CHINDEN BOULEVARD CORRIDOR PROJECT DEVELOPMENT

Garden City, Idaho

September 2016

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TRANSPORTATION ENGINEERING/PLANNING

MOVING**FORWARD**THINKING™

Project Report

Chinden Boulevard Corridor Project Development

Garden City, Idaho

Final

September 2016

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Project No. 18833.0

September 2016

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Section 1
Introduction

INTRODUCTION

The Bike and Pedestrian Assessment Report for Chinden Boulevard was completed in May 2015 by the Federal Highway Administration (FHWA) in partnership with several agencies, including the Ada County Highway District (ACHD), Community Planning Association of Southwest Idaho (COMPASS), Garden City, Idaho Transportation Department (ITD), and Valley Regional Transit (VRT). The purpose of the assessment was to identify common barriers and issues that affect the mobility and safety of people walking and biking on Chinden Boulevard from its eastern terminus to Coffey Street. The completed report resulted in a number of recommended action items to improve walking and biking on Chinden Boulevard.

Garden City has now leveraged funding and support from the COMPASS Project Development Program in order to continue moving forward with implementing action items from the FHWA report. This project has developed logical project bundles out of the action items from the FHWA report, prioritized the project bundles, and developed the four highest ranked bundles into more clearly defined project scopes over the course of two phases. This report summarizes this process and provides individual concept reports for each of the four project bundles selected for development.

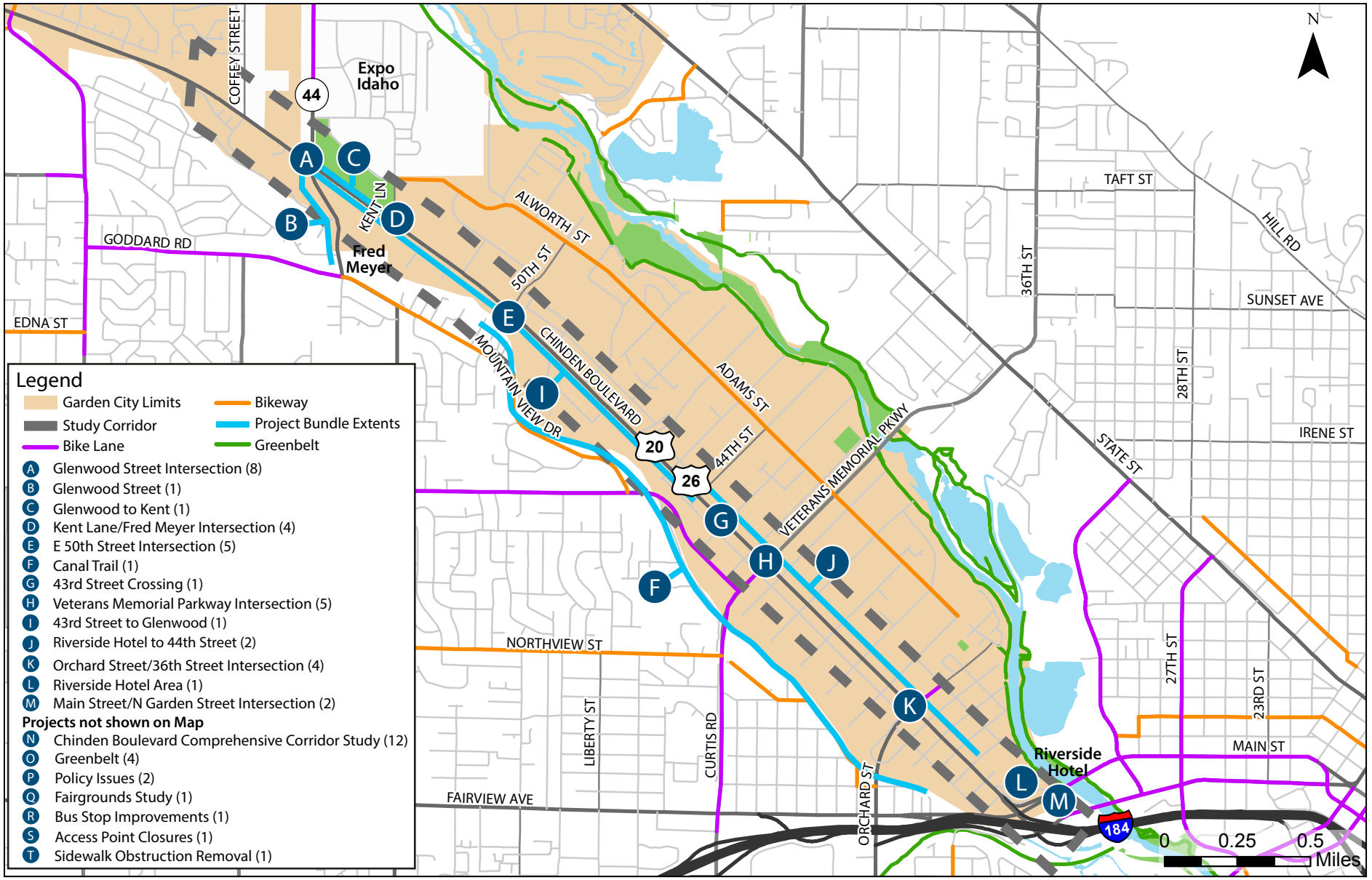
PHASE I: PROJECT BUNDLING AND RANKING

The goal of the first phase of the project was to identify the project bundles that would move forward into the second phase for further development. The processes used to group and rank the FHWA report's action items are described in Figure 1.

Figure 1 – Phase I Process Summary

The first step in the Phase I process involved organizing the individual action items from the FHWA report into logical "project bundles." The projects were grouped primarily based on geographic location, since most of the individual FHWA recommendations applied to specific intersections or roadway segments. Several corridor-wide recommendations were applied across multiple relevant location-specific projects, while others were grouped into corridor-wide project bundles. Figure 2 summarizes the location of the project bundles.

The Phase I bundles were then ranked based on technical criteria. Project team members reviewed the project bundles and their associated rankings, and selected the following four bundles to move forward for further development in Phase II of the project:



Project Bundle Site Vicinity Map
Garden City, Idaho

Figure **2**

Coordinate System: NAD 1983 Transverse Mercator

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- Glenwood to Kent – Pathway along Lady Bird Park; connecting the bus stops to the Kent Lane intersection
- 50th to Kent – Walkway along the north side of Chinden Boulevard
- 43rd to 50th – Walkway along the north side of Chinden Boulevard
- Pedestrian crossing at 43rd Street

The locations of these bundles are shown in Figure 3. These projects were selected in part because they were recommended in the FHWA report, but had not been assigned to a single lead agency and require collaboration between multiple agencies. The project team also believes these projects have the potential for near-term implementation and provide a significant benefit to walking and biking along the corridor. More details on the Phase I process and the project bundles can be found in Appendix A.

PHASE II: HIGH-PRIORITY PROJECT BUNDLE EVALUATION

The second phase of the project involved preparing more detailed concept reports for the four bundles listed above. The project assessment process and potential funding sources reviewed for the Phase II bundles are described below.

Project Assessment Process

A concept report was prepared for each project, including the following items:

- Recommended Treatment, including plan view concept drawings (10% level) over an aerial (*Glenwood to Kent, 50th to Kent, and 43rd to 50th*) or a 3-D rendering of the concept (*Pedestrian crossing at 43rd Street bundle).*
- Planning Level Cost-Estimate
- Potential Funding Sources
- Environmental Scan
- Implementation Process
- Future Considerations

Phase II Project Bundles
Garden City, Idaho

Figure **3**

Coordinate System: NAD 1983 Transverse Mercator

Potential Funding Sources

Several potential funding sources were reviewed for the four project bundles. The potentially applicable funding sources are described below. Information regarding their applicability to each specific project is included in each project's concept report. More information regarding the application process for each source can be found in Appendix B. Additional funding sources that were reviewed, but deemed inapplicable to the four project bundles, are also included in Appendix B.

Transportation Alternatives Program

The Transportation Alternatives Program (TAP) allocates federal funding from the Surface Transportation Block Grant Program (STBGP) to program projects for pedestrians, bicyclists, and other non-motorized forms of transportation (1). Projects that are eligible for TAP funds include on- and off-road bicycle and pedestrian facilities, and infrastructure projects for improving non-driver access to public transportation. Project applicants can apply for TAP funding at the statewide or local level (Boise Urbanized Area). Statewide TAP funding is programmed by ITD, while local TAP funding (TAP-TMA) is programmed by COMPASS. Both design and construction costs are eligible for funding through the TAP-Statewide program.

The application process and selection criteria for TAP-Statewide and TAP-TMA funding vary. TAP-Statewide funding does not require local prioritization, and is allocated based on demonstrated project need, benefits, and feasibility. TAP-TMA funding is allocated based on how well proposed projects align with the vision, goals and strategies of COMPASS' Communities in Motion 2040 Vision, the regional long range transportation plan for Ada and Canyon Counties (2).

Recreational Trails Program

The Recreational Trails Program (RTP) distributes federal funds for recreational trails and trail-related projects (3). Eligible projects include the construction of new recreational trails included or referenced in a Statewide Comprehensive Outdoor Recreation Plan required by the Land and Water Conservation Fund Act. RTP funding is administered by the Idaho Department of Parks and Recreation (IDPR).

ADA Curb Ramp Program

The ADA Curb Ramp Program provides funding to projects that provide accessible curb ramps on the state highway system (4). Eligible projects include the construction of new curb ramps or the alteration of existing curb ramps on state highways to meet the requirements of the Americans with Disabilities Act. Proposed ADA Curb Ramp projects are evaluated and administered by the Idaho Transportation Department (ITD).

Highway Safety Improvement Program

The Highway Safety Improvement Program (HSIP) distributes federal funds to projects that will reduce fatal and serious injury crashes on Idaho roads (5). Eligible projects include intersection safety

improvements, such as the installation of traffic control and similar warning devices at locations with high crashes, new pavement marking and sign installation at pedestrian-bicycle crossings, and school zone safety improvements. HSIP funding is administered by the Idaho Transportation Department (ITD).

Public Transportation Program

The Public Transportation Program allocates funding from the Federal Transit Agency (FTA) to public transportation projects, including projects designed to replace or construct bus-related facilities (6). Proposed public transportation projects in the Boise Urbanized Area are evaluated by both VRT and COMPASS, and distributed by VRT. FTA funds for Public Transportation Programs are limited, so the application process is competitive.

Communities in Motion Implementation Grants

COMPASS distributes annual Communities in Motion Implementation Grants to projects that help achieve key goals of the Communities in Motion 2040 vision, the regional long range transportation plan for Ada and Canyon Counties (7). Eligible projects for Communities in Motion (CIM) Implementation grants include projects that provide better access to public transportation, bicycle, and pedestrian facilities to offset congestion. CIM Implementation Grants can be used as matching funds for other grants or may be paired with local money to complete a project.

ACHD Community Programs

ACHD distributes annual Community Programs funds to projects related to walking and biking in Ada County (8). Eligible projects for Community Programs funds include new curb ramps and repairs, asphalt pathways, sidewalks and pedestrian signage, signals, and speed zone flashers. Projects on school walking and biking routes typically receive the highest priority. ACHD Community Programs usually funds projects on the local road system operated by ACHD. However, they could be used to fund crossings of, or walkways along, Chinden Boulevard. Using these funds on a State highway would require approval of the ACHD Commission.

TIGER Discretionary Grant Program

US Department of Transportation (USDOT) distributes annual Transportation Investment Generating Economic Recovery (TIGER) Discretionary funds to multimodal projects across the United States (9). Eligible projects for TIGER funds include planning, road, transit, and bicycle and pedestrian projects. The minimum total project cost of TIGER grant projects is $6.25 million, limiting the funding eligibility of the individual project bundles detailed in this report. However, TIGER grant applications can contain more than one project component, as long as the components demonstrate a strong relationship between them. Therefore, this program could be a potential funding source for a large set of projects on Chinden Boulevard (i.e., implanting Garden City's long-term vision for the corridor, including detached sidewalks and landscaping through city limits). This program is competitive, with only 40 of the 585 applications being funded in 2016.

Section 2
Glenwood to Kent

GLENWOOD TO KENT

The Glenwood to Kent project is focused on providing a shared-use path on the north side of Chinden Boulevard and improving access to the Valley Regional Transit (VRT) bus stop located in the southwest corner of the Chinden Boulevard/Kent Lane intersection. Figure 4 illustrates the site vicinity for this project bundle. When completed, this project will provide improved access for people walking, biking, and taking transit to reach several commercial destinations, including Garden City's only grocery store (Fred Meyer, located at Kent Lane). The north side trail will connect to the existing sidewalks and pathway along Glenwood Street, providing connections to the West Bench of Boise, several commercial and civic (i.e., Garden City Hall and Library) uses along Glenwood Street, and the Greenbelt.

