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June 21, 2021

Rob Wight
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Utah Department of Transportation
166 West Southwell Street
Ogden, Utah 84404

Subject: SR-108; SR-127 (Antelope Drive) to SR-126 (1900 West), Davis and Weber Counties, Final Environmental Impact Statement and Section 4(f) Evaluation, August 2008 and Record of Decision, October 29, 2008, UDOT Project STP-0108(13)4E

RE: **Environmental Re-evaluation for a segment of SR-108 from 300 North in West Point (Davis County) to 6000 South in Roy (Weber County) UDOT Project S-0108(36)6, PIN 15680**

Dear Mr. Wight:

The Final Environmental Impact Statement and Section 4(f) Evaluation (FEIS) for State Route 108 (SR-108) in Davis and Weber Counties evaluated the environmental impacts of improving SR-108 from its intersection with State Route 127 (SR-127, or Antelope Drive) to its intersection with State Route 126 (SR-126, or 1900 West), an approximately 9.5-mile section of SR-108. Since the FEIS was completed in 2008, portions of the project have been completed through staged construction. With Project S-108(36)6 (PIN 15680), the Utah Department of Transportation (UDOT) is updating the environmental analysis for the 2.5-mile section of SR-108 through Clinton, Utah, between Mile Point 6.0 (300 North in West Point) and Mile Point 8.5 (6000 South in Roy). SR-108 is 2000 West Street through West Point and Clinton (Davis County) but changes to 3500 West in Roy (Weber County).

This memorandum is intended to support a decision regarding whether a supplemental EIS is required pursuant to applicable criteria in FHWA's National Environmental Policy Act (NEPA) regulations. The regulations in 23 Code of Federal Regulations (CFR) Section 771.130(a) provide that a supplemental EIS is required when "(1) changes to the proposed action would result in significant environmental impacts that were not evaluated in the EIS; or (2) new information or circumstances relevant to environmental concerns and bearing on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS." To support that determination, this memorandum summarizes the proposed refinement to the EIS Selected Alternative; discusses changes in the affected environment; and considers whether any of the changes in the project and affected environment require a supplemental EIS. The attachments to this memorandum include the supporting figures, technical documentation, and clearance memoranda.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by UDOT pursuant to 23 United States Code (USC) Section 327 and a memorandum of understanding (MOU) dated January 17, 2017, and executed by FHWA and UDOT. This Re-evaluation is being processed in accordance with the assignment MOU, and UDOT is the agency responsible for approving the Re-evaluation.

BACKGROUND AND NEED FOR RE-EVALUATION

In the Record of Decision (ROD), dated October 28, 2008, UDOT and FHWA selected the Minimize 4(f) Impacts Alternative, which involves widening SR-108 to a 110-foot, five-lane cross section. The alignment of the Selected Alternative was meandered east-west through portions of the corridor to minimize impacts to Section 106 and Section 4(f) properties (historically eligible architectural structures). Since the 2008 ROD, additional architectural structures have become historically eligible; these additional eligible structures required updates to the project's Section 106 consultation and Section 4(f) compliance. Additionally, some previously eligible structures have subsequently been demolished. Therefore, efforts have been made during the Re-evaluation process to adjust the alignment of the Selected Alternative to minimize impacts to the currently eligible and remaining Section 106 and Section 4(f) properties. Those efforts resulted in development of a Refined Selected Alternative.

Refined Selected Alternative

The Refined Selected Alternative is illustrated in the attached map series (Attachment 1) and typical cross sections (Attachment 2). In addition to the efforts to avoid and minimize impacts to historic properties, the design year has been updated from 2040 to 2050. New traffic data was obtained to evaluate the ability of the roadway design to satisfy design-year traffic performance criteria. Based on the updated traffic study, adjustments have been made to the lengths of turn-lanes to better accommodate existing and projected 2050 turning traffic volumes.

A raised median was included in the FEIS preliminary design for the school crossing at the intersection with 550 North in West Point. As described in the Chapter 2 of the 2008 FEIS, other locations for raised medians would be considered during the final design of the project for high-traffic areas to improve safety.

Through the updated traffic analysis and discussions with the City of West Point, UDOT decided to include a high-intensity activated crosswalk (HAWK) signal at the 550 North school crossing. A raised median will not be necessary for the HAWK signal to operate effectively, so a raised median is not planned for this intersection. Based on the traffic and safety analysis, UDOT has not identified any other locations for raised medians in the Re-evaluation study area.

The 2008 Selected Alternative included a preliminary (20% design) stormwater drainage system to control the additional runoff that would result from the increase in impervious (paved) area due to the project. The FEIS stated that the stormwater system would be developed in more detail during final design and the location of storage features might be revised. There were no properties identified in the FEIS for locating potential stormwater ponds between 300 North and 6000 South.

In developing the design of the Refined Selected Alternative, three new locations for stormwater ponds have been identified:

- 475/525 North 2000 West (properties already owned by UDOT)
- 2029 North 2000 West (vacant property)
- Property to the west of 2212 West 1800 North (vacant property that would be partially acquired)

Another development that has occurred since the 2008 FEIS for SR-108 is UDOT's completion of an FEIS and ROD for State Route 37 (SR-37, or 1800 North in Clinton) in 2015. As a part of the current Re-evaluation of SR-108, adjustments to the design of the intersection of 2000 West and 1800 North have been made to accommodate the selected alternative for the 1800 North project (the widening of 1800 North as approved in the 2015 FEIS and ROD has not yet occurred). The Refined Selected Alternative for SR-108 includes reconstructing approximately 900 feet of 1800 North in each direction from the intersection at 2000 West. The cross-section of 1800 North at the intersection (illustrated in Attachment 2) includes a 5-foot-wide bike lane on each side, which is consistent with the Wasatch Front Regional Council's (WFRC) adopted 2019–2050 Regional Transportation Plan.

Finally, the typical cross section has been modified to include a concrete, multi-use path on the west side of 2000 West. The path would be 12-feet wide in the typical cross section (Attachment 2). This differs from the cross section for the 2008 Selected Alternative, which included an 8-foot-wide shoulder and 4-foot-wide striped bike lane on each side of 2000 West, along with 4-foot-wide sidewalks on each side. The Refined Selected Alternative includes the multi-use path on the west side in lieu of the striped bike lanes on each side. A 5-foot-wide sidewalk would be constructed on the east side. The multi-use path would provide a wider and safer multi-use space for local residents to travel the corridor using strollers, scooters, bikes, etc., while the 8-foot shoulder on each side of 2000 West is still included and would accommodate cyclists who prefer to ride on the shoulders of the roadway.

Table 1 summarizes design features of the 2008 Selected Alternative compared to the 2021 Refined Selected Alternative.

Table 1. Design Comparisons of the Selected Alternative and the Refined Selected Alternative.

FEIS/ROD Selected Alternative 2008	Refined Selected Alternative 2021
Road Widening/Typical Cross Section	
• 5-lane cross section (two travel lanes in each direction and center median lane). • 110-foot typical cross section. • 4-foot bike lane on each side. • 8-foot shoulder on each side to better accommodate bus service.	• 5-lane cross section (two travel lanes in each direction and center median lane). • 110-foot typical cross section. • 12-foot multi-use path on west side; no on-road bike lanes included. • 8-foot shoulder on each side to better accommodate bus service as well as on-road bicycling.
Turn Lanes	
• Improve most intersections with dedicated right-turn and left-turn lanes; only developed to 20% preliminary design in the FEIS. • Dual left-turn lanes at the 2000 West—1800 North intersection on 2000 West only, both directions.	• Turn lane locations and lengths have been specified in the design to accommodate existing and 2050 design year traffic volumes. • Dual left-turn lanes at the 2000 West—1800 North intersection, all four directions.
Raised Medians	
• In the FEIS, a raised median was proposed for the 550 North school crossing. • Other potential locations for raised medians was to be determined during final design, giving consideration to intersections in high-traffic areas.	• A high-intensity activated crosswalk (HAWK) signal is proposed for the 550 North school crossing. A raised median is not necessary for the HAWK signal to operate effectively, so a raised median is not planned for this intersection. • Raised medians are not proposed for any other intersections within the Re-evaluation study area.

FEIS/ROD Selected Alternative 2008	Refined Selected Alternative 2021
Stormwater	
• Stormwater features evaluated in the FEIS were based on a 20% preliminary design. • The FEIS stated that the stormwater system would be developed in more detail during final design and the location of storage features might be revised. • Properties were identified for potential stormwater ponds, none of these were between 300 North and 6000 South.	• The stormwater design has been updated including three proposed locations for stormwater ponds: o 475/525 North 2000 West (properties owned by UDOT) o 2029 North 2000 West: (vacant property) o Vacant property to the west of 2212 West 1800 North (property would be partially acquired by UDOT)

RE-EVALUATION ANALYSIS

This Re-evaluation analyzes the impacts of the Refined Selected Alternative resulting from the changes and completions of the project design and the previously known and newly identified environmental resources in the project area.

Purpose of and Need for Action

The purpose of the project as stated in the 2008 FEIS is to:

- reduce roadway congestion on SR-108;
- eliminate roadway deficiencies associated with a lack of shoulders and turn lanes in order to reduce accident rates on SR-108; and
- enhance multi-modal use by providing improved bicycle, pedestrian, and transit facilities consistent with local and regional land use and transportation plans

The Refined Selected Alternative is consistent with the FEIS project purpose. The proposed revisions included with the Refined Selected Alternative do not change the original project concept or project purpose; therefore, the purpose of and need for the project remain valid.

Independent Utility

The Refined Selected Alternative would not require any additional transportation improvements in order to meet the project purpose as provided in the 2008 FEIS and ROD. The project would not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

Alternatives

The Refined Selected Alternative does not change the basis for choosing the Minimize 4(f) Impacts Alternative as the selected alternative in the 2008 ROD. As part of the updated Section 4(f) analysis, UDOT considered whether the West Alternative from the 2008 FEIS would be a feasible and prudent alternative for reducing impacts to Section 4(f) properties; UDOT determined that the Refined Selected Alternative would have less impact.

Environmental Consequences

UDOT has evaluated the expected impacts to the natural and built environment from the Refined Selected Alternative. No substantial changes would occur to the natural or built environment as a result of the Refined Selected Alternative that would significantly affect the quality of the human and natural environment. The impacts of these changes are not individually or cumulatively significant or

significantly different from those described in the 2008 Final EIS and ROD for the EIS Selected Alternative.

As part of the Re-evaluation process, UDOT reviewed and updated impacts to the following resources: land use, road improvements and transit, active transportation, economic impacts, air quality, noise, cultural, and Section 4(f).

Land Use

As described in the 2008 FEIS, development along the SR-108 corridor is anticipated to continue and eventually reach buildout. This was expected to occur with or without improvement of SR-108. Since completion of the 2008 FEIS, commercial development has occurred along the corridor within Clinton City, with some previously residential structures having been demolished and the properties redeveloped commercially. This development and conversion of property is consistent with planning and zoning in Clinton City. The proposed improvements of 2000 West and 1800 North are consistent with local planning.

The cross-section of the Refined Selected Alternative is consistent in width with that of the 2008 Selected Alternative. However, the Refined Selected Alternative requires a larger number of full acquisitions of properties due to necessary shifts in the alignment to reduce the number of full acquisitions of historically eligible structures and Section 4(f) properties. Between 300 North and 6000 South, the 2008 Selected Alternative identified 6 relocations (full acquisitions) of residential properties, 1 commercial relocation, 9 potential residential relocations, and 1 potential commercial relocation. Of those, 8 residential properties have subsequently been demolished or redeveloped. The Refined Selected Alternative would require 15 residential relocations, 2 potential residential relocations, and 1 commercial relocation. Three of the residential relocations are properties that have been previously purchased by UDOT. Two vacant properties would also be acquired for constructing stormwater detention facilities.

While the number, types, and locations of property acquisitions needed for the project have changed, the Refined Selected Alternative is consistent with local land use planning and would not have overall adverse impacts on land use.

Road Improvements and Transit

As part of this Re-evaluation, UDOT updated the design year of the project from 2030 to 2050 and obtained an updated traffic study. For the segment of SR-108 between 300 North and 6000 South, signalized intersections occur at intervals of approximately 0.5 mile. As agricultural lands continue to convert to urban development, traffic volumes would also continue to increase on all segments. The No-Action Alternative explored in Table 2 reflects the worsening traffic as a drop in Level of Service (LOS), in some cases as low as F, while the Refined Selected Alternative illustrates improved traffic flow resulting from additional thru lanes and expanded turn lanes. (Numbers and locations of signalized intersections would not be changed from existing conditions.)

Table 2. Intersection Levels of Service (LOS).

INTERSECTION	EXISTING 2021		NO-ACTION 2050		REFINED SELECTED ALTERNATIVE 2050	
	AM	PM	AM	PM	AM	PM
300 North	C	C	C	D	D	E
800 North	A	B	C	E	A	A
1300 North	B	C	C	E	A	B
1800 North	C	D	F	F	D	D
2300 North	B	C	D	F	A	C
6000 South	C	D	F	F	B	C

Source: J-U-B Engineers, Inc. 2021. PIN 15680: 2000 West (SR-108); 300 North to 6000 South Traffic Analysis.

For the 2008 Selected Alternative, UDOT determined that LOS would improve to E or better on all segments for the 2030 design year. Under the 2050 PM peak hour conditions, all intersections for the Refined Selected Alternative are anticipated to operate at an overall LOS D or better except at 300 North, which is expected to operate at an overall LOS of E. Based on the updated traffic study, the Refined Selected Alternative would improve design-year traffic flow equal to or better than the 2008 Selected Alternative.

The Refined Selected Alternative would also have transit benefits at least comparable to the 2008 Selected Alternative. In the 2008 FEIS, UDOT determined that widened shoulders would better allow buses to pull out of traffic and would reduce congestion on SR-108. Buses would operate more efficiently than under the No-Action Alternative. This improvement would not increase or decrease transit ridership in the area. The Refined Selected Alternative provides the same widened shoulder widths as the 2008 Selected Alternative.

Active Transportation

The 2008 Selected Alternative included 8-foot shoulders with a 4-foot, Class II bicycle lane, 2.5-foot curb and gutter, and 4-foot sidewalks. The Refined Selected Alternative includes the 12-foot-wide multi-use path on the west side in lieu of the 4-foot bike lanes on each side. A 5-foot-wide sidewalk would be constructed on the east side. The multi-use path would provide a wider and safer multi-use space for local residents to travel the corridor using strollers, scooters, bikes, etc., while the 8-foot shoulder on each side of SR-108 is still included and would accommodate cyclists who prefer to ride on the shoulders of the roadway.

The Refined Selected Alternative includes reconstructing approximately 900 feet of 1800 North in each direction from the intersection at 2000 West. The cross-section of 1800 North at the intersection (illustrated in Attachment 2) also includes a 5-foot-wide bike lane on each side, consistent with the WFRC's adopted 2019-2050 Regional Transportation Plan.

UDOT coordinated with Clinton City and the UDOT Active Transportation Manager in making these modifications to the Selected Alternative.

Economics

Economic impacts have not substantially changed from the determinations of the 2008 FEIS, but some specific locations of impacts to businesses have changed. In the 2008 FEIS, UDOT determined that the proposed improvements to SR-108 would change the local economic conditions along the corridor and surrounding cities. During construction, there would be temporary economic impacts from the loss of some business and the resulting loss of sales tax; however, the long-term improvements in mobility would benefit the local economy by reducing congestion, improving safety, and making businesses more accessible. The cities along the corridor have included in their plans a widened SR-108 to help support the proposed economic development. The Refined Selected Alternative would have these same effects for the Re-evaluation segment of the corridor.

Within the current Re-evaluation segment, the 2008 FEIS identified a potential relocation impact to an agricultural building/business owned by the Church of Jesus Christ of Latter-day Saints located at 880 North 2000 West (east side of the road). The agricultural business described in the 2008 FEIS is located on the same parcel as a residential structure, 914 North 2000 West, also owned by the Church of Jesus Christ of Latter-day Saints. The alignment of SR-108 under the Refined Selected Alternative would require demolition of the residential structure. However, the portion of the parcel with agricultural structures would not require demolition; operation of these facilities would not be affected in the long term.

The 2008 FEIS also listed potential relocation of businesses at 2201/2173 North 2000 West, which included Great Harvest Bread Bakery and Cafe. With the Refined Selected Alternative, only partial acquisition of property from this business property would be necessary and the businesses would not be relocated.

One business relocation is identified for the Refined Selected Alternative that was not identified as a relocation in the 2008 FEIS. This is a commercial structure at 2016 West 2300 North (the current uses of this property are not known).

Some other businesses may be impacted by partial acquisition and construction disturbance. In some cases, this may include loss of parking space or loss of park strip. Acquisition of property and compensation would be completed according to the Uniform Relocation Assistance Act, as amended; Title VI of the Civil Rights Act of 1964; and 49 CFR 24, Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs.

Air Quality

In the 2008 FEIS, UDOT determined that the Selected Alternative would not result in any federal or state air quality standard being exceeded, and the project was not a project of air quality concern. However, the EPA subsequently designated the Salt Lake City nonattainment area for fine particulate matter ($PM_{2.5}$) in December 2009 (EPA 2021a). The nonattainment area is inclusive of Davis County and portions of Weber County, and the SR-108 project is within the nonattainment area. As part of this Re-evaluation, UDOT prepared a project-level conformity determination. UDOT found that the Refined Selected Alternative does not qualify as a project of air quality concern for $PM_{2.5}$ because the project would not result in a substantial increase in diesel traffic compared to the No-Action Alternative. Also, projected traffic volumes for the design year are less than those suggested by EPA for which consideration of a quantitative project-level (hot-spot) evaluation could be warranted. The report was offered for interagency consultation, no comments were received. FHWA determined on April 29, 2021 that the project confirms to Utah's State Implementation Plan. UDOT's evaluation report and FHWA's conformity determination letter are included in Attachment 3.

Noise

The UDOT Abatement Policy has been revised since the 2008 FEIS, the alignment of the Selected Alternative has been modified, and land uses of the Re-evaluation segment of the corridor have changed. Because these changes could potentially affect traffic noise and the feasibility and reasonableness of abatement, a new noise study was completed for the Re-evaluation segment of SR-108 (Attachment 4). In the study, there were two noise-impacted locations along the Re-evaluation segment where it was determined that a noise wall would be feasible from an engineering and design standpoint. These locations were then modeled for potential abatement.

The first location evaluated for a noise wall was along the west side of 2000 West between approximately 1500 North and 1600 North. This wall was modeled in two segments separated by a gap for an existing neighborhood pedestrian access. Eight-foot-high wall segments at this location were found to meet both the acoustic feasibility and reasonableness design goals, and were found to be cost-effective. Therefore, the 8-foot-high wall segments at this location are recommended for balloting. This process is part of the final design phase of a project and involves sending ballots to potentially benefitted property owners and tenants as well as any whose property abuts any portion of the proposed noise barrier. A barrier identified as recommended for balloting is a barrier that has been shown to be both feasible and reasonable. However, that finding is not a commitment to build a barrier. The final decision to build noise walls would be made upon completion of the project design, the public involvement process, and concurrence with the UDOT Noise Policy.

A second location evaluated for a noise wall was also on the west side between the Weber-Davis county line and 6000 South. In the evaluation, UDOT determined that this wall would not meet the cost-effectiveness criterion and is therefore not recommended for balloting.

Historic, Archaeological, and Paleontological Resources
Based on field reconnaissance, some previously identified archaeological structures that were eligible for listing on the National Register of Historic Places (NRHP) have been demolished since the 2008 FEIS and ROD. Other architectural structures that were not old enough to be eligible in 2008 would be eligible now. Therefore, for the Re-evaluation, UDOT obtained updated inventories of archaeological and architectural resources in the potentially affected area. The surveys resulted in identification of 3 ineligible archaeological sites and 40 architectural properties, 32 of which were determined eligible.

UDOT prepared a Determination of Eligibility and Finding of Effect (DOEFOE) for the Refined Selected Alternative, and two Amendments to the DOEFOE. UDOT has also provided opportunity for consultation with Native American tribes and opportunity for public comment. The determinations of the DOEFOE and Amendments have been reviewed and concurred by SHPO. The Refined Selected Alternative requires minor right-of-way acquisition along the frontage from 22 properties eligible to the NRHP (No Adverse Effects) and full acquisition of 7 eligible properties (Adverse Effects). UDOT developed an amendment to the original SR-108 Memorandum of Agreement with SHPO and consulting parties to resolve the adverse effects. Copies of the DOEFOE, Amendments, and MOA are included with the Section 4(f) analysis report for the Refined Selected Alternative, Attachment 5.

Section 4(f) Resources
UDOT obtained an updated Section 4(f) analysis for the Re-evaluation (Attachment 5). Based on the analysis, UDOT made the following determinations:

- The Refined Selected Alternative would result in Section 4(f) uses with greater than *de minimis* impacts to seven Section 4(f) properties;
- There is no feasible and prudent alternative that would avoid the use of Section 4(f) properties;
- The Refined Selected Alternative would have least overall harm for purposes of Section 774.3(c); and
- The Refined Selected Alternative includes all possible planning to minimize harm to the Section 4(f) properties resulting from these uses.

Environmental Consequences Summary

Table 3 summarizes the changes to the evaluation of environmental resources from the 2008 FEIS. Brief explanations for resource impacts that have not changed are also included.

Table 3. Summary of Re-evaluation Analysis.

Resource	Changed?		Determination Summary
	Yes	No	
Land Use	X		Some properties have been redeveloped since the 2008 FEIS and ROD, and some agricultural properties have been converted to commercial use. While the number, types, and locations of property acquisitions needed for the project have changed, the Refined Selected Alternative is consistent with local land use planning and would not have adverse impacts on land use.
Farmland		X	The Refined Selected Alternative would require partial acquisition from two parcels with Agricultural Protection Area (APA) designations. Partial acquisitions would also be needed from some active agricultural lands. UDOT would coordinate with landowners on a case-by-case basis and would provide compensation for the expense of re-establishing farm enterprises and for fair market value of the buildings and land. These impacts and commitments have not changed from the 2008 FEIS and ROD.
Social/ Community		X	Social/community impacts (Attachment 6) are not substantially different from the 2008 FEIS and ROD. A relatively small proportion of relocations is not expected to have long-term or widespread effects on local cohesiveness. No schools, churches, recreation facilities, or other gathering places would be relocated. Public services and utilities could be temporarily disrupted during construction but would not be permanently affected.
Environmental Justice		X	Consistent with the 2008 Selected Alternative, the Refined Selected Alternative would have beneficial effects on all populations in the impact analysis area, including race/ethnic minority and low-income persons. The Refined Selected Alternative would not be expected to cause disproportionately high and adverse effects on any environmental justice populations; this determination has not changed from the 2008 FEIS and ROD.
Road Improvements and Transit	X		The design year was updated from 2030 to 2050. The Refined Selected Alternative would improve design-year traffic flow equal to or better than the 2008 Selected Alternative. Consistent with the 2008 Selected Alternative, buses would be expected to operate more efficiently with the Refined Selected Alternative.
Active Transportation	X		The Refined Selected Alternative includes a multi-use path on the west side of 2000 West in lieu of 4-foot bike lanes on each side. A 5-foot-wide sidewalk would be constructed on the east side. The reconstructed portion of 1800 North would include a 5-foot-wide bike lane on each side.
Economics	X		Economic impacts have not substantially changed from determinations in the 2008 FEIS, but some specific locations of impacts have changed. One business relocation, a commercial structure at 2016 West 2300 North, would be necessary for the Refined Selected Alternative.

Resource	Changed?		Determination Summary
	Yes	No	
Joint Development		X	In the 2008 FEIS, a pedestrian underpass for the Clinton Community Trail was identified as a joint development opportunity. As part of the Re-evaluation process, UDOT has coordinated with Clinton City and determined that the underpass can be accommodated by UDOT at a future date but funding is not currently available for construction.
Air Quality	X		The EPA designated the Salt Lake City, Utah, nonattainment area for fine particulate matter ($PM_{2.5}$) in December 2009. The nonattainment area is inclusive of the Re-evaluation project area. UDOT completed an air quality assessment for $PM_{2.5}$, determining that the Refined Selected Alternative does not qualify as a project of air quality concern.
Noise	X		A noise study was prepared for the Refined Selected Alternative. One noise barrier was identified as feasible and reasonable and is recommended for balloting in final design.
Water Resources and Wetlands		X	Water quality mitigation measures from the 2008 FEIS would not be changed for the Refined Selected Alternative. One property that would be disturbed during construction was identified as having a wetland feature. UDOT obtained an Approved Jurisdictional Determination from the US Army Corps of Engineers (USACE) to conclude that this feature is a non-jurisdictional wetland. A memorandum and concurrence from UDOT's Senior Landscape Architect is included in Attachment 7.
Floodplains		X	No changes identified. There are no floodplains in the Re-evaluation study area. The determination of no floodplain impacts from the 2008 FEIS remains valid.
Ecosystem		X	No changes identified. Copies of updated species lists and a concurrence memo from UDOT's Natural Resources Manager are provided in Attachment 8.
Historic, Archaeological, and Paleontological	X		UDOT prepared a Determination of Eligibility and Finding of Effect (DOEFOE) for the Refined Selected Alternative, and two Addendums to the DOEFOE. The Refined Selected Alternative would cause adverse effects to seven eligible properties. UDOT has developed an MOU with SHPO and consulting parties to resolve the adverse effects.
Hazardous Waste Sites		X	Due to the amount of time that has passed since the 2008 FEIS and ROD, UDOT obtained new searches of available data for known hazardous waste sites and environmental conditions (Attachment 9). There are no open files for any sites.
Visual Resources		X	No changes identified. UDOT is coordinating with local governments to accommodate preferred aesthetic features of the design to the extent practicable.
Cumulative Impacts		X	Expected cumulative impacts have not changed from the 2008 FEIS. Anticipated conversion of land to developed uses near SR-108 has continued. Improvement of SR-108 remains consistent with adjacent land uses and would not directly or indirectly affect regionally and locally important resources such as water quality, threatened or endangered species, and air quality. The project would not contribute to cumulative impacts to these resources.

Resource	Changed?		Determination Summary
	Yes	No	
Indirect Impacts		X	Expected indirect impacts have not changed from the 2008 FEIS. The proposed roadway widening is consistent with local land use and transportation plans. Improvement of SR-108 supports local planning to develop the corridor with more commercial uses but will not induce local or regional growth; growth would be expected to occur the same under the No-Action Alternative.
Energy Impacts		X	Expected energy impacts have not changed from the 2008 FEIS. Construction will require fuel consumption and cause some temporary traffic delays, increasing fuel consumption. Long-term, some traffic congestion will be relieved which will reduce fuel consumption compared to the No-Action Alternative.
Construction Impacts		X	Expected construction impacts have not changed from the 2008 FEIS. Construction-related impacts would be temporary and would not result in long-term impacts.
Short-term Uses versus Long-term Productivity		X	Expected short-term use of renewable environmental resources versus preserving long-term productivity has not changed from the 2008 FEIS. Because most of the study area is already developed, the proposed project would not alter the long-term productivity of the area.
Irreversible and Irretrievable Commitment of Resources		X	Anticipated land use conversions and commitments of resources have not changed from the 2008 FEIS. Construction materials used for the project would be generally the same as described in the 2008 FEIS. Demolition of historically-eligible buildings would be considered an irreversible commitment of resources; this has not changed from the determination made in the 2008 FEIS. Commitment of funds for project construction is considered an irretrievable expenditure, with resulting benefits of improved accessibility, increased safety, and savings in travel time. These expected commitments and benefits have not changed.
Section 4(f) Resources	X		The Refined Selected Alternative would result in Section 4(f) uses with greater than *de minimis* impacts to seven Section 4(f) properties.
Permits and Clearances	X		Some of the permits and clearances described in the 2008 FEIS are not applicable to the segment between 300 North and 6000 South that is the subject of the current environmental Re-evaluation. The Re-evaluation segment will not require: Section 404 Wetland Permit, Section 401 Water Quality Certification, or Stream Alteration Permit. The PIN 15680 project does require: • Section 106 Memorandum of Agreement to resolve adverse effects – UDOT responsibility (complete) • SHPO and U.S. Department of the Interior concurrence with Section 4(f) determinations – UDOT responsibility (complete) • Section 402 Construction General Permit from the Utah Division of Water Quality and Stormwater Pollution Prevention Plan – Contractor responsibility • Air Quality Approval Order from the Utah Division of Air Quality for construction emissions – Contractor responsibility • Other construction-related permits as determined in contracting – Contractor responsibility

Public Involvement Efforts

UDOT met and consulted with representatives of local government (West Point, Clinton, Roy, and Davis County) periodically during development of this Re-evaluation to discuss consistency of the proposed design with land use planning an to identify and resolve issues of concern.

UDOT published an advertisement in the *Ogden Standard-Examiner* newspaper disclosing the Section 4(f) effects on historic properties, describing the project location and proposed action, and soliciting public comment. This notice ran from March 6 to 13, 2021.

The completed Re-evaluation will be made available for a 2-week public comment period prior to approval.

CONCLUSION

The Final EIS and Section 4(f) Evaluation for SR-108 has been re-evaluated as required by the FHWA regulations found in 23 CFR Parts 771 and 774, FHWA Technical Advisory T6640.8A, and NEPA.

UDOT has evaluated the expected impacts to the natural and built environment from the Refined Selected Alternative and evaluated any changes and new information against the analysis in the Final EIS. No substantial changes would occur to the natural or built environment as a result of the Refined Selected Alternative that would significantly affect the quality of the human and natural environment. The impacts of these changes are not individually or cumulatively significant or significantly different from those described in the 2008 Final EIS and ROD for the EIS Selected Alternative.

Per 23 CFR Section 771.130(a), an EIS shall be supplemented whenever (1) changes to the proposed action would result in significant environmental impacts that were not evaluated in the EIS or (2) new information or circumstances relevant to environmental concerns and bearing on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS. UDOT has determined that preparing a supplemental EIS is not necessary because the changes to the proposed action, new information, or new circumstances described in this Re-evaluation do not result in significant environmental impacts that were not evaluated in the EIS.

UDOT Environmental Services requests concurrence that the Re-evaluation has demonstrated that the ROD remains valid and that the proposed resources, impacts, and methodology documented in this environmental Re-evaluation are valid in accordance with 23 CFR Section 771.129.

Sincerely,

Brandon D. Weston
UDOT Environmental Services Director

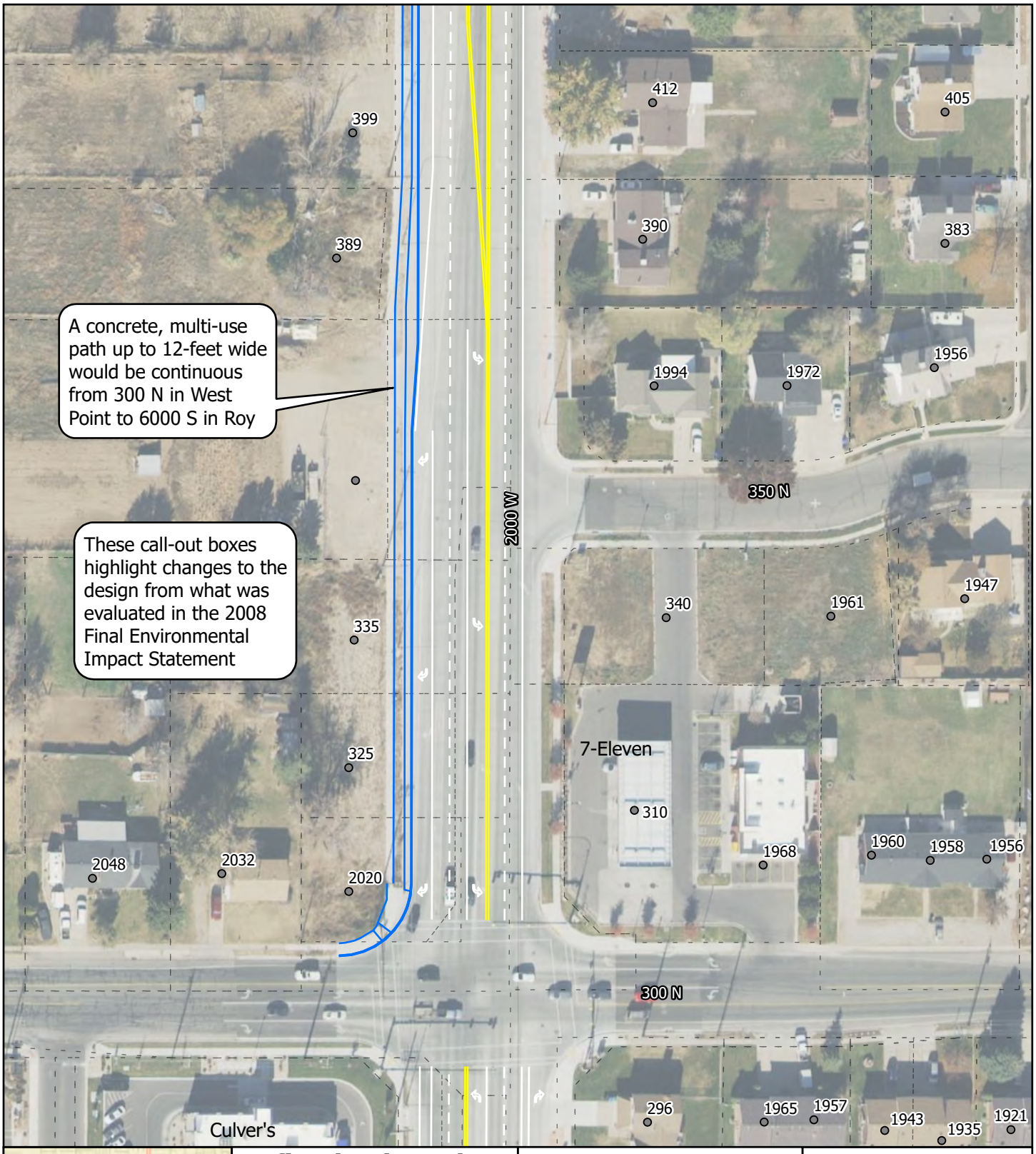
Enclosures

EIS Re-evaluation Approval
UDOT Project Number S-0108(36)6, SR-108; 300 North to 6000 South
Davis and Weber Counties, Utah (PIN 15680)

_____ _____

Rob Wight Date
Region One Director
Utah Department of Transportation

Attachment 1
Refined Selected Alternative
Maps



Refined Selected Alternative

SR-108 (2000 West)
300 North to 6000 South
EIS Re-evaluation
UDOT Project S-0108(36)6
PIN 15680
Map Date: 6/21/2021 11:20 AM
Map Page 1 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

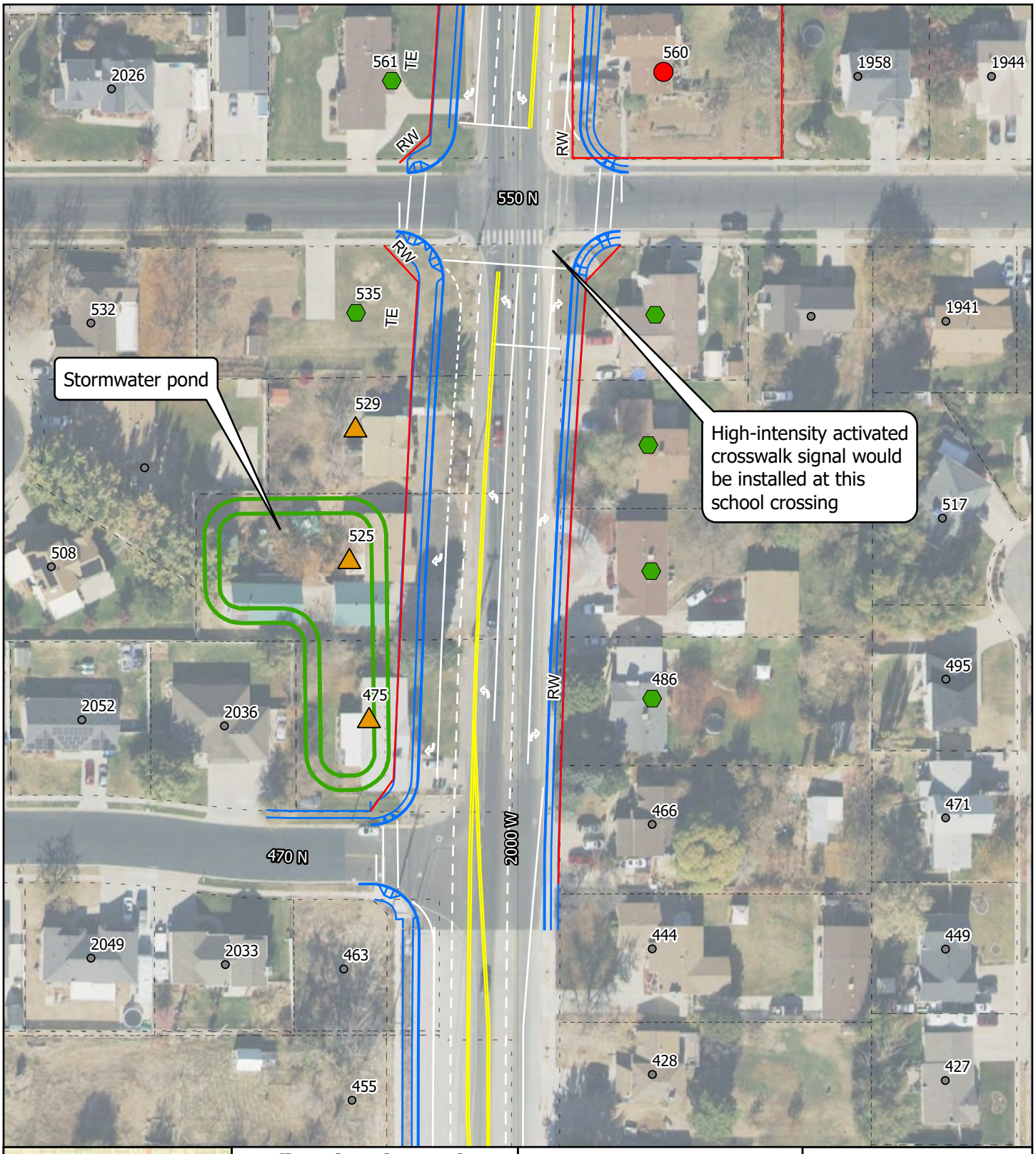
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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SR-108 (2000 West)
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UDOT Project S-0108(36)6
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Map Page 2 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

