction, then submit a Dust Mitigation Plan which will include measures to control fugitive dust and specifications for construction.

WHAT OUTREACH AND OPPORTUNITIES FOR PUBLIC AND STAKEHOLDER PARTICIPATION WERE PROVIDED?

Since the Project began, it continues to follow an extensive public and agency involvement process. So far, the public's opportunities for input includes a public scoping meeting which convened virtually, followed by a public scoping comment period. A project management team (PMT) consisting of invited stakeholder agencies representing the public has met regularly since the Project's kick-off in June 2020. RTC sent the Intent-to-Study Letter on September 2, 2020 (see Attachment C). A website for the Project generated more than 1,000 views, and RTC used their social media accounts to promote the Project and convince interested parties to view the website: SparksBlvdProject.com. Project updates were sent to members of the public, business owners, and local stakeholders in the Study Area; public agencies, local officials, resource agencies, and other local stakeholders, and the public were on the mailing list for the Project. These updates occurred in October 2020, January 2021, April 2021, July 2021, October 2021, and January 2022.

During the 30-day duration of the public scoping meeting, which included both the live event and virtual meeting, it received 42 public comments. The live online event convened on September 16, 2020, and it was recorded and published online so that anyone could review the materials for 30 days after the live event—through October 16, 2020. One comment was submitted via email; 29 were submitted through the Q and A room from the live event; three were submitted by voicemail; and nine were submitted through the website comment form. Major topics included the following: speed, noise, pedestrian safety, landscaping, drainage, the MUP, and O'Callaghan/Springland Drive and Sparks Boulevard intersection. See Attachment E for all comments.

The PMT meetings included representatives from RTC, the City, NDOT, and FHWA, and since July 2020, they have met 14 times. The purpose of the meetings was to update PMT members on progress of the Project and to solicit feedback on decisions made as the Project progressed through

the preliminary design, environmental review, and NEPA process. In October 2020, the PMT provided feedback on the recommended Preferred Alternative, which was subsequently modified to accommodate their concerns.

After the Project team recommended a Preferred Alternative, it sought input from the PMT. In addition, the public was notified of the recommendation in the public newsletter, and an update was sent to contacts of the mailing list, local stakeholders, and members of the public to gather comment on the Preferred Alternative to make any necessary modifications to the Project. Two comments were received via the website after this notice was sent in April 2021.

What Additional Opportunities for Stakeholder Participation Will Be Provided?

The publication of this EA marks the beginning of the 30-day public hearing period. Participation in the public hearing will be available online during this period, and there will also be an in-person public hearing event. Members of the public and interested parties are welcome to submit comments, questions, and concerns at any time during the 30-day period via written communication, verbally at the in-person public hearing event, by mail, fax, email, or online public hearing website. For information on attending the in-person event or other ways to review and comment on the document, please view the website: SparksBlvdProject.com, or contact the RTC Project Manager.

REFERENCES

- Atkins. 2021. *The Purpose and Need Technical Report*. Atkins.
- City of Sparks. 2013. Comprehensive Parks & Recreation Plan.
- Federal Highway Administration (FHWA). 2012. Section 4(f) Policy Paper. [4fpolicy-Final.pdf \(apta.com\)](#)
Accessed September 2021.
- NDOT. 2014. *Standard Specifications for Road and Bridge Construction*. NDOT.
- NDOT. 2018. Environmental Services Division Procedures Guide. Retrieved from
<https://www.dot.nv.gov/Home/ShowDocument?id=14165>
- Regional Transportation Commission of Washoe County. 2015. *Sparks Boulevard Multi-Modal Corridor Study*
(Corridor Study). Traffic Works.
- Regional Transportation Commission of Washoe County, Nevada, 2021. 2050 Regional Transportation Plan.
- Regional Transportation Commission of Washoe County, Nevada, 2022. Federal Fiscal year 2021-2025
Regional Transportation Improvement Program.
- Washoe County Health District. 2021. *Washoe County District Board of Health Regulations Governing Air
Quality Management Prohibited Emissions, Sections 040.005-040.200*. Available at:
[https://www.washoecounty.gov/health/files/air-
quality/Current%20Regulations/040%20Prohibited%20Emissions_Mar%202017.pdf](https://www.washoecounty.gov/health/files/air-quality/Current%20Regulations/040%20Prohibited%20Emissions_Mar%202017.pdf). Accessed September
2021.
- Washoe County School District. 2021. Community Use of Facilities.
<https://www.washoeschools.net/Page/3675> Accessed September 2021. Accessed September 2021.

ATTACHMENT A. ALTERNATIVES ANALYSIS SUMMARY

DRAFT

ATTACHMENT B. TECHNICAL REPORTS

DRAFT

**ATTACHMENT C. NEVADA DEPARTMENT OF TRANSPORTATION,
NOTICE OF INTENT**

DRAFT

ATTACHMENT D. ROADWAY PLANS

DRAFT

ATTACHMENT E. PUBLIC SCOPING SUMMARY

DRAFT