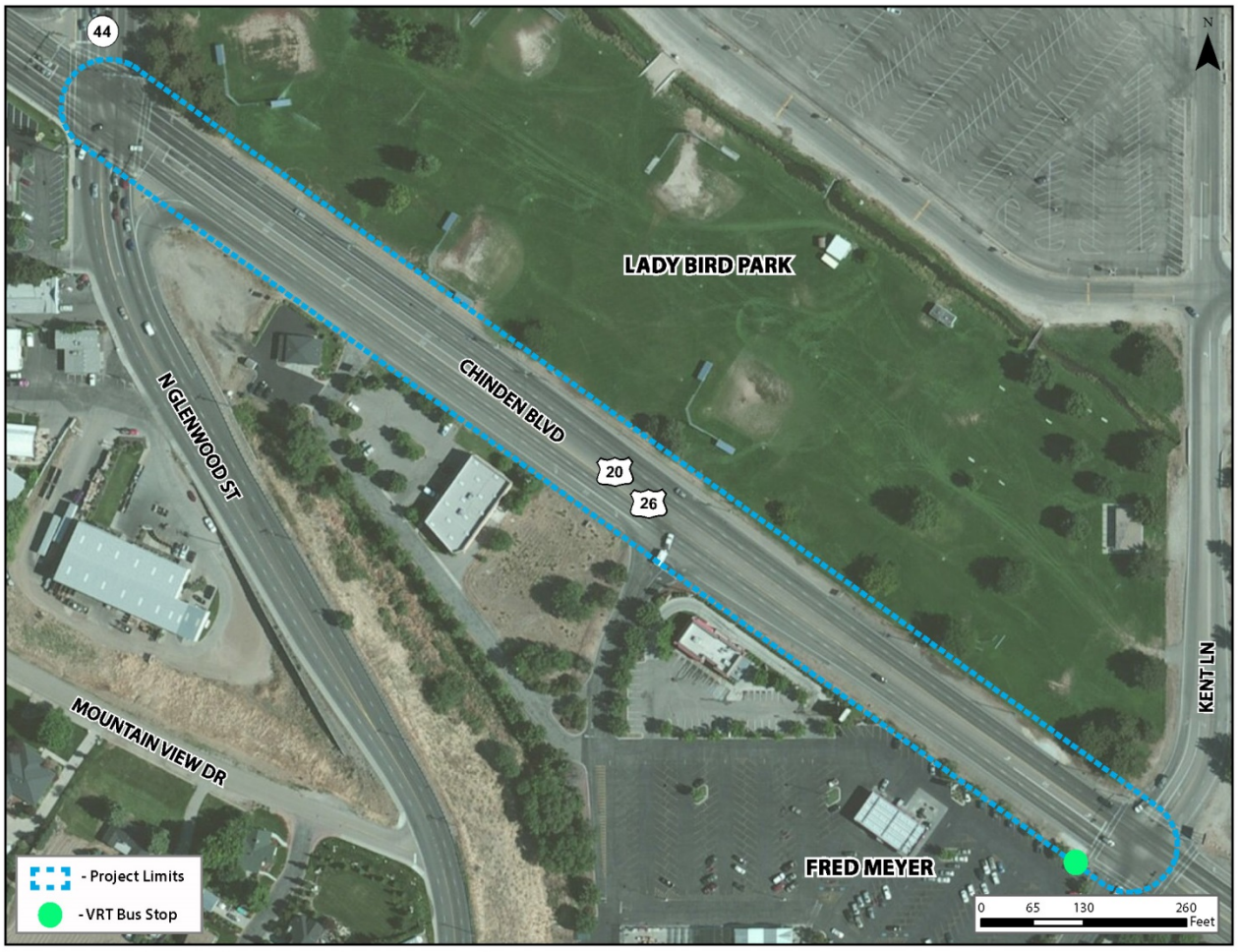


Figure 4 – Glenwood to Kent – Site Vicinity

A project prospectus sheet summarizing this project is included in the next page, while more details regarding the project are provided in the following sections.

GLENWOOD TO KENT – PATHWAY ALONG LADY BIRD PARK; CONNECTING THE BUS STOPS TO THE KENT LANE INTERSECTION

Description:	1) Construct a shared-use path along the north side of Chinden Boulevard, either through Lady Bird Park or adjacent to Chinden Boulevard using as much of the existing ITD right-of-way as possible. 2) Relocate the existing VRT bus stop on the south side of Chinden Boulevard to the far side of the Kent Lane intersection.
Purpose:	Improve access for people walking, biking, and taking transit to reach several commercial, civic, and recreational destinations by connecting to the Fred Meyer site and the existing sidewalks and pathway along Glenwood Street. Moves toward providing a complete walkway from 43rd Street (current western terminus of sidewalk on Chinden Boulevard) to Glenwood Street.
Lady Bird Trail Cost: $80,000 – $3,200,000 **VRT Bus Stop Cost:** $4,500 – $23,500	**Potential Funding Sources:** TAP, RTP, Public Transportation (bus stop relocation only), ADA Curb Ramp Program, CIM Implementation Grants, ACHD Community Programs
Potential Project Partners: Ada County, ACHD, COMPASS, Garden City, ITD, VRT	
Considerations:	Additional public involvement and consultation with Ada County will be needed to assess potential impacts to the park. The design of any trail adjoining Chinden Boulevard will need to consider stormwater drainage. Consultation will be required with Idaho Parks and Recreation to verify that the trail is considered a public recreational use.

Project Location/Images:

FHWA REPORT RECOMMENDATIONS/NEEDS IDENTIFIED

The FHWA Bike and Pedestrian Assessment Report (FHWA report) for Chinden Boulevard lists concerns associated with the Glenwood to Kent study area. The lack of a paved sidewalk or trail between Glenwood Street and Kent Lane leaves a significant gap in Garden City's pedestrian network, and fails to connect Garden City residents to key community amenities. The FHWA report also highlights the lack of ADA accessible pedestrian ramps at intersections as a barrier to vulnerable populations.

The FHWA report recommends closing the gap between Glenwood Street and Kent Lane with a pathway along the front of Lady Bird Park. It also advises connecting the VRT bus pads to existing sidewalks at the intersection of Chinden Boulevard and Kent Lane. Per discussions with COMPASS, Garden City and other project team members, both of these recommendations are incorporated into the Glenwood to Kent project bundle.

EXISTING BICYCLE AND PEDESTRIAN INFRASTRUCTURE

Existing walkway on the north side of Chinden Boulevard approaching Glenwood Street

Currently people walking and biking along Chinden Boulevard between Glenwood Street and Kent Lane cope with limited infrastructure. There are no sidewalks or other separated walkways. A paved shoulder varying between 5' and 10' in width adjoins the south side of Chinden Boulevard. An extruded curb runs along the paved shoulder east from the intersection of Chinden Boulevard and Glenwood Street for approximately 250'. An unpaved, gravel shoulder varying between 3' and 20' in width adjoins the north side of Chinden Boulevard. An extruded curb runs along the unpaved shoulder east from the intersection of Chinden Boulevard and Glenwood Street for approximately 1,070'. There is also an existing 8' paved pathway on the east side of Glenwood Street north of Chinden Boulevard that connects to the Greenbelt and other key community destinations, such as Memorial Stadium and Garden City Hall and Library.

RECOMMENDED TREATMENTS

This bundle contains two separate projects from the FHWA report:

A. Lady Bird Park Trail
B. VRT Bus Pad Relocation

Potential treatments for both of these projects are described in the following sections.

Lady Bird Park Trail

The Lady Bird Park Trail is a multi-use path that will provide a continuous connection on the north side of Chinden Boulevard between Glenwood Street and Kent Lane. The proposed path is recommended to be at least 10' wide to accommodate two-way bicycle and pedestrian traffic. The actual width should be determined in the design phase of the project. Two alternative alignments for this path were studied to analyze the benefits and constraints associated with different possible alignments of the path:

- Alternative 1 – is located completely within Lady Bird Park
- Alternative 2 – uses ITD right-of-way to the extent possible

Lady Bird Park Trail – Alternative 1

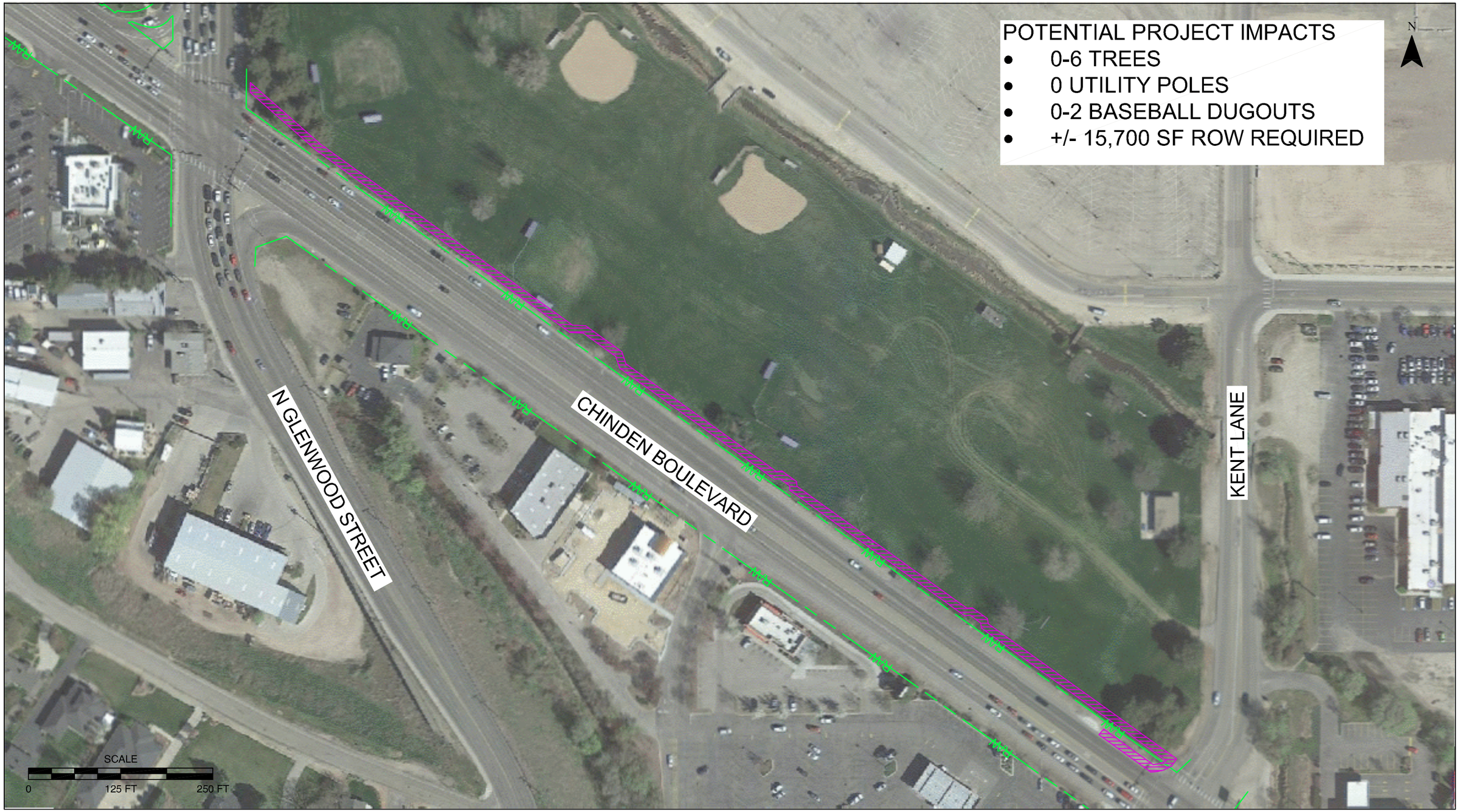
Alternative 1 runs entirely through Lady Bird Park from Kent Lane to Glenwood Street, as shown in Figure 5. The proposed alignment is just north of the fence that separates the park from Chinden Boulevard. The asphalt trail wraps around the existing chain link fence at the eastern end of the park in order to access the VRT bus stop located on the northern side of Chinden Boulevard. Alternatively, an access directly to the bus stop into the park could be provided by providing an opening in the fence and paving a connection between the bus stop and the trail. However, such a connection would need to account for the difference in elevation between the bus stop and the park and meet ADA requirements.

Since Alternative 1 runs almost exclusively through Lady Bird Park, the proposed trail will provide a low stress route for people walking and biking on Chinden Boulevard. This location also avoids challenges associated with utility pole conflicts and stormwater mitigation.

However, as drawn, there are potential conflicts with up to six trees, one baseball dugout, and one bench. All of these features could likely be avoided either by designing the alignment of the trail to avoid them or by narrowing the trail in their vicinity. Figure 5 summarizes the potential impacts of the alignment, while Figure 6 and Figure 7 identify the location of potential project impacts.

Finally, Lady Bird Park was originally purchased by Ada County using federal monies from the Land and Water Conservation Fund (LWCF). Land purchased with LWCF assistance is subject to Section 6(f) protections restricting the conversion of land to any use other than public outdoor recreation use (10). Changes to Ladybird Park that would convert any portion of the park to a use other than public outdoor recreation would require National Park Service (NPS) approval. NPS requires an "in-kind swap" of property to replace 6(f) land taken out of public outdoor recreation use with property of reasonably equivalent usefulness and location, and of at least equal fair market value. Idaho Department of Parks and Recreation (IDPR) can make the first review of whether a proposed change would qualify as a public outdoor recreation use or not. If they determine it does not, then NPS needs to be involved in approving a land swap.