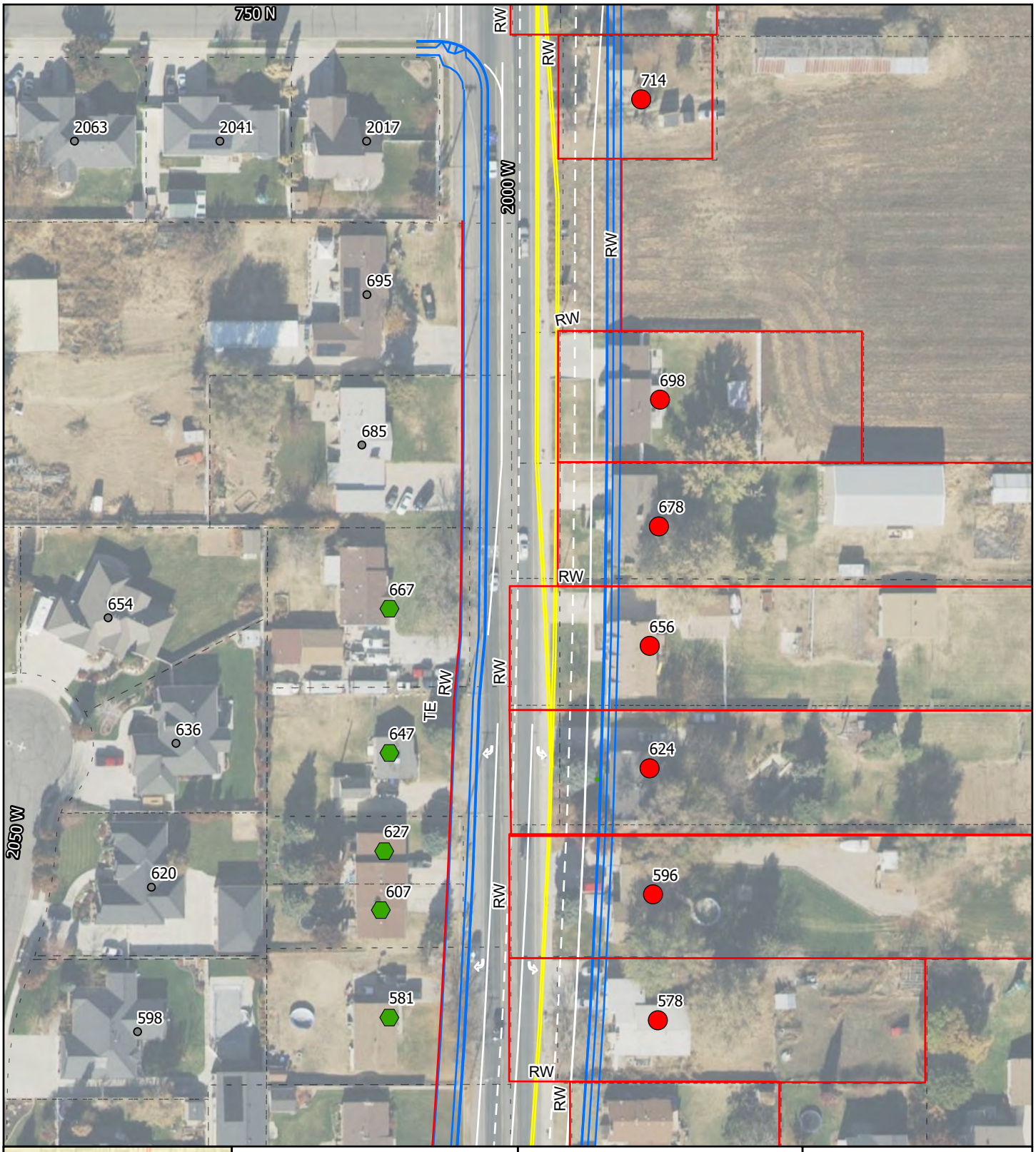
UDOT Keeping Utah Moving

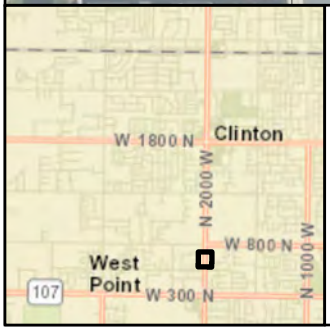
N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)





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PIN 15680
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Map Page 3 of 23

Acquisition for Right-of-Way

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- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

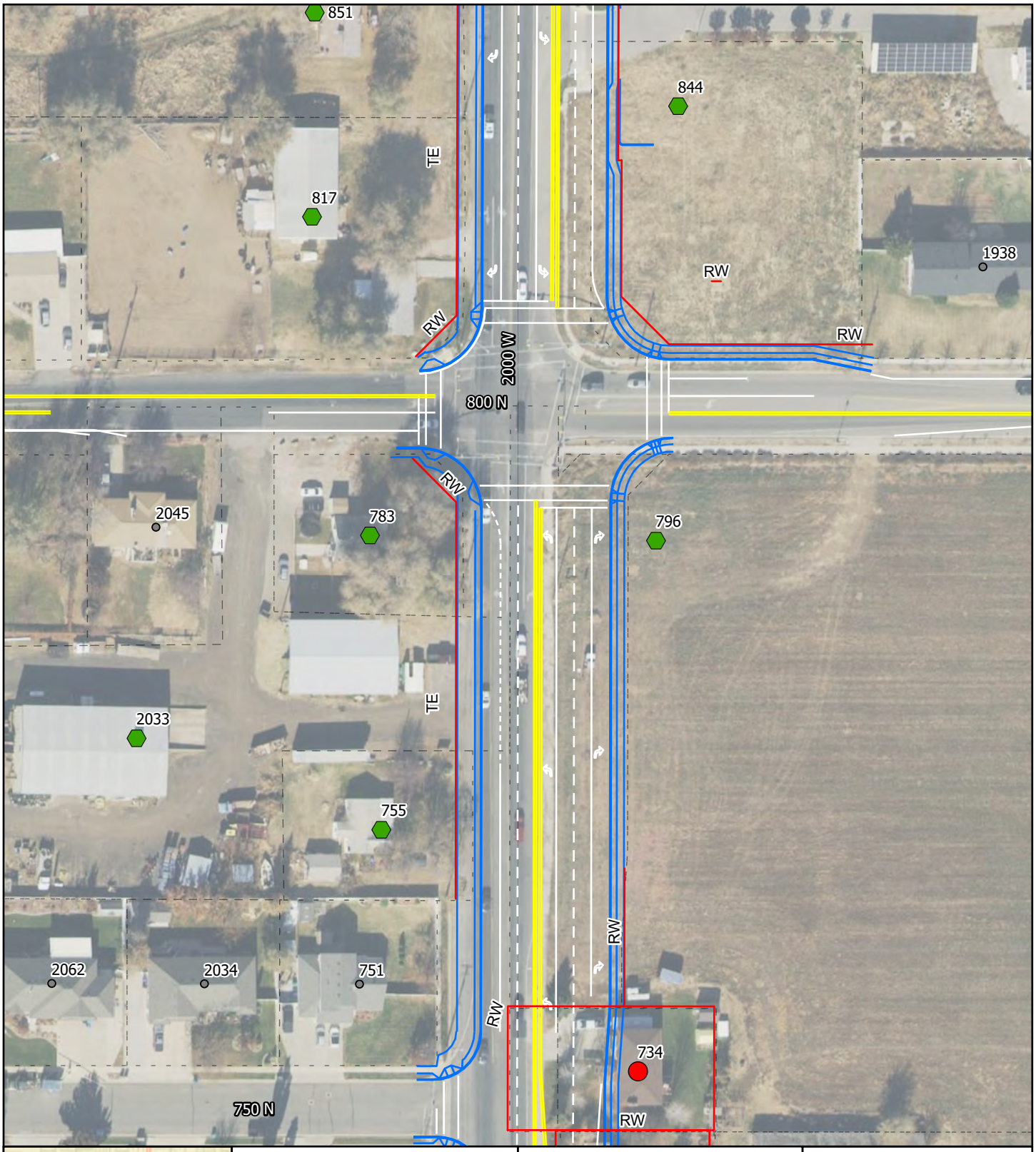
UDOT Keeping Utah Moving

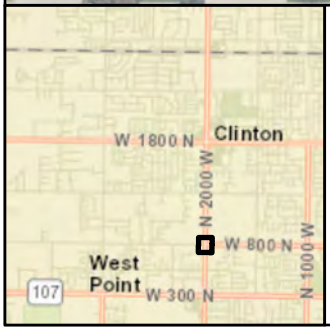
N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)





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Map Page 4 of 23

Acquisition for Right-of-Way

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- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

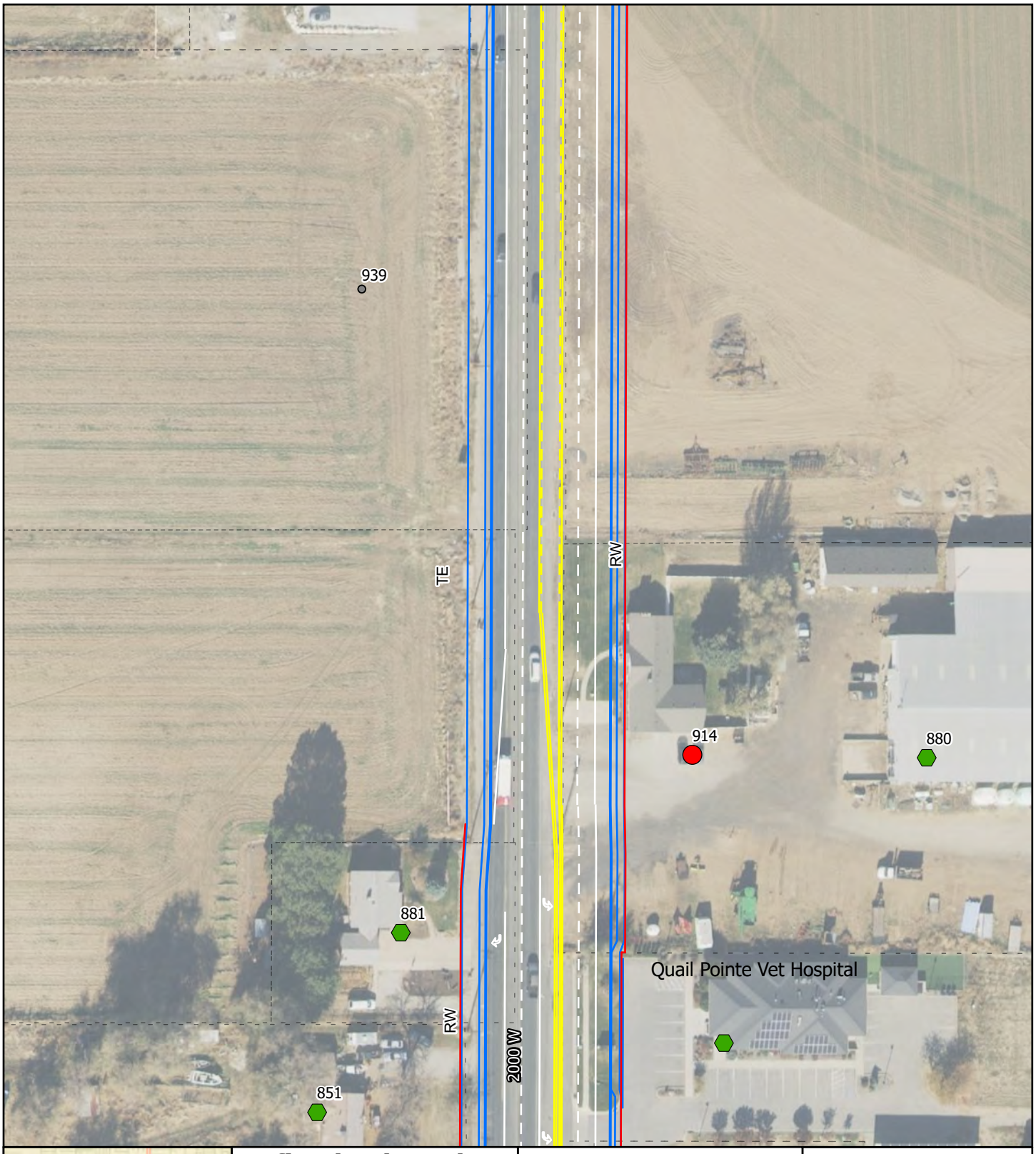
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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PIN 15680
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Map Page 5 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

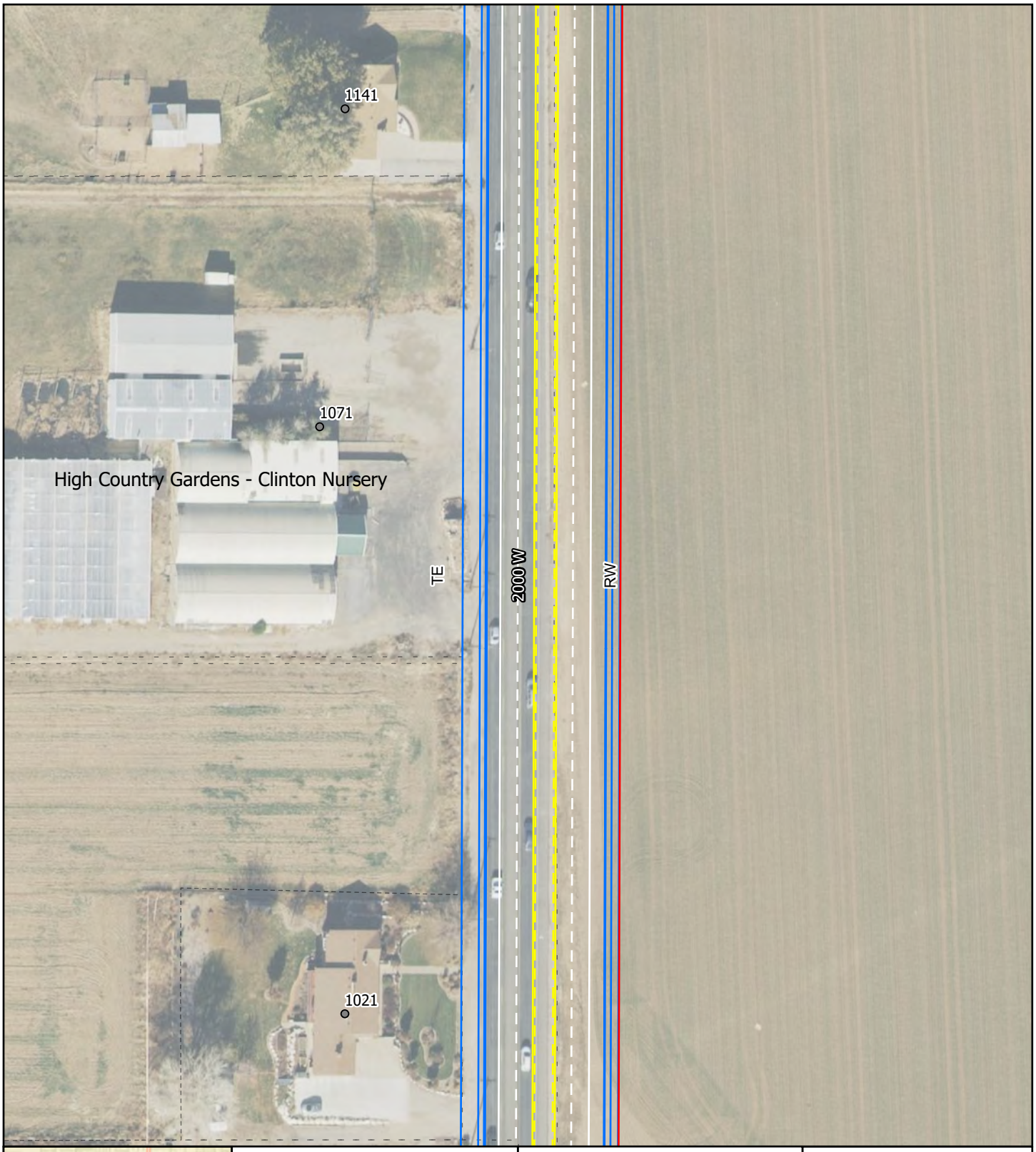
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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Map Page 6 of 23

Acquisition for Right-of-Way

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- Potential Relocation
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- Partial Acquisition
- None
- Noise Barrier

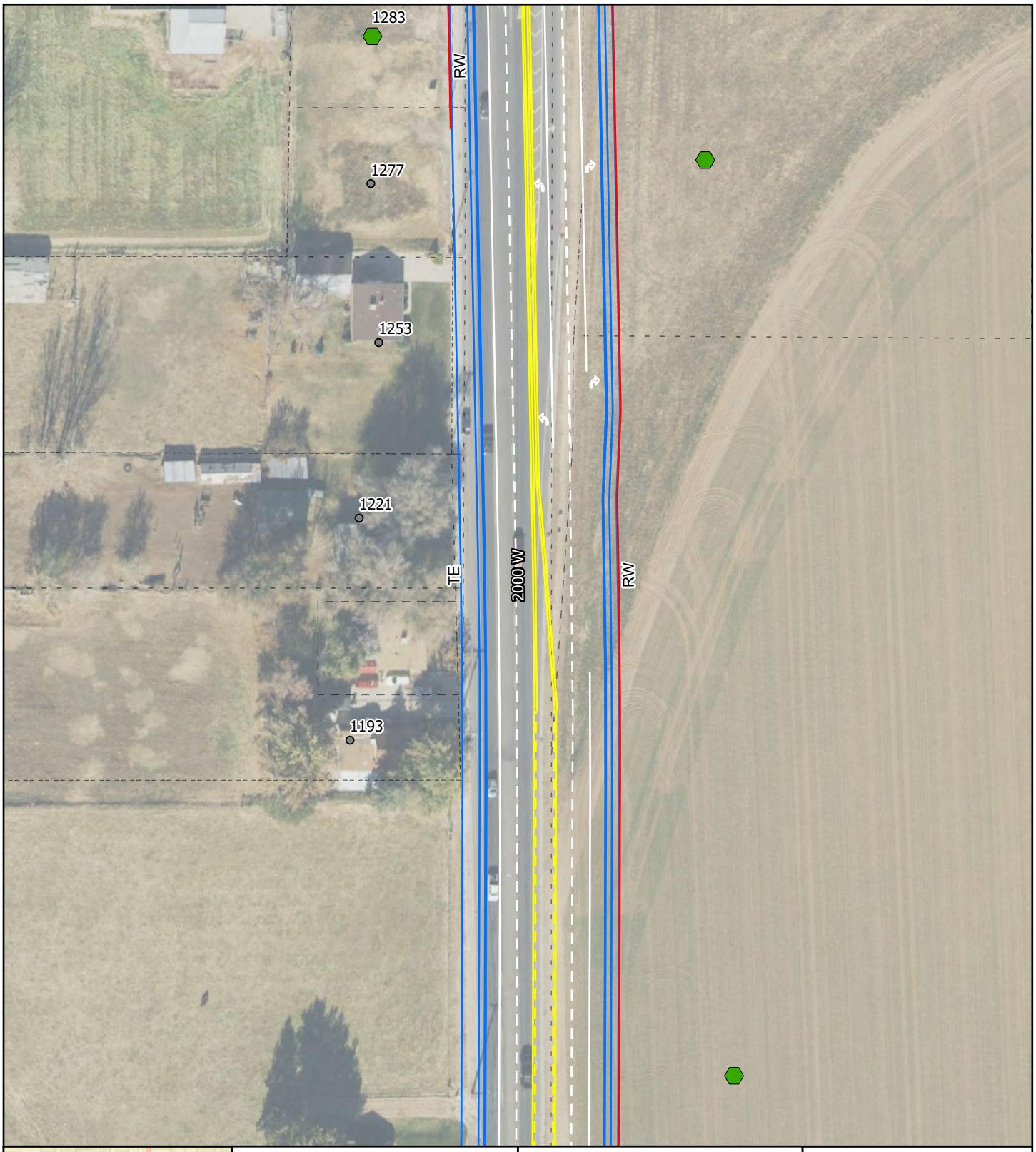
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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PIN 15680
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Map Page 7 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

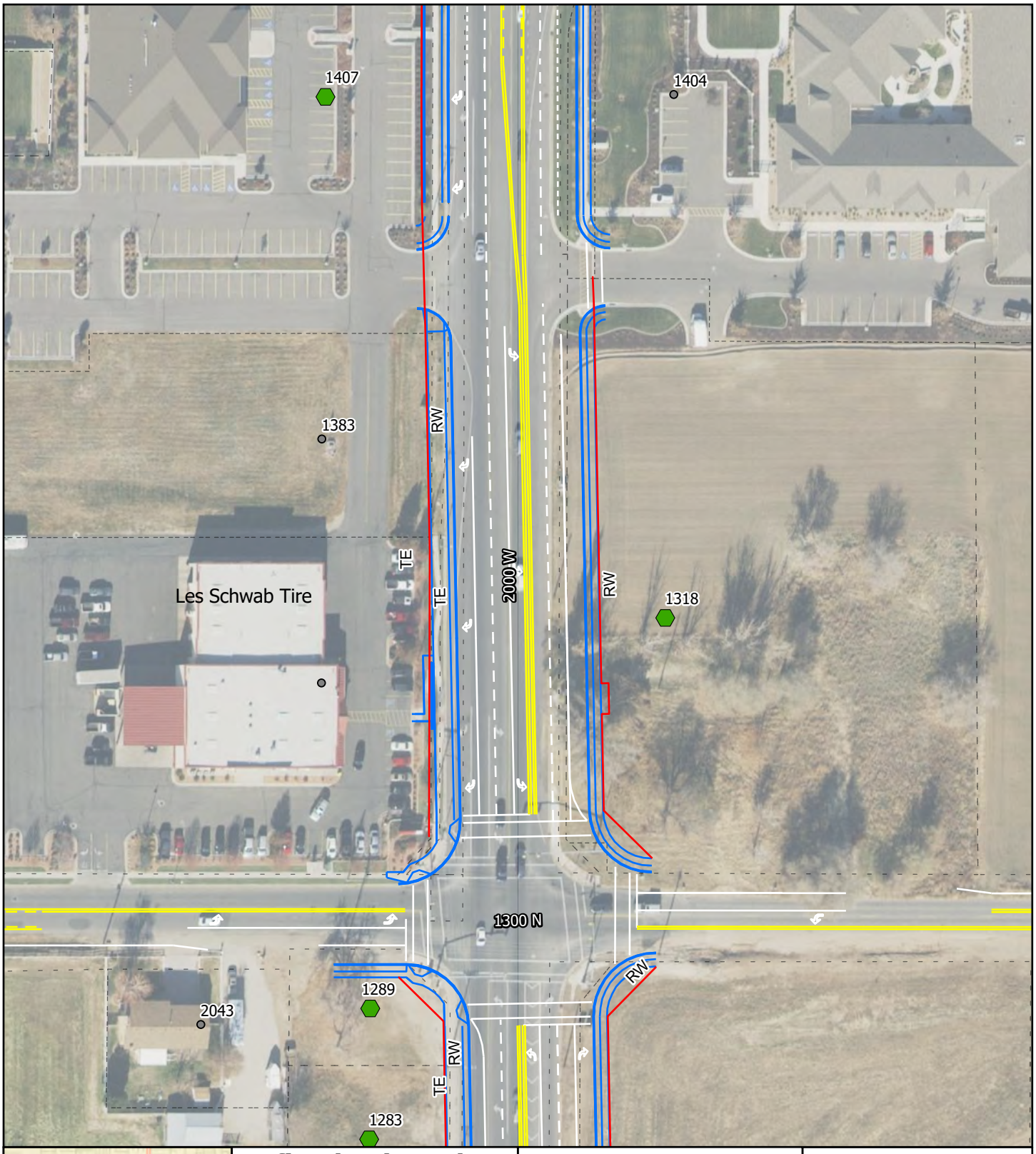
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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EIS Re-evaluation
UDOT Project S-0108(36)6
PIN 15680
Map Date: 6/21/2021 11:20 AM
Map Page 8 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

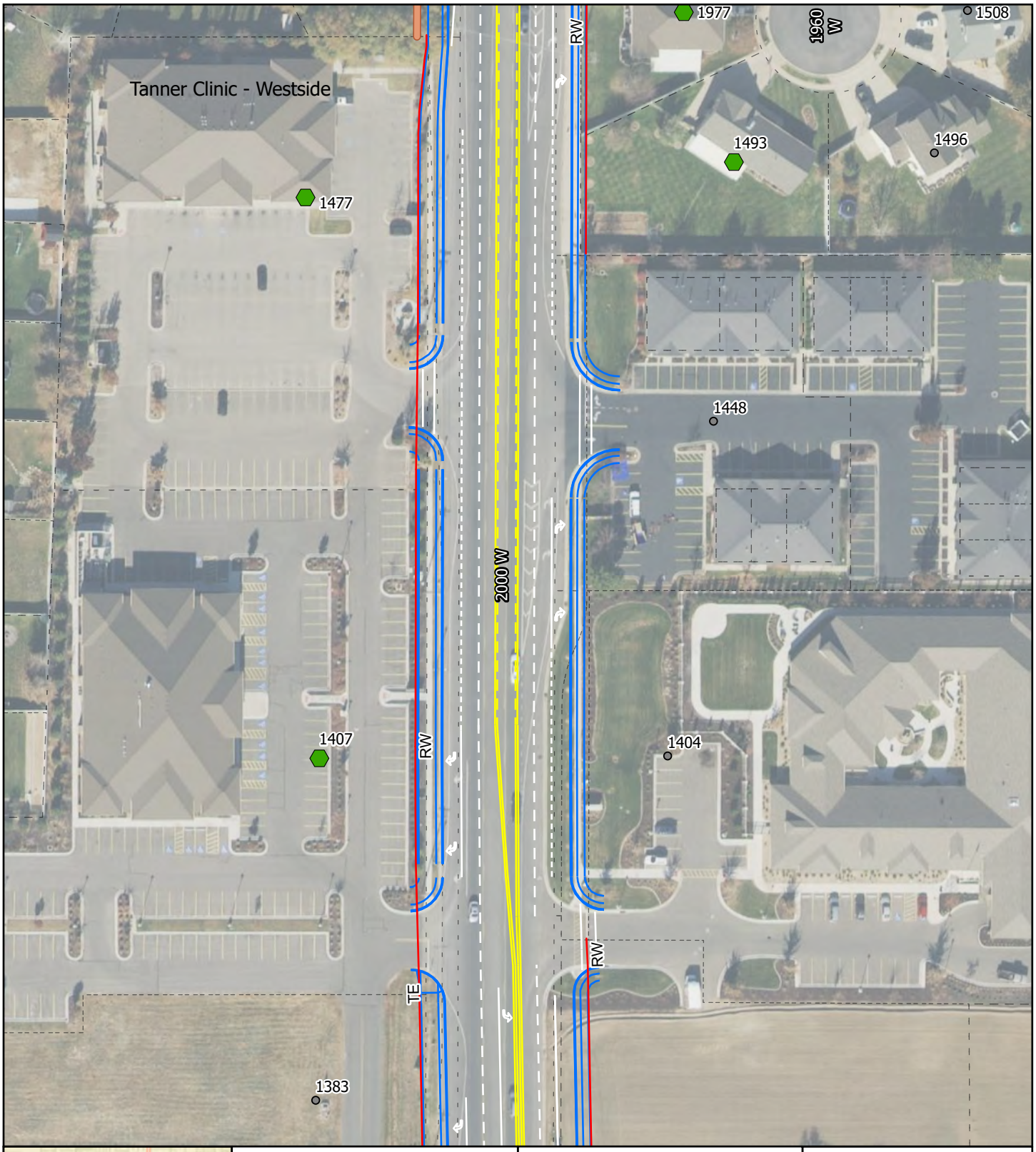
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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SR-108 (2000 West)
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UDOT Project S-0108(36)6
PIN 15680
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Map Page 9 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

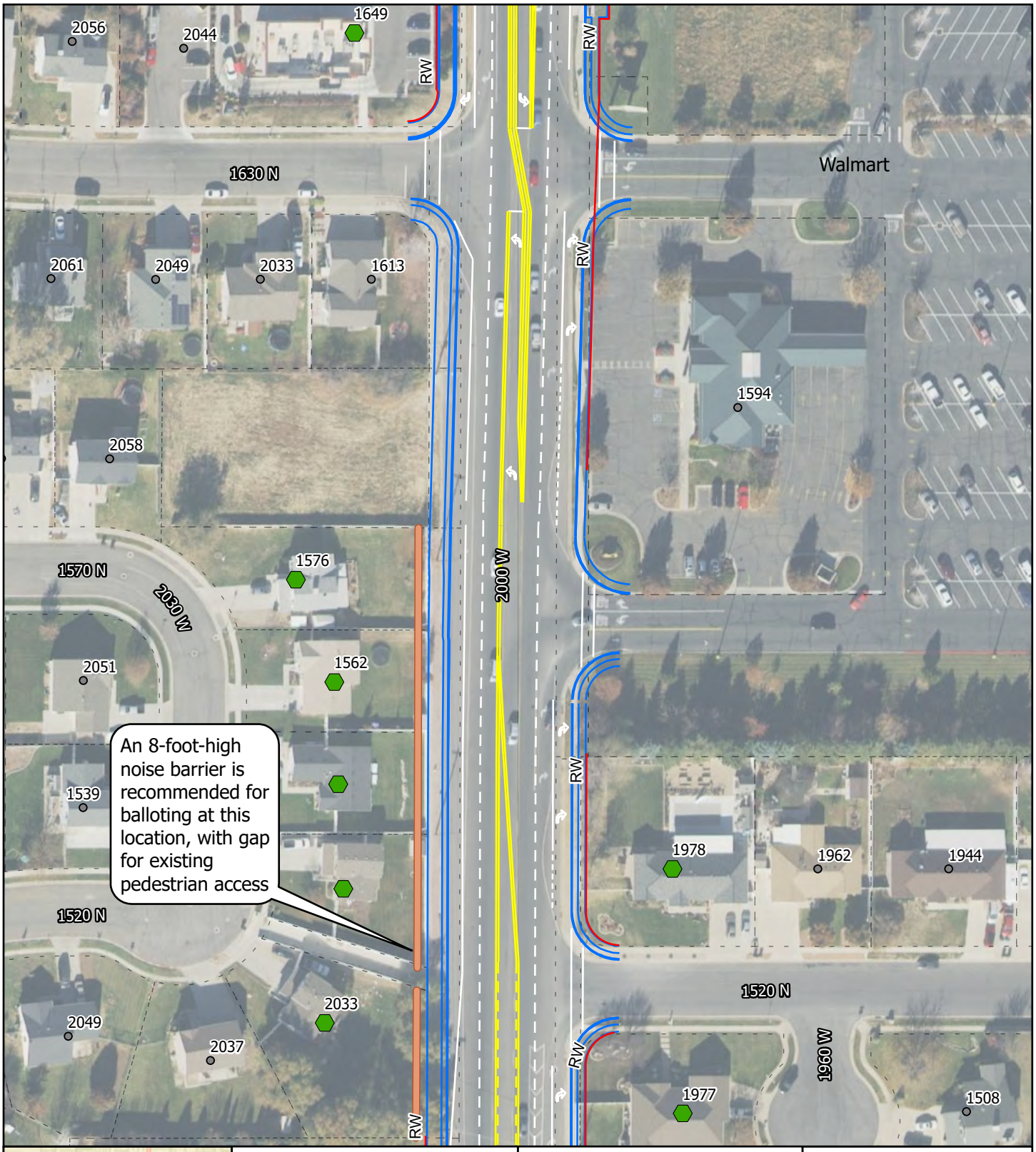
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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Map Date: 6/21/2021 11:20 AM
Map Page 10 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

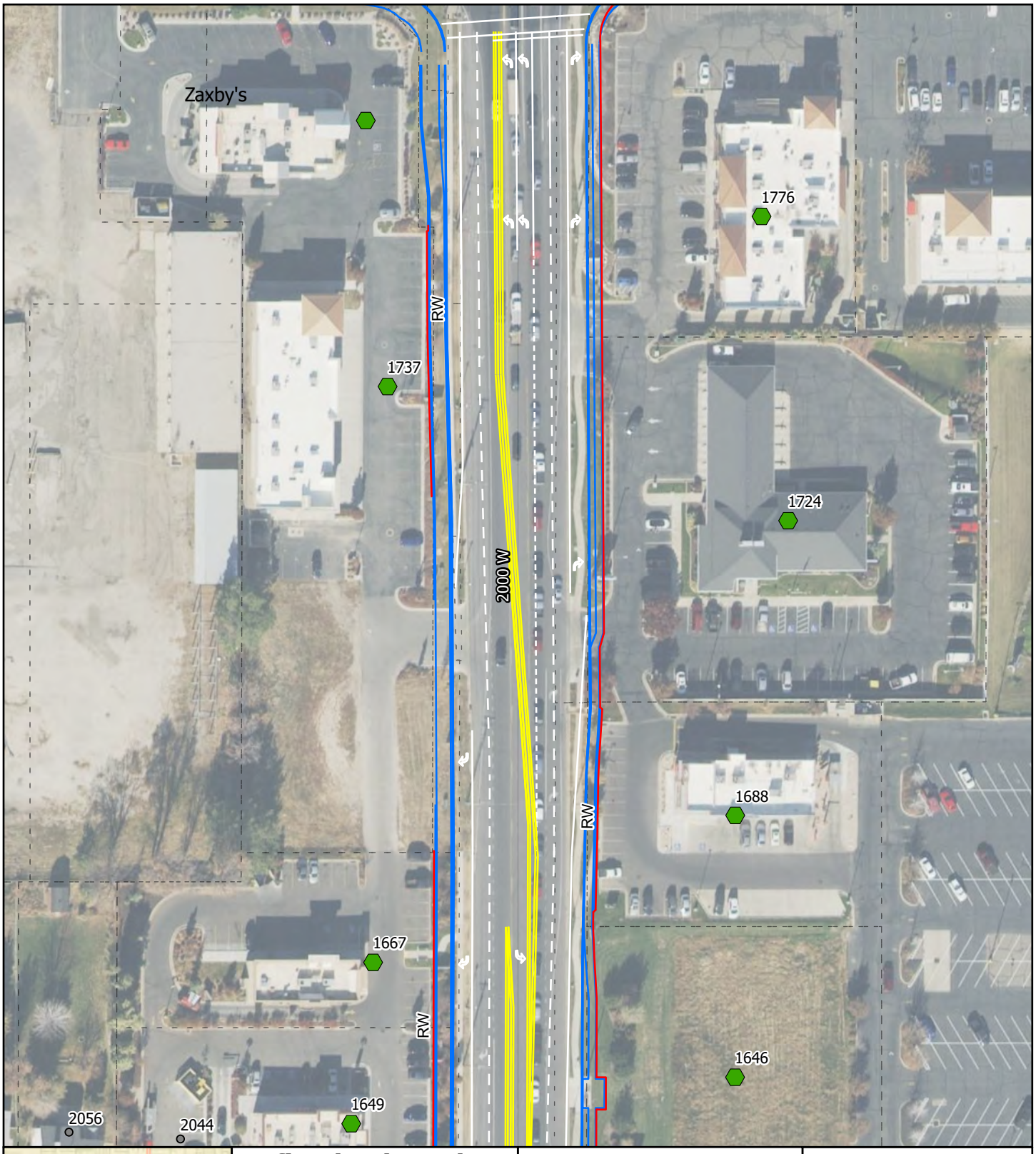
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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UDOT Project S-0108(36)6
PIN 15680
Map Date: 6/21/2021 11:20 AM
Map Page 11 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

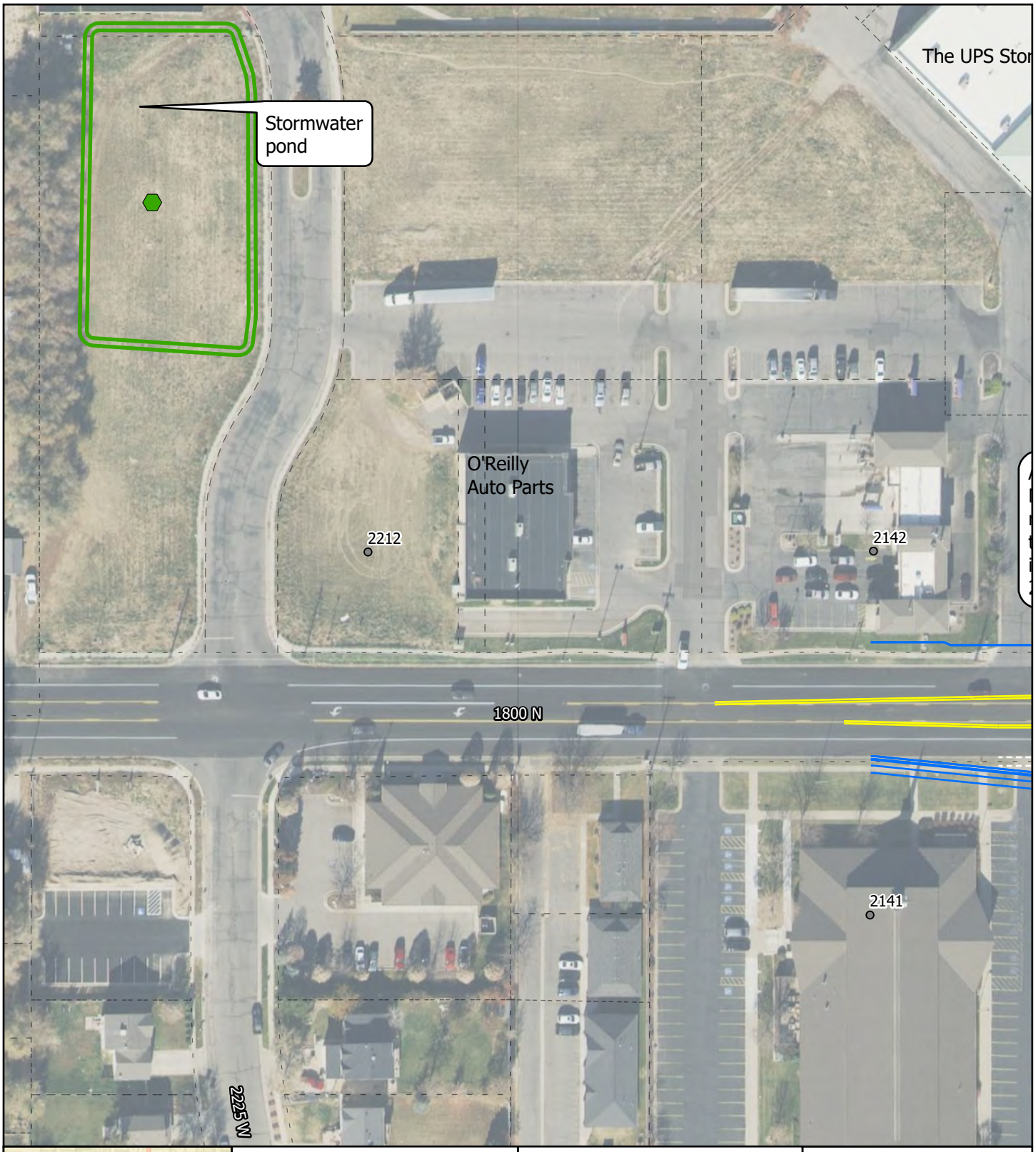
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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SR-108 (2000 West)
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EIS Re-evaluation
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Map Page 12 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

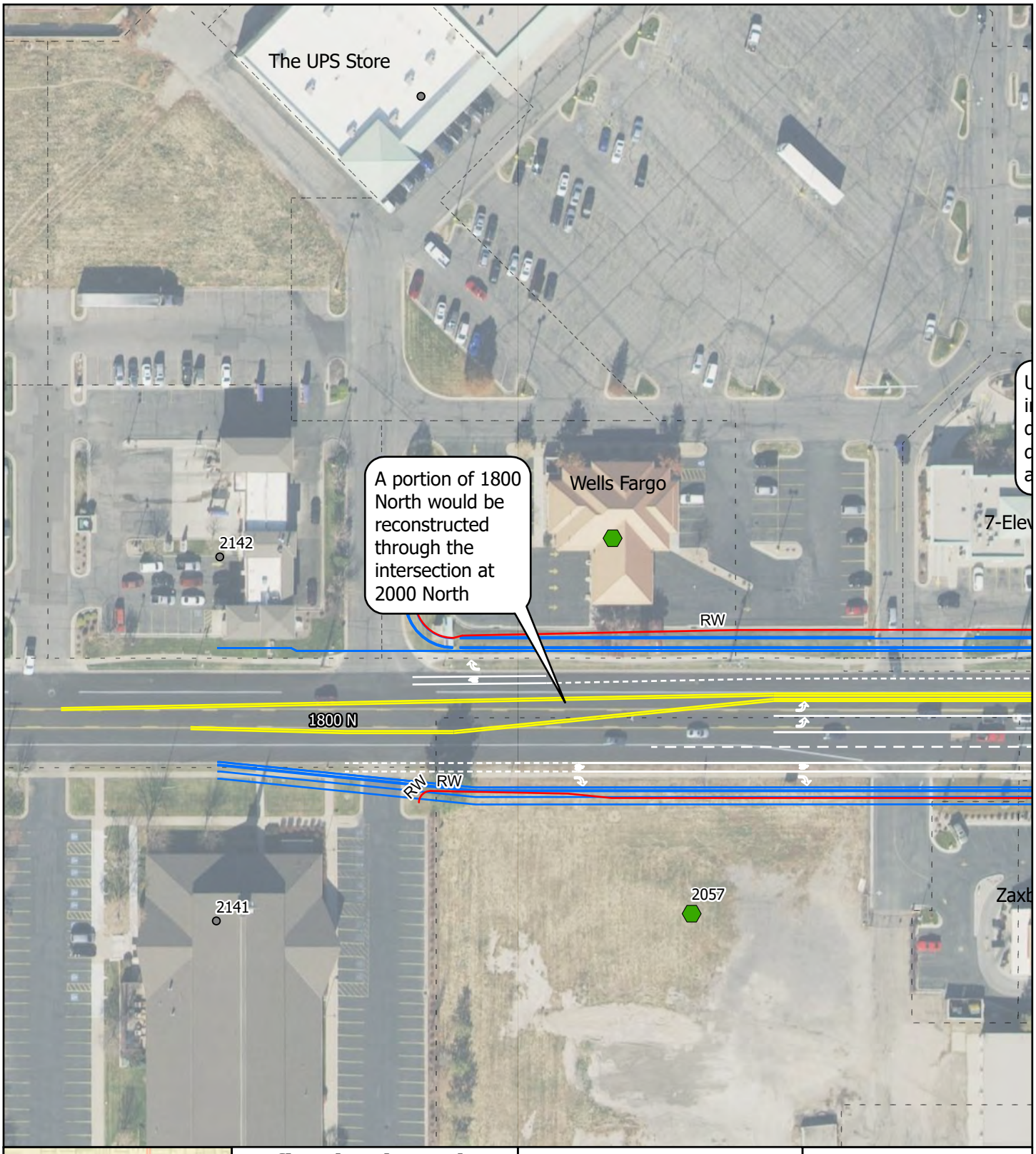
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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Map Page 13 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

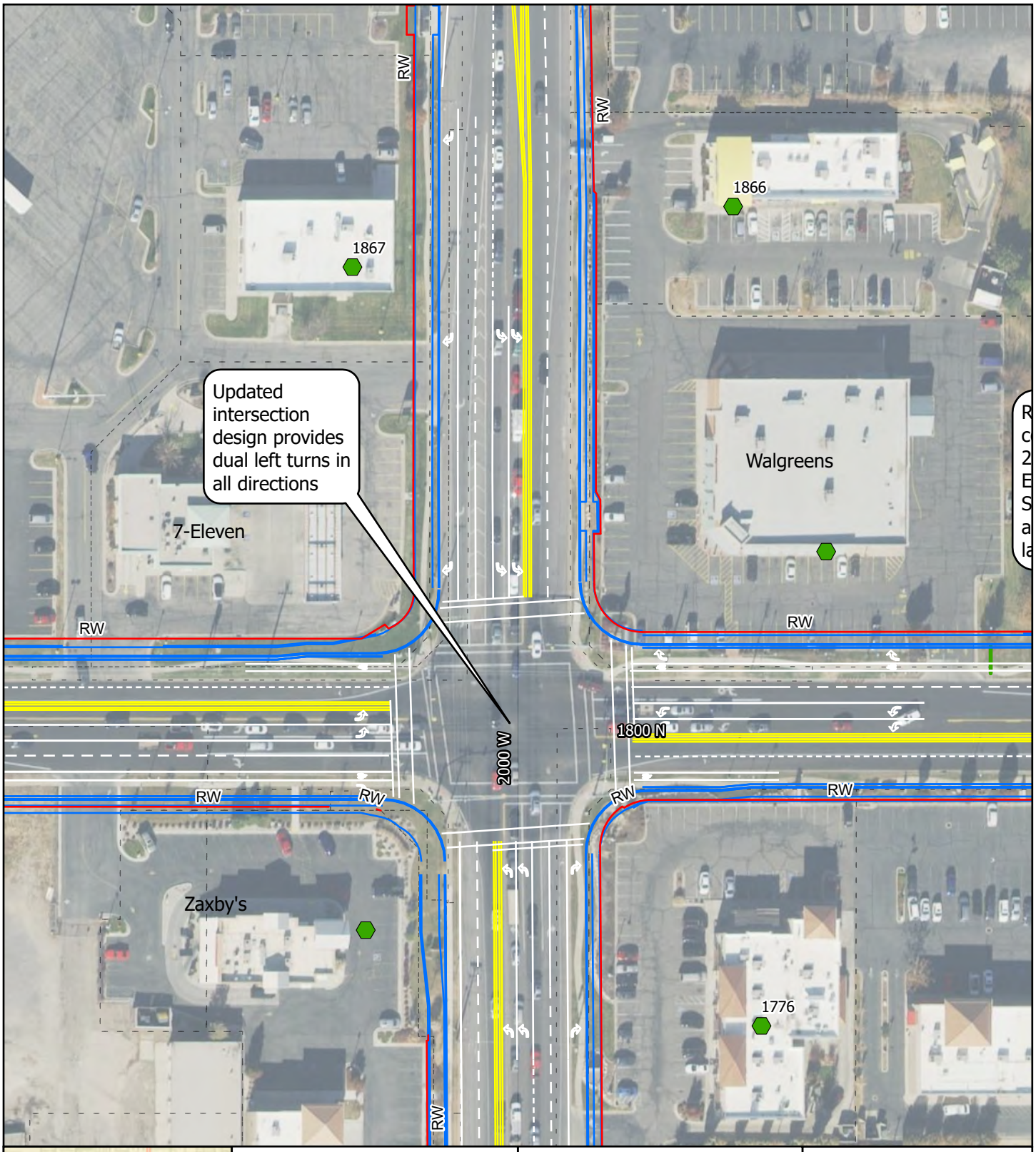
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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PIN 15680
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Map Page 14 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)

Refined Selected Alternative

SR-108 (2000 West)
300 North to 6000 South
EIS Re-evaluation
UDOT Project S-0108(36)6
PIN 15680
Map Date: 6/21/2021 11:20 AM
Map Page 15 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

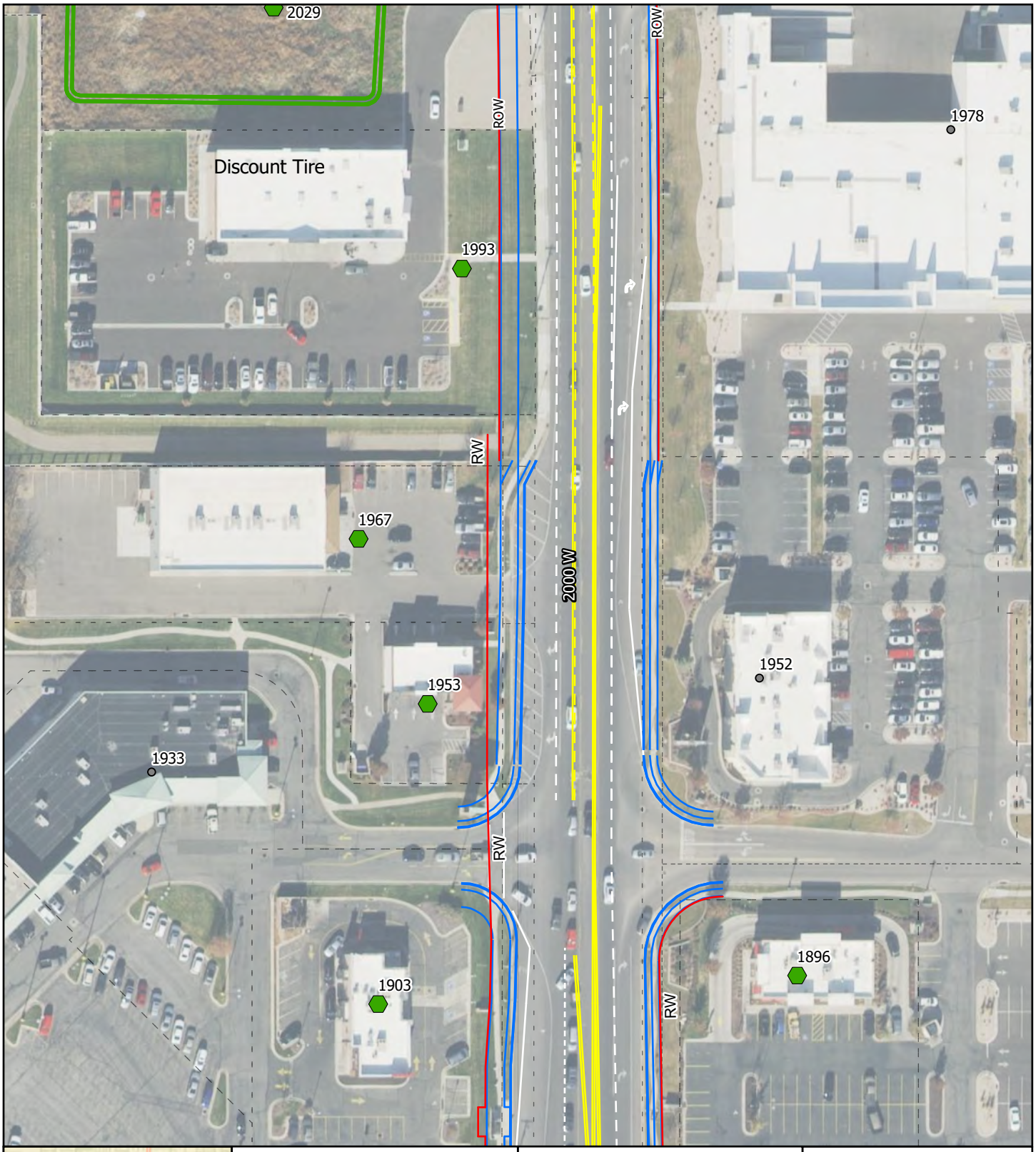
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



Refined Selected Alternative

SR-108 (2000 West)
300 North to 6000 South
EIS Re-evaluation
UDOT Project S-0108(36)6
PIN 15680
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Map Page 16 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

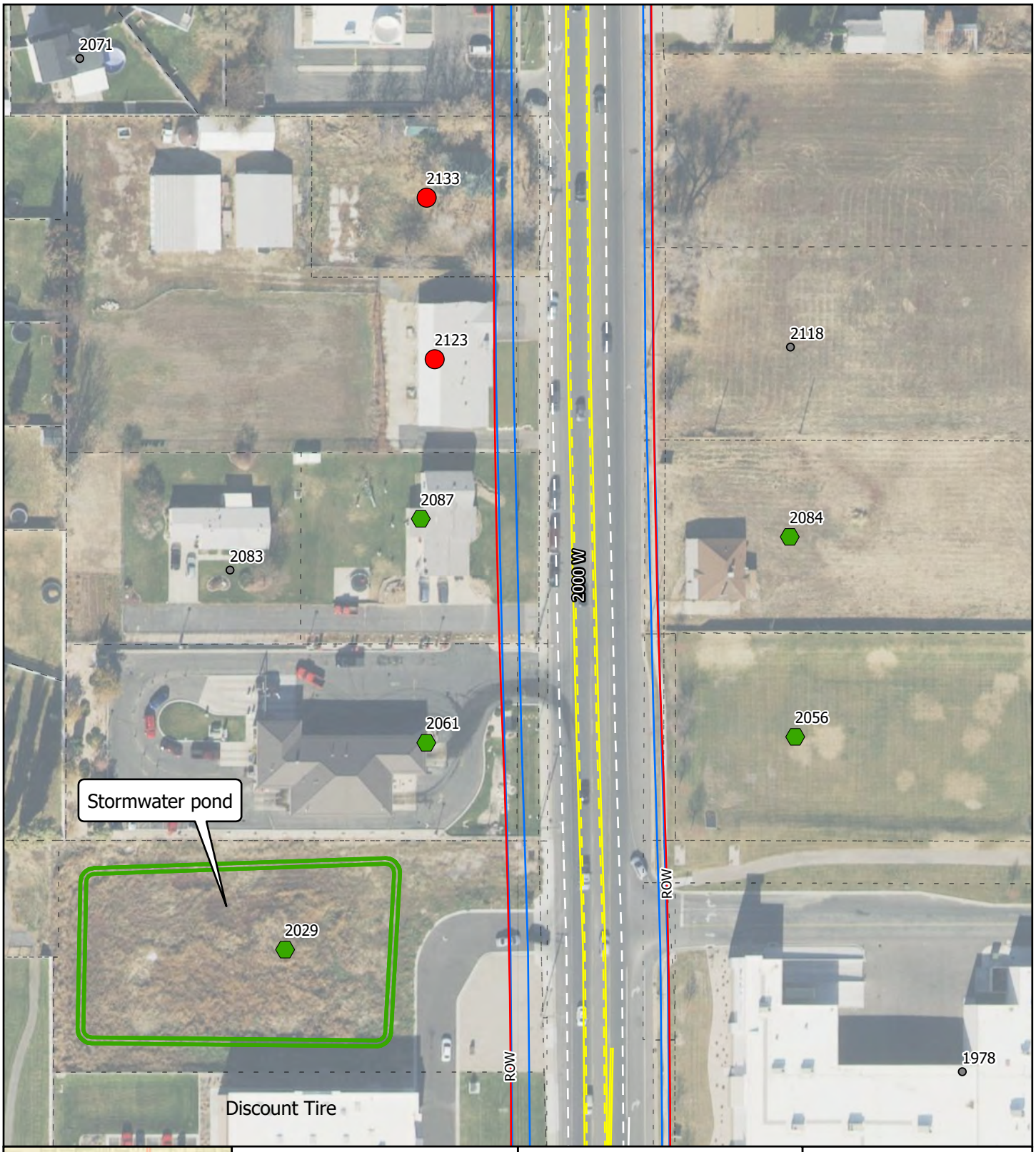
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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Map Page 17 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

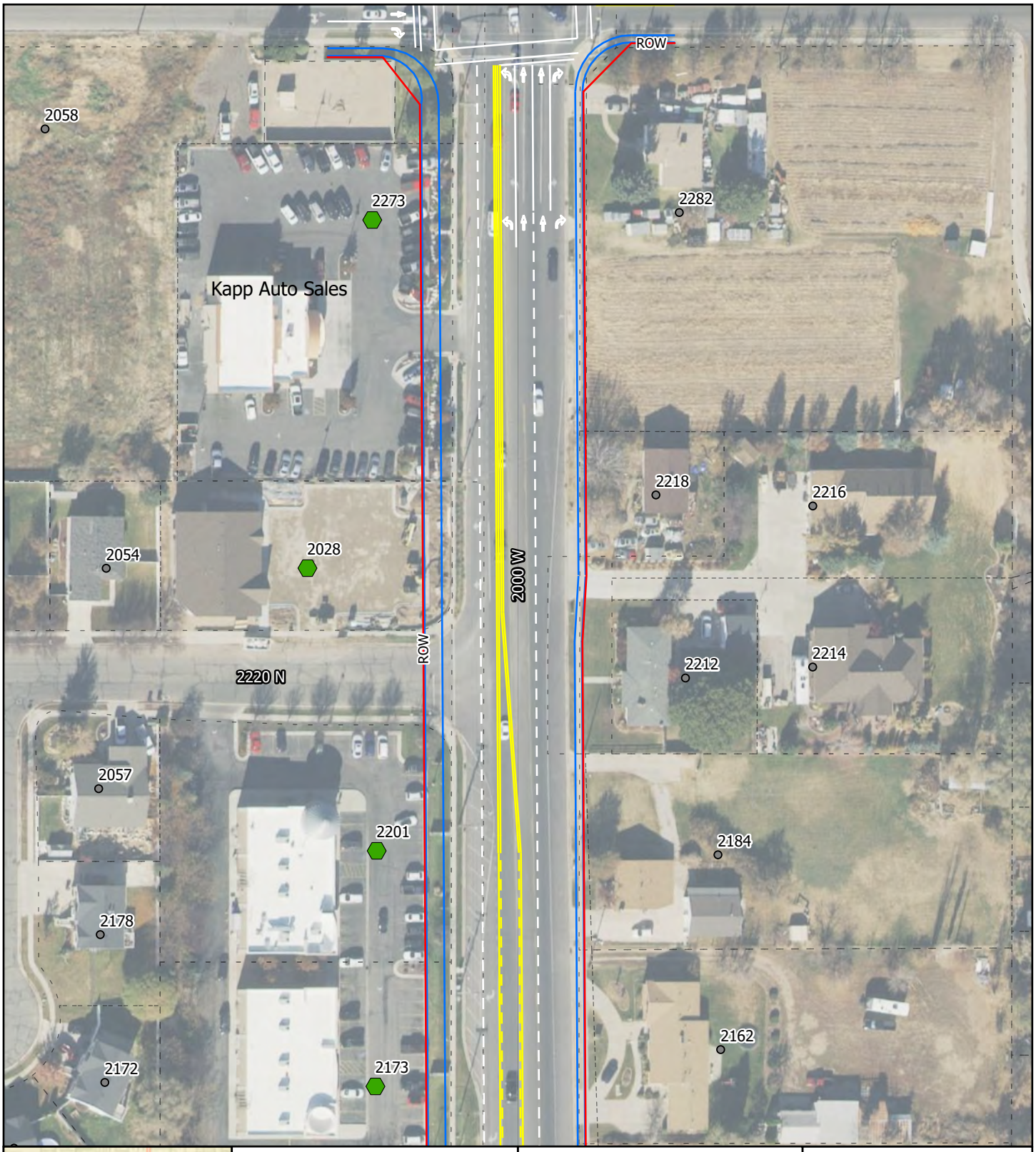
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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Map Page 18 of 23

Acquisition for Right-of-Way

- Full (Relocation)
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- UDOT-Owned (Relocation)
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- None
- Noise Barrier

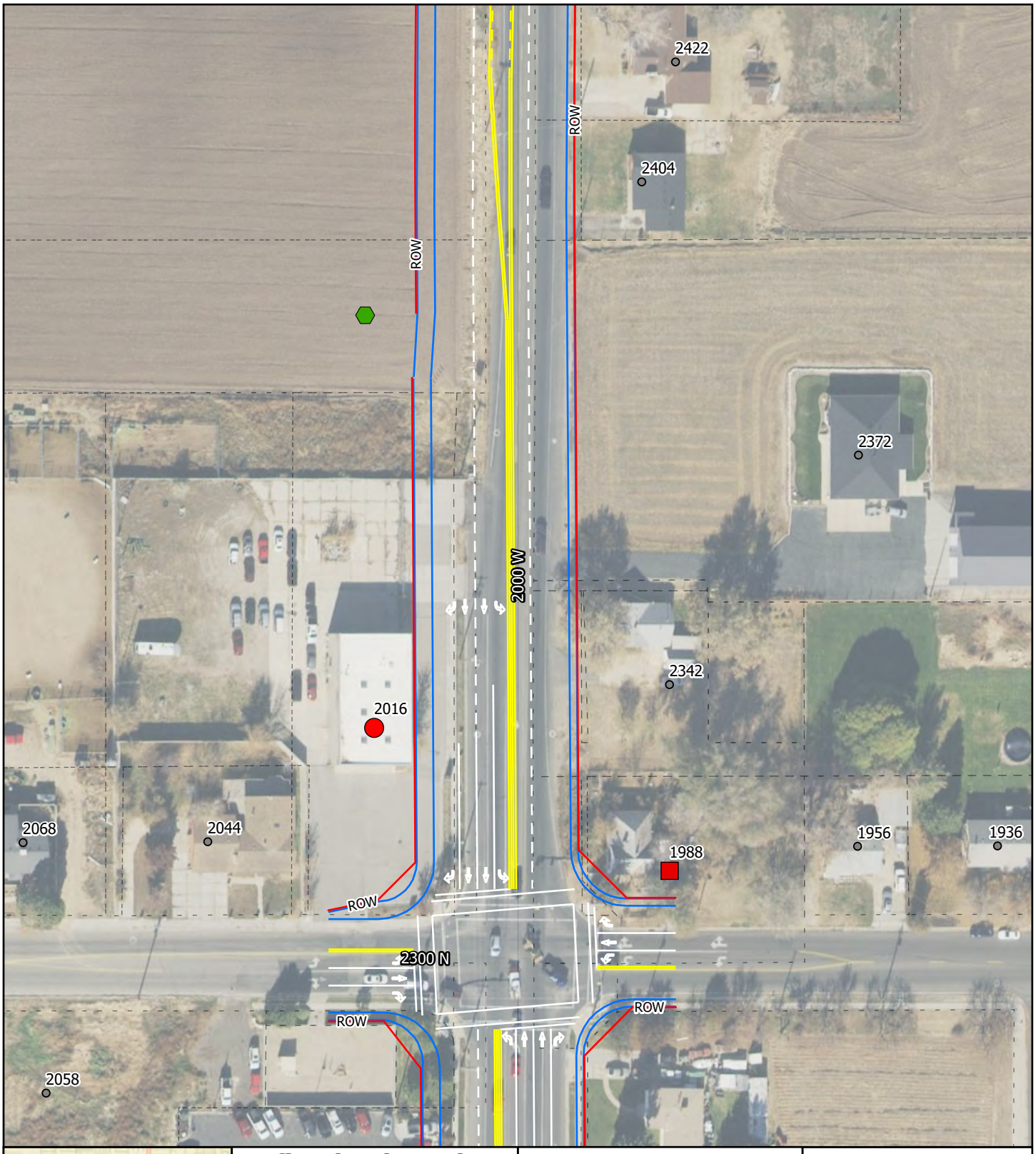
UDOT Keeping Utah Moving

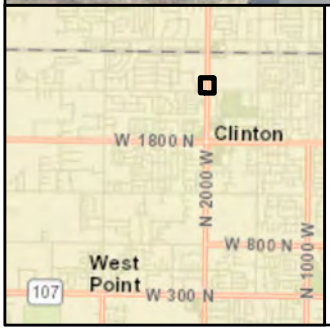
N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)





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Map Page 19 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

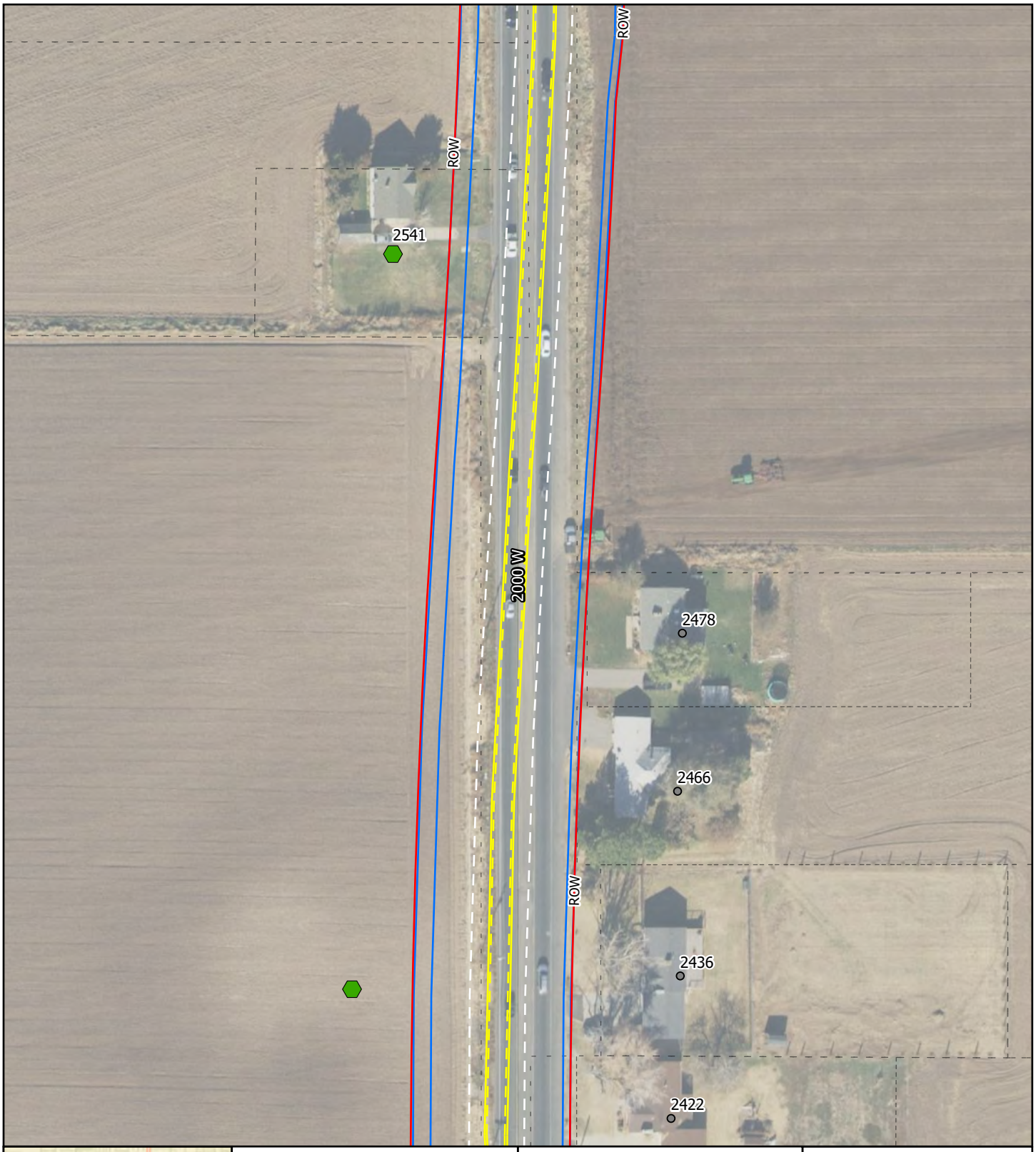
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



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Map Date: 6/21/2021 11:20 AM
Map Page 20 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

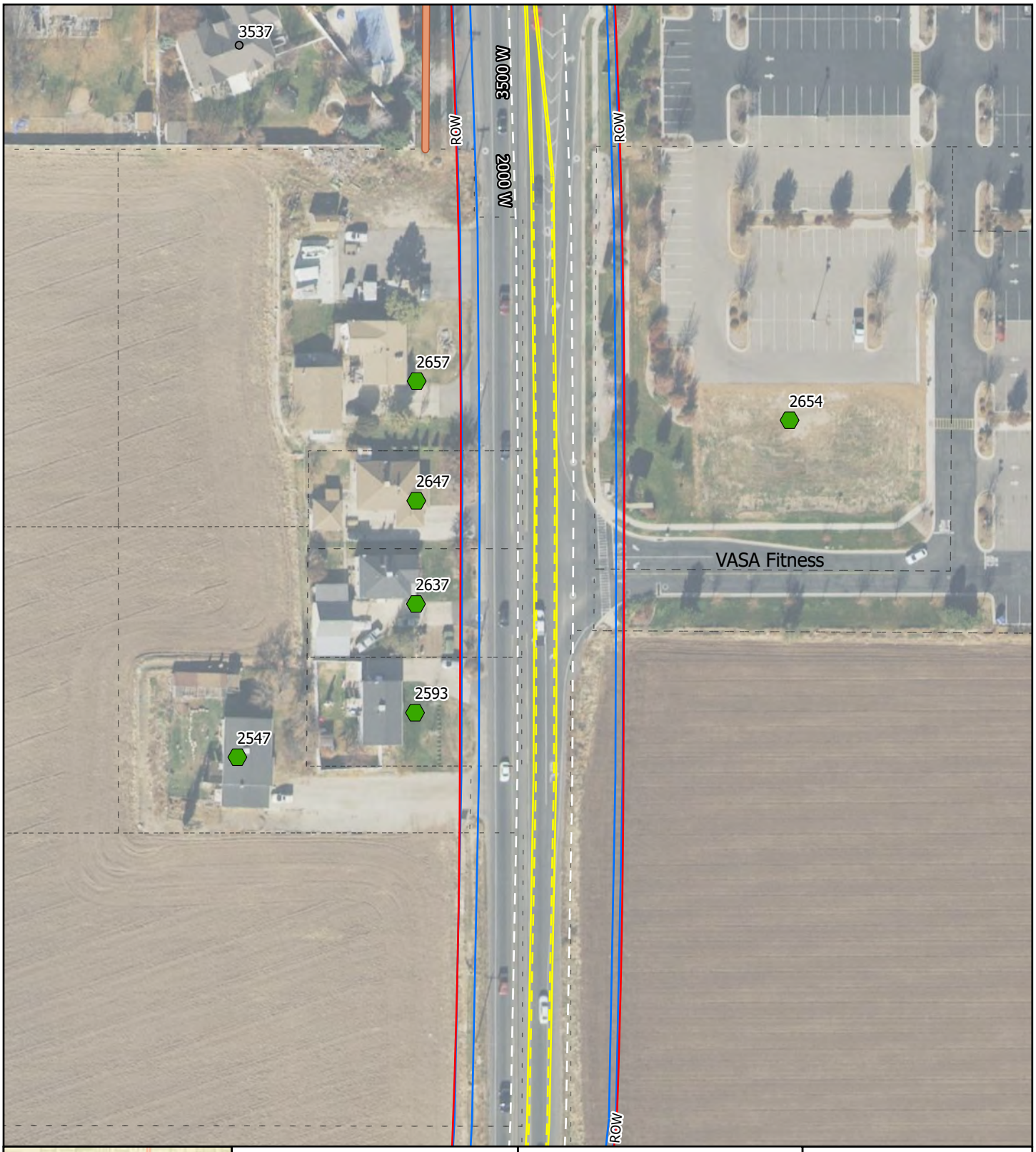
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



Refined Selected Alternative

SR-108 (2000 West)
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Map Page 21 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

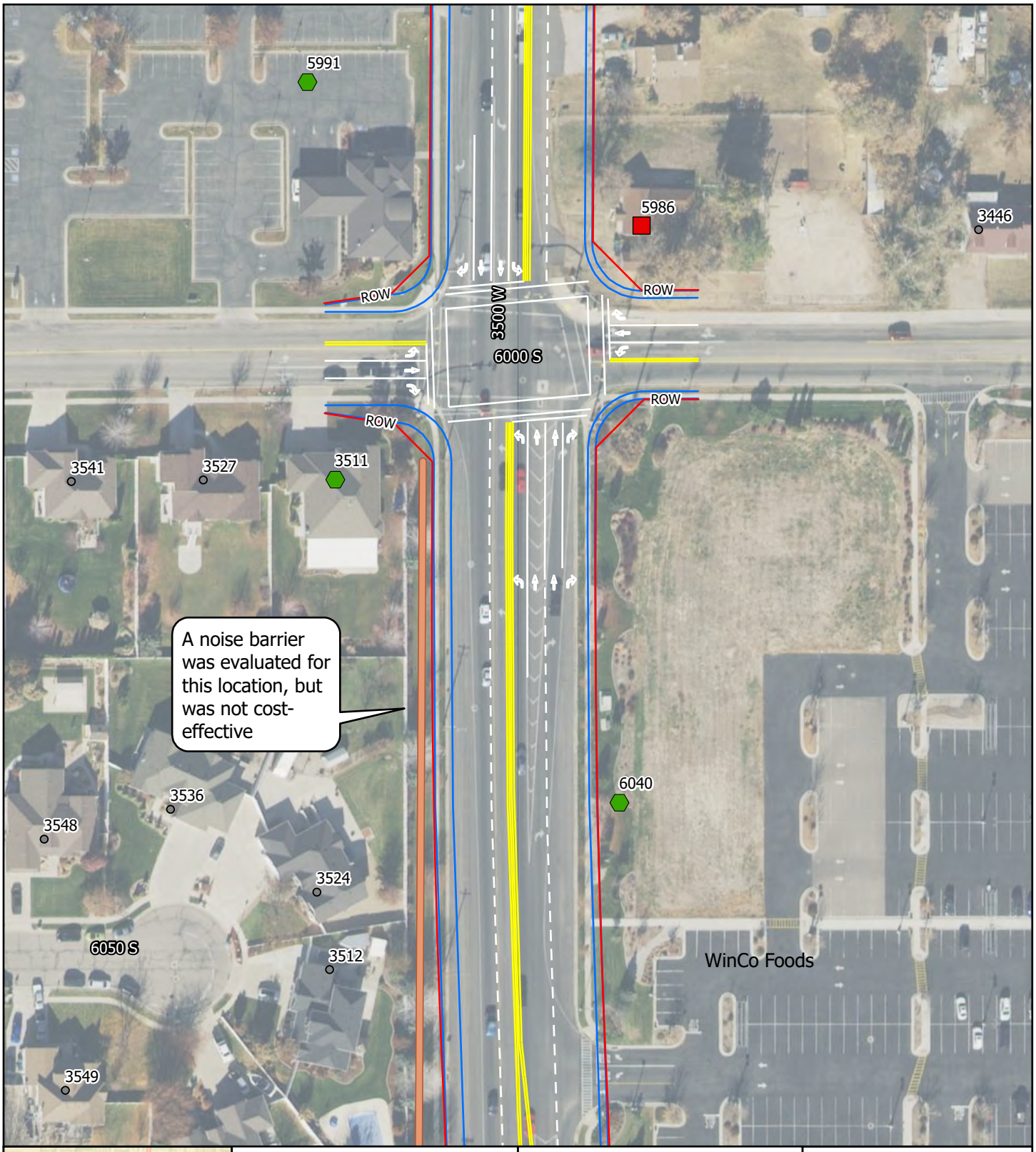
UDOT Keeping Utah Moving

N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)



Refined Selected Alternative

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Map Page 22 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

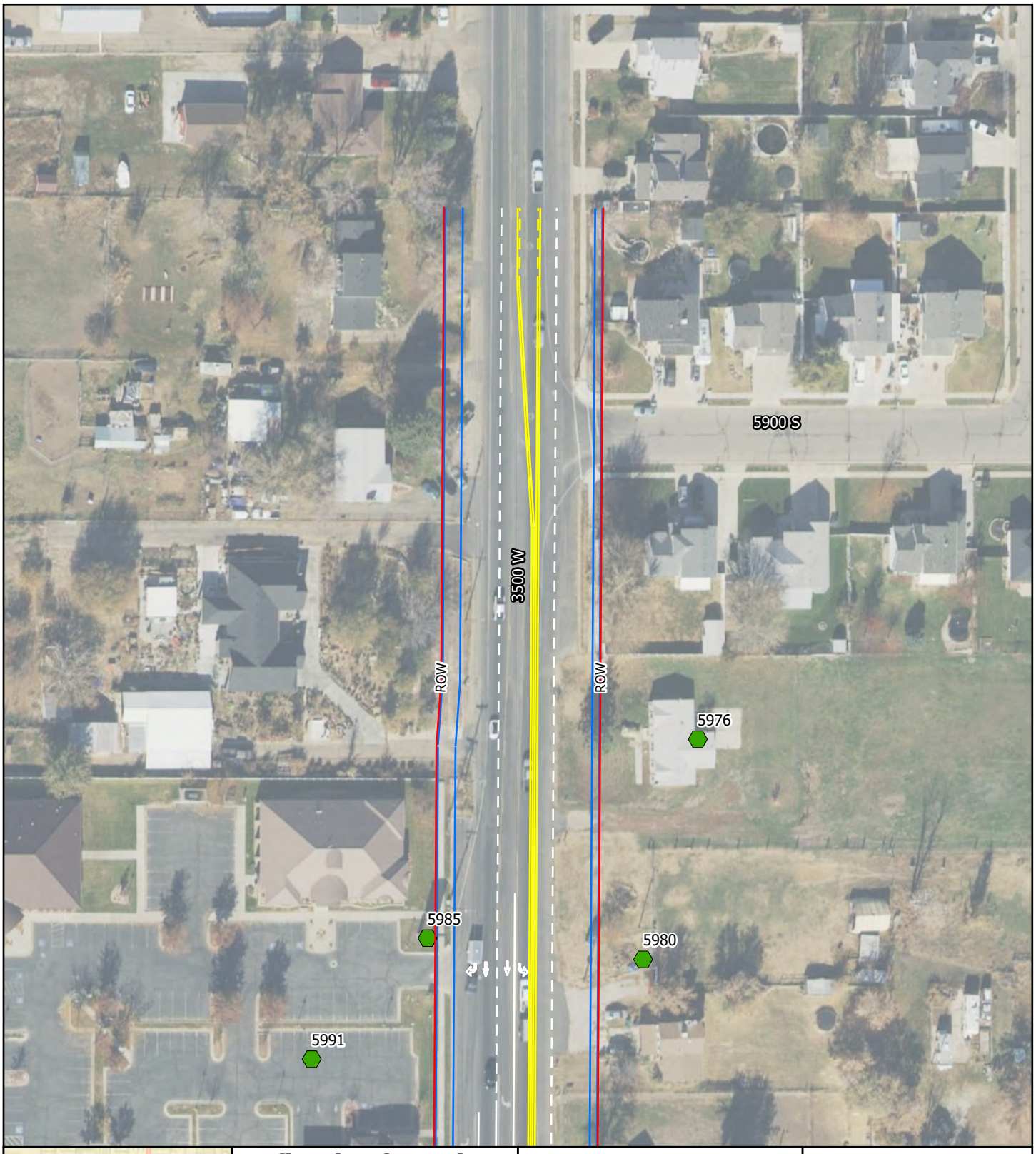
UDOT Keeping Utah Moving

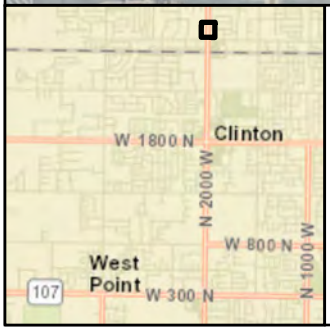
N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)





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Map Page 23 of 23

Acquisition for Right-of-Way

- Full (Relocation)
- Potential Relocation
- UDOT-Owned (Relocation)
- Partial Acquisition
- None
- Noise Barrier

UDOT Keeping Utah Moving

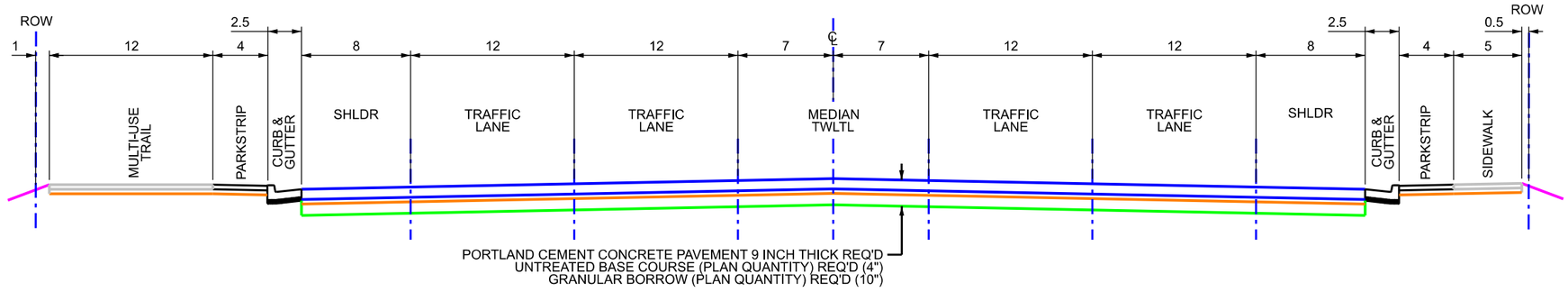
N

0 60 120 Feet

0 15 30 Meters

(Labels are property address numbers)

Attachment 2
Typical Cross Sections

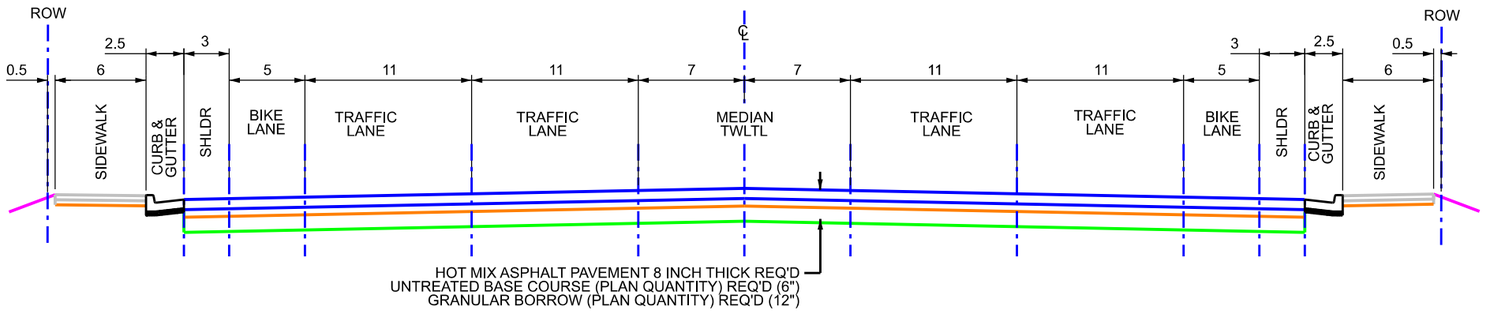


TYPICAL SECTION

2000W

205+00 TO 300+00

DESIGN SPEED 50 MPH



TYPICAL SECTION

1800N

08+75 TO 22+50

DESIGN SPEED 45 MPH

Attachment 3
Air Quality Assessment

2000 West
IMPROVED
West Point to Clinton

Project of Air Quality Concern Evaluation

SR-108 (2000 West): 300 North (West Point)

to 6000 South (Roy)

Davis County, Utah

UDOT Project S-0108(36)6; PIN 15680

May 2021

Prepared for:

Utah Department of Transportation
501 Constitution Blvd.
Taylorsville, Utah 84129

Prepared by:

BIO-WEST, Inc.