As a multi-purpose, non-motorized trail, both trail alternatives align with the public outdoor recreation use category. Ada County's Park and Open Space Master Plan defines Ladybird Park as a Sport Field Complex/Playfield (11). In addition to serving as a public outdoor recreation use, the trail



- POTENTIAL TRAIL ALIGNMENT
- APPROXIMATE ITD RIGHT-OF-WAY

LADY BIRD PARK TRAIL ALIGNMENT
ALTERNATIVE 1
GARDEN CITY, IDAHO

Figure **5**

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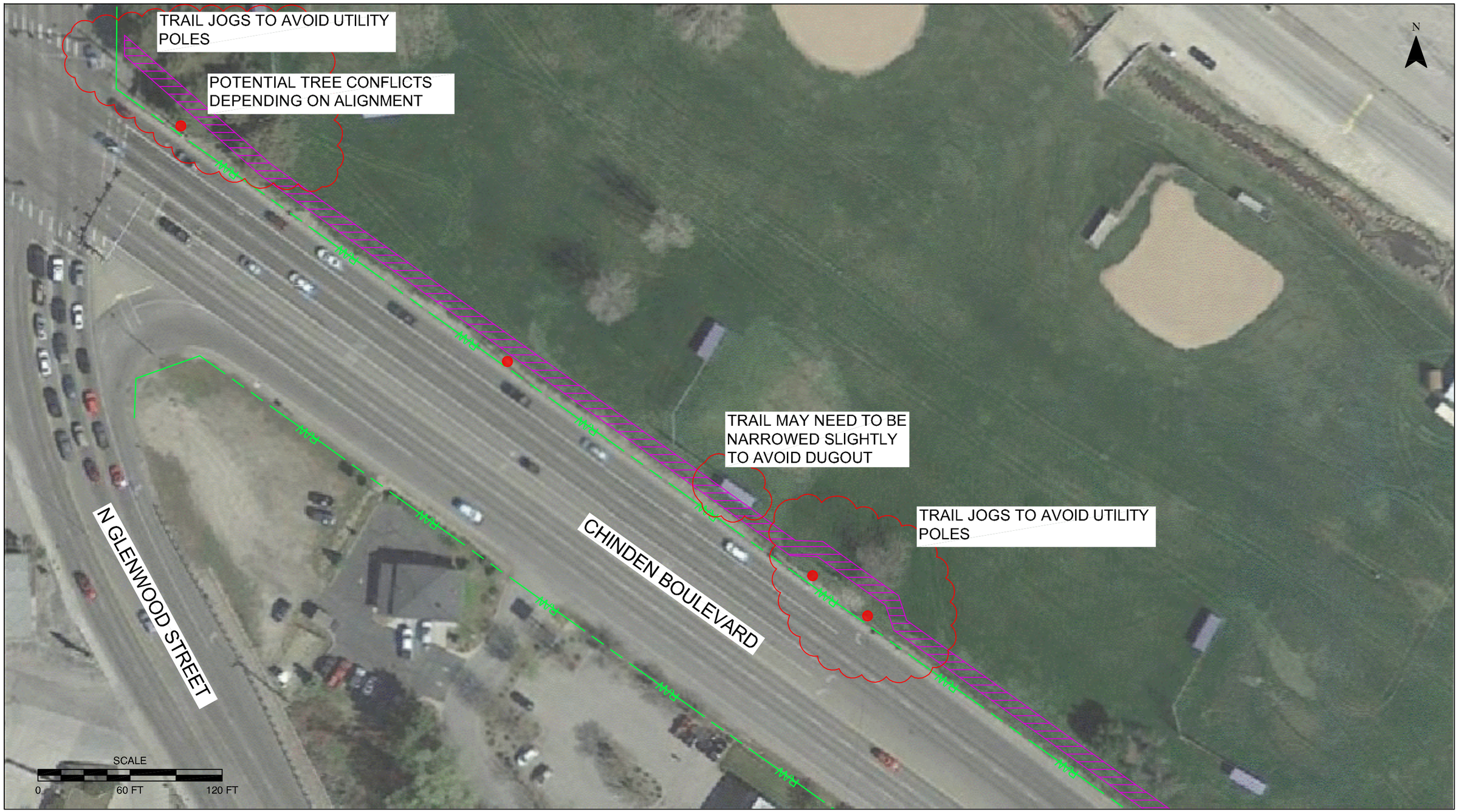
C:\Users\msanders\Desktop\ladybird\Lady Bird Park.dwg Sep 16, 2016 - 8:01am - msanders Layout Tab: Alternative 1



- POTENTIAL TRAIL ALIGNMENT
- APPROXIMATE ITD RIGHT-OF-WAY
- UTILITY POLE

LADY BIRD PARK TRAIL ALIGNMENT
ALTERNATIVE 1 - WESTERN VIEW
GARDEN CITY, IDAHO

Figure **6**

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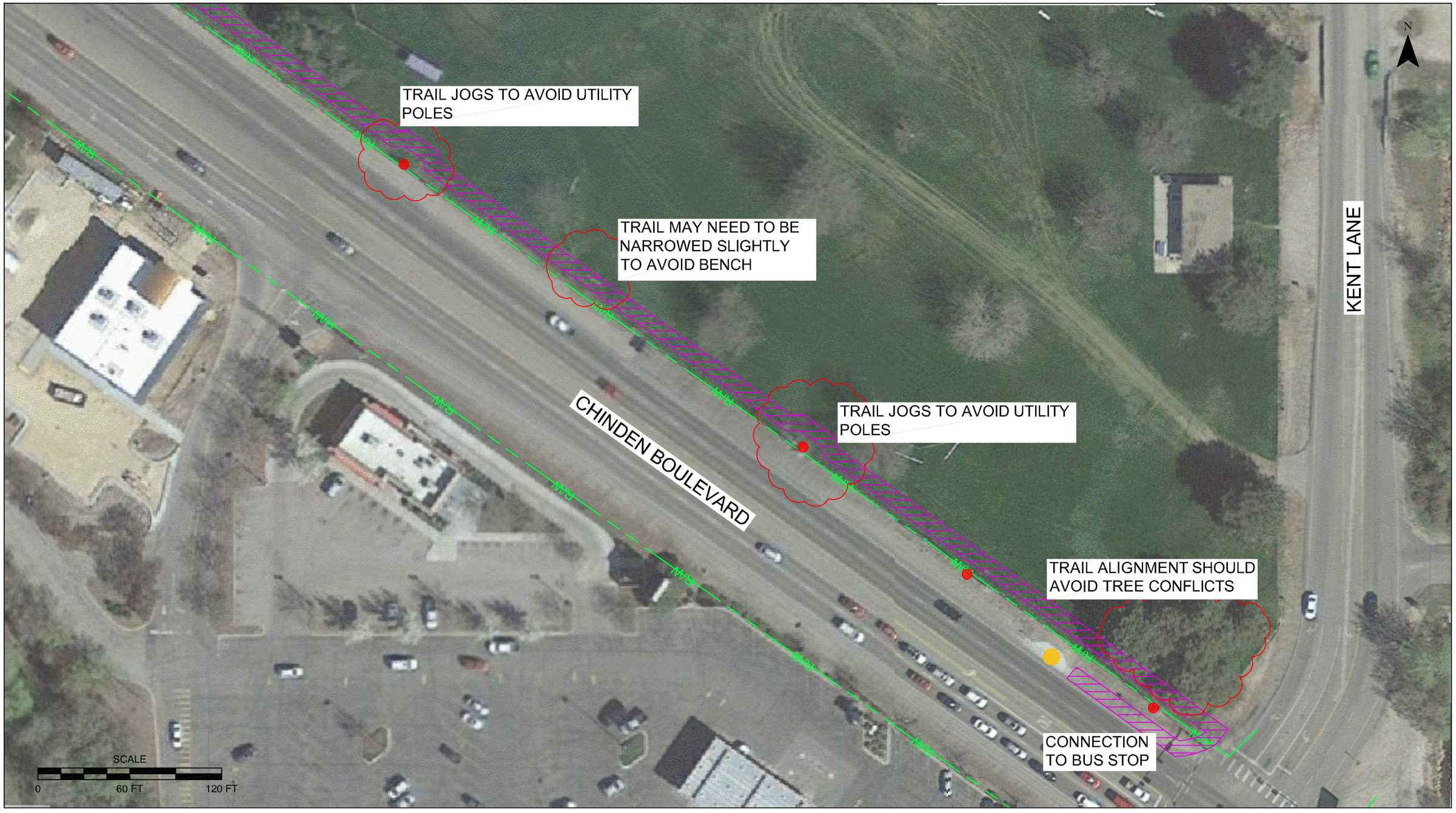

- POTENTIAL TRAIL ALIGNMENT
- APPROXIMATE ITD RIGHT-OF-WAY
- VRT BUS STOP
- UTILITY POLE

LADY BIRD PARK TRAIL ALIGNMENT
ALTERNATIVE 1 - EASTERN VIEW
GARDEN CITY, IDAHO

Figure **7**

supports Ladybird Park's stated function as a Sport Field Complex/Playfield by improving walking and biking access to the sport fields located within the park. The proposed trail also meets the intent of policy statements published in Ada County's Park and Open Space Master Plan, including Policy 9.3-4, which "support[s] the coordination of [a] bicycle pathway system with transportation programs…and other applicable plans or programs."

An example of a recent effort in the Treasure Valley that had to undergo a similar determination is the Eagle Road/McMillan Road intersection widening project. For that project, ACHD and the City of Boise replaced park land purchased with LWCF funds with a sidewalk. IDPR found that this constituted a public outdoor recreation use and enhanced access to the existing park.

Given the above findings, and based on our conversations with professionals who have been through this process before, we expect that either trail alternative will be deemed a public outdoor recreation use and a land swap will not be required.

Lady Bird Park Trail – Alternative 2

Alternative 2 uses as much of the existing ITD right-of-way along the north side of Chinden Boulevard as possible. This alternative provides a direct, clear route along Chinden Boulevard and connects to the VRT bus stop located on the northern side of Chinden Boulevard. Figure 8 illustrates the proposed trail alignment for Alternative 2, along with potential project impacts.

This trail could be constructed as either an asphalt path with extruded curb between the motor vehicle lanes and the trail (e.g., similar to the existing walkway on the south side of Chinden Boulevard, but wider and possibly with breaks to allow stormwater to flow through), or it could be built as a raised concrete pathway. The raised concrete pathway may be more comfortable for walking and biking than the extruded curb pathway. It would also provide an urban aesthetic. However, this option would not allow stormwater to flow through as it currently does. As a result additional stormwater infrastructure would need to be provided in conjunction with the project.

Existing extruded curb walkway on the south side of Chinden Boulevard near Glenwood Street

Figure 9 and Figure 10 summarize potential project impacts associated with Alternative 2. Since Alternative 2 runs along the length of a narrow unpaved shoulder, the proposed trail alignment will require relocating the park fence and may conflict with two trees and five utility poles. The trees could potentially be avoided, depending on the trail is aligned. Likewise, the utility poles could also be avoided by wrapping the trail around the north side of them; however, this would incur additional impacts to Lady Bird Park.

- POTENTIAL TRAIL ALIGNMENT
- APPROXIMATE ITD RIGHT-OF-WAY

LADY BIRD PARK TRAIL ALIGNMENT
ALTERNATIVE 2
GARDEN CITY, IDAHO

Figure **8**

- POTENTIAL TRAIL ALIGNMENT
- APPROXIMATE ITD RIGHT-OF-WAY
- UTILITY POLE

LADY BIRD PARK TRAIL ALIGNMENT
ALTERNATIVE 2 - WESTERN VIEW
GARDEN CITY, IDAHO

Figure **9**

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- POTENTIAL TRAIL ALIGNMENT
- APPROXIMATE ITD RIGHT-OF-WAY
- VRT BUS STOP
- UTILITY POLE

LADY BIRD PARK TRAIL ALIGNMENT
ALTERNATIVE 2 - EASTERN VIEW
GARDEN CITY, IDAHO

Figure **10**

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VRT Bus Stop Relocation

The current VRT bus stop on the south side of Chinden Boulevard is on the west side of the Fred Meyer access. However, the sidewalk into the store is on the east side of the intersection. Additionally, far-side bus stops are preferred by VRT. Two alternative treatments for this relocation were studied to analyze associated benefits and constraints:

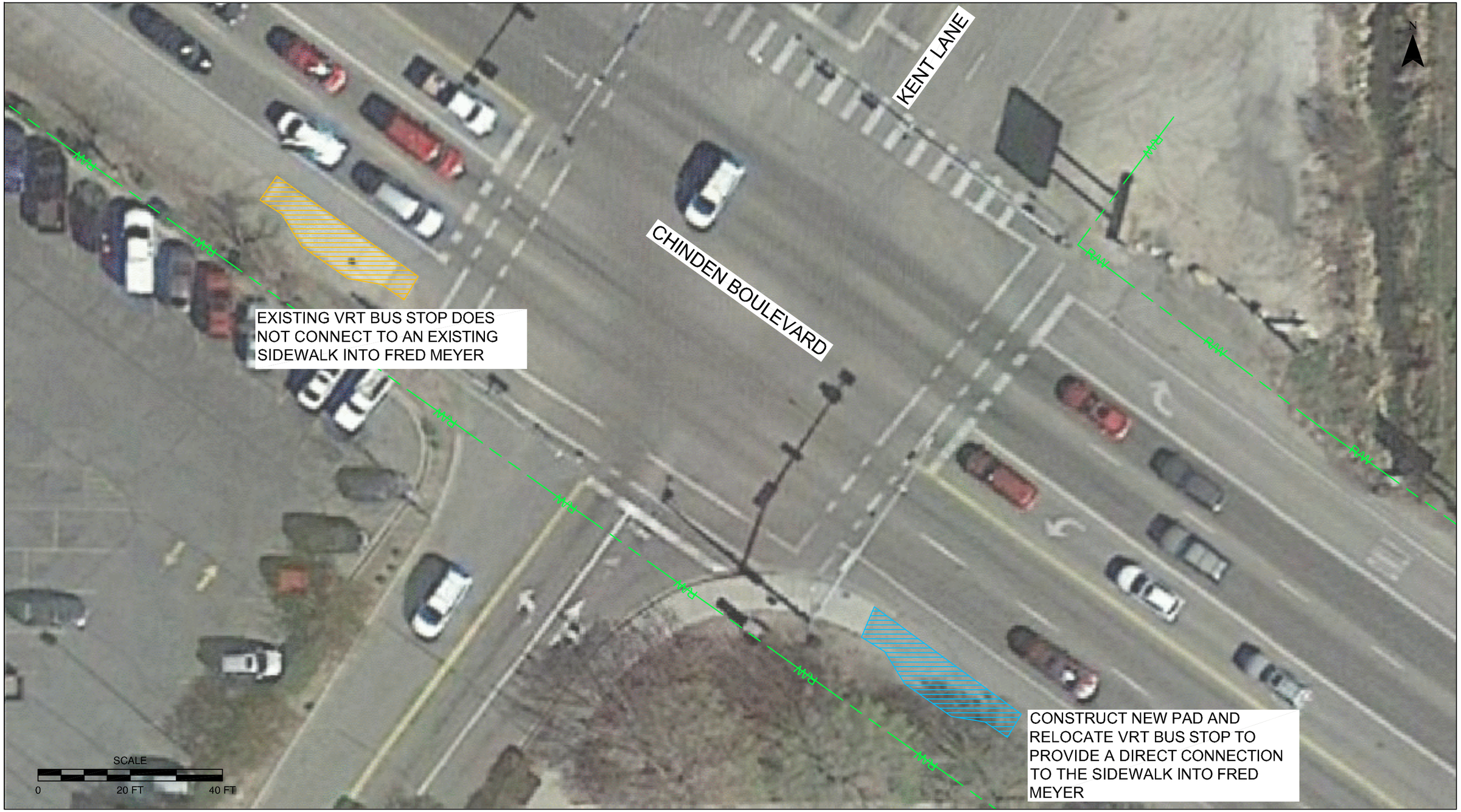
- Constructing the new bus stop in a configuration similar to the existing stop (i.e., with the bus stop pad located directly adjacent to the standard width shoulder)
- Constructing the new bus stop with an improved shoulder (i.e., one wide enough to accommodate the entire width of the bus)

Existing sidewalk into Fred Meyer

Figure 11 shows the proposed bus stop relocation without an improved shoulder and Figure 12 shows the proposed bus stop relocation with an improved shoulder. The primary benefit associated with this latter configuration is that it allows the bus to completely pull out of the motor vehicle travel lane to allow passengers to board and alight; thereby allowing motor vehicle traffic flow to continue in the far right lane. Both proposed concrete bus pads and associated 7’ sidewalk (the existing width of the nearby sidewalk) should extend to directly connect with the existing sidewalk and curb ramp in the northeast corner of the Kent Lane/Chinden Boulevard intersection. ITD is currently in the process of building new curb ramps at this corner of the intersection.