Table of Contents

List of Tables

List of Figures

Appendices

Introduction

The Final Environmental Impact Statement and Section 4(f) Evaluation (FEIS) for SR-108 in Davis and Weber Counties evaluated the environmental impacts of improving SR-108 from SR-127 (Antelope Drive) to SR-126 (1900 West, an approximately 9.5-mile section of SR-108. In the Record of Decision (ROD), dated October 28, 2008, UDOT and FHWA selected the Minimize 4(f) Impacts Alternative, which involves widening SR-108 to a 110-foot five-lane cross-section. The alignment of the 2008 Selected Alternative varied along the corridor to minimize impacts to Section 4(f) properties.

The approved project is being completed through staged construction. With Project S-108(36)6 (PIN 15680), UDOT is re-evaluating the environmental analysis for the 2.5-mile portion of SR-108 (2000 West) through Clinton, Utah between Mile Point 6.0 (300 North in West Point) and Mile Point 8.5 (6000 South in Roy). Figure 1 shows the project location.

Subsequent to completion of the FEIS and ROD in 2008, the U.S. Environmental Protection Agency (EPA) designated the "Salt Lake City" nonattainment area for fine particulate matter ($PM_{2.5}$) under the 24-hour $PM_{2.5}$ (2006) National Ambient Air Quality Standards (NAAQS) in November 2009 (74 FR 58687). The nonattainment area is inclusive of Davis County and portions of Weber County (EPA 2021a) and the SR-108 project is within the nonattainment area. This report has been prepared to provide information supporting a project-level conformity determination.

Figure 1. SR-108 Project Location

Modifications to the Selected Alternative

Since the 2008 ROD, additional architectural structures have become eligible for listing on the National Register of Historic Places; these additional eligible properties required updating of Section 106 consultation and Section 4(f) compliance. Additionally, some previously eligible structures have subsequently been demolished. Efforts were made during the reevaluation process to adjust the alignment of the Selected Alternative to minimize impacts to the currently eligible Section 106 and Section 4(f) properties in the PIN 15680 study area (Figure 2).

The design year of the project was also updated from 2030 to 2050. New traffic data was obtained to consider the ability of the roadway design to meet existing traffic needs and to update design year traffic performance of the Modified Selected Alternative. Based on the updated traffic study (JUB 2021), adjustments were made to some turn lane lengths to better accommodate turning traffic volumes and reduce congestion.

In 2015, UDOT completed a FEIS and ROD for SR-37 (1800 North). SR-37 and SR-108 intersect in the study area. Adjustments to the design of the intersection have been made to accommodate the selected design of SR-37 (not yet constructed).

Purpose of the Project

The purpose of the project as stated in the 2008 FEIS is to:

- Reduce roadway congestion on SR-108.
- Eliminate roadway deficiencies associated with a lack of shoulders and turn lanes in order to reduce accident rates on SR-108.
- Enhance multi-modal use by providing improved bicycle, pedestrian, and transit facilities consistent with local and regional land use and transportation plans.

The proposed changes to the Selected Alternative do not change the original project concept or its ability to meet the project purpose, as provided in the FEIS and ROD.

Figure 2. Study Area

Need for the Project

As described in the 2008 FEIS, the need for the SR-108 project is a result of the following conditions:

- **Current and Future Lack of Capacity**. Continued growth in the study area has resulted in increased travel on SR-108 that will exceed the roadway capacity, resulting in heavy congestion and causing long commutes and poor access for residents and businesses (see Section 1.4.1, Population, Household, and Employment Growth in the Study Area, and Section 1.4.3, Current and Future Traffic Congestion).
- **Reduced Function of SR-108**. Increased congestion along SR-108 will reduce the overall function of the roadway as an arterial that accommodates through traffic and will decrease the overall local and regional mobility for residents of Syracuse, West Point, Clinton, Roy, and West Haven (see Section 1.4.3, Current and Future Traffic Congestion).
- **Roadway Deficiencies**. Parts of SR-108 were built over 40 years ago and do not meet current design standards. These deficiencies include insufficient shoulders and turn lanes, a lack of sidewalks and bicycle lanes, and a lack of pullouts to support bus service (see Section 1.4.4, Safety on and Roadway Condition of SR-108, and Section 1.4.5, Transit, Pedestrian, and Bicycle Needs).

Attainment Status and Existing Conditions

An attainment area is an area that meets (or "attains") the National Ambient Air Quality Standards (NAAQS) for a given air pollutant. A nonattainment area is an area that does not meet the NAAQS for a given air pollutant. A maintenance area is an area previously designated as a nonattainment area that has been redesignated to attainment status and is required to have a maintenance plan (40 CFR 50).

Table 1 shows attainment status for Davis County. Davis County is included in the Salt Lake City nonattainment area for PM2.5 and in the Northern Wasatch Front nonattainment area for the 8-hour ozone standard. Table 2 shows the National Ambient Air Quality Standards (NAAQS). In its June 2020 proposed rule, EPA proposed an attainment determination for this area. More information on the proposed rule can be found in 85 FR 35033.

Table 1. Davis County Attainment Status

Pollutant	Status
Carbon Monoxide (CO)	Attainment
Lead (Pb)	Attainment
Nitrogen Dioxide (NO_2)	Attainment
Ozone (O_3)	Nonattainment (Marginal)
Particulate Matter ($PM_{2.5}$)	Nonattainment (Serious)
Particulate Matter (PM_{10})	Attainment
Sulfur Dioxide (SO_2)	Attainment

Source: EPA 2021b

Table 2. National Ambient Air Quality Standards for Particulate Matter and Ozone

Pollutant	Primary/ Secondary	Averaging Time	Level	Form
Particulate Matter ($PM_{2.5}$)	Primary	1 year	12.0 $\mu g/m^3$	annual mean, averaged over 3 years
	Secondary	1 year	15.0 $\mu g/m^3$	annual mean, averaged over 3 years
	Primary and Secondary	24 hours	35 $\mu g/m^3$	98th percentile, averaged over 3 years
Particulate Matter (PM_{10})	Primary and Secondary	24 hours	150 $\mu g/m^3$	Not to be exceeded more than once per year on average over 3 years
Ozone (O_3)	Primary and Secondary	8 hours	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years

Source: EPA 2021c

The SR-108 reevaluation study area is located between monitoring sites located in Weber and Davis Counties. In Weber County, the Ogden #2 Site (49-057-0002) at 228 East 32nd Street in Ogden was the geographically closest to SR-108, approximately 7 miles northeast of the study area. This site was taken down in June 2019 and the Ogden #2 site relocated to Harrisville (49-057-1003) at 425 W 2550 North, 15 miles to the northeast. For some period of time between June 2019 to December 2019 the Harrisville location was also offline as it was being retrofitted. In Davis County, Site 49-011-0004 is located at 171 West 1370 North in Bountiful, 24 miles to the southeast.

$PM_{2.5}$ data from the Ogden #2 Sites and the Bountiful site are included in Appendix A (EPA 2021d). The most recently available 10-year period for these sites is summarized in Table 3 (next page). Based on the available Ogden data, the 24-hour standard was exceeded in all years except the three most recent years, 2018, 2019, and 2020. For the Bountiful data, the 24-hour standard has not been exceeded since 2016. None of these sites have 3-year averages exceeding the annual standard for the years included in Table 3.

Table 3. Fine Particulate Matter Monitoring Data

	24-Hour $PM_{2.5}$					Annual $PM_{2.5}$		
Year	1st Max	2nd Max	98th Percentile	3-Year Average	Exceeds Standard?	Annual Mean	3-Year Average	Exceeds Standard?
Weber County, Ogden #2 Site 49.057.0002 (taken down June 2019)								
2010	56.1	55.0	39	--	--	9.2	--	--
2011	64.6	56.0	44	--	--	9.1	--	--
2012	63.7	35.5	26	36	Yes	9.0	9.1	No
2013	76.9	71.8	49	40	Yes	14.3	10.8	No
2014	96.7	72.2	33	36	Yes	11.0	11.4	No
2015	41.9	39.2	32	38	Yes	9.7	11.7	No
2016	49.2	46.2	39	35	Yes	9.2	10.0	No
2017	58.4	51.9	39	37	Yes	9.0	9.3	No
2018	66.7	35.4	25	34	No	8.3	8.8	No
2019	36.0	30.1	22	29	No	5.3	7.5	No
Weber County, Ogden #2 Site 49.057.1003 (using 2017 and 2018 data from Site 49.057.0002 for 3-year averages)								
2019	32.6	32.4	27	30	No	6.3	7.9	No
2020	47.5	41.9	26	26	No	6.9	7.2	No
Davis County, Bountiful Site 49.011.0004								
2010	57.0	45.7	44	--	--	9.0	--	--
2011	56.4	39.7	34	--	--	8.4	--	--
2012	34.7	26.8	26	35	Yes	7.9	8.4	No
2013	51.2	45.6	46	35	Yes	10.9	9.1	No
2014	47.1	45.9	44	39	Yes	7.4	8.7	No
2015	45.1	41.4	29	40	Yes	6.5	8.3	No
2016	51.8	48.9	38	37	Yes	8.0	7.3	No
2017	45.2	43.7	36	34	No	8.7	7.7	No
2018	42.0	33.8	27	34	No	7.3	8.0	No
2019	38.1	28.8	16	26	No	5.6	7.2	No
2020	63.8	46.5	34	26	No	9.2	7.4	No

Source: EPA 2021d

All $PM_{2.5}$ measures and standards are measured in micrograms per cubic meter ($\mu g/m^3$)

The 24-Hour $PM_{2.5}$ Standard is a three-year average of 35 $\mu g/m^3$ or greater

The primary annual $PM_{2.5}$ Standard is 12 $\mu g/m^3$ and the secondary annual standard is 15 $\mu g/m^3$

Traffic Conditions

In the 2.5-mile stretch of SR-108 (study area), the transition between rural agricultural land uses and suburban/urban use becomes apparent, and it is this rapidly developing area that requires attention to achieve UDOT traffic goals for LOS. This stretch of SR-108 between 6000 South in Roy and proceeding south to 300 North in Clinton is classified as an Access Category 5 Regional priority road of urban importance and has a posted speed limit of 45 mph. SR-108 also serves as an important connection for several east-west roadways important to the region and providing connection to I-15.

Table 4 summarizes existing and future traffic volumes and vehicle mixes for the study area. Average daily traffic was determined from PM peak hour volumes in the traffic study (JUB 2021), assuming that PM peak is 10 percent of the daily volume. The proportion of diesel vehicles was determined from field studies conducted by BIO-WEST for the noise study and is consistent with the proportion of single unit and combination unit trucks reported in the UDOT 2017 Annual Average Daily Traffic for SR-108 between mile posts 7.5 and 8.5 (UDOT 2021).

Table 4. Traffic Data

SR-108 Segments between Major Intersections	% Diesel Vehicles	Average Daily Traffic			
		Existing (2021)		Future (2050)	
		All Vehicles	Diesel Vehicles	All Vehicles	Diesel Vehicles
300 N to 800 N	12%	15,870	1,904	34,800	4,176
800 N to 1300 N	12%	14,050	1,686	40,070	4,808
1300 N to 1800 N	12%	16,070	1,928	36,460	4,375
1800 N to 2050 N	12%	21,290	2,555	30,020	3,602
2050 N to 2300 N	12%	22,030	2,644	27,550	3,306
2300 N to 6000 S	12%	20,750	2,490	32,170	3,860

Major intersections appear at approximately half mile intervals along the corridor. As the agricultural areas still existing along portions of the corridor continue to convert to suburban type growth, the trends of growth and traffic increases are anticipated to increase as well. The no-build alternative explored in Table 5 reflects the worsening levels of traffic as a drop in LOS, in some cases as low as F, while the Modified Selected Alternative illustrates how these impacts can be mitigated with the proposed project.

Table 5. Intersection Levels of Service

	Existing 2021		No-Build 2050		Build 2050 (Modified Selected Alternative)	
Intersection	AM	PM	AM	PM	AM	PM
Roy / Weber County:						
6000 South	C	D	F	F	B	C
Clinton and West Point / Davis County:						
2300 North	B	C	D	F	A	C
1800 North	C	D	F	F	D	D
1300 North	B	C	C	E	A	B
800 North	A	B	C	E	A	A
300 North	C	C	C	D	D	E

Overall, the existing AM peak hour conditions operate at LOS C or better. Existing PM peak hour traffic still meets UDOT's goal of LOS D or better. However, there appears to be significant northbound latent demand with some signalized intersections reaching capacity, which would be expected to worsen in the future under the no-build condition.

Definitions and Examples

Title 40: Protection of Environment is the section of the Code of Federal Regulations (CFR) that pertains to the environmental regulations implemented by the EPA. Subchapter C of Title 40 covers air programs such as the Clean Air Act and NAAQS. The SR-108 Project is not an exempt project under either 40 CFR 93.126 or 40 CFR 93.128 because it will add travel lanes, and therefore requires further review to determine if the project meets the criteria of air quality concern. If a project is of air quality concern it will require a quantitative $PM_{2.5}$ hot-spot analysis. Projects defined by 40 CFR 93.123(b)(1) as projects of air quality concern include:

(i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles

(ii) Projects affecting intersections that are at LOS D, E, or F with a significant number of diesel vehicles, or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project

(iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location

(iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location

(v) Projects in or affecting locations, areas, or categories of sites which are identified in the PM_{10} or $PM_{2.5}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation

EPA's *Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Non-attainment and Maintenance Areas* (EPA 2015) provides guidance for reviewing transportation projects in the context of Title 40 and clarification on the criteria for determining whether a project is a project of air quality concern. Appendix B of EPA's hot-spot guidance provides the following examples of projects of local air quality concern that would be covered by 40 CFR 93.123(b)(1)(i) and (ii):

- A project on a new highway or expressway that serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT) and 8% or more of such AADT is diesel truck traffic
- New exit ramps and other highway facility improvements to connect a highway or expressway to a major freight, bus, or intermodal terminal
- Expansion of an existing highway or other facility that affects a congested intersection (operated at LOS D, E, or F) that has a significant increase in the number of diesel trucks
- Similar highway projects that involve a significant increase in the number of diesel transit busses and/or diesel trucks

EPA's hot-spot guidance also provides the following examples of projects that are *not* projects of local air quality concern under 40 CFR 93.123(b)(1)(i) and (ii):

- Any new or expanded highway project that primarily services gasoline vehicle traffic (i.e., does not involve a significant number or increase in the number of diesel vehicles), including such projects involving congested intersections operating at LOS D, E, or F.
- An intersection channelization project or interchange configuration project that involves either turn lanes or slots, or lanes or movements that are physically separated. These kinds of projects improve freeway operations by smoothing traffic flow and vehicle speeds by improving weave and merge operations, which would not be expected to create or worsen PM NAAQS violations.
- Intersection channelization projects, traffic circles or roundabouts, intersection signalization projects at individual intersections, and interchange reconfiguration projects that are designed to improve traffic flow and vehicle speeds, and do not involve any increases in idling. Thus, they would be expected to have a neutral or positive influence on PM emissions.

Evaluation

This section considers the characteristics of the SR-108 project according to the definitions and examples described in the previous section.

New Highway Capacity

Definition. Is this a new highway project that has a significant number of diesel vehicles?
Response. No. SR-108 is an existing highway.

Expanded Highway Capacity

Definition. Is this an expanded highway project that has a significant increase in the number of diesel vehicles?

Response. No. The Modified Selected Alternative would expand the existing highway to accommodate the projected population growth and increase in average annual daily traffic (AADT). However, there would be no significant increase in the percentage of diesel vehicles for the 2050 design year compared to the no-build alternative.

The volume of traffic is expected to increase due to continued residential growth and infill development. Diesel traffic is expected to remain proportionately consistent while traffic flow and LOS drops precipitously under a no-build alternative. The Modified Selected Alternative would have limited impact on access and would not change freight and bus travel patterns. The Modified Selected Alternative would improve traffic flow compared to no-build and therefore would reduce the amount of time that vehicles spend idling. Idling vehicles produce more particulate emissions than do moving vehicles.

Projects with Congested Intersections

Definition. Does this project affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles, or will this project change an intersection to a LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project?

Response. No. While the project is designed to address intersections that currently have LOS D in PM peak traffic (6000 South in Roy and 1800 North in Clinton), the significance of the route to diesel traffic is limited and will not be changed based on this project. Furthermore, the improvements proposed as part of this design will increase LOS immediately, but will also prevent significant declines in LOS in future scenarios.

New Bus and Rail Terminals

Definition. Does this project include new bus and rail terminals and transfer points that will have a significant number of diesel vehicles congregating at a single location?

Response. No. The SR-108 Project does not involve constructing or connecting to new bus or rail terminals or transfer stations.

Expanded Bus and Rail Terminals

Definition. Does this project include expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location?

Response. No. The SR-108 Project does not involve expanding bus or rail terminals or transfer stations.

Projects in or Affecting PM_{10} or $PM_{2.5}$ Sites

Definition. Is this project in or affecting locations, areas, or categories of sites which are identified in the PM_{10} or $PM_{2.5}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation?

Response. No. The SR-108 Project type is not identified in the implementation plan as a project of air quality concern or as a type of transportation project location having a potential to increase local

emissions or worsen air quality, thus requiring a hot-spot analysis. The Modified Selected Alternative would improve traffic flow, reduce vehicle idling, and improve the level of service at intersections compared to the no-build alternative. The Modified Selected Alternative would not increase truck traffic compared to the no-build alternative.

Determination

Standard. State whether the project is a project of air quality concern and summarize the support determination. Document the relevant agencies that require interagency consultation on any input for the determination from federal, state, and local transportation and air agencies as necessary for this project per 40 CFR 93.105. This information will be included in any subsequent air quality analysis and project level conformity determination reports.

Response. The SR-108 Project does not qualify as a project of air quality concern since the Modified Selected Alternative would not result in a substantial increase in diesel traffic in the study area compared to the no-build alternative. Traffic volumes in 2040 are much less than those suggested by EPA where consideration of a quantitative project-level (hot-spot) evaluation could be warranted. The project is not expected to either influence the vehicle mix in the study area or attract a significant number of new diesel vehicles to the area. This project is not a project of air quality concern; therefore, no project-level (hot-spot) analysis should be required for conformity purposes under 40 CFR 93.123(b).

This evaluation report was offered for interagency consultation, no comments were received. FHWA determined on April 29, 2021 that the project confirms to Utah's State Implementation Plan (SIP). FHWA's letter is included in Appendix B.

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Appendix A

Air Monitoring Data

Monitor Values Report

Geographic Area: Weber County, UT
Pollutant: PM2.5
Year: 2010
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
341	56.1	55	53.9	45.6	42	9.2	Included	1	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
107	55.3	43.4	39.3	39.3	39	8.2*	None	1	490571003	425 W 2550 North, Ogden, Utah	Harrisville	Weber	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated by state, local, and tribal organizations who own and submit the data.

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 10, 2019

Monitor Values Report

Geographic Area: Weber County, UT
Pollutant: PM2.5
Year: 2011
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
347	64.6	56	55.2	49.6	44	9.1	Included	1	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
112	52.6	38.4	32.9	30.3	33	7.5	None	1	490571003	425 W 2550 North, Ogden, Utah	Harrisville	Weber	UT	08

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 10, 2019

Monitor Values Report

Geographic Area: Weber County, UT
Pollutant: PM2.5
Year: 2012
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
341	63.7	35.5	34.8	31.5	26	9	Included	1	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
115	35.4	31.7	27.4	26.5	27	7	Included	1	490571003	425 W 2550 North, Ogden, Utah	Harrisville	Weber	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 10, 2019

Monitor Values Report

Geographic Area: Weber County, UT
Pollutant: PM2.5
Year: 2013
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
278	67.2	66.2	66	63	43	11.1*	Included	1	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
365	76.9	71.8	70.2	66.1	49	14.3	None	4	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
85	61.9	45.8	44.6	44.3	46	12.3*	None	1	490571003	425 W 2550 North, Ogden, Utah	Harrisville	Weber	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

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This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 10, 2019

Monitor Values Report

Geographic Area: Weber County, UT
Pollutant: PM2.5
Year: 2014
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
314	81.7	67.6	45.4	40.9	26	7.4	Included	1	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
354	96.7	72.2	45.6	45.5	33	11	None	4	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

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This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 10, 2019

Monitor Values Report

Geographic Area: Weber County, UT
Pollutant: PM2.5
Year: 2015
Exceptional Events: Included (if any)
Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
265	44.5	42.9	36.1	32.9	28	7.4*	None	1	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
326	41.9	39.2	39.1	35.7	32	9.7*	Included	4	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

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Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 10, 2019

Monitor Values Report

Geographic Area: Weber County, UT
Pollutant: PM2.5
Year: 2016
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
316	49.2	46.2	45.1	42.8	39	9.2	None	1	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
172	14.6	13.8	13.2	11.6	12	5.1*	None	3	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

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This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 10, 2019

Monitor Values Report

Geographic Area: Weber County, UT
Pollutant: PM2.5
Year: 2017
Exceptional Events: Included (if any)
Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
350	58.4	51.9	48.4	45.8	39	9	Included	1	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
238	77.3	38.7	27.1	26.8	25	6.4*	Included	3	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
33	54.8	40.9	38.2	37.9	55	11.8*	None	5	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 10, 2019

Monitor Values Report

Geographic Area: Weber County, UT
Pollutant: PM2.5
Year: 2018
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
355	66.7	35.4	32.8	31.4	25	8.3	Included	1	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
353	49.4	38.3	34.6	33.2	25	8.5	Included	5	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 10, 2019

Monitor Values Report

Geographic Area: Weber County, UT
Pollutant: PM2.5
Year: 2019
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
134	36	30.1	22.4	21.9	22	5.3*	None	1	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
151	34.9	27.7	26.6	23.9	24	5.5*	None	5	490570002	228 32nd Street, Ogden, Utah	Ogden	Weber	UT	08
125	32.6	32.4	26.8	25.5	27	6.3*	None	1	490571003	425 W 2550 North, Ogden, Utah	Harrisville	Weber	UT	08
104	31.7	31.4	25.4	24.1	25	5.2*	None	3	490571003	425 W 2550 North, Ogden, Utah	Harrisville	Weber	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

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This report is based on monitor-level summary statistics. Air quality standards for some pollutants (PM2.5 and Pb) allow for combining data from multiple monitors into a site-level summary statistic that can be compared to the standard. In those cases, the site-level statistics may differ from the monitor-level statistics upon which this report is based.

Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: February 22, 2021

Monitor Values Report

Geographic Area: Weber County, UT
Pollutant: PM2.5
Year: 2020
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
327	42	38.9	30.8	26.9	23	6.9	Included	1	490571003	425 W 2550 North, Ogden, Utah	Harrisville	Weber	UT	08
354	47.5	41.9	33.2	29.7	26	6.9	Included	3	490571003	425 W 2550 North, Ogden, Utah	Harrisville	Weber	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Monitor Values Report

Geographic Area: Davis County, UT
Pollutant: PM2.5
Year: 2010
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
115	57	45.7	43.5	42.1	44	9	Included	1	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated by state, local, and tribal organizations who own and submit the data.

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Monitor Values Report

Geographic Area: Davis County, UT
Pollutant: PM2.5
Year: 2011
Exceptional Events: Included (if any)
Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
113	56.4	39.7	33.7	32.2	34	8.4	None	1	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Monitor Values Report

Geographic Area: Davis County, UT
Pollutant: PM2.5
Year: 2012
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
122	34.7	26.8	25.9	25.5	26	7.9	None	1	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Monitor Values Report

Geographic Area: Davis County, UT
Pollutant: PM2.5
Year: 2013
Exceptional Events: Included (if any)
Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
98	51.2	45.6	45.1	45.1	46	10.9*	None	1	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Monitor Values Report

Geographic Area: Davis County, UT
Pollutant: PM2.5
Year: 2014
Exceptional Events: Included (if any)
Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
116	47.1	45.9	43.9	36.3	44	7.4	None	1	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#mon

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Monitor Values Report

Geographic Area: Davis County, UT
Pollutant: PM2.5
Year: 2015
Exceptional Events: Included (if any)
Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
99	34.7	31.4	20.2	19.4	31	6.2*	None	1	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08
241	45.1	41.4	37.6	34.3	29	6.5*	None	3	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Monitor Values Report

Geographic Area: Davis County, UT
Pollutant: PM2.5
Year: 2016
Exceptional Events: Included (if any)
Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
188	51.8	48.9	45.7	37.5	38	8	None	1	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08
359	44.7	44.1	43.6	34.7	25	8	None	3	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Monitor Values Report

Geographic Area: Davis County, UT
Pollutant: PM2.5
Year: 2017
Exceptional Events: Included (if any)
Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
348	45.2	43.7	43.2	39.8	36	8.7	Included	1	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08
276	43.4	39.3	36.4	35.5	35	9.1*	Included	3	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Monitor Values Report

Geographic Area: Davis County, UT
Pollutant: PM2.5
Year: 2018
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
356	38.3	32.5	31.2	30.6	26	7.9	Included	1	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08
339	42	33.8	33.8	32.1	27	7.3	Included	3	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Monitor Values Report

Geographic Area: Davis County, UT
Pollutant: PM2.5
Year: 2019
Exceptional Events: Included (if any)
Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
268	31.3	31.3	26.2	23.4	23	5.7*	None	1	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08
360	38.1	28.8	27.9	23	16	5.6	None	3	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Monitor Values Report

Geographic Area: Davis County, UT
Pollutant: PM2.5
Year: 2020
Exceptional Events: Included (if any)

Note: The * indicates the mean does not satisfy minimum data completeness criteria.

Obs	First Max	Second Max	Third Max	Fourth Max	98th Percentile	Weighted Annual Mean	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
325	32.3	28.8	27.4	26.1	26	7.1	None	1	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08
366	63.8	46.5	45.3	41.3	34	9.2	Included	3	490110004	171 West 1370 North, Bountiful, Utah	Bountiful	Davis	UT	08

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Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: April 8, 2021

Appendix B
FHWA Determination

U.S. Department of Transportation
Federal Highway Administration

Utah Division

2520 West 4700 South, Suite 9-A
Salt Lake City, UT 84129-1874
801-955-3520
FAX 801-955-3539

April 29, 2020

In Reply Refer To:
HDA-UT

Naomi Kisen
Utah Department of Transportation
4501 South 2700 West
Salt Lake City, UT 84129

SUBJECT: Project Level Conformity Determination

Dear Ms. Kisen:

On April 19, 2020, the Utah Department of Transportation (UDOT) submitted to the Federal Highway Administration (FHWA) a complete request for a project level conformity determination for the SR-108; 300 North to 6000 South project phased construction evaluation. The project is in an area that is designated Non-Attainment or Maintenance for Ozone and Particulate Matter (PM10, PM2.5).

The project level conformity analysis submitted by UDOT indicates that the project level conformity requirements of 40 CFR Part 93 have been met. The project is included in the Wasatch Front Regional Council's (WFRC) current Metropolitan Transportation Plan (MTP) and the Transportation Improvement Program (TIP). The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

As required by 40 CFR 93.116 and 93.123, the localized PM2.5 and PM10 analysis are included in the documentation. The analyses demonstrate that the project will not create any new violations of the standards or increase the severity or number of existing violations.

Based on the information provided, FHWA finds that the project conforms with the State Implementation Plan (SIP) in accordance with 40 CFR Part 93.

If you have any questions pertaining to this conformity finding, please contact our office at (801) 955-3500.

Sincerely,

Edward Woolford

Edward Woolford
Program Manager

cc: Brandon Weston, UDOT
Gregory Lohrke, R8-USEPA
Kip Billing, WFRC

Attachment 4
Noise Study Report

2000 West
IMPROVED
West Point to Clinton

Traffic Noise Study

UDOT Project S-0108(36)6; PIN 15680

May 2021

Utah Department of Transportation (UDOT)
501 Constitution Blvd.
Taylorsville, Utah 84129

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated January 17, 2017, and executed by FHWA and UDOT.

Table of Contents

List of Tables

List of Figures

Appendices

Introduction

This study provides an evaluation of traffic-generated noise and potential noise abatement for a 2.5-mile section of State Route 108 (SR-108, or 2000 West) through Clinton, Utah, between Mile Point 6.0 (300 North in West Point) and Mile Point 8.5 (6000 South in Roy). The project location is shown in Figure 1. The Utah Department of Transportation (UDOT) proposes to widen the current two-lane road to five lanes. With the addition of through lanes, the project is a Type I project under the UDOT Noise Abatement Policy (UDOT 2020), which is a project requiring the preparation of a noise study.

Figure 1. Project Location

Fundamentals of Noise Measurement

This section provides basic information regarding the fundamentals of traffic noise measurement for readers who are less familiar with traffic noise modeling methods and regulatory procedures. Additional helpful information for understanding the fundamentals of traffic noise can be found on the Federal Highway Administration (FHWA) website (FHWA 2021).

Sound is created when an object moves, such as the rustling of leaves when the wind blows. Noise is defined as unwanted sound, and sound coming from traffic is generally understood to be a form of unwanted sound because at certain levels traffic noise can interfere with our ability to hear desirable sounds, such as a conversation between friends taking place in a park or backyard.

The unit used in sound measurement is called the decibel (dB), and decibels are measured on a logarithmic scale. On this logarithmic scale, a doubling of acoustic energy corresponds to an increase of 3 dB, regardless of the level of the original sound. So, if one vehicle produces 70 dB when it passes an observer, two identical vehicles that produce 70 dB passing the observer simultaneously would together produce 70 dB + 3 dB = 73dB, rather than a simple arithmetic doubling (i.e., 70+70=140). This happens because acoustic energy from a source that is closer to us (or a source with more energy) will mask much of the acoustic energy from a source farther away (or a source with less energy).

To understand how people experience sound, it is also important to know that different decibel weighting scales are used for measuring various kinds of noise environments. The most commonly used scale is known as the A-weighted scale, abbreviated as dBA. The A-weighted scale has been demonstrated to closely represent the response of the human ear to sound. Table 1 illustrates sound level changes on the A-weighted decibel scale compared to relative loudness as perceived by most people. Experiments show that most people begin to detect a sound level increase at 3 dB, while changes in noise of 1 to 2 dB are generally not perceptible. A 5-dB increase is a readily perceptible change by most people, and a 10-dB increase is generally perceived as a doubling of loudness.

Table 1. Sound Level Change and Relative Loudness (UDOT 2020)

Sound Level Change	Relative Loudness
1 dBA [a]	No perceptible change
3 dBA	Barely perceptible change
5 dBA	Readily perceptible change
10 dBA	Perceived as twice as loud

[a] Decibels on the A-weighted scale.

With the A-weighted scale in mind, Figure 2 illustrates typical sound levels for some common outdoor and indoor noise environments. Evident from the comparisons in Figure 2, sound levels dissipate quickly with distance (a gas lawnmower at 3 feet compared to 100 feet) and also vary greatly over periods of time (daytime and nighttime, for example).

In terms of noise dissipation with distance, sound intensity decreases in proportion with the square of the distance from the source; generally, this means that sound levels from a point source will decrease by 6 dBA for each doubling of distance.

In terms of the variability of sound over time, the measurement that is most commonly used to express dBA levels for traffic noise is the hourly equivalent sound level, or Leq(h). The Leq(h) describes a noise-sensitive receiver's average exposure to all noise-producing events over a 1-hour period. UDOT's noise abatement criteria are based on Leq(h) noise levels for the worst traffic noise-generating hour during a typical weekday.

To summarize key points, sound level for typical human exposures to noise is measured in A-weighted decibels (dBA) and in traffic-noise measurement, exposure of a noise-sensitive receiver to traffic noise over time is typically measured as the Leq(h), or the average exposure during the worst hour of traffic noise during a typical weekday.

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 mph		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower at 100 feet	70	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20	
		Broadcast/recording studio (background)
	10	
	0	

Figure 2. Typical A-weighted sound levels

Noise Abatement Criteria (NAC)

The FHWA has developed criteria for evaluating potential noise impacts and for determining if such impacts require mitigation (23 CFR Part 772). Noise Abatement Criteria (NAC) are values which, when approached or exceeded, require consideration of noise abatement measures. Criteria are specific to land use activity categories, as presented in Table 2. The UDOT Noise Abatement Policy (UDOT 2020) uses "approach" criteria, which are values 1 dBA lower than the FHWA's NAC.

In UDOT's Noise Abatement Policy (UDOT 2020), a receptor is a discrete or representative location of a noise-sensitive area (or areas). A receptor is considered impacted by traffic noise under one of two possible conditions:

1) The future. worst-case noise level for the receptor is equal to or greater than the NAC for the appropriate land-use activity category, or;

2) the receptor is predicted to receive a substantial noise increase, defined as an increase of 10 dBA or more over *existing noise levels*. This impact criterion takes effect regardless of existing noise levels.

If either of these conditions are met for a given receptor, then UDOT considers implementing noise-abatement measures for that receptor.

Worst-case hourly traffic noise levels occur when vehicle volume, speed, and the number of heavy trucks combine to produce the highest possible free-flowing capacity for a given road. Under the UDOT Noise Abatement Policy, roadway capacity Level of Service C is used in noise modeling to represent this worst-case traffic noise condition, unless there is a project-specific reason to use a different roadway capacity that has been prior-approved by the UDOT Environmental Services Director.

Table 2. Noise Abatement Criteria (NAC) (source: UDOT 2020)

Activity Category	FHWA Criteria, Leq(h)	Department Criteria, Leq(h)[a]	Evaluation Location	Land Use Activity Description
A	57	56	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	66	Exterior	Residential
C	67	66	Exterior	Active sports areas, amphitheaters, 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	51	Interior	Auditoriums, daycare 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	71	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 for which no building permit has been issued.

[a] Hourly A-weighted sound level in decibels reflecting a 1 dBA "approach" value below 23 CFR 772 values

Study Methods and Procedures

To assess existing and future worst-case traffic noise for receptors in the study area, noise modeling was completed using the traffic noise-prediction computer model (FHWA Traffic Noise Model [TNM] Version 2.5). The model accounts for factors that influence traffic noise

propagation and dissipation. These factors include (1) roadway geometry; (2) vehicle volumes, types, and speeds; (3) ground absorption; (4) buildings and other noise barriers; and (5) receptor location and distance from other objects. The noise model is verified using field-collected noise measurements and traffic counts. The verified model is used to determine existing and future worst-case traffic noise. Noise abatement measures are also modeled.

Site visits were conducted on October 28 and 29, 2020, to identify and map land use categories and relevant noise model objects and to obtain existing noise measurements for representative locations.

Traffic noise measurements were collected at nine locations using a Quest Technologies 2900 sound level meter; locations are indicated in Table 3 and shown in the Appendix A map series. Noise measurements were taken to verify the traffic-noise model. Each noise measurement was taken for 20 minutes. Traffic counts were made for the measurement duration at each site. Vehicles were classified as automobiles, medium-duty trucks, heavy-duty trucks, and motorcycles. An automobile was defined as a vehicle with two axles and four tires designed primarily to carry passengers. Small vans and light trucks were included in this category. Medium-duty trucks included all cargo vehicles with two axles and six tires. Heavy-duty trucks included all vehicles with three or more axles. Operating speeds were also noted.

Table 3 compares the measured and modeled noise levels; all modeled levels were within 1 dBA of the measured noise levels, indicating that the model provided accurate noise prediction for the study area.

Table 3. Comparison of measured and modeled traffic noise

Measurement Site	Address	Field-measured Leq(h) [a]	TNM-modeled Leq(h) [a]	Difference
1	535 N 2000 W	64.0	63.3	+0.7
2	2123 W 750 N	48.1	48.8	– 0.7
3	714 N 2000 W	60.5	60.4	+0.1
4	1141 N 2000 W	60.9	59.9	+1.0
5	1404 N 2000 W	60.0	60.2	– 0.2
6	1577 N 2000 W	62.6	61.6	+1.0
7	2084 N 2000 W	59.9	59.5	+0.4
8	2478 N 2000 W	61.3	60.1	+0.2
9	2547 N 2000 W	59.1	58.5	+0.6

[a] Hourly equivalent sound level, or Leq(h); measurement unit is decibels on the A-weighted scale (dBA)

For the noise model, representations of study area features affecting traffic noise propagation (e.g., buildings, terrain lines, roadways, ground zones) were created using aerial photography and CAD drawing objects (.dxf file) and then imported into TNM model runs for the project. Measured Leq(h) and traffic counts for existing roads were entered into TNM to verify that the model accurately predicted traffic noise based on the modeled objects, vehicle types, volumes, and speeds.

Existing noise-sensitive land uses include the residential neighborhoods that border 2000 West, a church located at 2141 West 1800 North, and portions of the Clinton Community Trail. There are currently undeveloped lands adjacent to 2000 West in Clinton City; the City was contacted to

determine if there were any permitted developments. One permitted development was a new preschool located at 844 North 2000 West. The church building, trail, and the preschool are all Activity Category C and were included in the noise study. There is one restaurant with an outdoor eating area, Great Harvest Bread, located at 2201 N 2000 West (Activity Category E). All other noise-sensitive land uses in the study area were residential (Activity Category B).

Modeled Existing Noise Levels

Traffic volumes for modeling existing traffic noise were obtained from the project traffic study (JUB 2021). The traffic study used 2019 data for existing traffic volumes. In the noise model, evening peak hour volumes traveling at posted speed limits were used. Medium- and heavy-truck traffic proportions were based on UDOT Annual Average Daily Traffic information (UDOT 2021); this was 9 percent medium trucks, 3 percent heavy trucks, and 88 percent automobiles.

Modeling of existing worst-hour traffic noise identified a total of 10 out of 551 receptor locations with existing noise levels exceeding the NAC for the respective land use activity category. **Results for the receptors with existing noise exceeding the abatement criterion are reported in Table 4; results for all study area receptors are illustrated in the Appendix A map series and reported in the table in Appendix B.**

Table 4. Locations with Modeled Existing Noise Exceeding the Noise Abatement Criteria (NAC)

Description/ Location	Map Page (Appendix A)	Land Use Activity Category	Noise Abatement Criterion [a]	Modeled Existing Noise, 2019 [a]
1977 W 1520 N	4	B	66	68
1576 N 2030 W	4	B	66	67
1562 N 2030 W	4	B	66	67
1548 N 2030 W	4	B	66	67
1532 N 2030 W	4	B	66	67
Trail, Location 3	5	C	66	69
Trail, Location 4	5	C	66	72
3512 W 6050 S	6	B	66	67
3524 W 6050 S	6	B	66	67
3511 W 6000 S	6	B	66	66

[a] Hourly equivalent sound level, or Leq(h); measurement unit is decibels on the A-weighted scale (dBA)

Modeled Future Noise Levels

Traffic volumes for design year 2050 noise modeling were based on Level of Service C volume traveling at design speeds; the volume used was 700 vehicles per hour per lane with the same vehicle type proportions used for existing traffic, and the design speed was 50 mph.

Table 5 lists locations with modeled future noise levels exceeding the noise abatement criterion for respective land use activity categories. A total of 24 study area properties would be impacted by future noise levels. All of the locations that were found to be impacted by existing noise were also determined to be impacted by design year noise. All of the design year noise impacts are due

to the modeled future noise exceeding the abatement criteria for the respective land uses except for one location, a church located at 2141 West 1800 North, which would be impacted by a substantial increase of 10 dBA.

Table 5. Locations with Design Year 2050 Noise Exceeding the Noise Abatement Criteria (NAC)

Description/ Location	Map Page (Appendix C)	Land Use Activity Category	Noise Abatement Criterion [a]	Modeled Existing Noise, 2019 [a]	Modeled Future Noise, 2050 [a]	Noise Increase
1982 W 100 N	1	B	66	63	67	4
282 N 2000 W	1	B	66	64	68	4
296 N 2000 W	1	B	66	64	68	4
2032 W 300 N	1	B	66	64	66	2
2048 W 300 N	1	B	66	64	66	2
714 N 2000 W (relocation)	2	B	66	61	70	9
734 N 2000 W (relocation)	2	B	66	60	69	8
783 N 2000 W	2	B	66	62	66	4
844 N 2000 W (preschool)	2	C	66	65	71	6
1493 N 1960 W	4	B	66	62	66	4
1977 W 1520 N	4	B	66	68	72	4
1978 W 1520 N	4	B	66	65	70	5
2033 W 1520 N	4	B	66	65	70	5
1532 N 2030 W	4	B	66	67	72	5
1548 N 2030 W	4	B	66	67	72	5
1562 N 2030 W	4	B	66	67	72	5
1576 N 2030 W	4	B	66	67	72	5
1613 N 2000 W	4	B	66	62	68	6
2141 W 1800 N (church)	4	C	66	50	60	10
Trail, Location 3	5	C	66	69	73	4
Trail, Location 4	5	C	66	72	73	1
3512 W 6050 S	6	B	66	67	68	0
3524 W 6050 S	6	B	66	67	68	1
3511 W 6000 S	6	B	66	66	68	2

[a] Hourly equivalent sound level, or Leq(h); measurement unit is decibels on the A-weighted scale (dBA)

Modeled existing and future noise for all study area receptors is reported in Appendix B and illustrated in the Appendix C map series. The modeled average noise increase across the study area from existing noise to design-year noise was +3 dBA. In general, the noise model shows properties within 200 feet of 2000 West or major intersecting roads (signalized intersections) having design-year noise levels exceeding 60 dBA, properties from 200 to 400 feet from 2000 West having design-year noise levels of 50-60 dBA, and properties beyond 400 feet of 2000 West having design-year noise levels of 50 dBA or lower. Properties with noise levels

exceeding the abatement criteria are those nearest major intersections or those with outdoor activity areas nearest the road (within approximately 50 feet of the future edge of pavement).

Abatement Considered

Potential methods of abating traffic noise impacts include traffic management (speed reduction or restriction of heavy truck traffic), noise insulation (building interiors), and noise barriers (berms or noise walls). Speed reductions and restriction of truck traffic would not be practicable or consistent with the intended transportation functions of the study area roadways. Noise insulation is also not a practicable mitigation measure for this project. Therefore, preliminary noise barrier (noise wall) modeling was performed for impacted receptors within the study area.

As a general design rule for a traffic-noise wall, it should be continuous along the roadway adjacent to the impacted site or sites. Openings for pedestrian or vehicular access greatly reduce the ability of a wall to reduce noise levels. For safety purposes, a wall that is located along an urban non-access-controlled roadway should not be taller than the distance from the back of curb to the face of the proposed wall.

Feasibility and reasonableness design criteria for evaluating noise walls are described in the UDOT Noise Abatement Policy (UDOT 2020). In general, if noise modeling determines that a noise wall would be feasible from an engineering and safety standpoint, and if the wall would meet acoustic feasibility and acoustic design goals, and if the wall is determined to be cost-effective, then the wall is recommended for balloting during the project final design phase to determine if noise abatement is desired by property owners and residents.

There were two locations in the study area where noise walls would be feasible from an engineering and safety standpoint and could potentially benefit noise-impacted receptors.

Wall 1 Analysis

Wall 1 was modeled as two segments. A gap between the two segments would be necessary to preserve an existing pedestrian access/sidewalk between two residential properties: 2037 West 1520 North and 1532 North 2030 West. The two modeled segments of Wall 1 are illustrated in Figure 3. The potential length of these walls is limited on the north end by a currently vacant property that requires property access from 2000 West, and on the south by a commercial property sidewalk access.

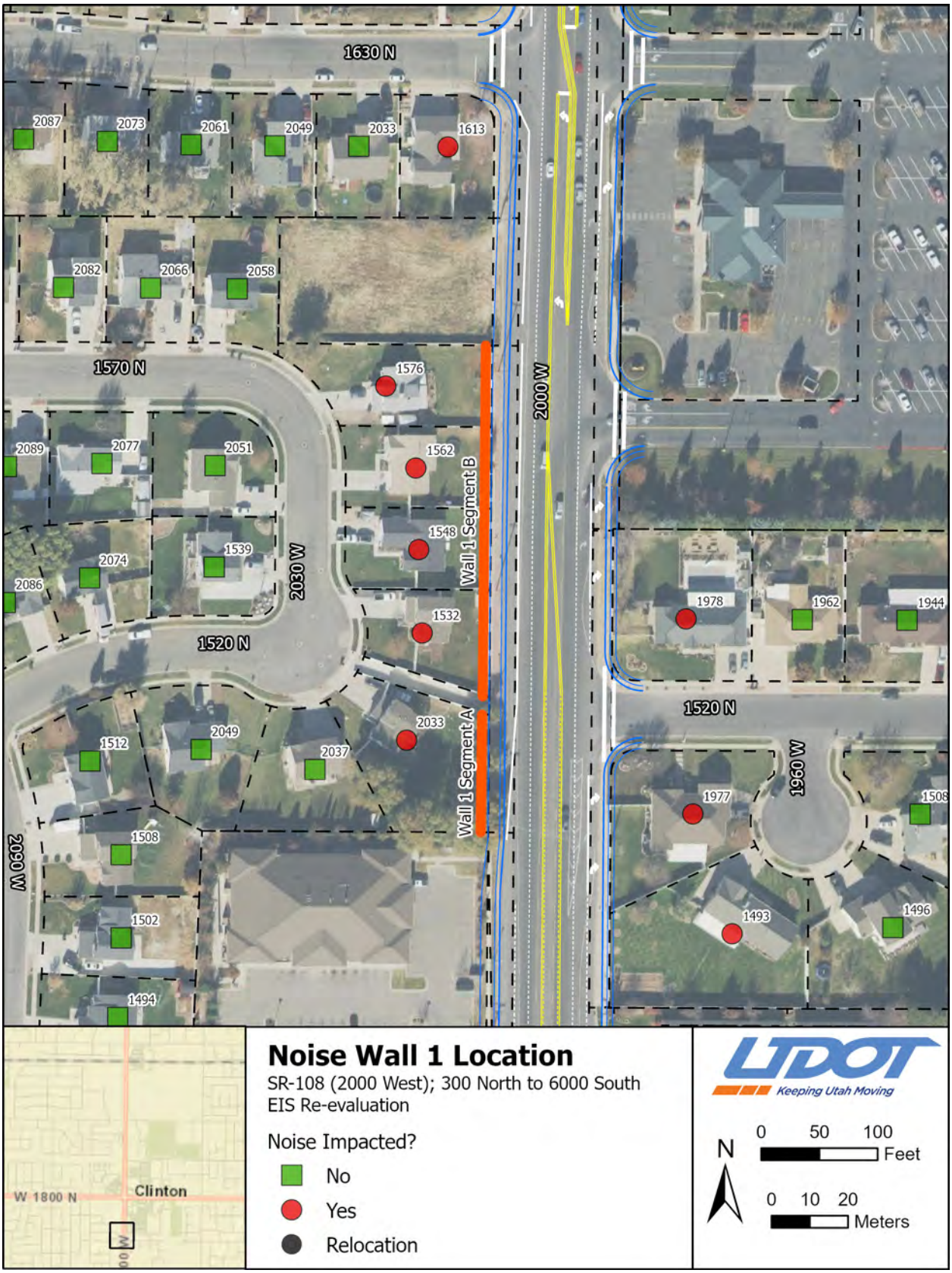


Figure 3. Noise Wall 1 Location

The maximum length of the two combined wall segments is 420 feet. The maximum allowable height of noise walls at this location is 12-feet. Wall heights of 8 feet, 10 feet, and 12 feet were modeled. Table 6 summarizes outcomes of the analysis for Wall 1; details of the analysis including modeled noise reductions are provided in Appendix D.

Table 6. Summary of Wall 1 Analysis

Wall 1 (Segments A and B)	Wall height in feet:		
	8	10	12
Noise Reduction by Receptor			
2051 West 1570 North (second row)	– 1	– 2	– 3
1539 North 2030 West (second row)	– 1	– 2	– 3
1576 North 2030 West (front row)	– 5	– 6	– 7
1562 North 2030 West (front row)	– 8	– 9	– 10
1548 North 2030 West (front row)	– 8	– 10	– 11
1532 North 2030 West (front row)	– 8	– 9	– 10
2033 West 1520 North (front row)	– 4	– 4	– 4
2037 West 1520 North (second row)	– 2	– 3	– 4
2049 West 1520 North (second row)	– 1	– 2	– 3
Feasibility			
Number of front-row with 5-dBA reduction	4	4	4
Percent of front-row with 5-dBA reduction	80.0	80.0	80.0
Meets acoustic feasibility goal (5-dBA reduction for at least 50 percent of front-row receptors)?	Yes	Yes	Yes
Reasonableness			
Number of front-row with 7-dBA reduction	3	3	4
Percent of front-row with 7-dBA reduction	60.0	60.0	80.0
Meets noise abatement design goal (7-dBA reduction for at least 35 percent of front-row receptors)?	Yes	Yes	Yes
Anticipated cost	$77,200	$94,000	$110,800
Allowable cost	$120,000	$150,000	$180,000
Cost-effective?	Yes	Yes	Yes
Is wall feasible and reasonable?	**Yes**	**Yes**	**Yes**

The 8-foot-high wall segments meet both the acoustic feasibility and reasonableness design goals, and are found to be cost-effective. Therefore, the 8-foot wall segments are recommended for balloting. A barrier identified as recommended for balloting is a barrier that has been shown to be both feasible and reasonable. However, that finding is not a commitment to build a barrier. The final decision to build noise walls will be made upon completion of the project design, the public involvement process, and concurrence with the UDOT Noise Policy.

Wall 2 Analysis

Wall 2 was modeled at the location illustrated in Figure 4. The potential length of a noise wall at this location is limited on the north by the intersection at 6000 South and on the south by a residential property with direct access to 2000 West. The maximum height of a noise wall at this location would be 12 feet. Wall heights of 8 feet, 10 feet, and 12 feet were modeled. Results of modeling for Wall 2 are summarized in Table 7; additional details are provided in Appendix E. All of the wall heights meet the acoustic feasibility goal of providing a 5dBA reduction or greater for at least 50 percent of front-row receptors. Ten-foot-high and 12-foot-high walls would also meet the reasonableness design goal of providing a 7 dBA or greater reduction for at least 35 percent of front-row receptors. **However, none of the wall heights meet the cost-effectiveness criterion; therefore, Wall 2 is not recommended for balloting.**

Table 7. Summary of Wall 2 Analysis

Wall 2	Wall height in feet:		
	8	10	12
Noise Reduction by Receptor			
3511 W 6000 S (front row)	– 4	– 6	– 6
3527 W 6000 S (second row)	– 1	– 2	– 2
3536 W 6050 S (second row)	– 2	– 3	– 4
3524 W 6050 S (front row)	– 6	– 7	– 8
3512 W 6050 S (front row)	– 6	– 7	– 8
3537 W 6050 S (front row)	– 2	– 3	– 3
Feasibility			
Number of front-row with 5-dBA reduction	2	3	3
Percent of front-row with 5-dBA reduction	50.0	75.0	75.0
Meets acoustic feasibility goal (5-dBA reduction for at least 50 percent of front-row receptors)?	Yes	Yes	Yes
Reasonableness			
Number of front-row with 7-dBA reduction	0	2	2
Percent of front-row with 7 dBA reduction	0.0	50.0	50.0
Meets noise abatement design goal (7-dBA reduction for at least 35 percent of front-row receptors)?	No	Yes	Yes
Anticipated cost	$99,508	$121,268	$143,028
Allowable cost	$60,000	$90,000	$90,000
Cost-effective?	No	No	No
Is wall feasible and reasonable?	**No**	**No**	**No**

Figure 4. Noise Wall 2 Location

Other Locations Considered

Noise walls were not modeled for the following impacted properties because direct access driveways would prevent constructing noise walls at these locations:

- 1892 West 100 North
- 282 North 2000 West
- 296 North 2000 West
- 2032 West 300 North
- 2048 West 300 North
- 714 North 2000 West (relocation)
- 734 North 2000 West (relocation)
- 783 North 2000 West
- 844 North 2000 West (preschool)
- 2141 West 1800 North (church)
- Clinton Community Trail

Noise walls were not modeled for these four impacted residential properties because wall segments along 2000 West at these locations would adversely affect horizontal sight distances for vehicles to safely turn onto 2000 West:

- 1493 North 1960 West
- 1977 West 1520 North
- 1978 West 1520 North
- 1613 North 2000 West

Construction Noise

Land uses that are sensitive to traffic noise are also sensitive to construction noise. Locations within about 1,900 feet of a construction site will experience occasional episodes of noise levels greater than 60 dBA. Areas within about 750 feet of a construction site will experience episodes of noise levels greater than 70 dBA. Episodes of high noise levels would not be continuous throughout the day and would generally be restricted to daytime hours. In order to consistently address construction traffic noise for noise-sensitive land uses, contractors are required to follow UDOT Special Provision Section 00555M, *Prosecution and Progress*, which includes requirements to minimize noise during nighttime construction work and to obtain a temporary permit.

Local Planning and Future Noise Levels

The current project is located in a rapidly developing portion of Davis County. Based on noise modeling in this study, the 66 dBA NAC level (Activity Categories B and C) is likely to be exceeded within approximately 90 feet from the edge of pavement and 71 dBA (Activity Category E) is likely to be exceeded within 50 feet.

This information is intended to provide a general guide for future planning but does not account for variable influences of terrain, ground cover type, and intervening structures at various locations that can affect traffic noise levels at specific locations.

Summary and Conclusions

- Noise-sensitive receptors in the SR-108 study area include nearby residences, one church building, portions of a recreational trail, a newly constructed preschool, and one restaurant with an outdoor eating area.
- The modeled average noise increase for the study area was +3 dBA.
- A total of 24 study area properties would be impacted by future noise levels.
- There were two locations where noise walls were modeled. One of these locations was determined to meet noise abatement feasibility and reasonableness criteria and is recommended for balloting.
- A barrier identified as recommended for balloting is a barrier that has been shown to be both feasible and reasonable. However, that finding is not a commitment to build a barrier. The final decision to build noise walls will be made upon completion of the project design, the public involvement process, and concurrence with the UDOT Noise Policy.
- Noise walls were not modeled where direct access driveways would prevent constructing noise walls or where noise walls would adversely affect horizontal sight distance for drivers accessing 2000 West.
- Short-term construction noise impacts would occur and effects would be minimized by requiring the construction contractor to follow UDOT Special Provisions for nighttime construction work if nighttime work is necessary.

The following are included in the project record for documentation:

- Noise measurement data sheets, photos, and sound meter data logs
- Traffic volumes used for noise modeling
- Traffic Noise Model output tables

References

[FHWA] U.S. Department of Transportation, Federal Highway Administration. 2021. Highway Traffic Noise Analysis and Abatement Policy and Guidance: Noise Fundamentals. Location: https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm. Accessed: 3/1/2021.

[FHWA] U.S. Department of Transportation, Federal Highway Administration. 2011. Highway Traffic Noise: Analysis and Abatement Guidance. Publication FHWA-HEP-10-025.

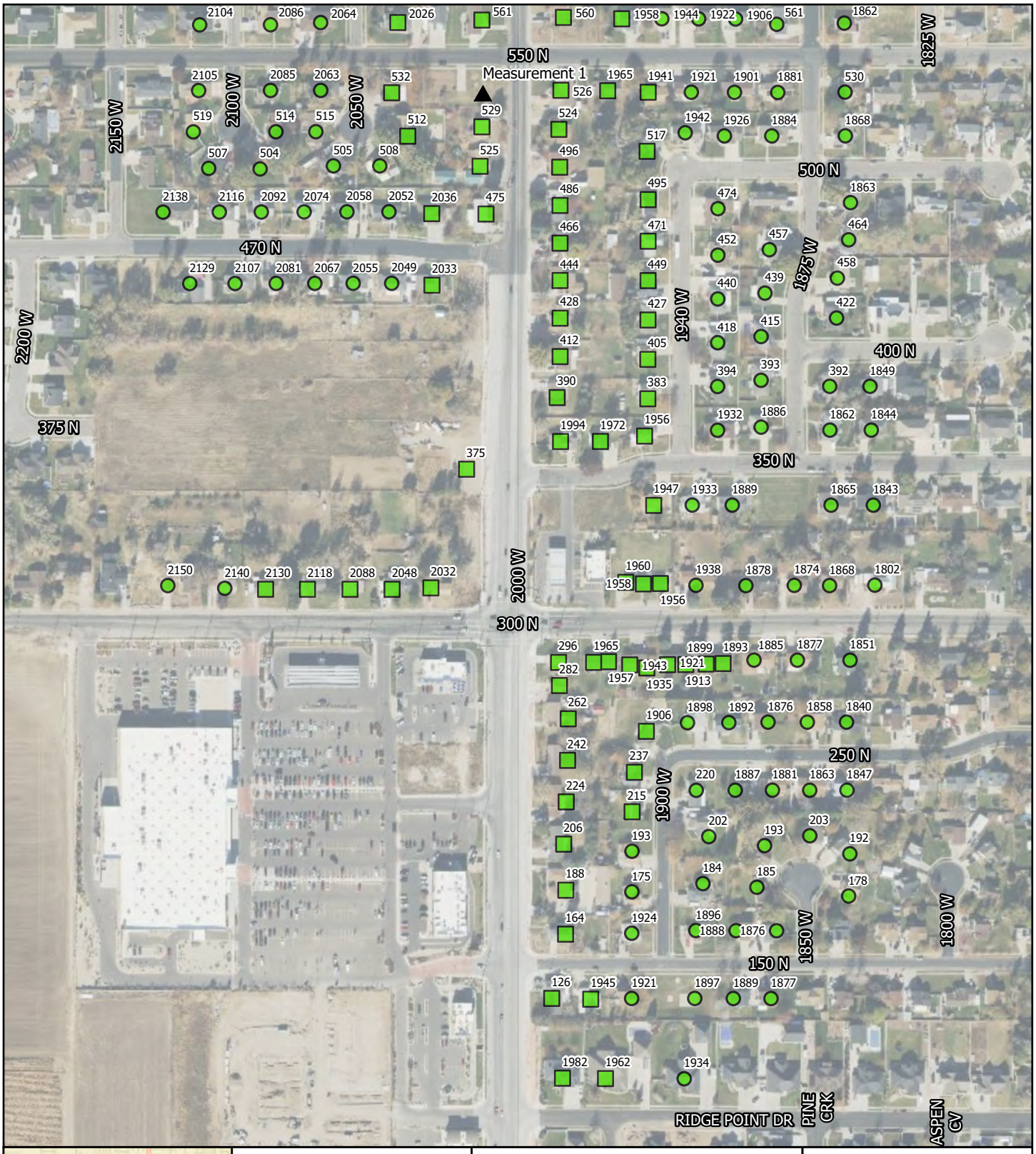
[JUB] JUB Engineers, Inc. 2021. PIN 15680: 2000 West (SR-108); 300 North to 6000 South Traffic Analysis Memorandum, January 8.

[UDOT] Utah Department of Transportation. 2021. Map of Annual Average Daily Traffic (AADT) for roadway segments in Utah. Location: https://www.udot.utah.gov/connect/docs/aadt-google-map. Accessed: 1/26/2021.

[UDOT] Utah Department of Transportation. 2020. Noise Abatement Policy. UDOT Policy 08A2-01, Revised May 28.

Appendix A

Map Series Showing Modeled Existing Noise Levels



2000 West (SR-108)
300 North to 6000 South
EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680

Noise Study Attachment A
Map Page 1 of 6

Existing Noise

▲ Noise Measurement Locations

Modeled Worst Hour Existing Noise

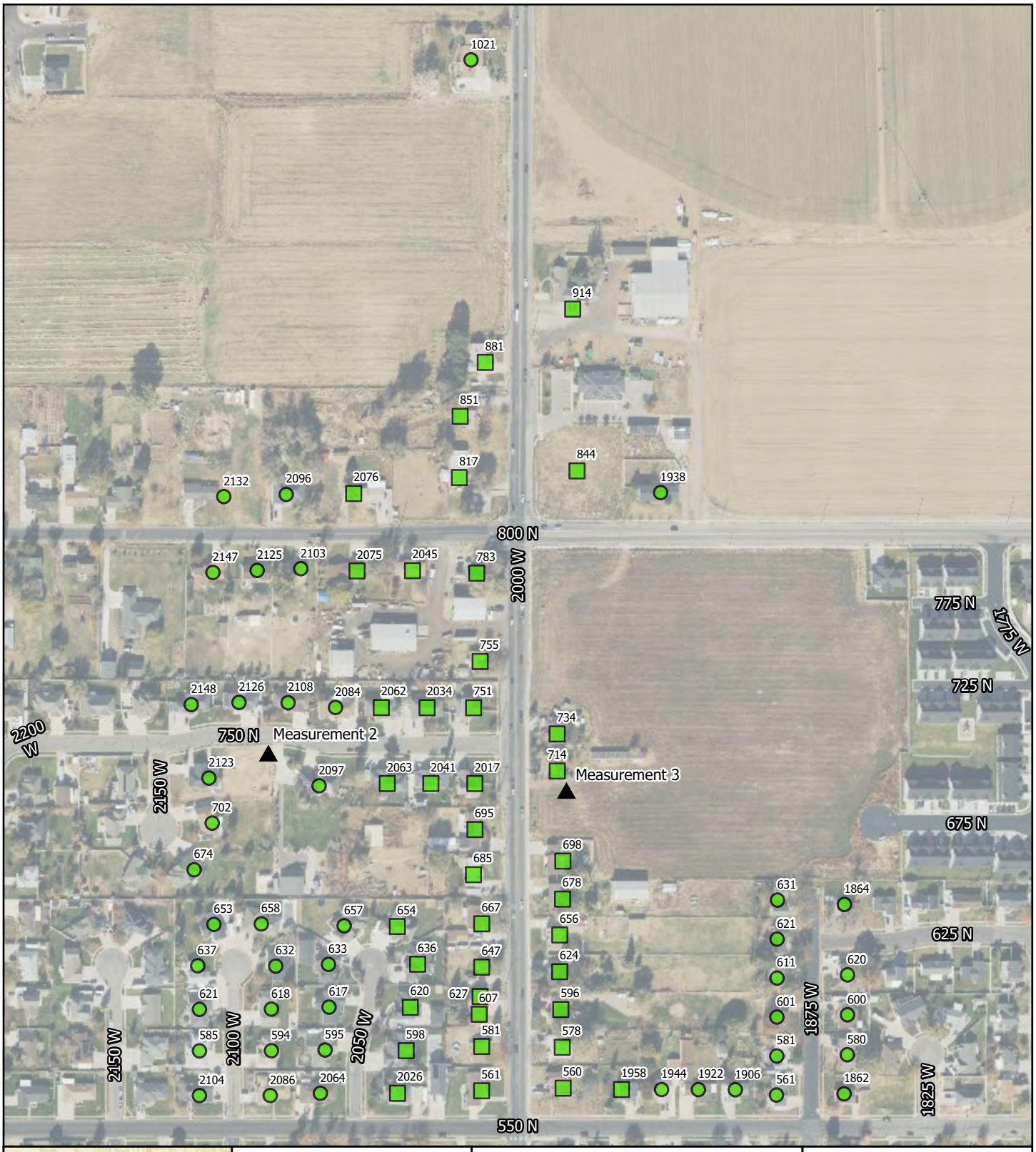
- 44 - 55 dBA
- 56 - 65 dBA
- 66 - 70 dBA
- 71 - 72 dBA

UDOT Keeping Utah Moving

N

0 200 400 Feet

0 50 100 Meters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2075
2045
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2000 W
775 N
1750 W
755
725 N
2148
2126
2108
2084
2062
2034
751
734
2200 W
750 N
Measurement 2
714
Measurement 3
2123
2097
2063
2041
2017
2150 W
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2150 W
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2050 W
2104
2086
2064
2026
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560
1958
1944
1922
1906
561
1862
1825 W
550 N
West Point
Clinton
W 1800 N
2000 W
W 800 N
1000 W
W 300 N
107
2000 West (SR-108)
300 North to 6000 South
EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680
Noise Study Attachment A
Map Page 2 of 6
Existing Noise
Noise Measurement Locations
Modeled Worst Hour Existing Noise
44 - 55 dBA
56 - 65 dBA
66 - 70 dBA
71 - 72 dBA
UDOT
Keeping Utah Moving
N
0 200 400 Feet
0 50 100 Meters

2000 West (SR-108)
300 North to 6000 South
EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680

Noise Study Attachment A
Map Page 3 of 6

Existing Noise

▲ Noise Measurement Locations

Modeled Worst Hour Existing Noise

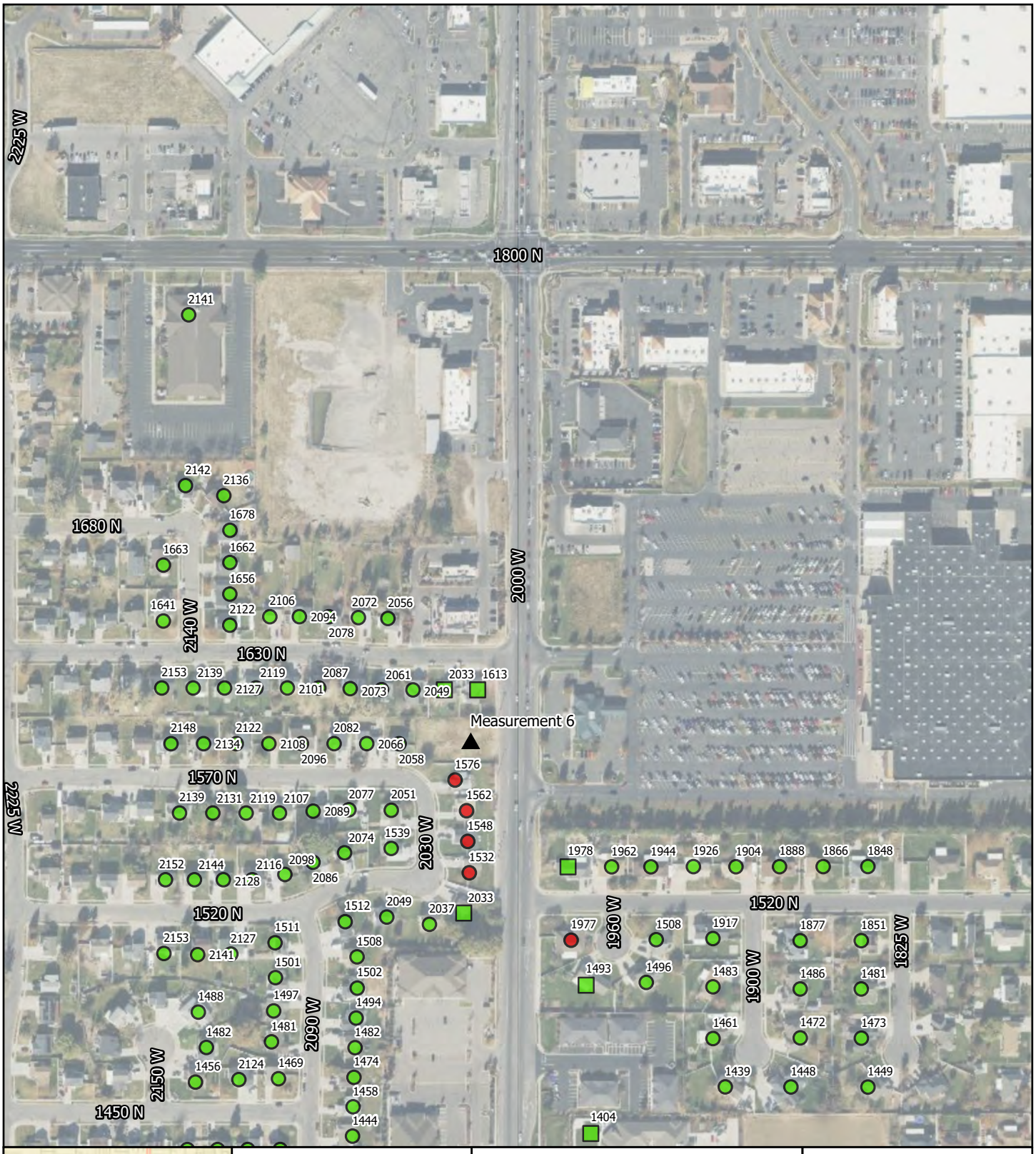
- 44 - 55 dBA
- 56 - 65 dBA
- 66 - 70 dBA
- 71 - 72 dBA

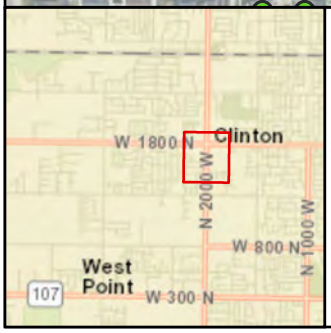
UDOT Keeping Utah Moving

N

0 200 400 Feet

0 50 100 Meters





2000 West (SR-108)
300 North to 6000 South
EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680

Noise Study Attachment A
Map Page 4 of 6

Existing Noise

▲ Noise Measurement Locations

Modeled Worst Hour Existing Noise

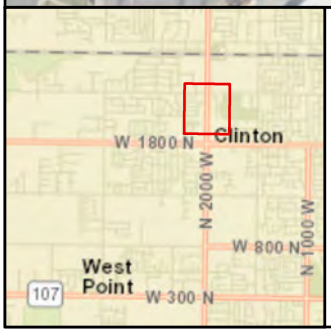
- 44 - 55 dBA
- 56 - 65 dBA
- 66 - 70 dBA
- 71 - 72 dBA

UDOT Keeping Utah Moving

N

0 200 400 Feet

0 50 100 Meters



2000 West (SR-108)
300 North to 6000 South
EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680

Noise Study Attachment A
Map Page 5 of 6

Existing Noise

▲ Noise Measurement Locations

Modeled Worst Hour Existing Noise

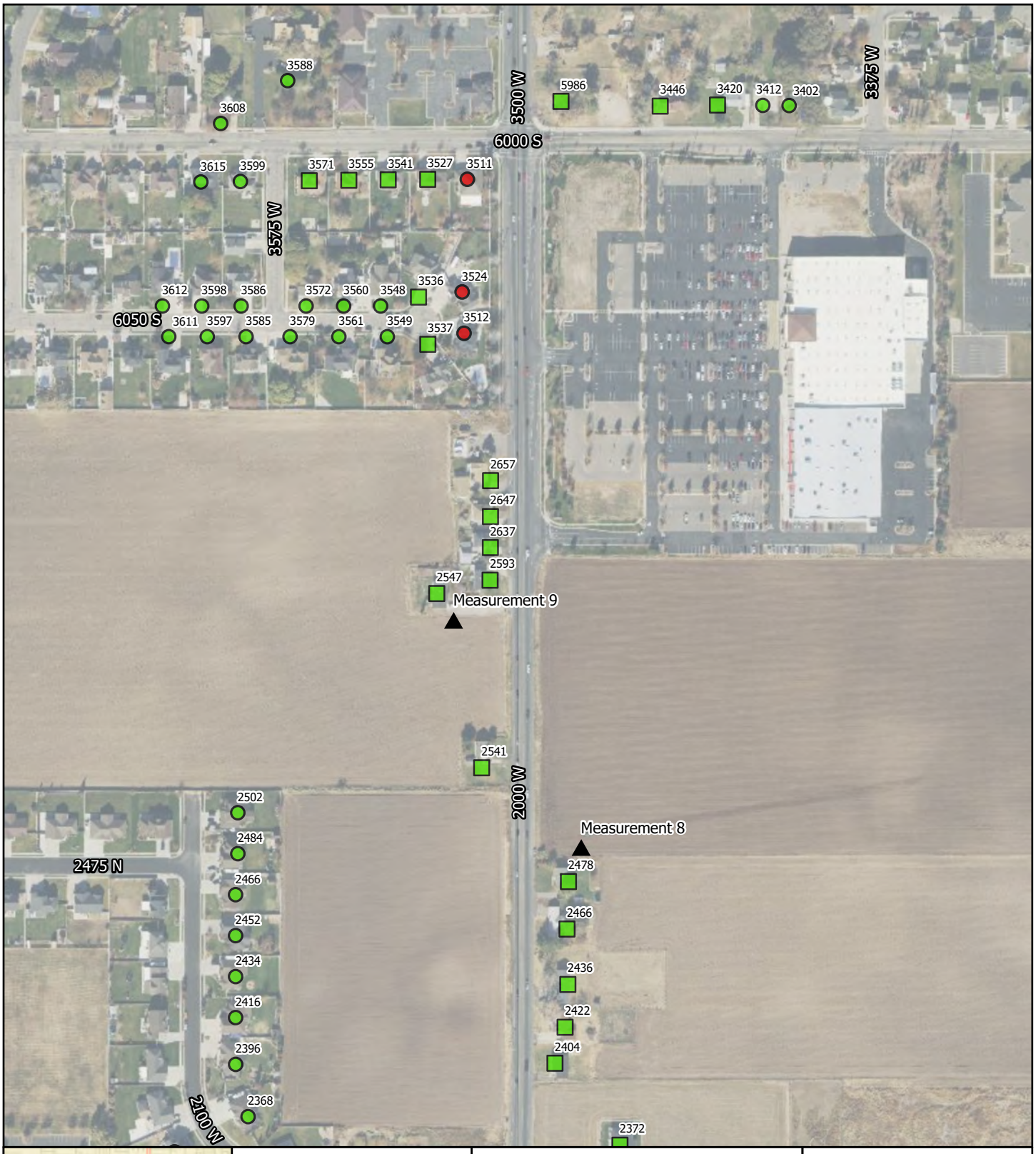
- 44 - 55 dBA
- 56 - 65 dBA
- 66 - 70 dBA
- 71 - 72 dBA

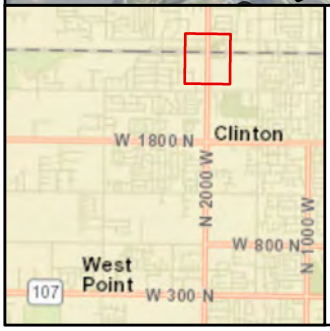
UDOT Keeping Utah Moving

N

0 200 400 Feet

0 50 100 Meters





2000 West (SR-108)
300 North to 6000 South
EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680

Noise Study Attachment A
Map Page 6 of 6

Existing Noise

▲ Noise Measurement Locations

Modeled Worst Hour Existing Noise

- 44 - 55 dBA
- 56 - 65 dBA
- 66 - 70 dBA
- 71 - 72 dBA

UDOT Keeping Utah Moving

N

0 200 400 Feet

0 50 100 Meters

Appendix B

Noise Modeling Results Table for

All Study Area Receptors

The following table provides complete results of noise modeling for all study area receptors. Locations of receptors are illustrated in Appendix A (existing noise) and Appendix C (design year noise). Existing and future noise levels reported in the table are the modeled Leq(h) for the given location measured in A-weighted decibels (dBA).

An impacted receptor has or is predicted to have a Leq(h) that is greater than or equal to the noise abatement criterion for the appropriate land use category, or is predicted to receive a substantial increase, defined as 10 dBA or more over existing noise levels.