PLANNING LEVEL COST-ESTIMATE

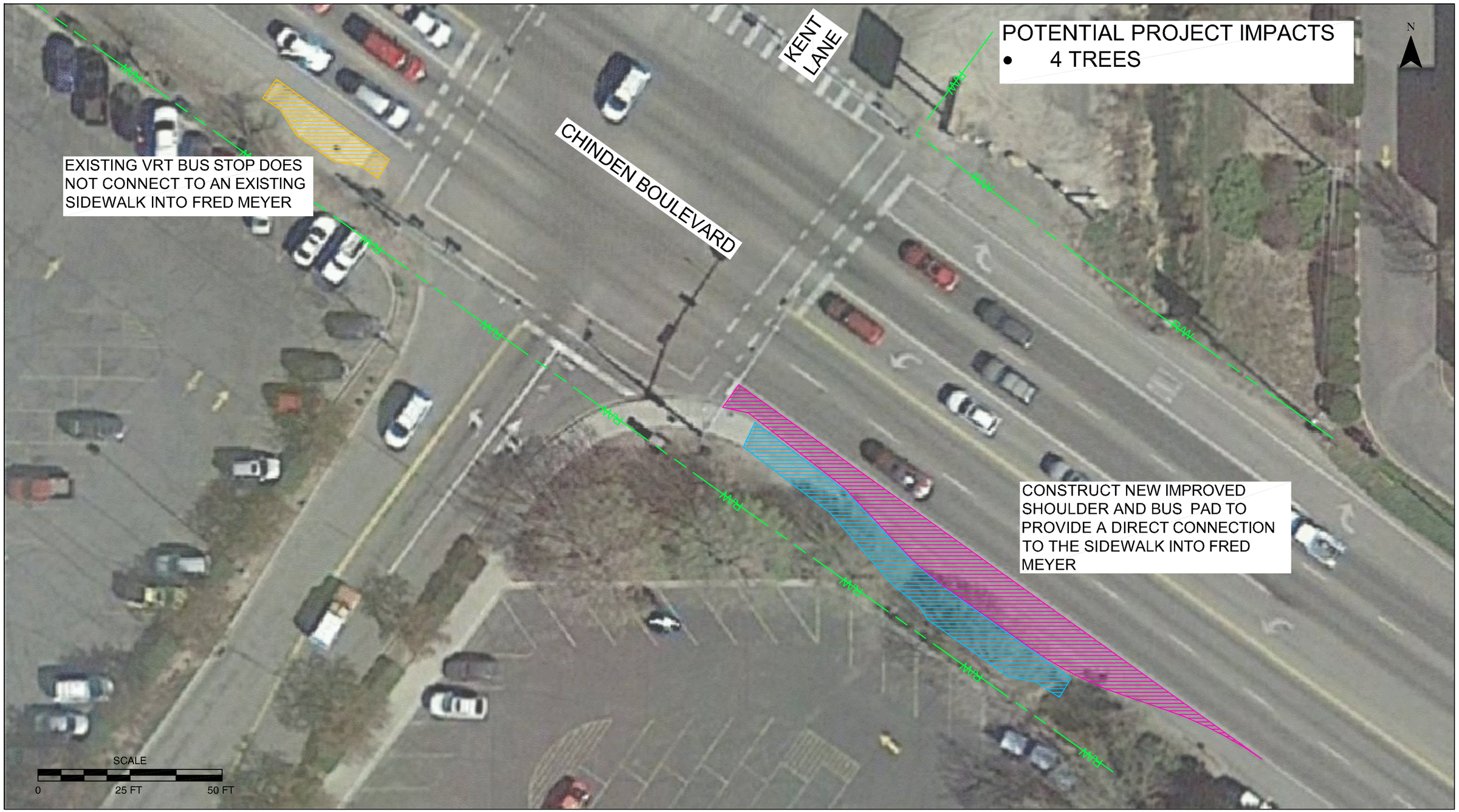
Planning level cost estimates were prepared for each of the two trail alternatives and the relocation of the VRT bus stop. Table 1 summarizes the estimated costs of each potential project. Appendix C provides detailed estimates for each recommended treatment.



- EXISTING BUS PAD LOCATION
- PROPOSED BUS PAD LOCATION
- APPROXIMATE ITD RIGHT-OF-WAY

POTENTIAL VRT BUS PAD RELOCATION
LADY BIRD PARK
GARDEN CITY, IDAHO

Figure **11**



- EXISTING BUS PAD LOCATION
- PROPOSED IMPROVED SHOULDER
- PROPOSED BUS PAD LOCATION
- APPROXIMATE ITD RIGHT-OF-WAY

POTENTIAL VRT BUS PAD RELOCATION WITH IMPROVED SHOULDER
LADY BIRD PARK
GARDEN CITY, IDAHO

Figure **12**

Table 1 Estimated Project Costs - Glenwood to Kent

Project	Estimated Cost
Lady Bird Park Trail Alternatives	
Alternative 1	$80,00 – 115,000[1]
Alternative 2 – Concrete Pathway	$365,000 - $3,200,000[2]
Alternative 2 – Asphalt Trail with Extruded Curb	$175,000
VRT Bus Stop Relocation	$4,500 - $23,500[3]

[1] The cost estimate for Alternative 1 could vary based on whether or not the trail width is reduced to avoid conflicting with the baseball dugouts and whether tree impacts are avoided.
[2] The high end of this range assumes that a stormwater trunkline connecting to the nearest line to the northwest is built. The low end of this range assumes no stormwater improvements.
[3] The high end of this range includes the improved shoulder, while the lower end only includes the relocated bus stop pad.

Alternative 1 is expected to have the lowest cost of the potential Lady Bird Park trail alternatives.

There is a fair amount of uncertainty regarding the cost estimate for the concrete pathway. The high end of the range shown assumes that a new stormwater trunk line is built connecting to the nearest existing line, which is located about 1.5 miles to the northwest. This assumes that the existing facility can support additional stormwater from this section of Chinden Boulevard. If it cannot, other options would need to be explored. It is also possible the other means to properly treat the stormwater could be developed (e.g., a nearby swale, or if the line from the southeast is extended along Chinden Boulevard with other projects), which could result in a cost in the middle of this range. Further analysis of stormwater treatment options would be required if a raised concrete pathway is moved forward as the preferred option.

For the bus stop relocation portion, the option with the improved shoulder is expected to cost about $19,000 more than building the stop in a similar fashion to the existing one. The higher costs for the improved shoulder option result from having to extend the existing asphalt roadway beyond the current edge of pavement and removing trees that will likely be impacted by the widened shoulder.

POTENTIAL FUNDING SOURCES

The recommended Glenwood to Kent projects are eligible for local, state and federal funding. Table 2 lists applicable funding sources and eligible projects. Appendix B details the application processes and selection criteria for these funding sources.

Table 2 Applicable Funding Sources - Glenwood to Kent

Funding Source	Funding Jurisdiction	Program Administrator	Eligible Projects
Transportation Alternatives Program	Federal	State – ITD Local - COMPASS	▪ Lady Bird Park Trail (Alternative 1) ▪ Lady Bird Park Trail (Alternative 2) ▪ VRT Bus Stop Relocation
Recreational Trails Program	Federal	IDPR	▪ Lady Bird Park Trail (Alternative 1)
ADA Curb Ramp Program	ITD	ITD	▪ Lady Bird Park Trail (Alternative 2)
Public Transportation Program	Federal	Regional – VRT Local - COMPASS	▪ VRT Bus Stop Relocation
Communities in Motion Implementation Program	COMPASS	COMPASS	▪ Lady Bird Park Trail (Alternative 1) ▪ Lady Bird Park Trail (Alternative 2) ▪ VRT Bus Stop Relocation
ACHD Community Programs	ACHD	ACHD	▪ Lady Bird Park Trail (Alternative 1) ▪ Lady Bird Park Trail (Alternative 2)

Transportation Alternatives Program

The Glenwood to Kent project bundle is eligible for TAP funding at both the statewide and local level (Boise Urbanized Area). Key goals of the CIM 2040 vision met by the project bundle include increasing walkability and transportation options and providing better access to parks. The project is also located within an environmental justice consideration area, increasing the likelihood that the project could receive TAP-TMA funding (12). If Alternative 1 or 2 is adopted in Garden City's Comprehensive Plan, then the project will be more likely to receive TAP-TMA funding.

Recreational Trails Program

If the Lady Bird Park Trail project (Alternative 1) is deemed to be a recreational trail and is added to a future iteration of Ada County's Comprehensive Plan, then the project would be eligible for Recreational Trails Program funding. A completed environmental survey is required to be submitted with all applications for RTP funding.

ADA Curb Ramp Program

The ADA curb ramps proposed as elements of the Ladybird Park Trail may be eligible for ADA Curb Ramp Program funding. Per ITD's 2016 Curb Ramp Inventory, the northwest corner of the intersection of Kent Lane and Chinden Boulevard is identified as a high priority location for installing an ADA ramp (13). The northeast corner of the intersection of Glenwood Street and Chinden Boulevard is identified as a low priority location for installing an ADA ramp. Since the northwest corner of the intersection of Kent Lane and Chinden Boulevard has a high-priority designation, a proposed ADA ramp at this location is more likely to receive ADA Curb Ramp Program funding from ITD.

Public Transportation Program

The recommended VRT Bus Stop relocation is eligible for Public Transportation Program funding, which is distributed by VRT. Bus stop enhancement projects, including the relocation and installment of bus stops, have been funded by VRT and included in the FY2016-2020 Regional Transportation Improvement Program.

Communities in Motion Program

The Glenwood to Kent project bundle is eligible for a CIM Implementation Grant, since all three projects provide better access to public transportation, bicycle, and pedestrian facilities. The Lady Bird Park Trail alternatives are estimated to cost more than the amount that recent CIM Implementation Grants have been awarded for. Therefore, this grant should be considered for use as potential matching funds for another funding source or to be paired with local funds.

ACHD Community Programs

The Lady Bird Park Trail alternatives may be eligible for funding from ACHD. However, this would not be a typical use of these funds and would require approval from the ACHD Commission.

ENVIRONMENTAL SCAN

An environmental scan was conducted to identify, at a high-level, potential environmental constraints and considerations within the Glenwood to Kent study area. Appendix D provides the detailed environmental scan. Key findings from the environmental scan are as follows:

- The National Register of Historic Places in Idaho from the State Historic Preservation Office (SHPO) indicated there are no listed historic places in the project area
- EPA's Enviromapper program indicated that there are 5 hazardous waste generators located within a ¼-mile of the study area
- IDEQ has identified 17 Underground Storage Tanks (USTs) and 1 leaking Underground Storage Tank (LUSTs) within a ¼-mile of the study area
- The US Fish & Wildlife Service (USFWS) has not identified the project area as proposed critical habitat for local threatened or endangered species
    - Slickspot Peppergrass is a proposed endangered species that may occur in the project area
    - The Yellow-billed Cuckoo is a threatened species that may occur in the project area
- Data from the National Wetlands Inventory database indicated Riverine Wetlands within a ¼-mile of the study area. No wetlands are known to be located in the path of the proposed projects.

IMPLEMENTATION PROCESS

The following section outlines the general steps that would need to be taken to implement the projects.

Lady Bird Park Trail

The following steps should be taken to implement this project:

- Determine which alternative is preferred
- If Alternative 1 is selected:
    - Verify with IDPR that the trail will be considered a valid public outdoor recreational use
    - If Recreational Trails Program funding is to be considered, the trail will need to be added to Ada County's Comprehensive Plan as a recreational path
- If Alternative 2 is selected:
    - Determine whether it will be built as a raised concrete pathway or as an asphalt pathway with an extruded curb barrier
        - If it will be a concrete walkway, then determine what stormwater drainage mitigations will be required (this may be done as part of the design process)
    - Verify with IDPR that the trail will be considered a valid public outdoor recreational use
- Determine the appropriate level of public involvement necessary to implement the preferred alternative
    - Alternative 1 may require greater outreach due to its impacts to the park
- Develop grant applications for design through construction in coordination with ITD, Garden City, COMPASS, and Ada County

VRT Bus Stop Relocation

The following steps should be taken to implement this project:

- Determine if the bus stop relocation will include an improved shoulder
- Determine if the project will require grant funding or if it will be funded by VRT.
    - If grant funding will be required, develop grant applications for design through construction in coordination with ITD, Garden City, COMPASS and VRT.

FUTURE CONSIDERATIONS

Notable considerations that will need to be addressed during the implementation phase are highlighted here.

Lady Bird Park Development Restrictions

Lady Bird Park was originally purchased by Ada County using LWCF funds. Consequently, Lady Bird Park is subject to Section 6(f) protections restricting the conversion of land to any use other than a public outdoor recreation use. The Lady Bird Park trail alternatives would still provide a public outdoor recreational use and enhance access to the park. Given this, we expect that 6(f) mitigation will not be required; however confirmation of this will need to be made with IDPR as the project moves into the design phase.

Chinden Boulevard Stormwater Treatment Options

According to data provided by ITD staff, this section of Chinden Boulevard does not have stormwater drainage systems. The nearest facilities are on Kent Lane, but are owned by ACHD. The nearest ITD stormwater facilities are located about 1.5 miles to the northwest.