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
Locations on Map Page 1 of 6, Appendices A and C							
1934 W 100 N	1	B	66	53	57	4	No
1962 W 100 N	1	B	66	58	62	4	No
1982 W 100 N	1	**B**	**66**	**63**	**67**	**4**	**Yes**
1876 W 150 N	1	B	66	49	53	4	No
1877 W 150 N	1	B	66	49	53	4	No
1888 W 150 N	1	B	66	50	53	3	No
1889 W 150 N	1	B	66	50	54	4	No
1896 W 150 N	1	B	66	52	56	4	No
1897 W 150 N	1	B	66	53	56	4	No
1921 W 150 N	1	B	66	55	59	4	No
1924 W 150 N	1	B	66	55	59	4	No
1945 W 150 N	1	B	66	58	62	4	No
1840 W 250 N	1	B	66	52	56	4	No
1847 W 250 N	1	B	66	49	52	3	No
1858 W 250 N	1	B	66	52	56	4	No
1863 W 250 N	1	B	66	51	54	3	No
1876 W 250 N	1	B	66	54	58	4	No
1881 W 250 N	1	B	66	51	54	3	No
1887 W 250 N	1	B	66	53	57	4	No
1892 W 250 N	1	B	66	53	57	4	No
1898 W 250 N	1	B	66	53	57	4	No
1906 W 250 N	1	B	66	56	60	4	No
1802 W 300 N	1	B	66	53	57	4	No
1851 W 300 N	1	B	66	53	57	4	No
1868 W 300 N	1	B	66	53	57	4	No
1874 W 300 N	1	B	66	54	58	4	No
1877 W 300 N	1	B	66	54	58	4	No
1878 W 300 N	1	B	66	55	59	4	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
1885 W 300 N	1	B	66	55	59	4	No
1893 W 300 N	1	B	66	58	62	4	No
1899 W 300 N	1	B	66	58	62	4	No
1913 W 300 N	1	B	66	58	62	4	No
1921 W 300 N	1	B	66	58	62	4	No
1935 W 300 N	1	B	66	58	62	4	No
1938 W 300 N	1	B	66	55	59	4	No
1943 W 300 N	1	B	66	60	64	4	No
1956 W 300 N	1	B	66	57	61	4	No
1957 W 300 N	1	B	66	60	64	4	No
1958 W 300 N	1	B	66	57	61	4	No
1960 W 300 N	1	B	66	57	61	4	No
1965 W 300 N	1	B	66	60	64	4	No
2032 W 300 N	**1**	**B**	**66**	**64**	**66**	**2**	**Yes**
2048 W 300 N	**1**	**B**	**66**	**64**	**66**	**2**	**Yes**
2088 W 300 N	1	B	66	58	61	3	No
2118 W 300 N	1	B	66	57	60	3	No
2130 W 300 N	1	B	66	57	60	3	No
2140 W 300 N	1	B	66	54	57	3	No
2150 W 300 N	1	B	66	54	57	3	No
1843 W 350 N	1	B	66	51	55	4	No
1844 W 350 N	1	B	66	47	51	4	No
1862 W 350 N	1	B	66	49	53	4	No
1865 W 350 N	1	B	66	52	56	4	No
1886 W 350 N	1	B	66	51	55	4	No
1889 W 350 N	1	B	66	54	57	3	No
1932 W 350 N	1	B	66	52	56	4	No
1933 W 350 N	1	B	66	55	59	4	No
1947 W 350 N	1	B	66	56	60	4	No
1956 W 350 N	1	B	66	57	60	3	No
1972 W 350 N	1	B	66	58	61	3	No
1994 W 350 N	1	B	66	60	63	3	No
1849 W 400 N	1	B	66	47	51	4	No
2033 W 470 N	1	B	66	60	64	4	No
2036 W 470 N	1	B	66	57	61	4	No
2049 W 470 N	1	B	66	55	60	5	No
2052 W 470 N	1	B	66	55	60	5	No
2055 W 470 N	1	B	66	51	55	4	No
2058 W 470 N	1	B	66	51	55	4	No
2067 W 470 N	1	B	66	53	57	4	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
2074 W 470 N	1	B	66	51	55	4	No
2081 W 470 N	1	B	66	49	53	4	No
2092 W 470 N	1	B	66	49	53	4	No
2107 W 470 N	1	B	66	49	52	3	No
2116 W 470 N	1	B	66	49	52	3	No
2129 W 470 N	1	B	66	49	52	3	No
2138 W 470 N	1	B	66	47	51	4	No
1863 W 500 N	1	B	66	47	51	3	No
1868 W 500 N	1	B	66	47	51	4	No
1884 W 500 N	1	B	66	49	53	4	No
1926 W 500 N	1	B	66	51	55	4	No
1942 W 500 N	1	B	66	53	57	4	No
1862 W 550 N	1	B	66	46	50	4	No
1881 W 550 N	1	B	66	49	53	4	No
1901 W 550 N	1	B	66	51	55	4	No
1906 W 550 N	1	B	66	50	54	4	No
1921 W 550 N	1	B	66	52	56	4	No
1922 W 550 N	1	B	66	52	56	4	No
1941 W 550 N	1	B	66	56	59	3	No
1944 W 550 N	1	B	66	53	57	4	No
1958 W 550 N	1	B	66	57	60	3	No
1965 W 550 N	1	B	66	57	60	3	No
2026 W 550 N	1	B	66	57	59	4	No
2063 W 550 N	1	B	66	50	54	4	No
2064 W 550 N	1	B	66	50	54	4	No
2085 W 550 N	1	B	66	49	52	3	No
2086 W 550 N	1	B	66	50	53	3	No
2104 W 550 N	1	B	66	46	50	4	No
2105 W 550 N	1	B	66	47	50	3	No
178 N 1850 W	1	B	66	48	52	4	No
185 N 1850 W	1	B	66	51	54	3	No
192 N 1850 W	1	B	66	48	52	4	No
193 N 1850 W	1	B	66	51	54	3	No
203 N 1850 W	1	B	66	49	53	4	No
392 N 1875 W	1	B	66	47	51	4	No
393 N 1875 W	1	B	66	51	54	3	No
415 N 1875 W	1	B	66	51	54	3	No
422 N 1875 W	1	B	66	47	51	3	No
439 N 1875 W	1	B	66	51	54	3	No
457 N 1875 W	1	B	66	51	54	3	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
458 N 1875 W	1	B	66	47	51	3	No
464 N 1875 W	1	B	66	47	51	3	No
530 N 1875 W	1	B	66	46	49	3	No
561 N 1875 W	1	B	66	49	53	4	No
175 N 1900 W	1	B	66	55	59	4	No
184 N 1900 W	1	B	66	52	56	4	No
193 N 1900 W	1	B	66	55	59	4	No
202 N 1900 W	1	B	66	52	56	4	No
215 N 1900 W	1	B	66	56	60	4	No
220 N 1900 W	1	B	66	53	57	4	No
237 N 1900 W	1	B	66	56	60	4	No
383 N 1940 W	1	B	66	56	59	3	No
394 N 1940 W	1	B	66	51	55	4	No
405 N 1940 W	1	B	66	56	59	3	No
418 N 1940 W	1	B	66	51	55	4	No
427 N 1940 W	1	B	66	56	59	3	No
440 N 1940 W	1	B	66	51	55	4	No
449 N 1940 W	1	B	66	56	59	3	No
452 N 1940 W	1	B	66	51	55	4	No
471 N 1940 W	1	B	66	56	59	3	No
474 N 1940 W	1	B	66	51	55	4	No
495 N 1940 W	1	B	66	56	59	3	No
517 N 1940 W	1	B	66	56	59	3	No
126 N 2000 W	1	B	66	58	62	4	No
164 N 2000 W	1	B	66	58	62	4	No
188 N 2000 W	1	B	66	59	63	4	No
206 N 2000 W	1	B	66	59	63	4	No
224 N 2000 W	1	B	66	59	63	4	No
242 N 2000 W	1	B	66	59	63	4	No
262 N 2000 W	1	B	66	59	63	4	No
282 N 2000 W	**1**	**B**	**66**	**64**	**68**	**4**	**Yes**
296 N 2000 W	**1**	**B**	**66**	**64**	**68**	**4**	**Yes**
375 N 2000 W	1	B	66	61	64	3	No
390 N 2000 W	1	B	66	60	63	3	No
412 N 2000 W	1	B	66	60	63	3	No
428 N 2000 W	1	B	66	60	63	3	No
444 N 2000 W	1	B	66	58	61	3	No
466 N 2000 W	1	B	66	58	62	4	No
475 N 2000 W (Relocation)	1	B	66	60	65	5	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
486 N 2000 W	1	B	66	58	62	4	No
496 N 2000 W	1	B	66	58	62	4	No
524 N 2000 W	1	B	66	58	62	4	No
525 N 2000 W (Relocation)	1	B	66	59	63	4	No
526 N 2000 W	1	B	66	59	63	4	No
529 N 2000 W (Relocation)	1	B	66	60	65	5	No
560 N 2000 W (Relocation)	1	B	66	59	63	4	No
561 N 2000 W	1	B	66	59	63	4	No
505 N 2050 W	1	B	66	51	55	4	No
508 N 2050 W	1	B	66	55	60	5	No
512 N 2050 W	1	B	66	58	62	4	No
515 N 2050 W	1	B	66	50	54	4	No
532 N 2050 W	1	B	66	57	61	4	No
504 N 2100 W	1	B	66	49	53	4	No
507 N 2100 W	1	B	66	47	51	4	No
514 N 2100 W	1	B	66	50	54	4	No
519 N 2100 W	1	B	66	47	50	3	No
Locations on Map Page 3 of 6, Appendices A and C							
1864 W 625 N	2	B	66	48	52	4	No
2017 W 750 N	2	B	66	59	61	2	No
2034 W 750 N	2	B	66	57	61	4	No
2041 W 750 N	2	B	66	57	59	2	No
2062 W 750 N	2	B	66	57	61	4	No
2063 W 750 N	2	B	66	57	61	4	No
2084 W 750 N	2	B	66	53	57	4	No
2097 W 750 N	2	B	66	51	54	3	No
2108 W 750 N	2	B	66	51	54	3	No
2123 W 750 N	2	B	66	48	52	4	No
2126 W 750 N	2	B	66	49	53	4	No
2148 W 750 N	2	B	66	49	53	4	No
1938 W 800 N	2	B	66	55	60	5	No
2045 W 800 N	2	B	66	59	63	4	No
2075 W 800 N	2	B	66	56	61	5	No
2076 W 800 N	2	B	66	56	61	5	No
2096 W 800 N	2	B	66	53	57	4	No
2103 W 800 N	2	B	66	54	59	5	No
2125 W 800 N	2	B	66	52	57	5	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
2132 W 800 N	2	B	66	51	56	5	No
2147 W 800 N	2	B	66	52	57	5	No
580 N 1875 W	2	B	66	46	50	4	No
581 N 1875 W	2	B	66	49	53	4	No
600 N 1875 W	2	B	66	48	51	3	No
601 N 1875 W	2	B	66	49	53	4	No
611 N 1875 W	2	B	66	50	54	4	No
620 N 1875 W	2	B	66	48	52	4	No
621 N 1875 W	2	B	66	50	54	4	No
631 N 1875 W	2	B	66	50	54	4	No
578 N 2000 W (Relocation)	2	B	66	59	63	4	No
581 N 2000 W	2	B	66	59	63	4	No
596 N 2000 W (Relocation)	2	B	66	59	63	4	No
607 N 2000 W	2	B	66	59	62	3	No
624 N 2000 W (Relocation)	2	B	66	59	63	4	No
627 N 2000 W	2	B	66	59	62	3	No
647 N 2000 W	2	B	66	60	63	3	No
656 N 2000 W (Relocation)	2	B	66	59	63	4	No
667 N 2000 W	2	B	66	59	62	3	No
678 N 2000 W (Relocation)	2	B	66	59	63	4	No
685 N 2000 W	2	B	66	58	61	3	No
695 N 2000 W	2	B	66	58	61	3	No
698 N 2000 W (Relocation)	**2**	**B**	**66**	**60**	**65**	**5**	**Yes**
714 N 2000 W (Relocation)	**2**	**B**	**66**	**61**	**70**	**9**	**Yes**
734 N 2000 W (Relocation)	**2**	**B**	**66**	**60**	**69**	**8**	**Yes**
751 N 2000 W	2	B	66	61	64	3	No
755 N 2000 W	2	B	66	61	64	3	No
783 N 2000 W	**2**	**B**	**66**	**62**	**66**	**4**	**Yes**
817 N 2000 W	2	B	66	60	64	4	No
844 N 2000 W (Preschool)	**2**	**C**	**66**	**65**	**71**	**6**	**Yes**
851 N 2000 W	2	B	66	59	62	3	No
881 N 2000 W	2	B	66	60	63	3	No
914 N 2000 W (Relocation)	2	B	66	57	62	5	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
1021 N 2000 W	2	B	66	55	59	4	No
595 N 2050 W	2	B	66	51	54	3	No
598 N 2050 W	2	B	66	57	60	3	No
617 N 2050 W	2	B	66	51	54	3	No
620 N 2050 W	2	B	66	57	60	3	No
633 N 2050 W	2	B	66	51	54	3	No
636 N 2050 W	2	B	66	57	60	3	No
654 N 2050 W	2	B	66	57	60	3	No
657 N 2050 W	2	B	66	51	54	3	No
585 N 2100 W	2	B	66	47	51	4	No
594 N 2100 W	2	B	66	50	53	3	No
618 N 2100 W	2	B	66	50	53	3	No
621 N 2100 W	2	B	66	47	51	4	No
632 N 2100 W	2	B	66	50	53	3	No
637 N 2100 W	2	B	66	47	51	4	No
653 N 2100 W	2	B	66	47	51	4	No
658 N 2100 W	2	B	66	50	53	3	No
674 N 2150 W	2	B	66	48	51	3	No
702 N 2150 W	2	B	66	49	52	3	No
Locations on Map Page 3 of 6, Appendices A and B							
2142 W 1080 N	3	B	66	48	51	3	No
2149 W 1080 N	3	B	66	48	51	3	No
2136 W 1145 N	3	B	66	50	53	3	No
2137 W 1145 N	3	B	66	46	49	3	No
2126 W 1230 N	3	B	66	49	52	3	No
2043 W 1300 N	3	B	66	59	62	3	No
2083 W 1300 N	3	B	66	56	59	3	No
2117 W 1300 N	3	B	66	53	55	2	No
2133 W 1300 N	3	B	66	52	55	3	No
2147 W 1300 N	3	B	66	50	53	3	No
2122 W 1370 N	3	B	66	50	53	3	No
2134 W 1370 N	3	B	66	50	53	3	No
2121 W 1450 N	3	B	66	46	49	3	No
2124 W 1450 N	3	B	66	46	49	3	No
2133 W 1450 N	3	B	66	46	49	3	No
2141 W 1450 N	3	B	66	46	49	3	No
1449 N 1825 W	3	B	66	46	49	3	No
1439 N 1900 W	3	B	66	49	53	4	No
1448 N 1900 W	3	B	66	47	50	3	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
1141 N 2000 W	3	B	66	57	60	3	No
1193 N 2000 W	3	B	66	57	60	3	No
1221 N 2000 W	3	B	66	57	60	3	No
1253 N 2000 W	3	B	66	57	60	3	No
1404 N 2000 W	3	B	66	60	64	4	No
1319 N 2090 W	3	B	66	53	56	3	No
1331 N 2090 W	3	B	66	52	55	3	No
1343 N 2090 W	3	B	66	52	55	3	No
1357 N 2090 W	3	B	66	52	55	3	No
1399 N 2090 W	3	B	66	52	55	3	No
1432 N 2090 W	3	B	66	50	54	4	No
1437 N 2090 W	3	B	66	47	50	3	No
1444 N 2090 W	3	B	66	50	54	4	No
1458 N 2090 W	3	B	66	53	57	4	No
1469 N 2090 W	3	B	66	47	49	3	No
1474 N 2090 W	3	B	66	53	57	4	No
1304 N 2140 W	3	B	66	52	55	3	No
1326 N 2140 W	3	B	66	50	53	3	No
1342 N 2140 W	3	B	66	50	53	3	No
1358 N 2140 W	3	B	66	50	53	3	No
1456 N 2150 W	3	B	66	47	50	3	No
1202 N 2155 W	3	B	66	50	53	3	No
1218 N 2155 W	3	B	66	50	53	3	No
Locations on Map Page 4 of 6, Appendices A and C							
1848 W 1520 N	4	B	66	46	49	3	No
1962 W 1520 N	4	B	66	55	58	3	No
1944 W 1520 N	4	B	66	55	58	3	No
1926 W 1520 N	4	B	66	50	53	3	No
1904 W 1520 N	4	B	66	50	53	3	No
1888 W 1520 N	4	B	66	47	51	4	No
1866 W 1520 N	4	B	66	48	51	3	No
1978 W 1520 N	**4**	**B**	**66**	**65**	**70**	**5**	**Yes**
1977 W 1520 N	**4**	**B**	**66**	**68**	**72**	**4**	**Yes**
1493 N 1960 W	**4**	**B**	**66**	**62**	**66**	**4**	**Yes**
1496 N 1960 W	4	B	66	50	53	3	No
1508 N 1960 W	4	B	66	50	53	3	No
1917 W 1520 N	4	B	66	49	52	3	No
1483 N 1900 W	4	B	66	49	52	3	No
1877 W 1520 N	4	B	66	47	50	3	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
1486 N 1900 W	4	B	66	47	50	3	No
1851 W 1520 N	4	B	66	46	49	3	No
1481 N 1825 W	4	B	66	46	49	3	No
1641 N 2140 W	4	B	66	47	50	3	No
1663 N 2140 W	4	B	66	47	50	3	No
2142 W 1680 N	4	B	66	49	54	5	No
2136 W 1680 N	4	B	66	50	54	4	No
1678 N 2140 W	4	B	66	50	54	4	No
1662 N 2140 W	4	B	66	47	51	4	No
1656 N 2140 W	4	B	66	47	51	4	No
2122 W 1630 N	4	B	66	48	52	4	No
2106 W 1630 N	4	B	66	50	54	4	No
2094 W 1630 N	4	B	66	50	54	4	No
2078 W 1630 N	4	B	66	50	54	4	No
2072 W 1630 N	4	B	66	53	57	4	No
2056 W 1630 N	4	B	66	55	58	3	No
1613 N 2000 W	**4**	**B**	**66**	**62**	**68**	**6**	**Yes**
2033 W 1630 N	4	B	66	60	64	4	No
2049 W 1630 N	4	B	66	55	59	4	No
2061 W 1630 N	4	B	66	53	57	4	No
2073 W 1630 N	4	B	66	50	54	4	No
2087 W 1630 N	4	B	66	50	54	4	No
2101 W 1630 N	4	B	66	50	54	4	No
2119 W 1630 N	4	B	66	48	52	4	No
2127 W 1630 N	4	B	66	47	51	4	No
2139 W 1630 N	4	B	66	47	51	4	No
2153 W 1630 N	4	B	66	47	50	3	No
2153 W 1520 N	4	B	66	46	50	4	No
2141 W 1520 N	4	B	66	46	50	4	No
2127 W 1520 N	4	B	66	46	50	4	No
1511 N 2090 W	4	B	66	47	50	3	No
1512 N 2090 W	4	B	66	49	53	4	No
2074 W 1520 N	4	B	66	49	53	4	No
2086 W 1520 N	4	B	66	49	53	4	No
2098 W 1520 N	4	B	66	47	51	4	No
2116 W 1520 N	4	B	66	47	51	4	No
2128 W 1520 N	4	B	66	47	51	4	No
2144 W 1520 N	4	B	66	46	50	4	No
2152 W 1520 N	4	B	66	46	50	4	No
1482 N 2150 W	4	B	66	46	49	3	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
1488 N 2150 W	4	B	66	46	50	4	No
2148 W 1570 N	4	B	66	46	50	4	No
2134 W 1570 N	4	B	66	47	51	4	No
2122 W 1570 N	4	B	66	47	51	4	No
2108 W 1570 N	4	B	66	47	51	4	No
2096 W 1570 N	4	B	66	49	53	4	No
2082 W 1570 N	4	B	66	49	53	4	No
2066 W 1570 N	4	B	66	50	54	4	No
2058 W 1570 N	4	B	66	50	54	4	No
1576 N 2030 W	**4**	**B**	**66**	**67**	**72**	**5**	**Yes**
1562 N 2030 W	**4**	**B**	**66**	**67**	**72**	**5**	**Yes**
1548 N 2030 W	**4**	**B**	**66**	**67**	**72**	**5**	**Yes**
1532 N 2030 W	**4**	**B**	**66**	**67**	**72**	**5**	**Yes**
2033 W 1520 N	**4**	**B**	**66**	**65**	**70**	**5**	**Yes**
2037 W 1520 N	4	B	66	55	60	5	No
2049 W 1520 N	4	B	66	52	56	4	No
1539 N 2030 W	4	B	66	50	54	4	No
2051 W 1570 N	4	B	66	50	54	4	No
2077 W 1570 N	4	B	66	49	53	4	No
2089 W 1570 N	4	B	66	49	53	4	No
2107 W 1570 N	4	B	66	47	51	4	No
2119 W 1570 N	4	B	66	47	51	4	No
2131 W 1570 N	4	B	66	47	51	4	No
2139 W 1570 N	4	B	66	46	50	4	No
1501 N 2090 W	4	B	66	47	49	3	No
1497 N 2090 W	4	B	66	47	49	3	No
1481 N 2090 W	4	B	66	47	49	3	No
1482 N 2090 W	4	B	66	53	57	4	No
1494 N 2090 W	4	B	66	53	57	4	No
1502 N 2090 W	4	B	66	49	53	4	No
1508 N 2090 W	4	B	66	49	53	4	No
1473 N 1825 W	4	B	66	46	49	3	No
1472 N 1900 W	4	B	66	47	50	3	No
1461 N 1900 W	4	B	66	50	54	4	No
2141 W 1800 N (Church)	**4**	**C**	**66**	**50**	**60**	**10**	**Yes**
Locations on Map Page 5 of 6, Appendices A and C							
2091 N 1930 W	5	B	66	55	58	3	No
2094 N 1930 W	5	B	66	50	52	2	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
2097 N 1930 W	5	B	66	55	58	3	No
2106 N 1930 W	5	B	66	50	52	2	No
2109 N 1930 W	5	B	66	55	58	3	No
2112 N 1930 W	5	B	66	50	52	2	No
2119 N 1930 W	5	B	66	55	57	2	No
2122 N 1930 W	5	B	66	50	52	2	No
2126 N 1930 W	5	B	66	50	52	2	No
2129 N 1930 W	5	B	66	55	57	2	No
2133 N 1930 W	5	B	66	55	57	2	No
2138 N 1930 W	5	B	66	50	52	2	No
2144 N 1930 W	5	B	66	50	52	2	No
2147 N 1930 W	5	B	66	55	57	2	No
2157 N 1930 W	5	B	66	55	57	2	No
2174 N 1930 W	5	B	66	50	52	2	No
2177 N 1930 W	5	B	66	55	57	2	No
2182 N 1930 W	5	B	66	50	52	2	No
2189 N 1930 W	5	B	66	55	57	2	No
2194 N 1930 W	5	B	66	50	52	2	No
2198 N 1930 W	5	B	66	50	52	2	No
2206 N 1930 W	5	B	66	50	54	4	No
2209 N 1930 W	5	B	66	55	57	2	No
2218 N 1930 W	5	B	66	55	56	1	No
2221 N 1930 W	5	B	66	55	57	2	No
2083 N 2000 W	5	B	66	53	56	3	No
2084 N 2000 W	5	B	66	61	64	3	No
2087 N 2000 W	5	B	66	57	62	5	No
2123 N 2000 W	5	B	66	57	62	5	No
2133 N 2000 W	5	B	66	57	62	5	No
2162 N 2000 W	5	B	66	61	64	3	No
2184 N 2000 W	5	B	66	61	64	3	No
2201 N 2000 W (Great Harvest Bread)	5	E	71	60	64	4	No
2212 N 2000 W	5	B	66	61	64	3	No
2214 N 2000 W	5	B	66	56	58	2	No
2216 N 2000 W	5	B	66	56	58	2	No
2218 N 2000 W	5	B	66	62	64	2	No
2282 N 2000 W	5	B	66	62	64	2	No
2342 N 2000 W	5	B	66	63	65	2	No
2372 N 2000 W	5	B	66	56	57	1	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
2172 N 2070 W	5	B	66	55	58	3	No
2178 N 2070 W	5	B	66	56	58	2	No
2203 N 2070 W	5	B	66	49	52	3	No
2103 W 2075 N	5	B	66	49	51	3	No
2108 W 2075 N	5	B	66	49	51	3	No
2121 W 2075 N	5	B	66	48	51	3	No
2126 W 2075 N	5	B	66	48	51	3	No
2137 W 2075 N	5	B	66	47	49	2	No
2144 W 2075 N	5	B	66	47	49	2	No
2072 N 2090 W	5	B	66	51	54	3	No
2084 N 2090 W	5	B	66	51	54	3	No
2098 N 2090 W	5	B	66	51	54	3	No
2116 N 2090 W	5	B	66	51	54	3	No
2122 N 2090 W	5	B	66	51	54	3	No
2129 N 2090 W	5	B	66	49	51	3	No
2134 N 2090 W	5	B	66	51	54	3	No
1987 N 2095 W	5	B	66	44	48	4	No
2011 N 2095 W	5	B	66	44	47	3	No
2012 N 2095 W	5	B	66	51	54	3	No
2018 N 2095 W	5	B	66	51	54	3	No
2034 N 2095 W	5	B	66	51	54	3	No
2037 N 2095 W	5	B	66	44	47	3	No
2318 N 2100 W	5	B	66	58	60	2	No
2338 N 2100 W	5	B	66	54	56	2	No
2341 N 2100 W	5	B	66	52	55	3	No
2352 N 2100 W	5	B	66	54	56	2	No
2357 N 2100 W	5	B	66	52	54	2	No
2368 N 2100 W	5	B	66	54	56	2	No
2369 N 2100 W	5	B	66	50	52	2	No
2109 W 2120 N	5	B	66	49	51	3	No
2126 W 2120 N	5	B	66	48	50	2	No
2127 W 2120 N	5	B	66	48	50	2	No
2143 W 2120 N	5	B	66	47	49	2	No
2144 W 2120 N	5	B	66	47	49	2	No
1983 N 2125 W	5	B	66	44	47	3	No
1984 N 2125 W	5	B	66	44	47	3	No
1997 N 2125 W	5	B	66	44	47	3	No
1998 N 2125 W	5	B	66	44	47	3	No
2018 N 2125 W	5	B	66	44	47	3	No
2019 N 2125 W	5	B	66	44	47	3	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
1988 N 2165 W	5	B	66	44	47	3	No
2012 N 2165 W	5	B	66	44	47	3	No
2034 N 2165 W	5	B	66	44	49	3	No
2071 W 2175 N	5	B	66	53	56	3	No
2082 W 2175 N	5	B	66	49	52	3	No
2087 W 2175 N	5	B	66	51	54	3	No
2094 W 2175 N	5	B	66	49	52	3	No
2113 W 2175 N	5	B	66	49	51	3	No
2116 W 2175 N	5	B	66	49	51	2	No
2129 W 2175 N	5	B	66	48	50	2	No
2132 W 2175 N	5	B	66	48	50	2	No
2141 W 2175 N	5	B	66	47	49	2	No
2154 W 2175 N	5	B	66	47	49	2	No
2157 W 2175 N	5	B	66	47	49	2	No
2054 W 2220 N	5	B	66	55	58	3	No
2057 W 2220 N	5	B	66	54	56	2	No
2066 W 2220 N	5	B	66	54	57	3	No
2082 W 2220 N	5	B	66	52	55	3	No
2097 W 2220 N	5	B	66	49	52	3	No
2098 W 2220 N	5	B	66	52	54	2	No
2113 W 2220 N	5	B	66	49	51	2	No
2114 W 2220 N	5	B	66	50	52	2	No
2128 W 2220 N	5	B	66	50	52	2	No
2129 W 2220 N	5	B	66	49	51	2	No
2142 W 2220 N	5	B	66	49	51	2	No
2147 W 2220 N	5	B	66	49	51	2	No
2156 W 2220 N	5	B	66	49	51	2	No
1900 N 2225 W (20 Units)	5	B	66	49	52	3	No
Clinton Community Trail, Point 1	5	C	66	47	50	3	No
Clinton Community Trail, Point 2	5	C	66	56	59	3	No
Clinton Community Trail, Point 3	**5**	**C**	**66**	**69**	**73**	**4**	**Yes**
Clinton Community Trail, Point 4	**5**	**C**	**66**	**72**	**73**	**1**	**Yes**
Clinton Community Trail, Point 5	5	C	66	58	60	2	No
Clinton Community Trail, Point 6	5	C	66	51	54	3	No
2103 W 2265 N	5	B	66	50	52	2	No

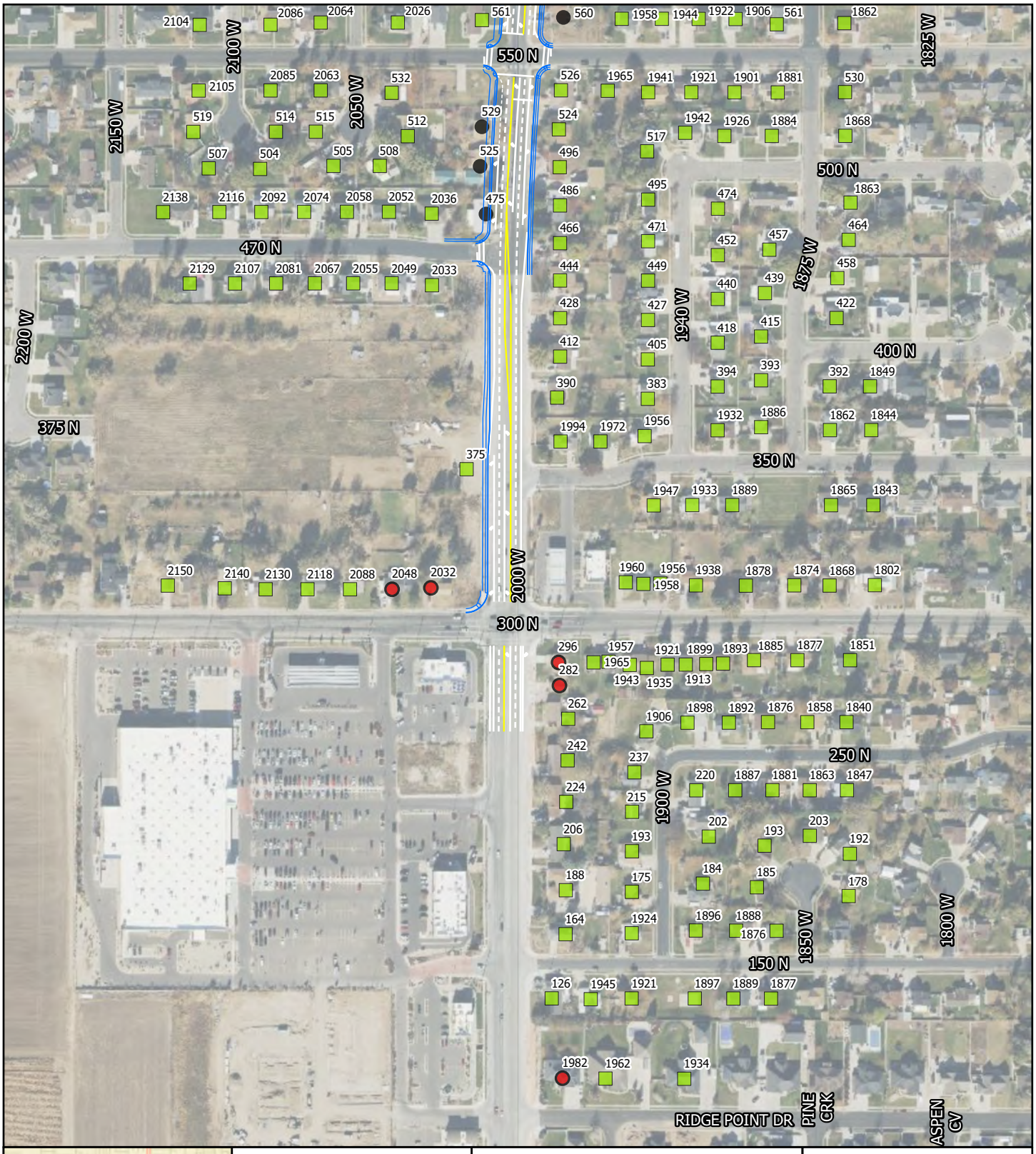
Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
2116 W 2265 N	5	B	66	60	62	2	No
2117 W 2265 N	5	B	66	50	52	2	No
2131 W 2265 N	5	B	66	50	52	2	No
2132 W 2265 N	5	B	66	60	62	2	No
2143 W 2265 N	5	B	66	50	52	2	No
2148 W 2265 N	5	B	66	60	62	2	No
1848 W 2300 N	5	B	66	55	57	2	No
1864 W 2300 N	5	B	66	55	57	2	No
1881 W 2300 N	5	B	66	55	57	2	No
1888 W 2300 N	5	B	66	55	57	2	No
1907 W 2300 N	5	B	66	55	57	2	No
1912 W 2300 N	5	B	66	55	57	2	No
1919 W 2300 N	5	B	66	55	57	2	No
1936 W 2300 N	5	B	66	60	61	1	No
1956 W 2300 N	5	B	66	60	61	1	No
1988 W 2300 N (Potential Relocation)	5	B	66	63	65	2	No
2044 W 2300 N	5	B	66	58	60	2	No
2068 W 2300 N	5	B	66	58	60	2	No
2093 W 2300 N	5	B	66	56	59	3	No
2118 W 2300 N	5	B	66	60	62	2	No
2142 W 2300 N	5	B	66	60	62	2	No
Locations on Map Page 6 of 6, Appendices A and C							
2404 N 2000 W	6	B	66	60	61	1	No
2422 N 2000 W	6	B	66	60	61	1	No
2436 N 2000 W	6	B	66	60	61	1	No
2466 N 2000 W	6	B	66	60	61	1	No
2478 N 2000 W	6	B	66	60	61	1	No
2541 N 2000 W	6	B	66	56	58	2	No
2547 N 2000 W	6	B	66	58	59	1	No
2593 N 2000 W	6	B	66	60	62	2	No
2637 N 2000 W	6	B	66	60	62	2	No
2647 N 2000 W	6	B	66	60	62	2	No
2657 N 2000 W	6	B	66	60	62	2	No
2396 N 2100 W	6	B	66	51	53	2	No
2416 N 2100 W	6	B	66	51	53	2	No
2434 N 2100 W	6	B	66	51	53	2	No
2452 N 2100 W	6	B	66	51	53	2	No
2466 N 2100 W	6	B	66	51	53	2	No

Description / Location	Map Page	Activity Category	Noise Abatement Criterion	Existing Noise, 2019	Future Noise, 2050	Increase	Noise Impact?
2484 N 2100 W	6	B	66	51	53	2	No
2502 N 2100 W	6	B	66	51	53	2	No
5986 S 3500 W (Potential Relocation)	6	B	66	63	65	2	No
3402 W 6000 S	6	B	66	55	59	4	No
3412 W 6000 S	6	B	66	55	59	4	No
3420 W 6000 S	6	B	66	61	65	4	No
3446 W 6000 S	6	B	66	61	65	4	No
3527 W 6000 S	6	B	66	61	64	3	No
3541 W 6000 S	6	B	66	61	64	3	No
3555 W 6000 S	6	B	66	61	64	3	No
3571 W 6000 S	6	B	66	56	59	3	No
3588 W 6000 S	6	B	66	51	55	4	No
3599 W 6000 S	6	B	66	52	56	4	No
3608 W 6000 S	6	B	66	51	55	4	No
3615 W 6000 S	6	B	66	52	56	4	No
3511 W 6000 S	**6**	**B**	**66**	**66**	**68**	**2**	**Yes**
3512 W 6050 S	**6**	**B**	**66**	**67**	**68**	**0**	**Yes**
3524 W 6050 S	**6**	**B**	**66**	**67**	**68**	**1**	**Yes**
3536 W 6050 S	6	B	66	61	63	2	No
3537 W 6050 S	6	B	66	60	62	1	No
3548 W 6050 S	6	B	66	54	57	3	No
3549 W 6050 S	6	B	66	54	56	2	No
3560 W 6050 S	6	B	66	54	57	3	No
3561 W 6050 S	6	B	66	54	56	2	No
3572 W 6050 S	6	B	66	54	57	3	No
3579 W 6050 S	6	B	66	54	56	2	No
3585 W 6050 S	6	B	66	50	52	2	No
3586 W 6050 S	6	B	66	50	53	3	No
3597 W 6050 S	6	B	66	50	52	2	No
3598 W 6050 S	6	B	66	50	53	3	No
3611 W 6050 S	6	B	66	50	52	2	No
3612 W 6050 S	6	B	66	50	53	3	No

Appendix C

Map Series Showing

Design Year 2050 Noise Levels



2000 West (SR-108)
300 North to 6000 South

EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680

Noise Study Attachment B
Map Page 1 of 6

Design Year 2050 Noise Impacts

Impacted? (Labels are address numbers)

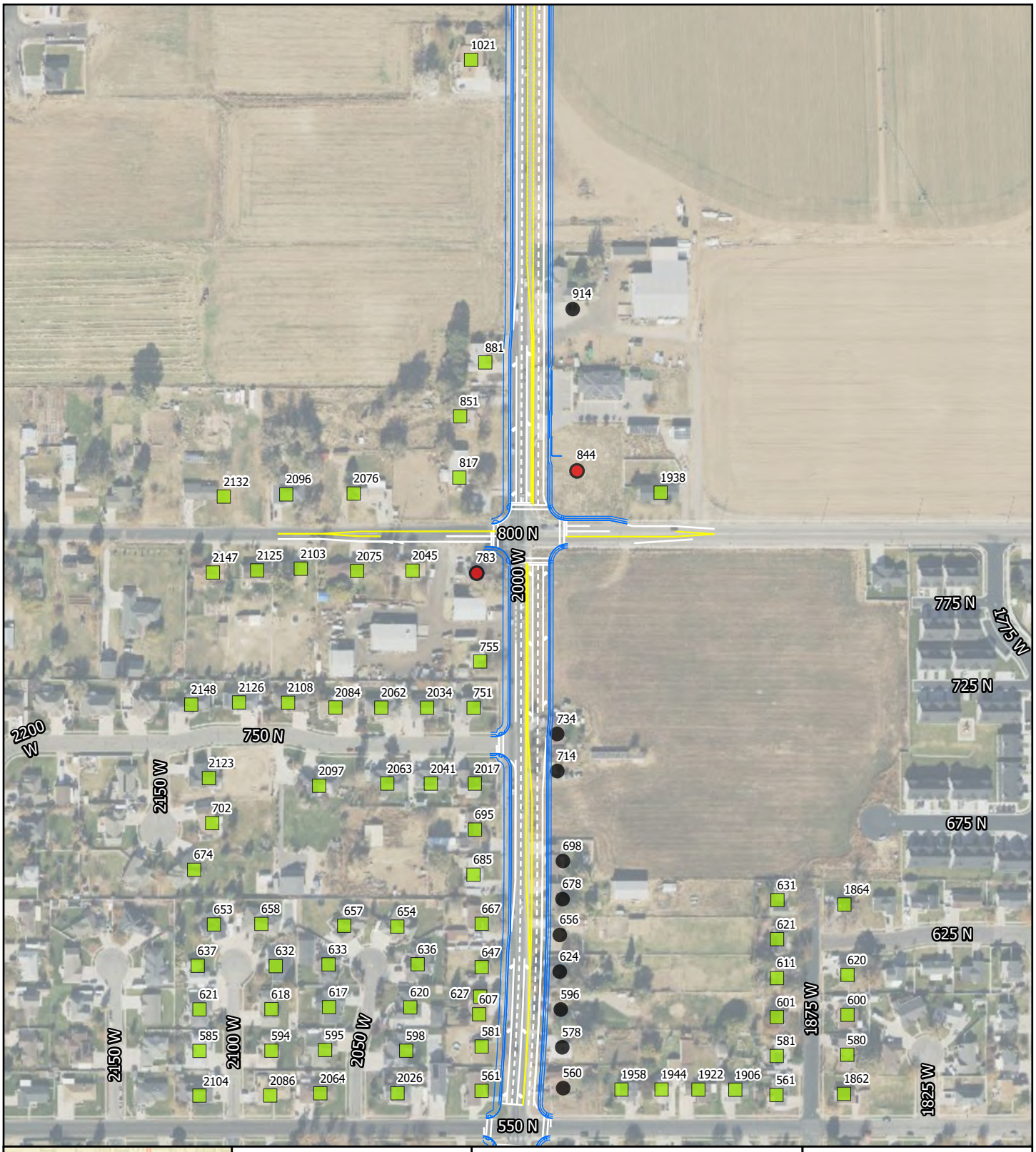
- No
- Yes
- Relocation

UDOT Keeping Utah Moving

N

0 200 400 Feet

0 50 100 Meters



2000 West (SR-108)
300 North to 6000 South

EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680

Noise Study Attachment B
Map Page 2 of 6

Design Year 2050 Noise Impacts

Impacted? (Labels are address numbers)

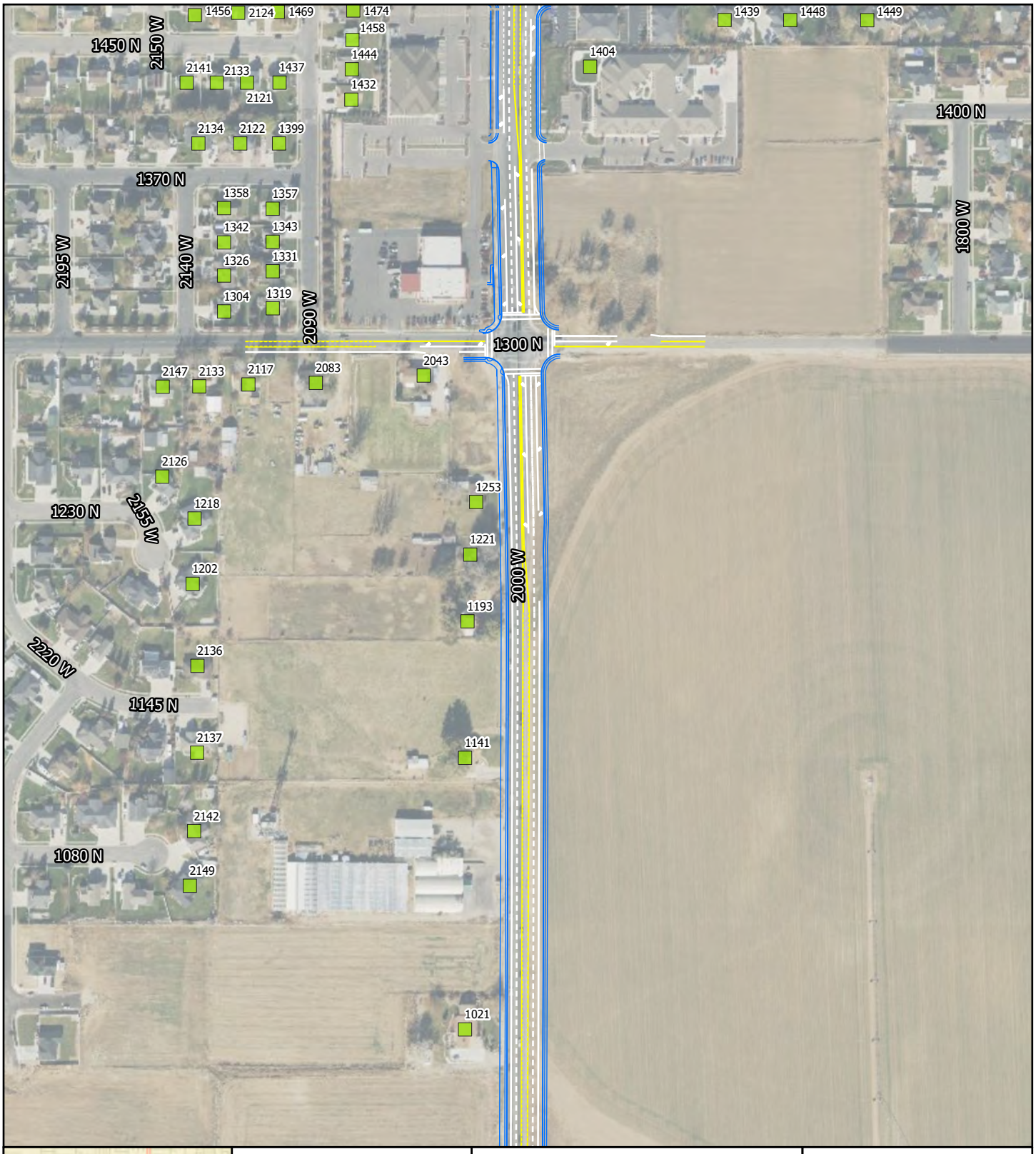
- No
- Yes
- Relocation

UDOT Keeping Utah Moving

N

0 200 400 Feet

0 50 100 Meters



2000 West (SR-108)
300 North to 6000 South

EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680

Noise Study Attachment B
Map Page 3 of 6

Design Year 2050 Noise Impacts

Impacted? (Labels are address numbers)

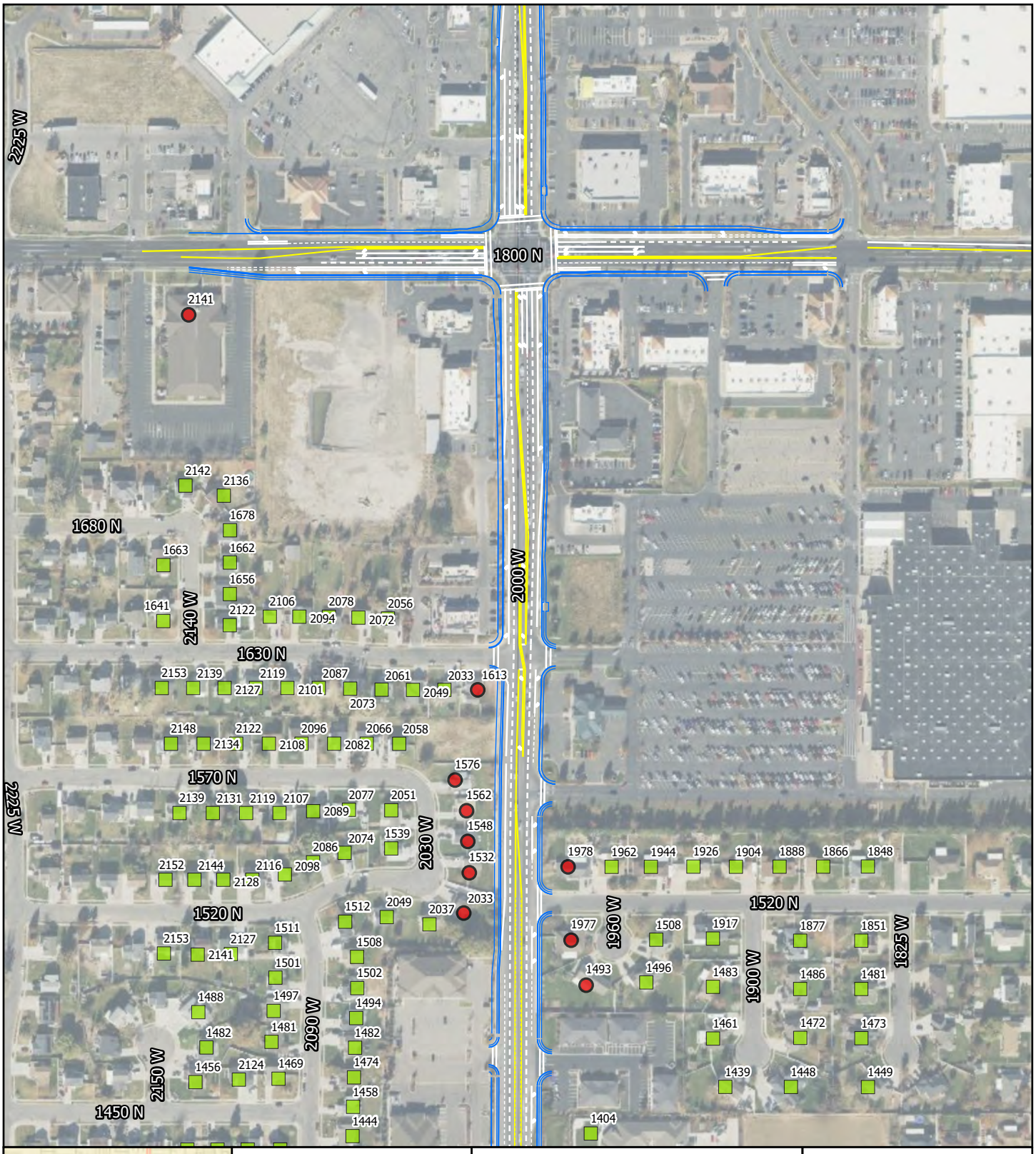
- No
- Yes
- Relocation

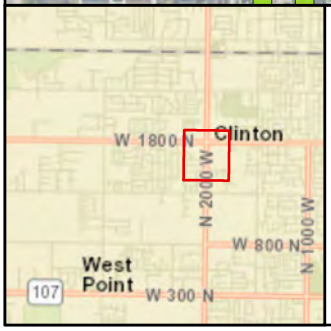
UDOT Keeping Utah Moving

N

0 200 400 Feet

0 50 100 Meters





2000 West (SR-108)
300 North to 6000 South

EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680

Noise Study Attachment B
Map Page 4 of 6

Design Year 2050 Noise Impacts

Impacted? (Labels are address numbers)

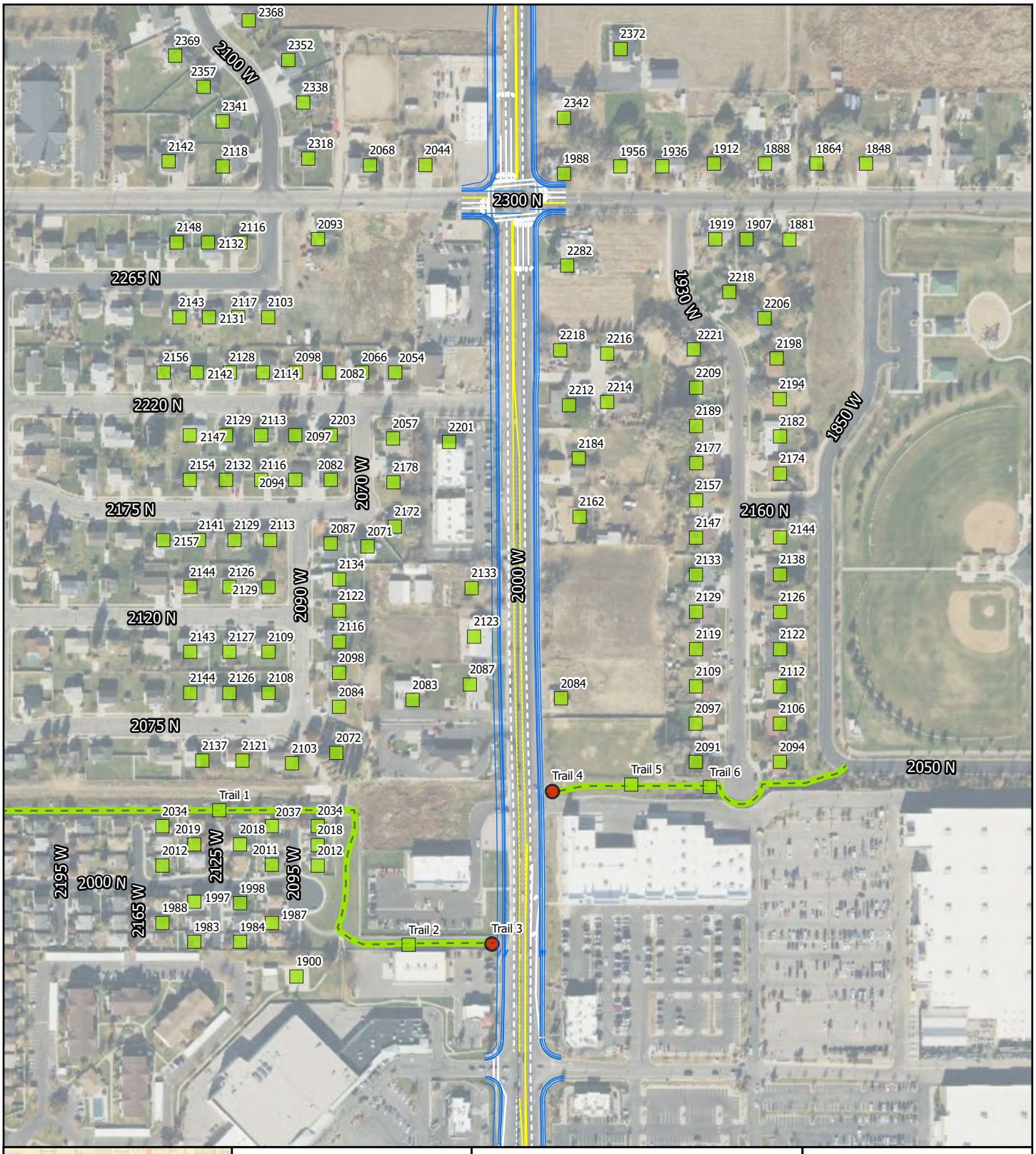
- No
- Yes
- Relocation

UDOT Keeping Utah Moving

N

0 200 400 Feet

0 50 100 Meters



2000 West (SR-108)
300 North to 6000 South

EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680

Noise Study Attachment B
Map Page 5 of 6

Design Year 2050 Noise Impacts

Impacted? (Labels are address numbers)

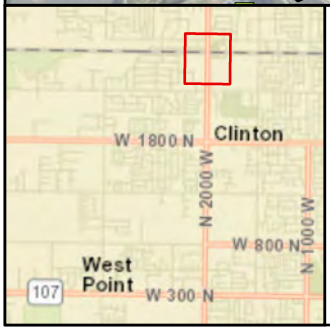
- No
- Yes
- Relocation

UDOT Keeping Utah Moving

N

0 200 400 Feet

0 50 100 Meters



2000 West (SR-108)
300 North to 6000 South

EIS Reevaluation
UDOT Project S-0108(36)6
PIN 15680

Noise Study Attachment B
Map Page 6 of 6

Design Year 2050 Noise Impacts

Impacted? (Labels are address numbers)

- No
- Yes
- Relocation

UDOT Keeping Utah Moving

N

0 200 400 Feet

0 50 100 Meters

Appendix D

Noise Wall 1 Modeling Results

2000 S Wall 1 (Segments A and B)					
Wall Height in Feet:	8.00				
Receptor	**First Row?**	**Noise Reduction**	**Benefitted 5 dBA Reduction**	**1st Row 5 dBA Reduction?**	**1st Row 7 dBA Reduction?**
2051 W 1570 N	No	1	No	No	No
1539 N 2030 W	No	1	No	No	No
1576 N 2030 W	Yes	5	Yes	Yes	No
1562 N 2030 W	Yes	8	Yes	Yes	Yes
1548 N 2030 W	Yes	8	Yes	Yes	Yes
1532 N 2030 W	Yes	8	Yes	Yes	Yes
2033 W 1520 N	Yes	4	No	No	No
2037 W 1520 N	No	2	No	No	No
2049 W 1520 N	No	1	No	No	No
Feasibility Factors:					
Number of First-Row with 5 dBA or greater reduction				4	
Percent of first-row with 5 dBA or greater reduction				80.0	
Meets acoustic feasibility goal? (5 dBA reduction for 50% of front-row)				Yes	
Reasonableness Factors:					
Number of first-row with 7 dBA or greater reduction					3.0
Percent of first-row with 7 dBA or greater reduction					60.0
Meets noise abatement design goal? (7 dBA reduction for 35% of front-row)					Yes
Cost Effectiveness					
Number benefitted (receptors with 5 dBA or greater reduction)					4
Wall Height (feet)					8.00
Wall Length (feet)					420.00
Cost of Noise Wall (Length x Height x $20/sq ft):					$67,200.00
Right of Way Cost					$10,000.00
Total Cost					$77,200.00
Cost per Benefitted Receptor					$19,300.00
Cost Effective? (cost per benefitted receptor is $30,000 or less)					Yes

2000 S Wall 1 (Segments A and B)					
Wall Height in Feet:	10.00				
Receptor	**First Row?**	**Noise Reduction**	**Benefitted 5 dBA Reduction**	**1st Row 5 dBA Reduction?**	**1st Row 7 dBA Reduction?**
2051 W 1570 N	No	2	No	No	No
1539 N 2030 W	No	2	No	No	No
1576 N 2030 W	Yes	6	Yes	Yes	No
1562 N 2030 W	Yes	9	Yes	Yes	Yes
1548 N 2030 W	Yes	10	Yes	Yes	Yes
1532 N 2030 W	Yes	9	Yes	Yes	Yes
2033 W 1520 N	Yes	4	No	No	No
2037 W 1520 N	No	3	No	No	No
2049 W 1520 N	No	2	No	No	No
Feasibility Factors:					
Number of First-Row with 5 dBA or greater reduction				4	
Percent of first-row with 5 dBA or greater reduction				80.0	
Meets acoustic feasibility goal? (5 dBA reduction for 50% of front-row)				Yes	
Reasonableness Factors:					
Number of first-row with 7 dBA or greater reduction					3.0
Percent of first-row with 7 dBA or greater reduction					60.0
Meets noise abatement design goal? (7 dBA reduction for 35% of front-row)					Yes
Cost Effectiveness					
Number benefitted (receptors with 5 dBA or greater reduction)					4
Wall Height (feet)					10.00
Wall Length (feet)					420.00
Cost of Noise Wall (Length x Height x $20/sq ft):					$84,000.00
Right of Way Cost					$10,000.00
Total Cost					$94,000.00
Cost per Benefitted Receptor					$23,500.00
Cost Effective? (cost per benefitted receptor is $30,000 or less)					Yes

2000 S Wall 1 (Segments A and B)

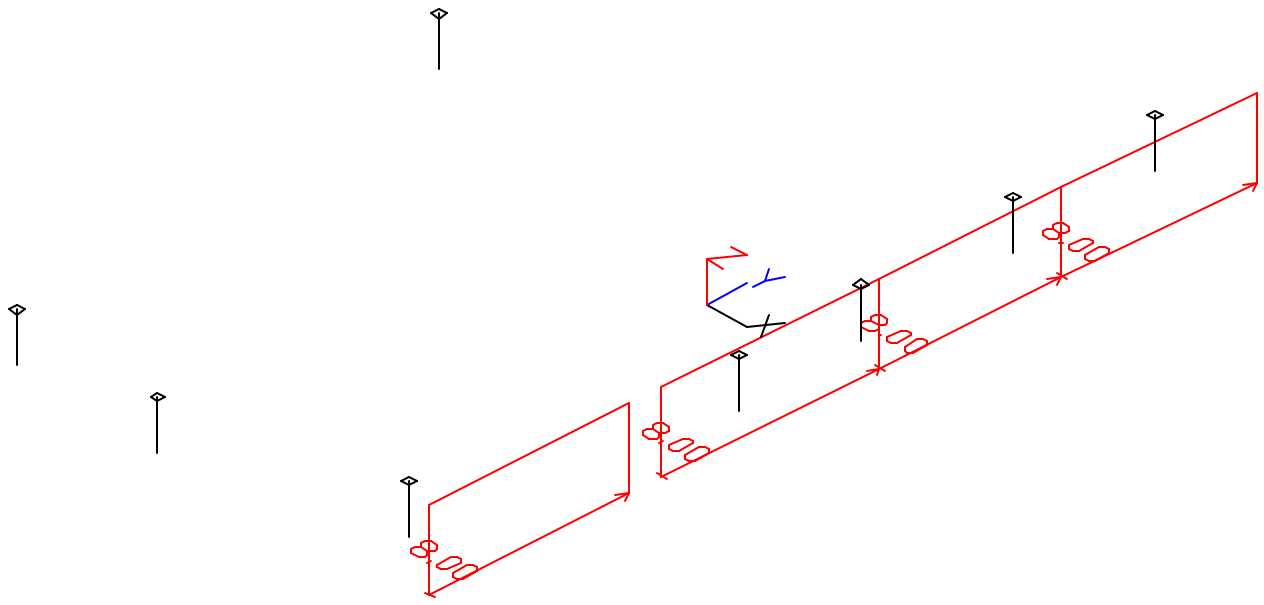
Wall Height in Feet: 12.00

Receptor	First Row?	Noise Reduction	Benefitted 5 dBA Reduction	1st Row 5 dBA Reduction?	1st Row 7 dBA Reduction?
2051 W 1570 N	No	3	No	No	No
1539 N 2030 W	No	3	No	No	No
1576 N 2030 W	Yes	7	Yes	Yes	Yes
1562 N 2030 W	Yes	10	Yes	Yes	Yes
1548 N 2030 W	Yes	11	Yes	Yes	Yes
1532 N 2030 W	Yes	10	Yes	Yes	Yes
2033 W 1520 N	Yes	4	No	No	No
2037 W 1520 N	No	4	No	No	No
2049 W 1520 N	No	3	No	No	No

Feasibility Factors:		
Number of First-Row with 5 dBA or greater reduction	4	
Percent of first-row with 5 dBA or greater reduction	80.0	
Meets acoustic feasibility goal? (5 dBA reduction for 50% of front-row)	Yes	

Reasonableness Factors:	
Number of first-row with 7 dBA or greater reduction	4.0
Percent of first-row with 7 dBA or greater reduction	80.0
Meets noise abatement design goal? (7 dBA reduction for 35% of front-row)	Yes

Cost Effectiveness	
Number benefitted (receptors with 5 dBA or greater reduction)	4
Wall Height (feet)	12.00
Wall Length (feet)	420.00
Cost of Noise Wall (Length x Height x $20/sq ft):	$100,800.00
Right of Way Cost	$ 10,000.00
Total Cost	$110,800.00
Cost per Benefitted Receptor	$ 27,700.00
Cost Effective? (cost per benefitted receptor is $30,000 or less)	Yes



Barrier Analysis		Sheet 1 of 1	6 May 2021
		UDOT	
Barrier View-Wall 1		Project/Contract No. SR-108 Reevaluation PIN 15	
Run name: Abatement2		TNM Version 2.5, Feb 2004	
Scale: <DNA - due to perspective>		Analysis By: S. Keenan BIO-WEST	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

UDOT
S. Keenan BIO-WEST

5 May 2021
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SR-108 Reevaluation PIN 15680
RUN: Barrier Analysis
BARRIER DESIGN: Wall 1
ATMOSPHERICS: 55 deg F, 20% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
2051 W 1570 N	517	2	50.3	54.0	66	3.7	10	----	52.9	1.1	7	-5.9
1576 N 2030 W	433	1	66.7	72.3	66	5.6	10	Snd Lvl	67.5	4.8	7	-2.2
1562 N 2030 W	432	1	66.8	72.3	66	5.5	10	Snd Lvl	64.6	7.7	7	0.7
1548 N 2030 W	426	1	67.0	72.2	66	5.2	10	Snd Lvl	63.8	8.4	7	1.4
1532 N 2030 W	423	1	67.2	72.1	66	4.9	10	Snd Lvl	63.8	8.3	7	1.3
2033 W 1520 N	421	1	64.9	69.7	66	4.8	10	Snd Lvl	66.1	3.6	7	-3.4
2037 W 1520 N	514	1	55.4	59.5	66	4.1	10	----	57.2	2.3	7	-4.7
2049 W 1520 N	516	1	51.8	55.3	66	3.5	10	----	53.9	1.4	7	-5.6

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	9	1.1	4.7	8.4
All Impacted	5	3.6	6.6	8.4
All that meet NR Goal	3	7.7	8.1	8.4

UDOT
S. Keenan BIO-WEST

5 May 2021
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SR-108 Reevaluation PIN 15680
RUN: Barrier Analysis
BARRIER DESIGN: Wall 1
ATMOSPHERICS: 55 deg F, 20% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
2051 W 1570 N	517	2	50.3	54.0	66	3.7	10	----	52.3	1.7	7	-5.3
1576 N 2030 W	433	1	66.7	72.3	66	5.6	10	Snd Lvl	66.2	6.1	7	-0.9
1562 N 2030 W	432	1	66.8	72.3	66	5.5	10	Snd Lvl	63.1	9.2	7	2.2
1548 N 2030 W	426	1	67.0	72.2	66	5.2	10	Snd Lvl	62.3	9.9	7	2.9
1532 N 2030 W	423	1	67.2	72.1	66	4.9	10	Snd Lvl	62.7	9.4	7	2.4
2033 W 1520 N	421	1	64.9	69.7	66	4.8	10	Snd Lvl	65.5	4.2	7	-2.8
2037 W 1520 N	514	1	55.4	59.5	66	4.1	10	----	56.4	3.1	7	-3.9
2049 W 1520 N	516	1	51.8	55.3	66	3.5	10	----	53.3	2.0	7	-5.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	9	1.7	5.7	9.9
All Impacted	5	4.2	7.8	9.9
All that meet NR Goal	3	9.2	9.5	9.9

UDOT
S. Keenan BIO-WEST

5 May 2021
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SR-108 Reevaluation PIN 15680
RUN: Barrier Analysis
BARRIER DESIGN: Wall 1
ATMOSPHERICS: 55 deg F, 20% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
2051 W 1570 N	517	2	50.3	54.0	66	3.7	10	----	51.5	2.5	7	-4.5
1576 N 2030 W	433	1	66.7	72.3	66	5.6	10	Snd Lvl	65.8	6.5	7	-0.5
1562 N 2030 W	432	1	66.8	72.3	66	5.5	10	Snd Lvl	62.1	10.2	7	3.2
1548 N 2030 W	426	1	67.0	72.2	66	5.2	10	Snd Lvl	61.2	11.0	7	4.0
1532 N 2030 W	423	1	67.2	72.1	66	4.9	10	Snd Lvl	61.8	10.3	7	3.3
2033 W 1520 N	421	1	64.9	69.7	66	4.8	10	Snd Lvl	65.3	4.4	7	-2.6
2037 W 1520 N	514	1	55.4	59.5	66	4.1	10	----	55.8	3.7	7	-3.3
2049 W 1520 N	516	1	51.8	55.3	66	3.5	10	----	52.7	2.6	7	-4.4

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	9	2.5	6.4	11.0
All Impacted	5	4.4	8.5	11.0
All that meet NR Goal	3	10.2	10.5	11.0

Appendix E

Noise Wall 2 Modeling Results

2000 S Wall 2					
Wall Height in Feet:	8.00				
Receptor	**First Row?**	**Noise Reduction**	**Benefitted 5 dBA Reduction**	**1st Row 5 dBA Reduction?**	**1st Row 7 dBA Reduction?**
3511 W 6000 S	Yes	4	No	No	No
3527 W 6000 S	No	1	No	No	No
3536 W 6050 S	No	2	No	No	No
3524 W 6050 S	Yes	6	Yes	Yes	No
3512 W 6050 S	Yes	6	Yes	Yes	No
3537 W 6050 S	Yes	2	No	No	No
Feasibility Factors:					
Number of First-Row with 5 dBA or greater reduction				2	
Percent of first-row with 5 dBA or greater reduction				50.0	
Meets acoustic feasibility goal? (5 dBA reduction for 50% of front-row)				Yes	
Reasonableness Factors:					
Number of first-row with 7 dBA or greater reduction					0.0
Percent of first-row with 7 dBA or greater reduction					0.0
Meets noise abatement design goal? (7 dBA reduction for 35% of front-row)					No
Cost Effectiveness					
Number benefitted (receptors with 5 dBA or greater reduction)					2
Wall Height (feet)					8.00
Wall Length (feet)					544.00
Cost of Noise Wall (Length x Height x $20/sq ft):					$ 87,040.00
Right of Way Cost					$ 12,468.00
Total Cost					$ 99,508.00
Cost per Benefitted Receptor					$ 49,754.00
Cost Effective? (cost per benefitted receptor is $30,000 or less)					No

2000 S Wall 2					
Wall Height in Feet:	10.00				
Receptor	**First Row?**	**Noise Reduction**	**Benefitted 5 dBA Reduction**	**1st Row 5 dBA Reduction?**	**1st Row 7 dBA Reduction?**
3511 W 6000 S	Yes	6	Yes	Yes	No
3527 W 6000 S	No	2	No	No	No
3536 W 6050 S	No	3	No	No	No
3524 W 6050 S	Yes	7	Yes	Yes	Yes
3512 W 6050 S	Yes	7	Yes	Yes	Yes
3537 W 6050 S	Yes	3	No	No	No
Feasibility Factors:					
Number of First-Row with 5 dBA or greater reduction				3	
Percent of first-row with 5 dBA or greater reduction				75.0	
Meets acoustic feasibility goal? (5 dBA reduction for 50% of front-row)				Yes	
Reasonableness Factors:					
Number of first-row with 7 dBA or greater reduction					2.0
Percent of first-row with 7 dBA or greater reduction					50.0
Meets noise abatement design goal? (7 dBA reduction for 35% of front-row)					Yes
Cost Effectiveness					
Number benefitted (receptors with 5 dBA or greater reduction)					3
Wall Height (feet)					10.00
Wall Length (feet)					544.00
Cost of Noise Wall (Length x Height x $20/sq ft):					$108,800.00
Right of Way Cost					$ 12,468.00
Total Cost					$121,268.00
Cost per Benefitted Receptor					$ 40,422.67
Cost Effective? (cost per benefitted receptor is $30,000 or less)					No

2000 S Wall 2

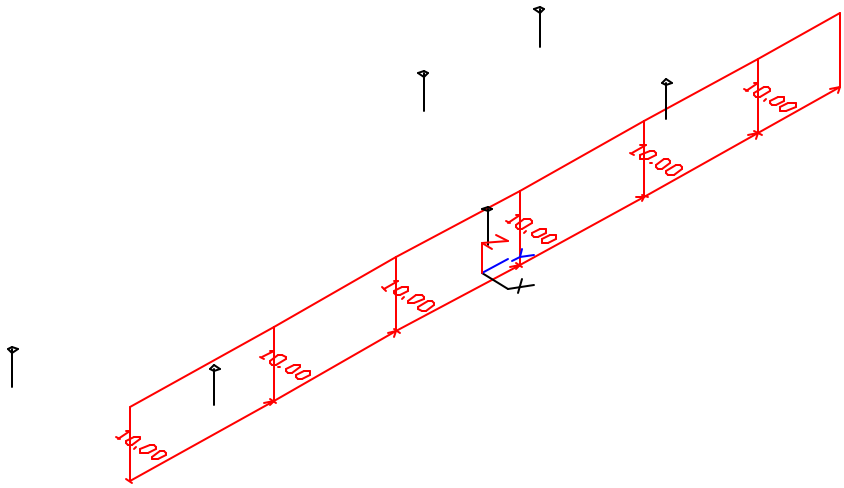
Wall Height in Feet: 12.00

Receptor	First Row?	Noise Reduction	Benefitted 5 dBA Reduction	1st Row 5 dBA Reduction?	1st Row 7 dBA Reduction?
3511 W 6000 S	Yes	6	Yes	Yes	No
3527 W 6000 S	No	2	No	No	No
3536 W 6050 S	No	4	No	No	No
3524 W 6050 S	Yes	8	Yes	Yes	Yes
3512 W 6050 S	Yes	8	Yes	Yes	Yes
3537 W 6050 S	Yes	3	No	No	No

Feasibility Factors:	
Number of First-Row with 5 dBA or greater reduction	3
Percent of first-row with 5 dBA or greater reduction	75.0
Meets acoustic feasibility goal? (5 dBA reduction for 50% of front-row)	Yes

Reasonableness Factors:	
Number of first-row with 7 dBA or greater reduction	2.0
Percent of first-row with 7 dBA or greater reduction	50.0
Meets noise abatement design goal? (7 dBA reduction for 35% of front-row)	Yes

Cost Effectiveness	
Number benefitted (receptors with 5 dBA or greater reduction)	3
Wall Height (feet)	12.00
Wall Length (feet)	544.00
Cost of Noise Wall (Length x Height x $20/sq ft):	$130,560.00
Right of Way Cost	$ 12,468.00
Total Cost	$143,028.00
Cost per Benefitted Receptor	$ 47,676.00
Cost Effective? (cost per benefitted receptor is $30,000 or less)	No



Barrier Analysis		Sheet 1 of 1	24 Mar 2021
		UDOT	
Barrier View-Wall 2		Project/Contract No. SR-108 Reevaluation PIN 15	
Run name: Abatement		TNM Version 2.5, Feb 2004	
Scale: <DNA - due to perspective>		Analysis By: S. Keenan BIO-WEST	
Roadway:		Ground Zone:	polygon
Receiver:		Tree Zone:	dashed polygon
Barrier:		Contour Zone:	polygon
Building Row:		Parallel Barrier:	
Terrain Line:		Skew Section:	

UDOT
S. Keenan BIO-WEST

24 March 2021
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SR-108 Reevaluation PIN 15680
RUN: Barrier Analysis
BARRIER DESIGN: Wall 2 - 8 feet
ATMOSPHERICS: 55 deg F, 20% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
3511 W 6000 S	506	1	65.9	68.0	66	2.1	10	Snd Lvl	63.8	4.2	7	-2.8
3527 W 6000 S	513	1	61.3	63.6	66	2.3	10	----	62.5	1.1	7	-5.9
3536 W 6050 S	512	1	60.5	62.6	66	2.1	10	----	60.7	1.9	7	-5.1
3524 W 6050 S	503	1	66.7	67.9	66	1.2	10	Snd Lvl	61.9	6.0	7	-1.0
3512 W 6050 S	502	1	67.8	68.0	66	0.2	10	Snd Lvl	61.7	6.3	7	-0.7
3537 W 6050 S	499	1	60.6	61.9	66	1.3	10	----	60.1	1.8	7	-5.2

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	6	1.1	3.5	6.3
All Impacted	3	4.2	5.5	6.3
All that meet NR Goal	0	0.0	0.0	0.0

UDOT
S. Keenan BIO-WEST

24 March 2021
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SR-108 Reevaluation PIN 15680
RUN: Barrier Analysis
BARRIER DESIGN: Wall 2 - 10 feet
ATMOSPHERICS: 55 deg F, 20% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
3511 W 6000 S	506	1	65.9	68.0	66	2.1	10	Snd Lvl	62.5	5.5	7	-1.5
3527 W 6000 S	513	1	61.3	63.6	66	2.3	10	----	61.8	1.8	7	-5.2
3536 W 6050 S	512	1	60.5	62.6	66	2.1	10	----	59.4	3.2	7	-3.8
3524 W 6050 S	503	1	66.7	67.9	66	1.2	10	Snd Lvl	61.0	6.9	7	-0.1
3512 W 6050 S	502	1	67.8	68.0	66	0.2	10	Snd Lvl	60.7	7.3	7	0.3
3537 W 6050 S	499	1	60.6	61.9	66	1.3	10	----	59.3	2.6	7	-4.4

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	6	1.8	4.5	7.3
All Impacted	3	5.5	6.6	7.3
All that meet NR Goal	1	7.3	7.3	7.3

UDOT
S. Keenan BIO-WEST

24 March 2021
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: SR-108 Reevaluation PIN 15680
RUN: Barrier Analysis
BARRIER DESIGN: Wall 2 - 12 feet
ATMOSPHERICS: 55 deg F, 20% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
3511 W 6000 S	506	1	65.9	68.0	66	2.1	10	Snd Lvl	62.0	6.0	7	-1.0
3527 W 6000 S	513	1	61.3	63.6	66	2.3	10	----	61.5	2.1	7	-4.9
3536 W 6050 S	512	1	60.5	62.6	66	2.1	10	----	58.8	3.8	7	-3.2
3524 W 6050 S	503	1	66.7	67.9	66	1.2	10	Snd Lvl	60.2	7.7	7	0.7
3512 W 6050 S	502	1	67.8	68.0	66	0.2	10	Snd Lvl	59.9	8.1	7	1.1
3537 W 6050 S	499	1	60.6	61.9	66	1.3	10	----	59.0	2.9	7	-4.1

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	6	2.1	5.1	8.1
All Impacted	3	6.0	7.3	8.1
All that meet NR Goal	2	7.7	7.9	8.1

Attachment 5
Section 4(f) Report, including Copies of Cultural Resources Findings of Effect and SHPO Concurrence Letters

Legal Sufficiency Review

PROJECT INFORMATION	
Project PIN: 15680	**Project Name**: 2000 West (SR-108); 300 North to 6000 South, Davis and Weber Counties, Utah
Region: 1	**Project Location**: Davis and Weber Counties, Utah

LEGAL SUFFICIENCY (check all that apply)

☐ **Environmental Impact Statement** ☒ **Individual Section 4(f)** ☒ **Other:** Section 4(f) Re-evaluation

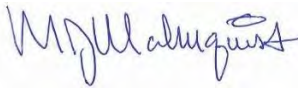
The intent of this checklist is to document the finding of legal sufficiency per FHWA Regulations: 23 CFR 771.125(b) and/or 23 CFR 774.7(d).

COMMENTS

We have reviewed the June 2021 Section 4(f) Re-evaluation for the 2000 West (SR-108); 300 North to 6000 South, Davis and Weber Counties Project and believe it meets the Federal Highway Administration's standards for legal sufficiency. Legal sufficiency depends on substantive content, procedural compliance and document quality and readability. A copy of the Section 4(f) Re-evaluation is attached.

Please note that a review for legal sufficiency also considers litigation risk. It is not possible to eliminate the risk of legal challenge or guarantee a successful outcome if a project is challenged. Therefore, a determination of legal sufficiency does not ensure that the project will not be challenged or that a challenge will not be successful.

COMPLETED BY: Mike Malmquist

Signature: 

Printed Name and Title: Mike Malmquist, Attorney	**Date:** June 16, 2021

2000 West (SR-108); 300 North to 6000 South, Davis and Weber Counties, Utah
Section 4(f) Re-evaluation

June 2021

Utah Department of Transportation

UDOT Project No. S-0108(36)6
UDOT PIN 15680

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated January 17, 2017, and executed by FHWA and UDOT.

TABLE OF CONTENTS

List of Figures

List of Tables

1.0 INTRODUCTION AND PROJECT BACKGROUND

The Utah Department of Transportation (UDOT) proposes improvements along a section of 2000 West (SR-108) in West Point in Davis County and Roy in Weber County, Utah (see **Figure 1**). The project would necessitate acquisition of right-of-way and temporary or permanent easements on adjacent properties to accommodate roadway widening, shifting the roadway alignment, improving intersections, and constructing pedestrian and bicycle paths. UDOT may apply federal funds from the Federal Highway Administration (FHWA) to the project, thereby invoking the National Environmental Policy Act (NEPA), Section 4(f) of the Department of Transportation Act of 1966 (Section 4(f), as amended), and the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR 800 (i.e., Section 106). In accordance with the Surface Transportation Project Delivery Program (23 USC §327), the UDOT assumes responsibility, assigned by the FHWA, for compliance under NEPA and other laws, including Section 4(f) of the DOT Act of 1966, as amended. This assignment is documented in a Memorandum of Understanding (MOU) between the FHWA and UDOT (executed January 17, 2017), under which UDOT is also assigned responsibility for complying with Section 106 of the NHPA and Section 4(f).

Proposed improvements along SR-108 between SR-126 and SR-127 were evaluated for environmental, social, and cultural impacts in an environmental impact statement (EIS) under NEPA. The final EIS and Section 4(f) Evaluation was issued in August 2008, and the Record of Decision (ROD) was signed in October 2008. The scope of the EIS and ROD encompassed the segment of SR-108 currently under study for improvement. Subsequent to the 2008 ROD, improvements were made along a portion of the SR-108 project corridor as funding allowed, but the portion between 300 North and 6000 South (i.e., the current project corridor) remained unimproved. Time lag since 2008 combined with design refinements and the "aging-in" of several additional properties into the historic period have necessitated a re-evaluation of environmental impacts, including a re-evaluation of Section 4(f) uses. That Section 4(f) re-evaluation is presented herein and supersedes the 2008 Section 4(f) evaluation for this section of SR-108.