Any project that would result in a change in conditions (i.e., constructing a continuous raised concrete pathway) may trigger the need to provide drainage mitigations. Possible drainage mitigation requirements include installing drainage infrastructure along Chinden Boulevard or directing stormwater from the site vicinity to nearby swales. If a nearby swale cannot be developed, then a connection to the nearest ITD facility 1.5 miles away would likely need to be made.

Public Involvement

The Lady Bird Park trail alternatives would impact the current use of the park. As a result, some level of public involvement would likely be needed, depending on the extent to which the park is impacted. More thorough engagement may be needed before the design phase for Alternative 1, which runs entirely through the park, while Alternative 2, which only affects a portion of the park's periphery may not necessitate the same level of effort.

Section 3
50th to Kent

50TH TO KENT

The 50th to Kent project bundle provides a walkway on the north side of Chinden Boulevard between 50th Street and Kent Lane. Figure 13 illustrates the site vicinity for the project bundle. When completed, this project will facilitate a more comfortable walking experience along the corridor. It will improve access to a range of commercial uses, including Garden City's only grocery store (Fred Meyer, located at Kent Lane), as well as to employment opportunities. When the Glenwood to Kent project bundle is built, the northern terminus of the 50th to Kent walkway will improve access to the Lady Bird Park Trail and relocated VRT bus stop described in the previous section.

Figure 13 - 50th to Kent Site Vicinity Map

A project prospectus sheet summarizing this project is included in the next page, while more details regarding the project are provided in the following sections.

50TH TO KENT – WALKWAY ALONG THE NORTH SIDE OF CHINDEN BOULEVARD

Description:	Construct an asphalt walkway separated from motor vehicle traffic by an extruded curb barrier along the north side of Chinden Boulevard from 50th Street to Kent Lane.
Purpose:	Improve access for people walking, biking, and taking transit to reach several commercial and employment destinations. Moves toward providing a complete walkway from 43rd Street (current western terminus of sidewalk on Chinden Boulevard) to Glenwood Street.
Cost: $70,000	**Potential Funding Sources:** TAP, CIM Implementation Grants, ACHD Community Programs, Public/Private Partnership

Potential Project Partners: ACHD, COMPASS, Garden City, ITD, Garden City Urban Renewal Agency, Adjacent Businesses

Considerations:

An extruded curb walkway is recommended due to the lack of existing stormwater infrastructure on Chinden Boulevard. The final design of the walkway will need to ensure that the curbing is designed so it remains a continuation of existing drainage conditions. Frequent, and sometimes long, driveways exist on Chinden Boulevard. The design should look for opportunities to better define and/or consolidate access points when feasible. The improvements proposed are not consistent with Garden City Code or sidewalk policy requirements or the Garden City Comprehensive Plan's vision of Chinden as a tree-lined boulevard. These improvements are considered an interim fix to provide a more comfortable walkway than exists today until the vision for the corridor can be implemented.

Project Location/Images:

FHWA RECOMMENDATION/NEEDS IDENTIFIED

The FHWA Bike and Pedestrian Assessment Report for Chinden Boulevard identifies the north side of Chinden Boulevard between 50th Street and Kent Lane as a focus area for providing safer bicycle and pedestrian infrastructure. The lack of a safe sidewalk or walkway between 50th Street and Kent Lane leaves a major gap in Garden City's bicycle and pedestrian network. The FHWA report specifically recommends a combination of extruded curb, shoulder, and sidewalk treatments to improve access to destinations along Chinden Boulevard.

Existing shoulder with open access frontage on Chinden Boulevard east of 50th Street

EXISTING BICYCLE AND PEDESTRIAN INFRASTRUCTURE

Bicyclists and pedestrians travelling along Chinden Boulevard between 50th Street and Kent Lane today utilize limited infrastructure. There are no sidewalks or separated walkways along this section of Chinden Boulevard. Paved shoulders varying between 2' and 18' in width adjoin the north side of Chinden Boulevard. Parked motor vehicles have been observed in the paved shoulders, further impeding safe bicycle and pedestrian travel along Chinden Boulevard between 50th Street and Kent Lane.

RECOMMENDED TREATMENT

There are two options for providing a walkway along the north side of Chinden Boulevard from 50th Street to Kent Lane: 1) a raised sidewalk (either attached or detached and buffered with a planter strip); or 2) an asphalt walkway separated by an extruded curb.

A sidewalk would provide the more comfortable walking experience of the options. However, a sidewalk would also likely trigger the need for stormwater drainage mitigations. According to data provided by ITD, there is not stormwater infrastructure on this section of Chinden Boulevard. It is likely that the installation of sidewalks on this section of Chinden Boulevard would trigger the need to build stormwater infrastructure (e.g., piping, "Green Street" treatments). This would result in increased expenses and project development time.

Extruded curb walkway section on Hill Road
Image Source: Google Streetview

After consulting with COMPASS and Garden City staff, given the desire to develop a project concept that could be implemented in the near-term, the recommended treatment presented here is a 5'

wide asphalt walkway with an extruded curb. The curb should be designed to allow stormwater to flow across the walkway as it does the shoulder today so there is no change in existing conditions. The improvements proposed are not consistent with Garden City Code or sidewalk policy requirements or the Garden City Comprehensive Plan's vision of Chinden as a tree-lined boulevard. Construction of the extruded curb walkway does not preclude the future implementation of Garden City's long-term vision for Chinden Boulevard, including the addition of sidewalks and street trees. Figure 14 and Figure 15 show the proposed asphalt walkway alignment.

PLANNING LEVEL COST-ESTIMATE

Planning level cost estimates were prepared for both the recommended extruded curb walkway and concrete sidewalk alternative. Table 3 below summarizes the estimated costs of each potential project. Appendix C provides detailed estimates for each recommended treatment.

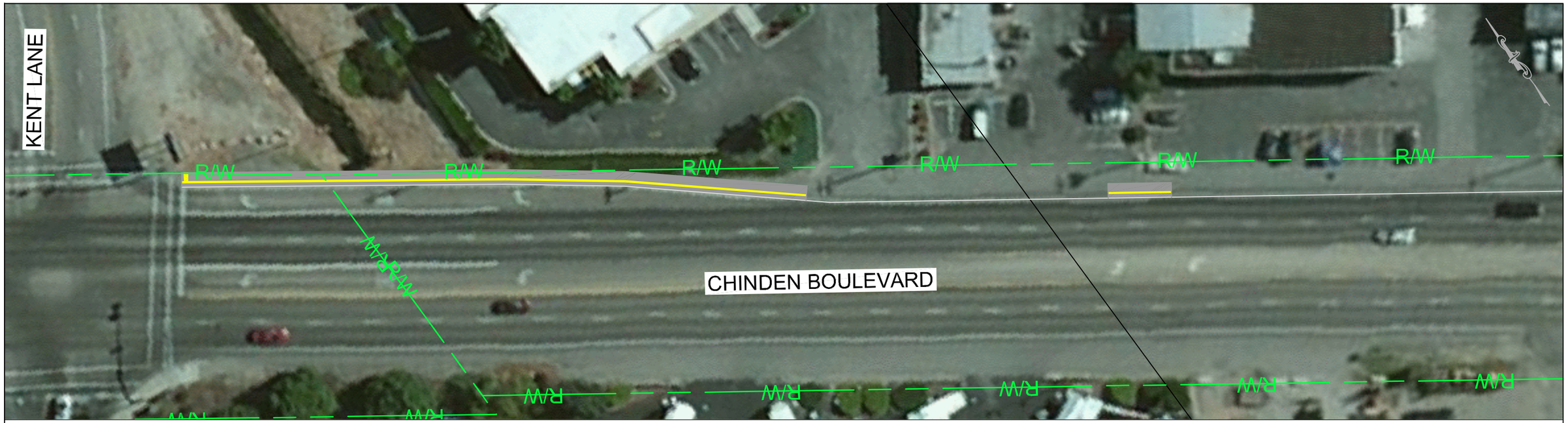
Table 3 Estimated Project Costs - 50th to Kent

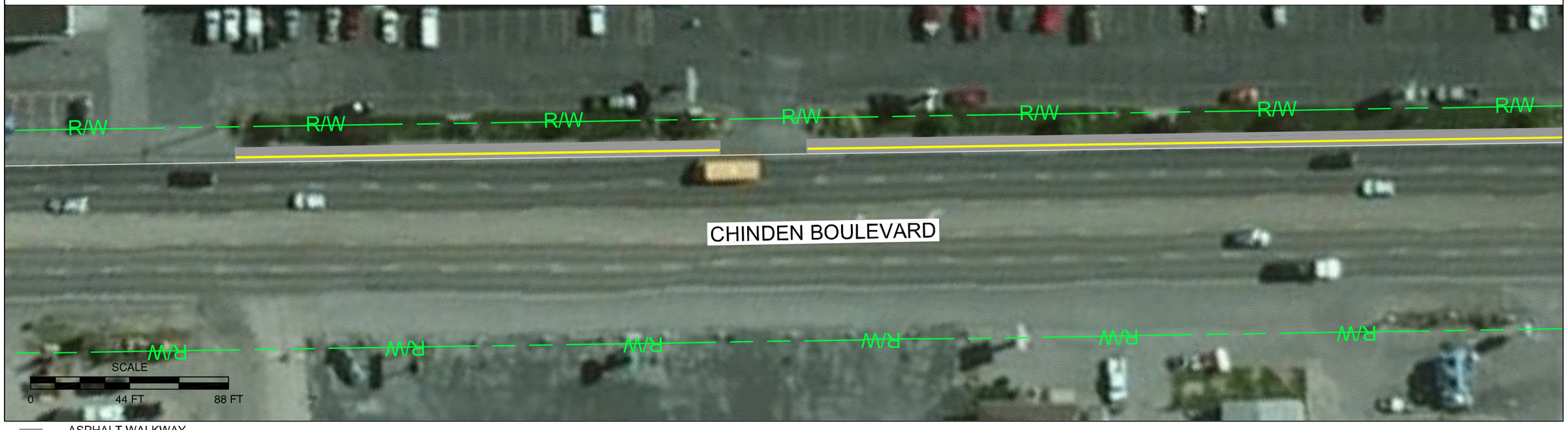
Project	Estimated Cost
Extruded Curb Asphalt Walkway	$70,000
Attached Concrete Sidewalk	$1,000,000 - $2,800,000[1]

[1]This cost estimate ranges depending on how far the stormwater trunk line needs to be built. The low end assumes that a new line has already been built to 50th Street as part of another project, while the high-end assumes it needs to be built all the way to the existing line at 43rd Street.

The primary costs associated with the extruded curb walkway is the curbing itself, as much of the asphalt for the walkway exists today.

There is a fair amount of uncertainty regarding the cost estimate for the concrete pathway. The high end of the range shown assumes that a new stormwater trunk line is built connecting to the nearest existing line, which is located at 43rd Street. This assumes that the existing facility can support additional stormwater from this section of Chinden Boulevard. If it cannot, other options would need to be explored. The lower end of the shown estimate assumes that the line only needs to be built for the length of the project (i.e., the existing line has been extended to 50th Street as part of another project). Further analysis of stormwater treatment options would be required to continue to develop a plan for adding sidewalk to Chinden Boulevard.





- ASPHALT WALKWAY
- EDGE STRIPE
- DETECTABLE DOMES
- EXTRUDED CURB
- APPROXIMATE ITD RIGHT-OF-WAY

50TH TO KENT
ASPHALT WALKWAY WITH EXTRUDED CURB
GARDEN CITY, IDAHO

Figure
14

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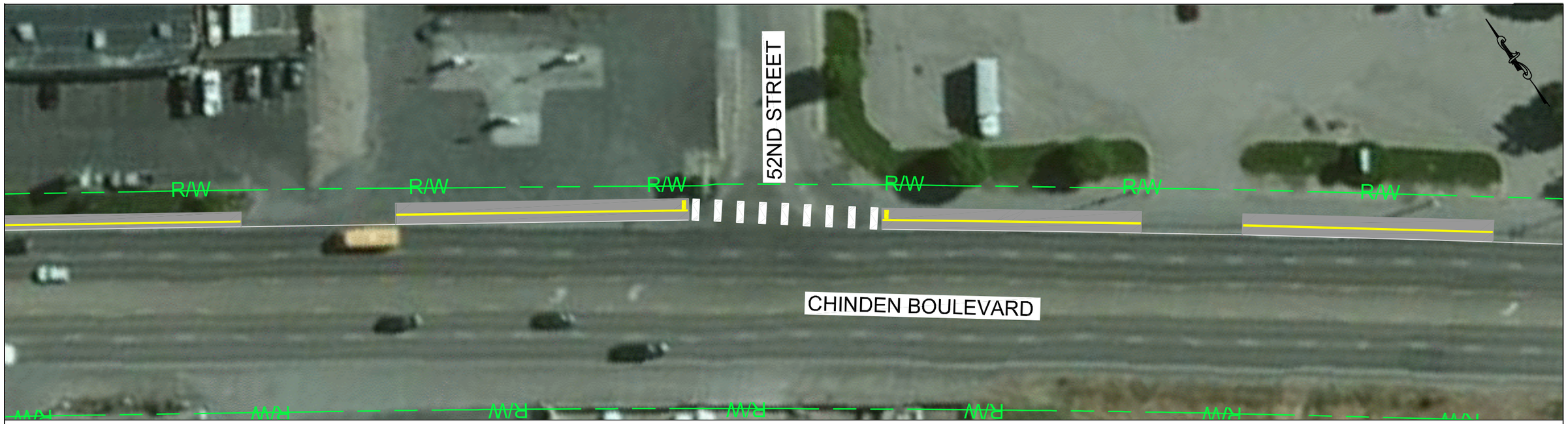

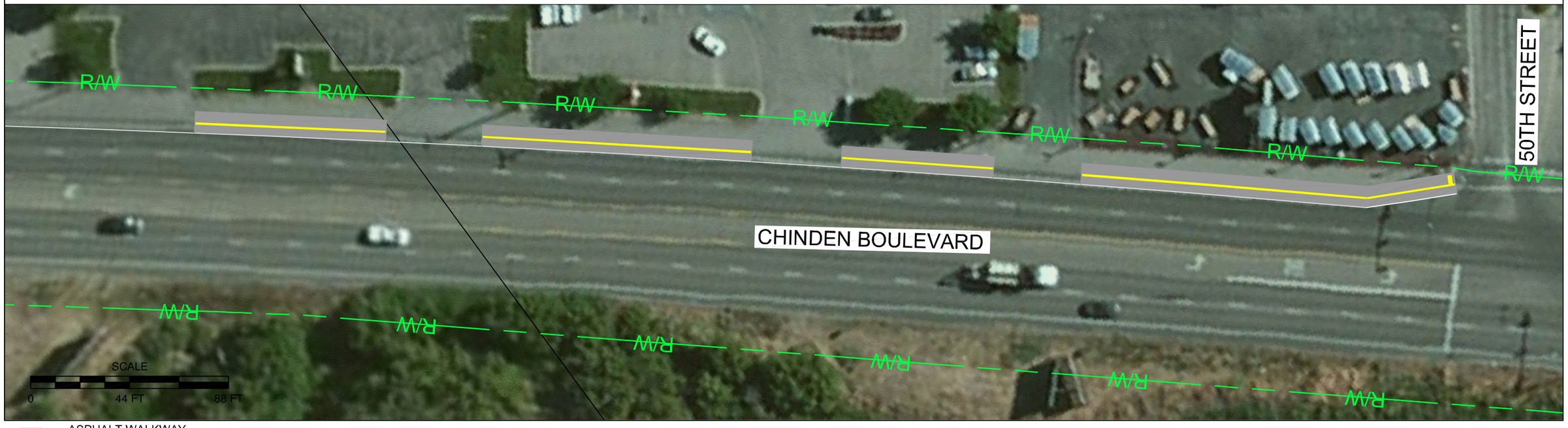

- ASPHALT WALKWAY
- EDGE STRIPE
- DETECTABLE DOMES
- EXTRUDED CURB
- APPROXIMATE ITD RIGHT-OF-WAY

50TH TO KENT
ASPHALT WALKWAY WITH EXTRUDED CURB
GARDEN CITY, IDAHO

Figure
15

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

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POTENTIAL FUNDING SOURCES

The recommended asphalt walkway is eligible for local, state and federal funding. Table 4 lists applicable funding sources and eligible projects. Appendix B details the application processes and selection criteria for these funding sources.

Table 4 Applicable Funding Sources - 50th to Kent

Funding Source	Funding Jurisdiction	Program Administrator
Transportation Alternatives Program	Federal	State – ITD Local - COMPASS
Communities in Motion Implementation Program	COMPASS	Local - COMPASS
ACHD Community Programs	ACHD	Local - ACHD
Local Business Partners	Local	Local

Transportation Alternatives Program

The 50th to Kent project bundle is eligible for TAP funding at both the statewide and local level (Boise Urbanized Area). Key goals of the CIM 2040 vision met by the project bundle include increasing walkability. The project is also located within an environmental justice consideration area, increasing the likelihood that the project could receive TAP-TMA funding. If the asphalt walkway is adopted in Garden City's Comprehensive Plan, then the project will be more likely to receive TAP-TMA funding.

Communities in Motion Program

The 50th to Kent project bundle is eligible for a CIM Implementation Grant, since the project provides better access to bicycle and pedestrian facilities. Both walkway alternatives are estimated to cost more than the amount that recent CIM Implementation Grants have been awarded for. Therefore, this grant should be considered for use as potential matching funds for another funding source or to be paired with local funds.

ACHD Community Programs

The proposed walkway from 50th Street to Kent Lane may be eligible for funding from ACHD. However, this would not be a typical use of these funds and would require approval from the ACHD Commission.

Local Business Partners

The proposed asphalt walkway could benefit from the financial support of local business owners seeking to improve access to their establishments and/or the aesthetic of the street. This could be accomplished through direct financial contributions to the project, or via a more formal government process, such as a local improvement district (LID) or by establishing an urban renewal area; though it is

expected that another urban renewal area would not be established in Garden City for several years at the earliest.

ENVIRONMENTAL SCAN

An environmental scan was conducted to identify, at a high-level, potential environmental constraints and considerations within the 50th to Kent study area. Appendix D provides the detailed environmental scan. Key findings from the environmental scan are as follows:

- The National Register of Historic Places in Idaho from the State Historic Preservation Office (SHPO) indicated there are no listed historic places in the project area
- EPA's Enviromapper program indicated that there are 12 hazardous waste generators located within a ¼-mile of the study area
- IDEQ has identified 23 Underground Storage Tanks (USTs) and 5 Leaking Underground Storage Tank (LUSTs) within a ¼-mile of the study area
- The US Fish & Wildlife Service (USFWS) has not identified the project area as proposed critical habitat for local threatened or endangered species
    - Slickspot Peppergrass is a proposed endangered species that may occur in the project area
    - The Yellow-billed Cuckoo is a threatened species that may occur in the project area
- Data from the National Wetlands Inventory database indicated Riverine Wetlands and Freshwater Emergent Wetlands within a ¼-mile of the study area. No wetlands are known to be located in the path of the proposed project bundle.

IMPLEMENTATION PROCESS

The following section outlines the general steps that would need to be taken to implement the project:

- Conduct property and business owner outreach necessary to implement the preferred project, including discussions regarding better defining open access frontages
- Develop grant applications for design through construction in coordination with ITD, Garden City, COMPASS, and possibly ACHD and local business owners

FUTURE CONSIDERATIONS

Notable considerations that will need to be addressed during the implementation phase are highlighted here.

Chinden Boulevard Stormwater Treatment Options

According to data provided by ITD staff, this section of Chinden Boulevard does not have stormwater drainage systems. The nearest facilities are on Kent Lane, but are owned by ACHD. The nearest ITD stormwater facilities are at 43rd Street.

Any project that would result in a change in conditions (i.e., constructing a continuous raised sidewalk) may trigger the need to provide drainage mitigations. Possible drainage mitigation requirements include installing drainage infrastructure along Chinden Boulevard or directing stormwater from the site vicinity to nearby swales. If a nearby swale cannot be developed, then a connection to the nearest ITD facility at 43rd Street would likely need to be made.

Chinden Boulevard Driveway Access

The paved shoulders on the north side of this section of Chinden Boulevard are intersected by nine access driveways and wider access "frontages." These access points limit the amount of coverage that any type of walkway can provide and present conflict points for people walking and driving. Opportunities to better define and consolidate driveway access points along Chinden Boulevard should be considered during the project design and construction phase. This will require additional coordination with local business and property owners.

Section 4
43rd to 50th

43RD TO 50TH

PROJECT AREA

The 43rd to 50th project includes a walkway on the north side of Chinden Boulevard between 43rd Street and 50th Street. Figure 16 illustrates the site vicinity for the project bundle. This project will provide improved access for people walking and biking to reach commercial, employment, and key community destinations. The walkway will also connect to the existing sidewalk network, which runs southwest along Chinden Boulevard from 43rd Street to Garden City limits where additional sidewalk connections are available to the Greenbelt and Boise via Garden Street and the Main Street/Fairview Avenue couplet. If the 50th to Kent project bundle is built, the 43rd to 50th Street walkway will improve access to Garden City's only grocery store (Fred Meyer, located at Kent Lane).

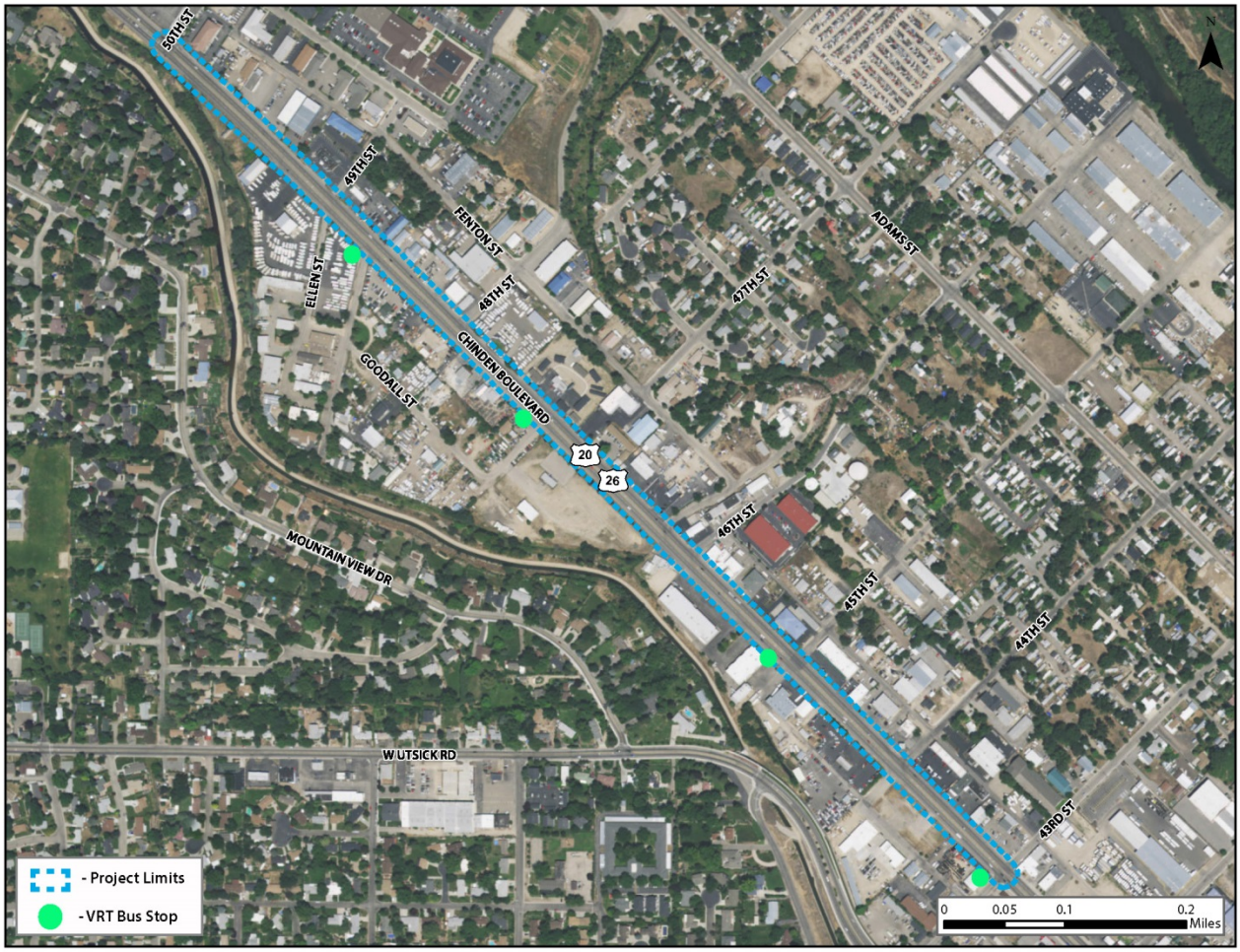


Figure 16 – 43rd to 50th Site Vicinity Map

A project prospectus sheet summarizing this project is included in the next page, while more details regarding the project are provided in the following sections.

43RD TO 50TH – WALKWAY ALONG THE NORTH SIDE OF CHINDEN BOULEVARD

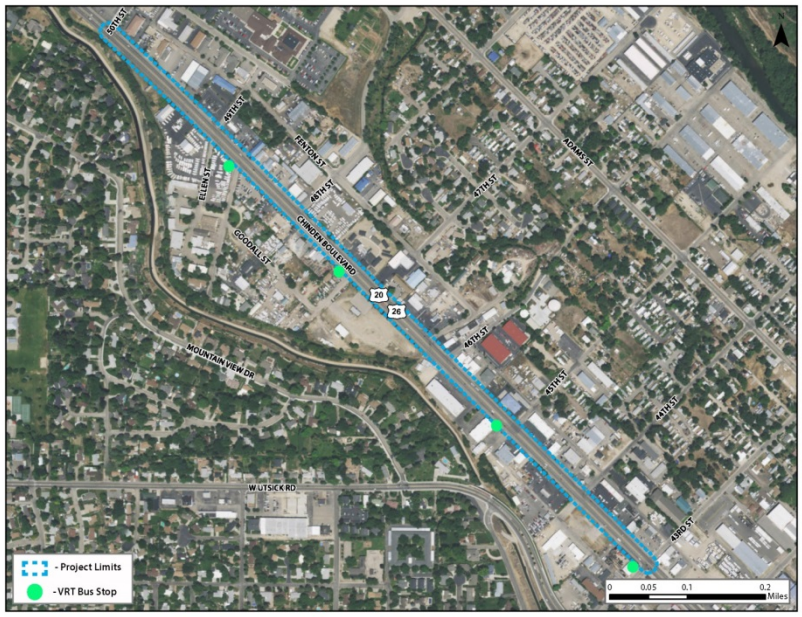
Description:	Construct an asphalt walkway separated from motor vehicle traffic by an extruded curb barrier along the north side of Chinden Boulevard from 43rd Street to 50th Street.
Purpose:	Improve access for people walking, biking, and taking transit to reach several commercial and employment destinations. Moves toward providing a complete walkway from 43rd Street (current western terminus of sidewalk on Chinden Boulevard) to Glenwood Street.
Cost: $130,000	**Potential Funding Sources:** TAP, CIM Implementation Grants, ACHD Community Programs, Public/Private Partnership

Potential Project Partners: ACHD, COMPASS, Garden City, ITD, Garden City Urban Renewal Agency, Adjacent Businesses

Considerations:

An extruded curb walkway is recommended due to the lack of existing stormwater infrastructure on Chinden Boulevard. The final design of the walkway will need to ensure that the curbing is designed so it remains a continuation of existing drainage conditions. Frequent, and sometimes long, driveways exist on Chinden Boulevard. The design should look for opportunities to better define and/or consolidate access points when feasible. The improvements proposed are not consistent with Garden City Code or sidewalk policy requirements or the Garden City Comprehensive Plan's vision of Chinden as a tree-lined boulevard. These improvements are considered an interim fix to provide a more comfortable walkway than exists today until the vision for the corridor can be implemented.

Project Location/Images:



FHWA RECOMMENDATION/NEEDS IDENTIFIED

The FHWA Bike and Pedestrian Assessment Report for Chinden Boulevard identifies the north side of Chinden Boulevard between 43rd Street and 50th Street as a focus area for providing safer bicycle and pedestrian infrastructure. The lack of a safe sidewalk or trail between 43rd Street and 50th Street leaves a major gap in Garden City's bicycle and pedestrian network. The FHWA report specifically recommends the use of a combination of extruded curb, shoulder, and sidewalk treatments to improve access to destinations along Chinden Boulevard.

EXISTING BICYCLE AND PEDESTRIAN INFRASTRUCTURE

Bicyclists and pedestrians travelling along Chinden Boulevard between 43rd and 50th Street today utilize limited infrastructure. There are no sidewalks or separated walkways along this section of Chinden Boulevard. Paved shoulders varying between 5' and 20' in width adjoin the north side of Chinden Boulevard, and paved shoulders varying between 7' and 20' adjoin the south side of Chinden Boulevard.

Existing shoulder on Chinden Boulevard west of 43rd Street

VRT bus stops are located on the western corner of the intersection of Chinden Boulevard and 43rd Street, the western corner of the intersection of Chinden Boulevard and 45th Street, the western corner of the intersection of Chinden Boulevard and 47th Street, and the western corner of the intersection of Chinden Boulevard and Murray Street. These bus stops must be accessed via existing paved shoulders.

RECOMMENDED TREATMENT

Extruded curb walkway section on State Street
Image Source: Google Streetview

There are two options for providing a walkway along the north side of Chinden Boulevard from 43rd Street to 50th Street: 1) a raised sidewalk (either attached or detached and buffered with a planter strip); or 2) an asphalt walkway separated by an extruded curb.

A sidewalk would provide the more comfortable walking experience of the options. However, a sidewalk would also likely trigger the need for stormwater drainage mitigations. According to data provided by ITD, there is not stormwater

infrastructure on this section of Chinden Boulevard. It is likely that the installation of sidewalks on this section of Chinden Boulevard would trigger the need to build stormwater infrastructure (e.g., piping, "Green Street" treatments). This would result in increased expenses and project development time.

After consulting with COMPASS and Garden City staff, given the desire to develop a project concept that could be implemented in the near-term, the recommended treatment presented here is a 5' wide asphalt walkway with an extruded curb. The curb should be designed to allow stormwater to flow across the walkway as it does the shoulder today so there is no change in existing conditions. The improvements proposed are not consistent with Garden City Code or sidewalk policy requirements or the Garden City Comprehensive Plan's vision of Chinden as a tree-lined boulevard. Construction of the extruded curb walkway does not preclude the future implementation of Garden City's long-term vision for Chinden Boulevard, including the addition of sidewalks and street trees. Figures 17, 18, 19 and 20 show the proposed asphalt walkway alignment.

PLANNING LEVEL COST-ESTIMATE

Planning level cost estimates were prepared for both the recommended extruded curb walkway and concrete sidewalk alternative. Table 5 below summarizes the estimated costs of each potential project. Appendix C provides detailed estimates for each recommended treatment.

Table 5 Estimated Project Costs - 43rd to 50th

Project	Total Estimated Cost
Extruded Curb Asphalt Walkway	$130,000
Attached Concrete Sidewalk	$2,100,000

The primary costs associated with the extruded curb walkway is the curbing itself, as much of the asphalt for the walkway exists today.

The largest reason for the difference in cost between the two options is the additional stormwater infrastructure that would likely be required with construction of sidewalk. The sidewalk cost estimate assumes the construction of a new stormwater trunk line for the length of the project that connects to the existing stormwater facility at 43rd Street. There could be additional costs associated with this if the existing facility requires expansion to accommodate the new connection.

- ASPHALT WALKWAY
- EDGE STRIPE
- DETECTABLE DOMES
- EXTRUDED CURB
- APPROXIMATE ITD RIGHT-OF-WAY

43RD TO 50TH
ASPHALT WALKWAY WITH EXTRUDED CURB
GARDEN CITY, IDAHO

Figure
17

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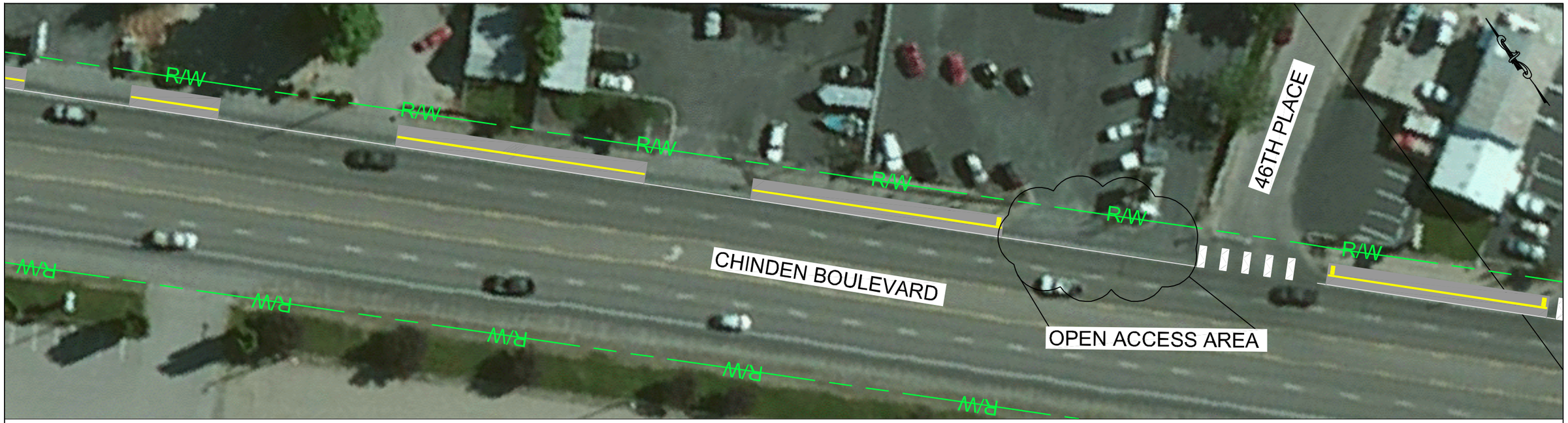
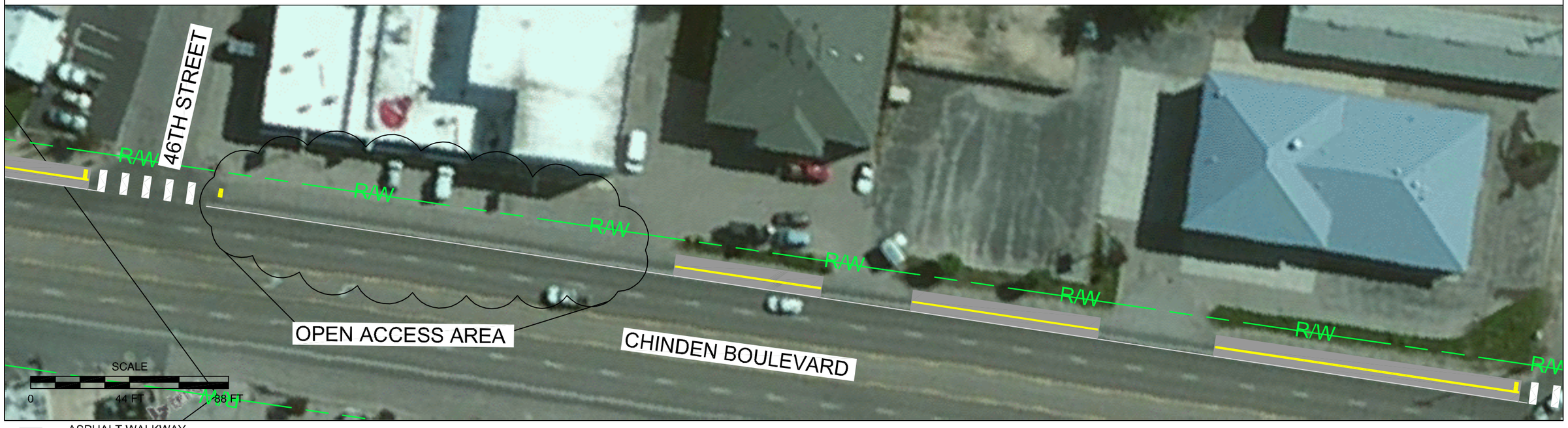
- ASPHALT WALKWAY
- EDGE STRIPE
- DETECTABLE DOMES
- EXTRUDED CURB
- APPROXIMATE ITD RIGHT-OF-WAY

43RD TO 50TH
ASPHALT WALKWAY WITH EXTRUDED CURB
GARDEN CITY, IDAHO

Figure
18





- ASPHALT WALKWAY
- EDGE STRIPE
- DETECTABLE DOMES
- EXTRUDED CURB
- APPROXIMATE ITD RIGHT-OF-WAY

43RD TO 50TH
ASPHALT WALKWAY WITH EXTRUDED CURB
GARDEN CITY, IDAHO

Figure
19

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TRANSPORTATION ENGINEERING/PLANNING

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- ASPHALT WALKWAY
- EDGE STRIPE
- DETECTABLE DOMES
- EXTRUDED CURB
- APPROXIMATE ITD RIGHT-OF-WAY

43RD TO 50TH
ASPHALT WALKWAY WITH EXTRUDED CURB
GARDEN CITY, IDAHO

Figure
20

POTENTIAL FUNDING SOURCES

The recommended asphalt walkway is eligible for local, state and federal funding. Table 6 lists applicable funding sources and eligible projects. Appendix B details the application processes and selection criteria for these funding sources.

Table 6 Applicable Funding Sources – 43rd to 50th

Funding Source	Funding Jurisdiction	Program Administrator
Transportation Alternatives Program	Federal	State – ITD Local - COMPASS
ADA Curb Ramp Program	ITD	State - ITD
Communities in Motion Implementation Program	COMPASS	Local - COMPASS
ACHD Community Programs	ACHD	Local - ACHD
Local Business Partners	Local	Local

Transportation Alternatives Program

The 43rd to 50th project bundle is eligible for TAP funding at both the statewide and local level (Boise Urbanized Area). Key goals of the CIM 2040 vision met by the project bundle include increasing walkability. The project is also located within an environmental justice consideration area, increasing the likelihood that the project could receive TAP-TMA funding. If the asphalt walkway is adopted in Garden City's Comprehensive Plan, then the project will be more likely to receive TAP-TMA funding.

Communities in Motion Program

The 43rd to 50th project bundle is eligible for a CIM Implementation Grant, since the project provides better access to bicycle and pedestrian facilities. Both walkway alternatives are estimated to cost more than the amount that recent CIM Implementation Grants have been awarded for. Therefore, this grant should be considered for use as potential matching funds for another funding source or to be paired with local funds.

ACHD Community Programs

The proposed walkway from 43rd Street to 50th Street may be eligible for funding from ACHD. However, this would not be a typical use of these funds and would require approval from the ACHD Commission.

Local Business Partners

The proposed asphalt walkway could benefit from the financial support of local business owners seeking to improve access to their establishments and/or the aesthetic of the street. This could be accomplished through direct financial contributions to the project, or via a more formal government process, such as a local improvement district or by establishing an urban renewal area; though it is

expected that another urban renewal area would not be established in Garden City for several years at the earliest.

ENVIRONMENTAL SCAN

An environmental scan was conducted to identify, at a high-level, potential environmental constraints and considerations within the 43rd to 50th study area. Appendix D provides the detailed environmental scan. Key findings from the environmental scan are as follows:

- The National Register of Historic Places in Idaho from the State Historic Preservation Office (SHPO) indicated there are no listed historic places in the project area
- EPA's Enviromapper program indicated that there are 20 hazardous waste generators located within a ¼-mile of the study area
- IDEQ has identified 12 Underground Storage Tanks (USTs) and 8 Leaking Underground Storage Tank (LUSTs) within a ¼-mile of the study area
- The US Fish & Wildlife Service (USFWS) has not identified the project area as proposed critical habitat for local threatened or endangered species
    - Slickspot Peppergrass is a proposed endangered species that may occur in the project area
    - The Yellow-billed Cuckoo is a threatened species that may occur in the project area
- Data from the National Wetlands Inventory database indicated Riverine Wetlands, Freshwater Emergent Wetlands and Freshwater Forested/Shrub Wetlands within a ¼-mile of the study area. Riverine Wetlands intersect with the project site at Chinden Boulevard and 46th Street.

IMPLEMENTATION PROCESS

The following section outlines the general steps that would need to be taken to implement the project:

- Conduct property and business owner outreach necessary to implement the preferred project, including discussions regarding better defining open access frontages
- Develop grant applications for design through construction in coordination with ITD, Garden City, COMPASS, and possibly ACHD and local business owners

FUTURE CONSIDERATIONS

Notable considerations that will need to be addressed during the implementation phase are highlighted here.

Chinden Boulevard Stormwater Treatment Options

According to data provided by ITD staff, this section of Chinden Boulevard does not have stormwater drainage systems. The nearest ITD stormwater facilities are at 43rd Street.

Any project that would result in a change in conditions (i.e., constructing a continuous raised sidewalk) may trigger the need to provide drainage mitigations. A likely stormwater treatment option for this section of Chinden Boulevard would be to install a new trunk line that connects to the existing stormwater facility at 43rd Street. However, further analysis would be required to determine the feasibility of this connection.

Chinden Boulevard Driveway Access

The paved shoulders on the north side of this section of Chinden Boulevard are intersected by 29 access driveways and wider access "frontages." These access points limit the amount of coverage that any type of walkway can provide and present conflict points for people walking and driving. Opportunities to better define and consolidate driveway access points along Chinden Boulevard should be considered during the project design and construction phase. This will require additional coordination with local business and property owners.

Section 5
Pedestrian Crossing at 43rd Street

PEDESTRIAN CROSSING AT 43RD STREET

PROJECT AREA

This project aims to improve crossing Chinden Boulevard at 43rd Street. Figure 21 illustrates the site vicinity for this project bundle. When completed, the pedestrian crossing will complete the missing link in a continuous route between Ustsick Road and the Greenbelt along 43rd Street, providing an alternative parallel route to Veterans Memorial Parkway/Curtis Road. In doing so, the crossing will also improve access to a local school (Anser Charter School) and the Boys and Girls Club.

43rd Street Connection to the Greenbelt
Image Source: Google Streetview

A project prospectus sheet summarizing this project is included in the following pages, while more details regarding the project are provided in the following sections.

FHWA RECOMMENDATION/NEEDS IDENTIFIED

The FHWA Bike and Pedestrian Assessment Report for Chinden Boulevard singled out the 43rd Street intersection as a focus area for implementing pedestrian crossing treatments. The lack of safe crossing options severely limits bicycle and pedestrian mobility along the Chinden Boulevard corridor. The FHWA report also highlights the lack of ADA accessible pedestrian ramps at Chinden Boulevard intersections as a barrier to vulnerable populations.

The FHWA report recommends constructing a pedestrian crossing at or near the intersection of Chinden Boulevard and 43rd Street.

EXISTING BICYCLE AND PEDESTRIAN INFRASTRUCTURE

There are no crossing treatments for people walking or biking at the intersection. The nearest crosswalk that provides a complete sidewalk connection to the Greenbelt is approximately 975’ to the east on the east side of the Veterans Memorial Parkway/Chinden Boulevard intersection (the sidewalk is not continuous on the west side of Veterans Memorial Parkway). To reach this crossing, people must walk along roads with relatively high motor vehicle volumes (i.e., Chinden Boulevard, Curtis Road, and/or Veterans Memorial Parkway). Due the presence of a right-turn lane and double left-turn lanes on Chinden Boulevard at Veterans Memorial Parkway, the crossing is longer than it would be at 43rd Street, leaving people walking and biking exposed for greater periods of time while crossing Chinden Boulevard. A VRT bus stop is also located at the western corner of the intersection of Chinden Boulevard and 43rd Street.

Key Biking & Walking Connections
Pedestrian Crossing at 43rd Street
Garden City, Idaho

Figure
21

Coordinate System: NAD 1983 Transverse Mercator

PEDESTRIAN CROSSING AT 43RD STREET

Description:	Install a pedestrian hybrid beacon (PHB) controlled crossing of Chinden Boulevard on the east side of the 43rd Street intersection.
Purpose:	Improve access for people walking, biking, and taking transit to reach Anser Charter School, the Boys and Girls Club, commercial and employment destinations, and the Greenbelt. Makes 43rd Street a more viable alternative route to Veterans Memorial Parkway for people walking and biking.
Cost: $74,000 - $78,500	**Potential Funding Sources:** TAP, CIM Implementation Grants, ACHD Community Programs
Potential Project Partners: ACHD, COMPASS, Garden City, ITD	
Considerations:	There is currently not enough crossing activity to meet MUTCD warrants for a PHB, but there is latent demand for the crossing given existing destinations near 43rd Street and the continuous connection it would provide. A more detailed engineering study may need to be completed prior to entering the design phase of this project.

Project Location/Images:

RECOMMENDED TREATMENT

A crossing controlled by a pedestrian hybrid beacon (PHB) is recommended for the east side of 43rd Street at Chinden Boulevard. The proposed crossing consists of two pedestrian hybrid signal poles and advance stop bars located on both eastern and western approaches to the intersection, a continental crosswalk at the eastern approach to the intersection, a crosswalk on the northern leg of the intersection, and ADA treatments on the northern side of the street (ITD is currently rebuilding the pedestrian ramps on the south side). Figure 22 shows the existing conditions at the 43rd Street intersection and Figure 23 shows a rendering of the 43rd Street intersection with the recommended pedestrian hybrid beacon and associated improvements.

This treatment was arrived at using National Cooperative Highway Research Program (NCHRP) Report *562 Improving Pedestrian Safety at Unsignalized Crossings procedure*. NCHRP Report 562 provides guidance on the type of treatments that should be considered for an unsignalized crossing given a number of factors, including the speed limit of the roadway being crossed, pedestrian volumes, motor vehicle traffic volumes, length of the crossing, walk time, and expected compliance of motor vehicle drivers. Treatment categories include no treatment, crosswalk, active/enhanced (measures such as rectangular rapid flashing beacon) and signal.

Crossing Demand and MUTCD Warrant

The treatment recommended by the NCHRP Report 562 analysis is based in part on existing demand. Existing pedestrian crossing volumes were observed during one weekday p.m. peak hour in July 2016. During this time only one person crossing Chinden Boulevard was observed. A previous bicycle count completed by the Treasure Valley Cycling Alliance (TVCA) observed 14 people biking on 43rd Street south of Ustick Road; however it is not clear if these people crossed Chinden Boulevard as part of their trip. Even if all of the people biking did cross Chinden Boulevard, the number of crossings would still be below what is needed to meet the PHB warrant in Section 4F of the Manual on Uniform Traffic Control Devices (MUTCD) *(14)*, which has a lower threshold of 20 crossings in a single hour.

Agencies will install PHBs even when the MUTCD warrant is not met when surrounding land-uses and the existing roadway suggest there may be latent or future demand for a crossing (e.g., near a school, in an area expected to develop/redevelop). Indeed, the project team observed that some people walking along 43rd Street approached Chinden Boulevard, decided not to cross there, and instead traveled further east to cross at Veterans Memorial Parkway. Given the potential for 43rd street to serve as an alternate route to Veterans Memorial Parkway, the presence of Anser Charter School (a supporting e-mail from the school is provided in Appendix E), and potential latent demand, it is possible that improvements at the intersection would increase pedestrian crossings. Consequently, a pedestrian hybrid beacon is the recommended crossing treatment for the intersection. The results of the NCHRP Report 562 analysis are included in Appendix E.

Figure 22 – 43rd Street Intersection Existing Conditions (Looking East)

Figure 23 - Proposed Pedestrian Hybrid Beacon at 43rd Street Intersection (Looking East)

Crossing Placement

As shown in Figure 23, the PHB is proposed to be located at the 43rd Street/Chinden Boulevard intersection. Section 4F.02 of the MUTCD recommends that the pedestrian hybrid beacon be installed at least 100 feet from side streets or driveways that are controlled by STOP or YIELD signs. It is written in the MUTCD as a "should" statement, so it is not a requirement. Many agencies do not follow this recommendation and choose to install PHBs directly at intersections, because this is where the crossing demand often is. There are several examples of such installations throughout the Treasure Valley on local roads and on ITD highways (i.e., State Highway 44/Highlands Drive in Middleton and State Highway 45/Colorado Avenue in Nampa).

SH 44/Highlands Drive Pedestrian Hybrid Beacon
Image Source: Google Streetview

Signal Coordination

Section 4F.02 of the MUTCD also recommends that pedestrian hybrid beacons be coordinated with nearby signals when they are present. ACHD operates traffic signals in Ada County. According to ACHD staff, the signal controller at the nearby Veterans Memorial Parkway intersection should be able to be interconnected with a PHB at 43rd Street and there is already conduit and fiber in place to facilitate this connection.

The expected benefit of coordinating the PHB with the signal at Veterans Memorial Parkway is that it could reduce the build-up of motor vehicle queues along westbound Chinden Boulevard. A planning-level analysis of potential queuing on Chinden Boulevard at the PHB was conducted to investigate the likelihood that queues could stack up from 43rd Street to the Veterans Memorial Parkway intersection. Based on this analysis, queues are typically expected to be about 7 vehicles (i.e., approximately 175 feet) per lane on westbound Chinden Boulevard during the weekday p.m. peak hour when the PHB is activated, assuming a coordinated operation. This is less than the approximately 850 feet of storage space that exists between the two intersections. There are several low-volume driveways on Chinden Boulevard that would be blocked for a short time while the pedestrian hybrid beacon is activated during peak time periods. The affected businesses have alternate access to Garden City's roadway network via alleys running on the north and south sides of Chinden Boulevard, so the pedestrian hybrid beacon should have minimal disruptive effects on surrounding businesses. More details on this analysis are included in Appendix E.

PLANNING LEVEL COST-ESTIMATE

Two planning level cost estimates were prepared for the proposed pedestrian crossing. The first cost estimate includes the costs associated with installing an uncoordinated PHB, and the second cost estimate includes costs associated with installing a coordinated PHB. Table 7 below summarizes the

estimated cost of the project. Appendix C provides a detailed estimate for the recommended treatment.

Table 7 Estimated Project Costs – Pedestrian Crossing at 43rd Street

Project	Total Estimated Cost
Pedestrian Hybrid Beacon and Crosswalk Markings	$74,000 - $79,000[1]

[1]The higher end of this range accounts for coordinated operation with the signal at Veterans Memorial Parkway

The main costs associated with the PHB include the cost of the beacon, utility cabinet, and associated pavement markings. Additional costs associated with the coordinated PHB include the installation of an interconnect splice vault and increased engineering design and construction management requirements.

POTENTIAL FUNDING SOURCES

The recommended pedestrian hybrid beacon is eligible for local, state and federal funding. Table 8 lists applicable funding sources and eligible projects. Appendix B details the application processes and selection criteria for these funding sources.

Table 8 Applicable Funding Sources – Pedestrian Crossing at 43rd Street

Funding Source	Funding Jurisdiction	Program Administrator
Transportation Alternatives Program	Federal	State – ITD Local - COMPASS
ADA Curb Ramp Program	ITD	State - ITD
Highway Safety Improvement Program	Federal	State - ITD
Communities in Motion Implementation Program	COMPASS	Local - COMPASS
ACHD Community Programs	ACHD	Local - ACHD

Transportation Alternatives Program

The 43rd Street Crossing project is eligible for TAP funding at both the statewide and local level (Boise Urbanized Area). Key goals of the CIM 2040 vision met by the project bundle include increasing walkability and transportation options. The project is also located within an environmental justice consideration area, increasing the likelihood that the project could receive TAP-TMA funding.

Highway Safety Improvement Program

The proposed pedestrian hybrid beacon and associated pavement markings and signage are eligible for HSIP funding. Projects located in areas with high crash rates are more likely to receive HSIP funding. Per LHTAC's Local Road Crash Database, four crashes have occurred in the vicinity of the 43rd Street intersection between 2010 and 2014 *(15)*. Three of the crashes involved property damage, and one crash involved a C injury accident. Since none of these crashes were fatal, and the 43rd Street has experienced relatively few crashes compared to larger, adjoining intersections, it is less likely that the proposed PHB and associated improvements will receive funding from the HSIP program.

Communities in Motion Program

The proposed pedestrian hybrid beacon is eligible for a CIM Implementation Grant, since the project increases walkability and provides better access to public transportation. The crossing is estimated to cost more than the amount that recent CIM Implementation Grants have been awarded for. Therefore, this grant should be considered for use as potential matching funds for another funding source or to be paired with local funds.

ACHD Community Programs

The proposed crossing may be eligible for funding from ACHD. However, this would not be a typical use of these funds and would require approval from the ACHD Commission. This funding source may be more likely for this project than the walkways given that the crossing would potentially serve children traveling to and from the ANSER Charter School who would be walking along an ACHD roadway (i.e., 43rd Street). Further, the current ACHD Commission has shown interest in funding crossings of Chinden Boulevard in the recent past.

ENVIRONMENTAL SCAN

An environmental scan was conducted to identify, at a high-level, potential environmental constraints and considerations within the study area. Appendix D provides the detailed environmental scan. Key findings from the environmental scan are as follows:

- The National Register of Historic Places in Idaho from the State Historic Preservation Office (SHPO) indicated there are no listed historic places in the project area
- EPA's Enviromapper program indicated that there are 11 hazardous waste generators located within a ¼-mile of the study area
- IDEQ has identified 21 Underground Storage Tanks (USTs) and 6 Leaking Underground Storage Tank (LUSTs) within a ¼-mile of the study area
- The US Fish & Wildlife Service (USFWS) has not identified the project area as proposed critical habitat for local threatened or endangered species
    - Slickspot Peppergrass is a proposed endangered species that may occur in the project area

  - The Yellow-billed Cuckoo is a threatened species that may occur in the project area
- Data from the National Wetlands Inventory database indicated Riverine Wetlands and Freshwater Emergent Wetlands within a ¼-mile of the study area. No wetlands are known to be located in the path of the proposed project bundle.

IMPLEMENTATION PROCESS

The following section outlines the general steps that would need to be taken to implement the project:

- Work with ITD to determine what level of additional analysis will be required prior to implementing the project
  - Section 4F of the MUTCD recommends that pedestrian hybrid beacons be considered on the basis of an engineering study that considers major-street volumes, speeds, widths, and gaps in conjunction with pedestrian volumes, walking speeds, and delay.
- Work with ITD to determine whether the beacon will operate in isolation (e.g., "hot" activation where the beacon begins within a few seconds of the button being depressed) or if it will be coordinated with the Veterans Memorial Parkway intersection
  - PHBs typically operate in isolation so that they activate shortly after the pedestrian call comes in. Coordinating the PHB may result in long delays after the pushbutton is activated, resulting in noncompliance with the "Don't Walk" indication and a beacon that is stopping traffic for a person who has already crossed if a gap appears earlier.
- Develop grant applications for design through construction in coordination with ITD, Garden City, COMPASS and ACHD.
- If the beacon is planned to be coordinated with the Veterans Memorial Parkway intersection, work with ACHD to interconnect the beacon with the Veteran's Memorial Parkway signal and develop timing plans specifying how the pedestrian hybrid beacon will fit within the coordinated signal system.

FUTURE CONSIDERATIONS

Notable considerations that will need to be addressed during the implementation phase are highlighted here.

Impacts to Traffic Operation

If implemented, the pedestrian hybrid beacon will affect motor vehicle traffic operations along Chinden Boulevard. This project has completed a planning-level queuing analysis, and determined based on this analysis, that it is not likely that queuing from the PHB on westbound Chinden Boulevard will extend back to the Veterans Memorial Parkway intersection during the weekday p.m. peak hour. Further

detailed analysis could be completed as part of any engineering study that may be required before the crossing is designed.

43rd Street Sidewalks

There is not a complete sidewalk connection on 43rd Street between Ustick Road and Chinden Boulevard. This does not necessarily impact people who are bicycling on 43rd Street, but it does detract from the walking environment on this section of 43rd Street. If the pedestrian hybrid beacon is implemented, ACHD should consider a sidewalk project on 43rd Street south of Chinden Boulevard to improve this connection for people walking to/from Ustick Road.

Section 6
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