This Section 4(f) re-evaluation was prepared in conjunction with the environmental re-evaluation for the roadway improvement and is based, in part, on information produced as part of that re-evaluation and during UDOT's compliance with the Section 106 process for the undertaking.

2.0 PROPOSED ACTION

The following sections provide a description of the Proposed Action—its study area, its Purpose and Need, and its physical components.

2.1 Purpose and Need

The 2008 Final Environmental Impact Statement and Section 4(f) Evaluation (FEIS) for SR-108 in Davis and Weber Counties evaluated the environmental impacts of improving SR-108 from SR-127 (Antelope Drive) to SR-126 (1900 West, an approximately 9.5-mile section of SR-108). With the current re-evaluation, UDOT is updating the environmental analysis for the 2.5-

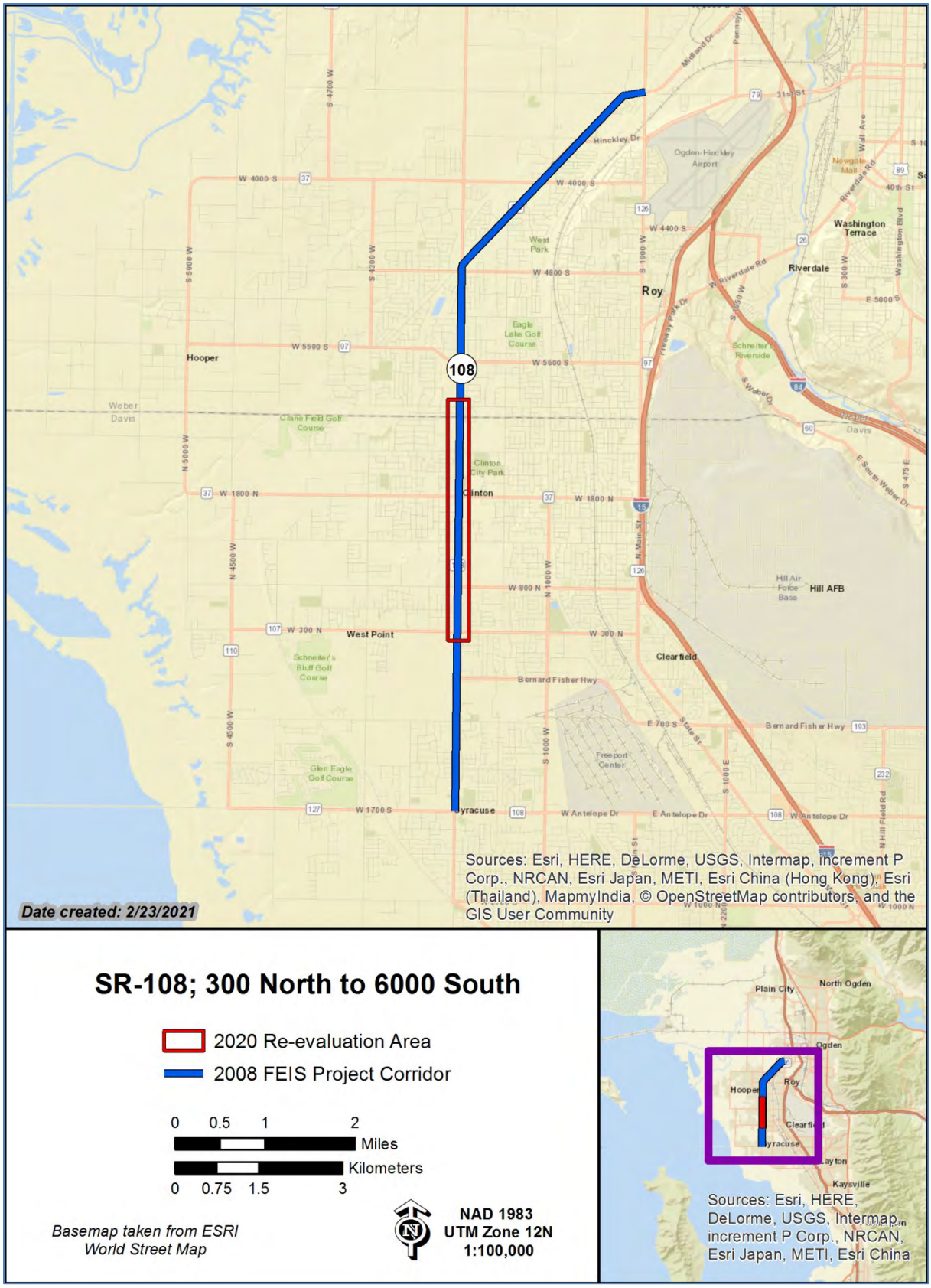


Figure 1. General project location

mile section of SR-108 through Clinton, Utah between Mile Point 6.0 (300 North in West Point) and Mile Point 8.5 (6000 South in Roy). The purpose and need for this re-evaluation is the same as stated in the 2008 FEIS. Specifically, the purpose of the project is to:

- Reduce roadway congestion on SR-108;
- Eliminate roadway deficiencies associated with a lack of shoulders and turn lanes in order to reduce accident rates on SR-108; and
- Enhance multi-modal use by providing improved bicycle, pedestrian, and transit facilities consistent with local and regional land use and transportation plans.

2.2 Study Area

The study area for the Section 4(f) re-evaluation is a rectangular shaped polygon straddling SR-108 between approximately 300 North in Clinton to 6000 South in Roy. Section 4(f) resources were inventoried for all properties adjacent to the existing right-of-way as well as properties adjacent to east-west roads at signalized intersections within 300 feet of the intersection, and within 800 feet of the major intersecting road, 1800 South (SR-37). See **Figures 2 and 3** for maps of the Section 4(f) re-evaluation study area.

2.3 Nature of Proposed Action

In the 2008 ROD, UDOT and FHWA selected the Minimize 4(f) Impacts Alternative, which involves widening SR-108 to a 110-foot wide, five-lane cross-section. The alignment of the selected alternative meandered through portions of the corridor to minimize impacts to Section 106 and Section 4(f) properties and was selected over a second alternative known as the West Alternative. The Minimize 4(f) Impacts Alternative constitutes the Proposed Action for the current re-evaluation with a few minor changes. Since the 2008 ROD, additional architectural structures have become eligible for listing on the National Register of Historic Places and qualify as historic sites under Section 4(f). Additionally, some previously eligible structures have subsequently been demolished. Therefore, efforts were made during the re-evaluation process to adjust the alignment of the Proposed Action to minimize impacts to the newly identified historic sites while still minimizing impacts to the previously evaluated Section 4(f) properties.

The Proposed Action, as selected in the 2008 ROD, included the following elements:

- A five-lane (110-foot) cross-section consisting of four 12-foot travel lanes, a 14-foot median (either a two-way left-turn lane or a raised center median, depending on the location), 8-foot shoulders, a 4-foot bicycle lane in each direction, 2.5-foot curb and gutter, 4.5-foot park strips, 4-foot sidewalks, and 1 foot between the back of the sidewalk and the edge of the right-of-way;
- Improved intersections with dedicated right-turn and left-turn lanes. Dual left-turn lanes would be provided at 1700 South (southbound only), 1800 North, 5600 South, 4800 South, and 1900 West (eastbound only); and
- Enough shoulder width to accommodate bus service.

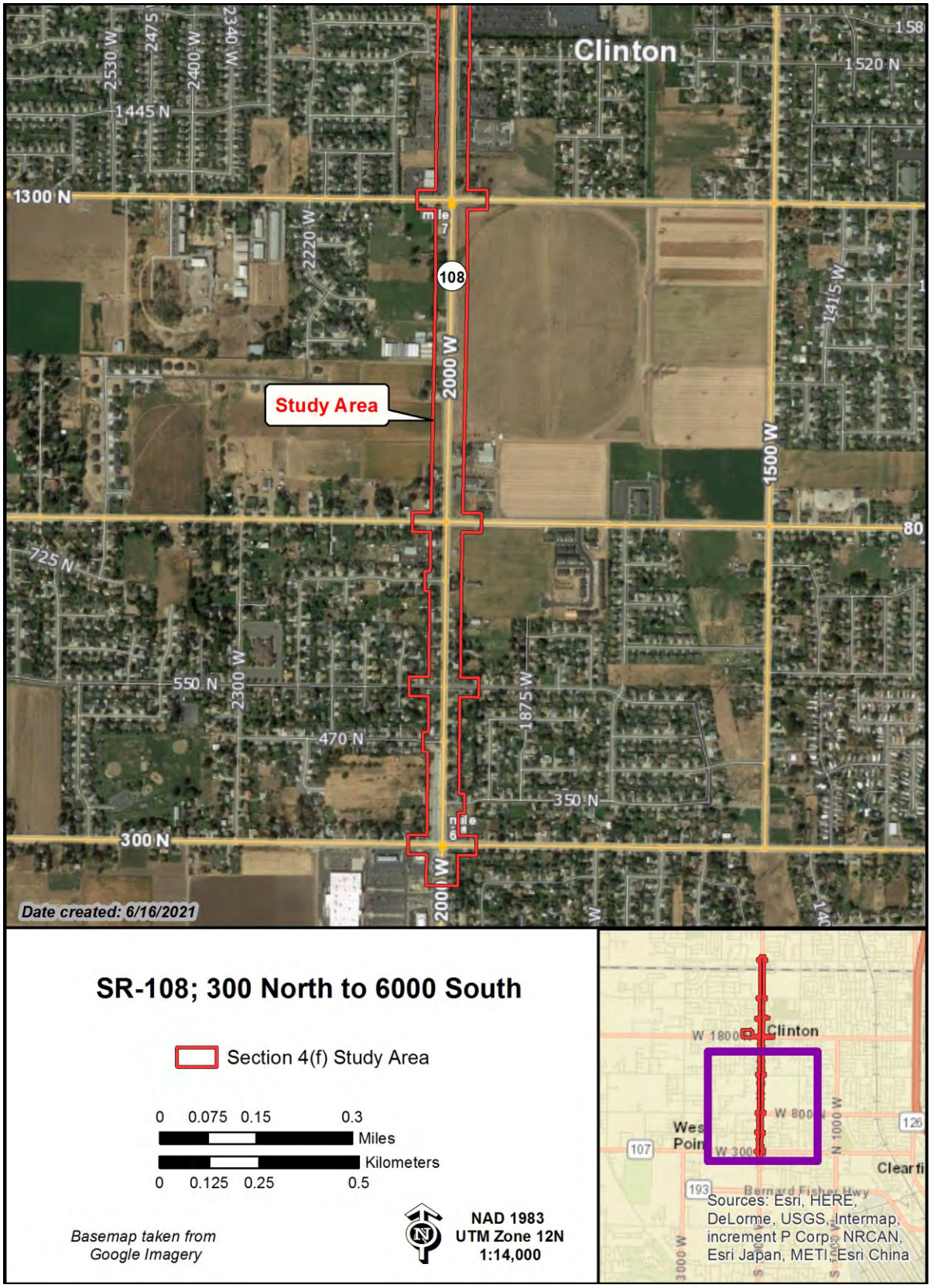


Figure 2. Study area, Map 1 of 2

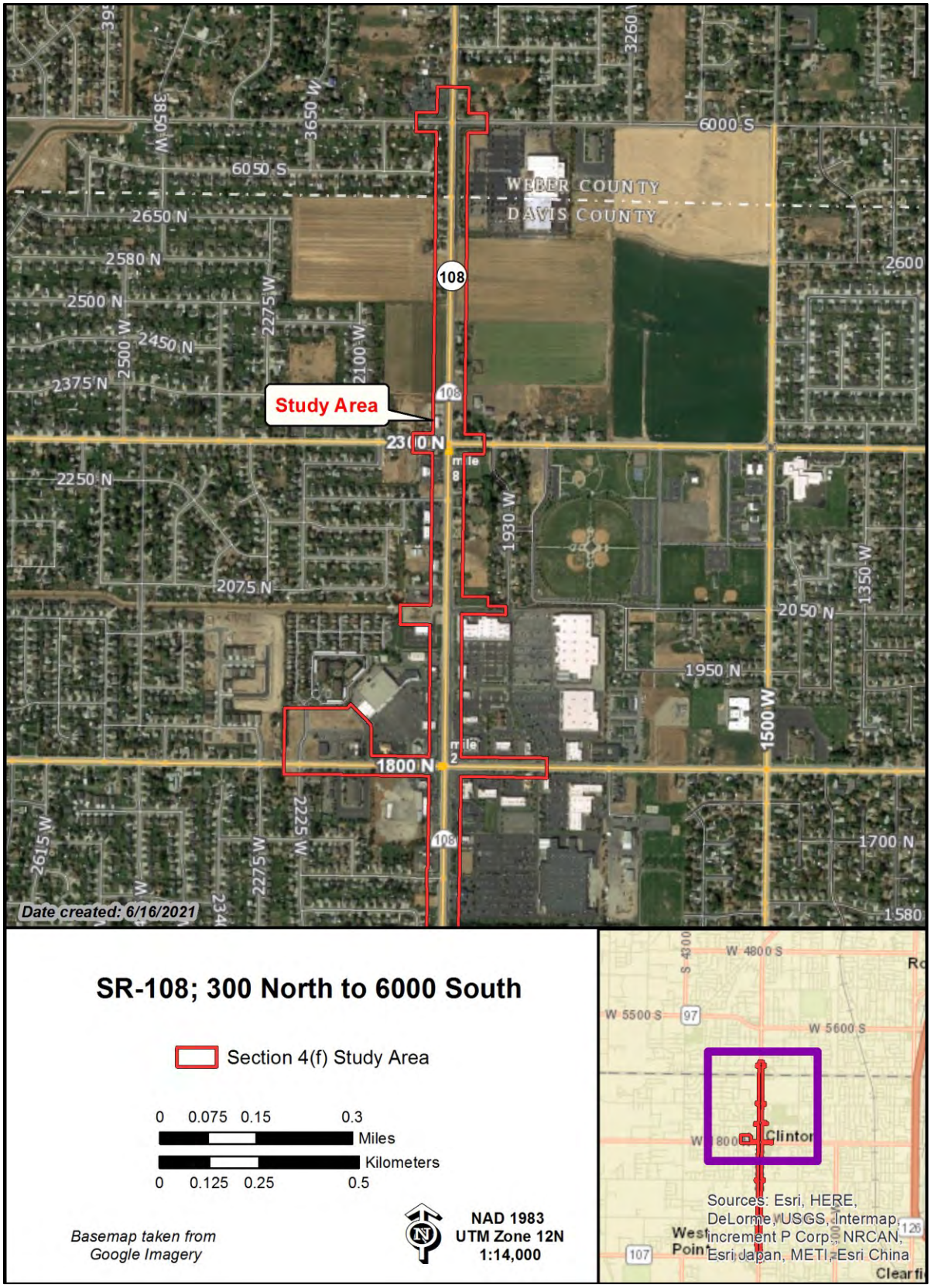


Figure 3. Study area, Map 2 of 2

Updated traffic data was obtained in 2020 as part of the re-evaluation to consider the ability of the roadway design to meet existing traffic needs and to update design year traffic performance of the Proposed Action. Adjustments were then made to the Proposed Action in terms of turn lane lengths to better accommodate current and newly modeled turning traffic volumes. UDOT also proposes to include a 10- to 12-foot wide protected multi-use path on the west side of the corridor in lieu of providing the previously approved 4-foot striped bike lanes in each direction. These modifications do not increase the overall 110-foot width as approved in the 2008 ROD and Final Section 4(f) evaluation. Changes to the proposed action are consistent with the FEIS project purpose and need.

3.0 REGULATORY SETTING

As previously noted, the Proposed Action may use federal funding through the Federal Aid Highway Program administered by the FHWA. Therefore, it must comply with Section 4(f). Section 4(f) of the U.S. Department of Transportation Act of 1966 is codified at 49 USC 303, and 23 USC 138 and declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and refuges, and historic sites" during transportation project development and implementation. The law is implemented by the FHWA through regulations in 23 CFR 774 and through guidance issued in the "Section 4(f) Policy Paper" (FHWA, July 2012). Pursuant to the MOU between the FHWA and UDOT that assigns responsibility for compliance with NEPA, NHPA, and Section 4(f) to UDOT, UDOT is responsible for the preparation of Section 4(f) evaluations following the FHWA regulations and guidance.

Resources to which Section 4(f) applies are as follows:

- publicly owned land of a park or recreation area of national, state, or local significance;
- publicly owned land of a wildlife refuge of national, state, or local significance; or
- land from a historic site of national, state, or local significance—defined as properties that are eligible for or listed on the National Register of Historic Places (NRHP) (per 36 CFR 800), unless the FHWA determines that an exception applies.

Section 4(f) does not apply if the official(s) with jurisdiction over a public park, recreation area, or wildlife refuge determine(s) that the property, considered in its entirety, is not significant, and the FHWA or its assignee (i.e., UDOT) has reviewed and approved that determination. In the absence of a determination of significance by the officials with jurisdiction, the FHWA/UDOT presumes the resource is significant but conducts an independent evaluation before making a final determination of significance.

3.1 Requirements for Section 4(f) Evaluation and Approval of Section 4(f) Uses

Section 4(f) considers impacts to publicly owned recreational properties or wildlife refuges and to historic sites in terms of "use." "Use" of a Section 4(f) property occurs when:

1. Land from a publicly owned recreational property or wildlife refuge or from a historic site is permanently incorporated into a transportation facility;

2. There is a temporary occupancy of land from a publicly owned recreational property or wildlife refuge or from a historic site and that occupancy is adverse in terms of Section 4(f)'s preservation purpose as determined by criteria in 23 CFR 774.13(d); or

3. There is a "constructive use" of a publicly owned recreational property or wildlife refuge or a historic site as determined by the criteria in 23 CFR 774.15.

As stated in 23 CFR 774.3:

> The [FHWA or its assignee] may not approve the use, as defined in § 774.17, of Section 4(f) property unless a determination is made under paragraph (a) or (b) of this section.
>
> (a) The [FHWA or its assignee] determines that:
>
> 1. There is no feasible and prudent avoidance alternative, as defined in § 774.17, to the use of land from the property; and
>
> 2. The action includes all possible planning, as defined in § 774.17, to minimize harm to the property resulting from such use; or
>
> (b) The [FHWA or its assignee] determines that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a *de minimis* impact, as defined in § 774.17, on the property.

Where there are uses with greater than *de minimis* impact to Section 4(f) resources and no feasible and prudent avoidance alternative can be identified, UDOT may approve only the alternative that causes the least overall harm in light of Section 4(f)'s preservation purpose and includes all possible planning to minimize harm to Section 4(f) resources.

Feasibility and prudence, as referenced in the discussion above, are defined in 23 CFR 774.17 as follows:

> (1) A feasible and prudent avoidance alternative avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property.
>
> (2) An alternative is not feasible if it cannot be built as a matter of sound engineering judgment.
>
> (3) An alternative is not prudent if:
>
> (i) It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;

(ii) It results in unacceptable safety or operational problems;

(iii) After reasonable mitigation, it still causes:

(A) Severe social, economic, or environmental impacts;

(B) Severe disruption to established communities;

(C) Severe disproportionate impacts to minority or low income populations; or

(D) Severe impacts to environmental resources protected under other Federal statutes;

(iv) It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;

(v) It causes other unique problems or unusual factors; or

(vi) It involves multiple factors in paragraphs (3)(i) through (3)(v) of this definition, that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

3.1.1 Special Considerations for Findings of De Minimis Use

Uses with *de minimis* impacts may be approved without consideration of alternatives or least overall harm. Prior to making a *de minimis* impact finding, UDOT (as FHWA's assignee) must carry out the following coordination, as stated in 23 CFR 774.5(b):

(1) For historic properties:

(i) The consulting parties identified in accordance with 36 CFR § 800 must be consulted; and

(ii) [UDOT] must receive written concurrence from the pertinent State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO), and from the Advisory Council on Historic Preservation (ACHP) if participating in the consultation process, in a finding of "no adverse effect" or "no historic properties affected" in accordance with 36 CFR § 800. The [UDOT] shall inform these officials of its intent to make a *de minimis* impact determination based on their concurrence in the finding of "no adverse effect" or "no historic properties affected."

(iii) Public notice and comment, beyond that required by 36 CFR § 800, is not required.

(2) For parks, recreation areas, and wildlife refuges:

(i) Public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the property must be provided. This requirement can be satisfied in conjunction with other public involvement procedures, such as a comment period provided on a NEPA document.

(ii) [UDOT] shall inform the official(s) with jurisdiction of its intent to make a *de minimis* impact finding. Following an opportunity for public review and comment [described above in (b)(2)(i)], the official(s) with jurisdiction over the Section 4(f) resources must concur in writing that the project will not adversely affect the activities, features, or attributes that make the property eligible for Section 4(f) protection. This concurrence may be combined with other comments on the project provided by the official(s).

3.1.2 Least Overall Harm

When no feasible and prudent avoidance alternative can be found for uses of Section 4(f) resources greater than a *de minimis* impact, UDOT may select from the remaining alternatives that use Section 4(f) property the alternative with the least overall harm. "Least overall harm" is determined by balancing the following factors:

- The ability to mitigate adverse impacts to each Section 4(f) property, including any measures that result in benefits to the property;
- The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection;
- The relative significance of each Section 4(f) property;
- The views of the official(s) with jurisdiction over each Section 4(f) property;
- The degree to which each alternative meets the purpose and need for the project;
- The magnitude, after reasonable mitigation, of any adverse impacts to resources not protected by Section 4(f); and
- Substantial differences in costs among the alternatives (see 23 CFR 774.3(c)).

If the assessment of overall harm finds that two or more alternatives are substantially equal, UDOT can approve any of those alternatives (Section 4(f) Policy Paper 3.3.3.2).

4.0 Identification of Section 4(f) Properties and Determinations of Use

To identify Section 4(f) properties that could be used by the project, UDOT took several research steps. These are discussed in more detail below.

4.1 Publicly Owned Parks, Recreation Areas, Wildlife and Waterfowl Refuges

UDOT conducted records reviews and on-site visits and carried out correspondence with city and county officials to identify any publicly owned parks, recreation areas, wildlife refuges, and waterfowl refuges in the study area. One publicly owned multi-use trail—the Clinton Community Trail (sometimes referred to as the Clinton Nature Trail)—is present on the project corridor. The Clinton Community Trail, which falls under the jurisdiction of Clinton City, is publicly owned, open to the public, and considered a significant recreational resource with the

City's community plan. As such, it qualifies as a Section 4(f) property. This trail is located within the existing and future publicly owned right-of-way for SR-108. At present, the trail enters the right-of-way from the east at approximately 2050 North SR-108 then turns south and incorporates the existing public sidewalk along the east side of SR-108 to the intersection with 1800 North. Here, the trail crosses in the public crosswalk then turns north and incorporates the existing sidewalk along the west side of SR-108 to approximately 1980 North, where it turns west and exits the right-of-way on the dedicated trail again (see **Figures 4 and 5**, below). Clinton City's community plan calls for construction of a mid-block trail crossing on SR-108 in the vicinity of where the two existing trail segments east and west of SR-108 join the existing sidewalks along the road. This proposed crossing is considered by the City as a future improvement to the trail but is not currently funded or scheduled for construction.

4.2 Historic Sites

The UDOT conducted a records review and field inventory to identify potential historic sites in the study area. As noted previously, a resource qualifies as a "historic site" under Section 4(f) if it is either listed on or has been determined eligible for the listing on the NRHP through the Section 106 process (i.e., 36 CFR 800). Per 36 CFR 800, determinations of NRHP eligibility and findings of effect are made in consultation with the State Historic Preservation Office (SHPO) and other consulting parties, as appropriate.

Through its efforts, UDOT identified 34 cultural resource sites in the study area. Of these, 32 are historical buildings, and 2 are archaeological resources, and of these 34 resources, 32—all historical buildings—qualify as historic sites. Thirteen of the sites are located on the east side of SR-108 and 19 are located on the west side (see **Figures 4 and 5** for their locations).

4.3 Determinations of Section 4(f) Use

As required by 36 CFR 800, the UDOT consulted with the officials with jurisdiction over Section 4(f) resources that could be affected by the Proposed Action and its alternatives. Clinton City is the official with jurisdiction over the Clinton Community Trail, and the Utah SHPO is the official with jurisdiction over historic sites. Descriptions of that consultation and the resulting determinations of use are provided below.

4.3.1 Publicly Owned Parks, Recreation Areas, Wildlife and Waterfowl Refuges

Implementation of the Proposed Action would require reconstruction of the sidewalks currently incorporated into this trail on both sides of SR-108 and reconstruction of the signalized intersection at 1800 North where the trail route currently crosses SR-108. The sidewalks, and therefore this portion of the trail, would see restricted access and/or designated detours during construction, and sidewalks and the 1800 North signalized crossing would be re-established and open to public use upon completion of that construction. Additionally, the Proposed Action would not preclude construction of the City's planned mid-block crossing.

Based on the anticipated short duration impacts to the Clinton Community Trail and the fact that the magnitude of changes to the trail would be minimal, the anticipated physical impacts to the trail would not be adverse, and the trail would be fully restored upon construction of the

Figure 4. Location of Section 4(f) resources, Map 1 of 2

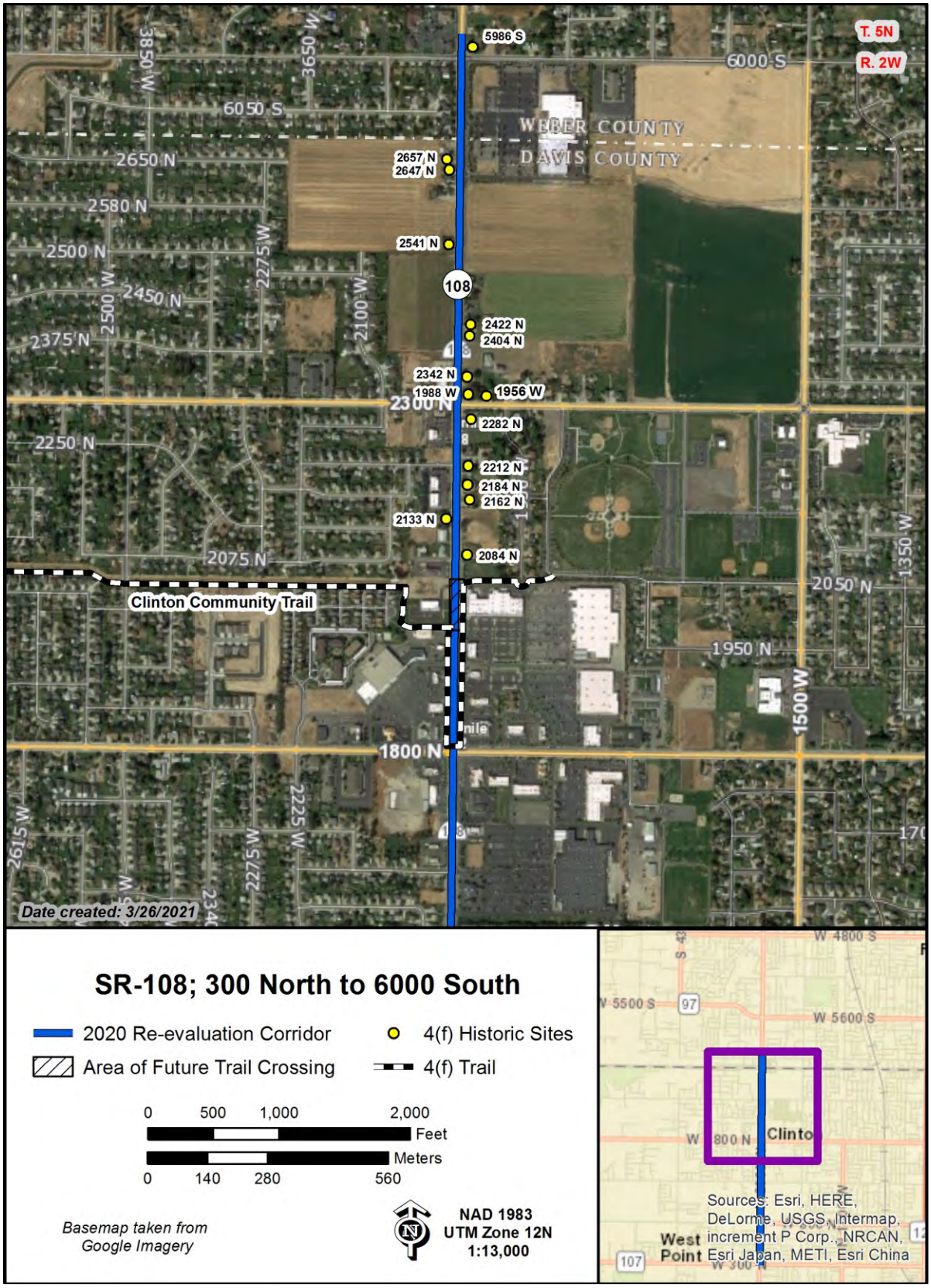


Figure 5. Location of Section 4(f) resources, Map 2 of 2

Proposed Action, UDOT has made a determination that no Section 4(f) use of the trail would occur and that the anticipated effects qualify as temporary occupancy under the criteria set forth in 23 CFR 774.13(d). UDOT consulted with Clinton City regarding this finding, and the City concurred with the determination of temporary occupancy. Documentation of the City's concurrence is provided in **Appendix A**.

4.3.2 Historic Sites

UDOT consulted with the Utah SHPO regarding the anticipated effects of the project on the historic sites in the study area. No other consulting parties participated in the Section 106 process for the re-evaluation. UDOT determined that seven of the historical building sites would be impacted to such an extent—including demolition of the NRHP-eligible buildings—that the effects would be considered ***adverse*** under 36 CFR 800. UDOT also determined that impacts to 22 of the sites would be sufficiently minor as to constitute ***no adverse effect*** under 36 CFR 800. The remaining three properties—2032 West 300 North, 2048 West 300 North, and 1956 West 2300 North—would be avoided in their entirety by the Proposed Action.

As noted above, determinations of adverse effect from the Proposed Action were made for seven properties under 36 CFR 800. Based on these determinations, UDOT also has made findings of a use with greater than *de minimis* impact for each of these sites under Section 4(f). Pursuant to the finding of no adverse effect for 22 additional sites under 36 CFR 800, UDOT has made findings of *de minimis* impact for the use of these sites under Section 4(f). There would be no Section 4(f) use of the remaining three historic sites at 2032 West 300 North, 2048 West 300 North, and 1956 West 2300 North under the Proposed Action. The nature of the Section 4(f) resources, the anticipated project impacts to them, and the determinations of Section 4(f) use are summarized below in **Table 1.** The anticipated impacts are depicted in **Figures 6–15 in Appendix B**. All of these determinations were documented in a Determination of Eligibility/Finding of Effect (DOE/FOE) executed by UDOT in consultation with the aforementioned parties (see **Appendix A**). The Utah SHPO concurred with UDOT's findings.

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Table 1. Historic Sites with Determinations of Section 4(f) Impacts

In 2008 FEIS?	*Address*	*Description*	*Nature of Effect*	*Section 4(f) Use?*	*Section 4(f) Impact*
No	475 N. 2000 W.	c. 1970 Ranch type / Ranch-Rambler style	Demolition of the structure	**Yes**	**Greater than *de minimis***
No	525 N. 2000 W.	c. 1965 Ranch type / Ranch-Rambler style	Demolition of the structure	**Yes**	**Greater than *de minimis***
No	678 N. 2000 W.	c. 1975 Split Entry type / Split Entry and Ranch-Rambler styles	Demolition of the structure	**Yes**	**Greater than *de minimis***
Yes	817 N. 2000 W.	c. 1950 Ranch type / Ranch-Rambler style	Partial acquisition: 974 sq. ft. (0.02 acres) out of 1.023 acres. Temporary Construction Easement (TCE): 2,334 sq. ft.	Yes	*de minimis*
Yes	914 N. 2000 W.	c. 1953 Ranch type / Ranch-Rambler style	Demolition of the structure	**Yes**	**Greater than *de minimis***
Yes	2133 N. 2000 W.	c. 1921 Bungalow type / Bungalow style	Demolition of the structure	**Yes**	**Greater than *de minimis***
Yes	1988 W. 2300 N.	c. 1934 Period Cottage type / Tudor Revival style	Demolition of the structure	**Yes**	**Greater than *de minimis***
Yes	2541 N. 2000 W.	c. 1949 WWII-Era Cottage type / Minimal Traditional style	Partial acquisition: 3,443 sq. ft. (0.08 acres) out of 0.5 acres. TCE: 1,148 sq. ft.	Yes	*de minimis*
Yes	2647 N. 2000 W.	c. 1924 Bungalow type / Bungalow and Prairie School styles	Partial acquisition: 858 sq. ft. (0.02 acres) out of0.225 acres. TCE: 645 sq. ft.	Yes	*de minimis*
Yes	5986 S. 3500 W.	c. 1912 Hall-Parlor type / Classical: Other style	Demolition of the structure	**Yes**	**Greater than *de minimis***
No	561 N. 2000 W.	c. 1965 Ranch type / Ranch-Rambler style	Partial acquisition: 3,263 sq. ft. (0.07 acres) out of 0.42 acres. TCE: 1,174 sq. ft.	Yes	*de minimis*
Yes	647 N. 2000 W.	c. 1952 WWII-Era Cottage type / Minimal Traditional style	Partial acquisition: 1,207 sq. ft. (0.03 acres) out of 0.34 acres. TCE: 1,027 sq. ft.	Yes	*de minimis*
Yes	667 N. 2000 W.	c. 1949 Early Ranch type / Early Ranch style	Partial acquisition: 749 sq. ft. (0.02 acres) out of 0.35 acres. TCE: 1,375 sq. ft.	Yes	*de minimis*
No	685 N. 2000 W.	c. 1965 Ranch type / Ranch-Rambler style	Partial acquisition: 541 sq. ft. (0.01 acres) out of 0.50 acres. TCE: 1,043 sq. ft.	Yes	*de minimis*
Yes	755 N. 2000 W.	c. 1948 WWII-Era Cottage type / Minimal Traditional style	No permanent acquisition. TCE: 1,340 sq. ft.	Yes	*de minimis*

Table 1. Historic Sites with Determinations of Section 4(f) Impacts

In 2008 FEIS?	*Address*	*Description*	*Nature of Effect*	*Section 4(f) Use?*	*Section 4(f) Impact*
Yes	851 N. 2000 W.	c. 1945 Early Ranch type / Early Ranch style	Partial acquisition: 553 sq. ft. (0.01 acres) out of 1.56 acres. TCE: 1,723 sq. ft.	Yes	*de minimis*
Yes	881 N. 2000 W.	c. 1953 Early Ranch type / Early Ranch style	Partial acquisition: 1,459 sq. ft. (0.03 acres) out of 0.47 acres. TCE: 1,871 sq. ft.	Yes	*de minimis*
Yes	1141 N. 2000 W.	c. 1958 Early Ranch type / Early Ranch style	No permanent acquisition. TCE: 3,580 sq. ft.	Yes	*de minimis*
Yes	1197 N. 2000 W.	c. 1952 Other Residential type / Ranch-Rambler style	No permanent acquisition. TCE: 513 sq. ft.	Yes	*de minimis*
Yes	1253 N. 2000 W.	c. 1958 Ranch type / Ranch-Rambler style	No permanent acquisition. TCE: 1,186 sq. ft.	Yes	*de minimis*
Yes	2084 N. 2000 W.	c. 1950 Early Ranch type / Early Ranch style	Partial acquisition: 1,038 sq. ft. (0.03 acres) out of 0.86 acres. TCE: 1,261 sq. ft.	Yes	*de minimis*
Yes	2162 N. 2000 W.	c. 1957 Ranch type / Ranch-Rambler style	Partial acquisition: 588 sq. ft. (0.01 acres) out of 0.88 acres. TCE: 1,262 sq. ft.	Yes	*de minimis*
Yes	2184 N. 2000 W.	c. 1961 Ranch type / Ranch-Rambler and Minimal Traditional styles	Partial acquisition: 425 sq. ft. (0.01 acres) out of 0.89 acres. TCE: 1,274 sq. ft.	Yes	*de minimis*
Yes	2212 N. 2000 W.	c. 1961 Ranch type / Ranch-Rambler and Post-WWII: Other styles	Partial acquisition: 376 sq. ft. (0.01 acres) out of 0.24 acres. TCE: 1,285 sq. ft.	Yes	*de minimis*
Yes	2282 N. 2000 W.	c. 1937 Early Ranch type / Ranch-Rambler and Post-WWII: Other styles	Partial acquisition: 930 sq. ft. (0.02 acres) out of 1.77 acres. TCE: 2,861 sq. ft.	Yes	*de minimis*
Yes	2342 N. 2000 W.	c. 1945 WWII-Era Cottage type / Minimal Traditional style	Partial acquisition: 1,822 sq. ft. (0.04 acres) out of 0.38 acres. TCE: 1,207 sq. ft.	Yes	*de minimis*
Yes	2404 N. 2000 W.	c. 1958 Ranch type / Ranch-Rambler style	No permanent acquisition. TCE: 781 sq. ft.	Yes	*de minimis*

Table 1. Historic Sites with Determinations of Section 4(f) Impacts

In 2008 FEIS?	*Address*	*Description*	*Nature of Effect*	*Section 4(f) Use?*	*Section 4(f) Impact*
Yes	2422 N. 2000 W.	c. 1961 Ranch type / Ranch-Rambler style	No permanent acquisition. TCE: 786 sq. ft.	Yes	*de minimis*
No	2657 N. 2000 W.	c. 1972 Split Entry type / Ranch-Rambler and Split Entry styles	Partial acquisition: 6,022 sq. ft. (0.14 acres) out of 1.44 acres. TCE: 1973 sq. ft.	Yes	*de minimis*
No	2048 W. 300 N.	c. 1969 Ranch type / Ranch-Rambler style	Avoided	No	N/A
No	2032 W. 300 N.	c. 1969 Split Entry type / Ranch-Rambler and Split Entry styles	Avoided	No	N/A

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5.0 AVOIDANCE ALTERNATIVES, MEASURES TO MINIMIZE HARM, AND LEAST OVERALL HARM

As part of the re-evaluation for this segment of the SR-108 corridor, UDOT determined that the Proposed Action would result in uses with greater than *de minimis* impacts on Section 4(f) properties—specifically, seven historic sites—and uses with *de minimis* impacts to 22 additional historic sites. UDOT also determined that impacts to the Clinton Community Trail (the sole Section 4(f) resource that is not a historic site) would qualify as temporary occupancy; therefore, no additional consideration of effects to this resource need be given. Before UDOT can approve a greater than *de minimis* impact on Section 4(f) resources, feasible and prudent alternatives to avoid that use must be considered. UDOT must also consider measures to minimize harm if avoidance is not feasible and prudent and all options in light of the concept of least overall harm.

Through the 2008 ROD for the EIS addressing the longer SR-108 Project, FHWA approved the Minimize 4(f) Impacts Alternative. In selecting this alternative, FHWA determined that (a) no feasible and prudent avoidance alternative existed; (b) UDOT had considered and, where possible, incorporated all reasonable measures to minimize harm to Section 4(f) resources; and (c) the Minimize 4(f) Impacts Alternative (i.e., the current Proposed Action) was the alternative with the least overall harm.

5.1 Avoidance Alternatives

The 2008 Section 4(f) Evaluation for the overall SR-108 Project examined the potential for feasible and prudent avoidance alternatives, including consideration of:

- An off-corridor avoidance alternative, examining the feasibility of improving the following north-south roads instead of SR-108:
    - 1000 West
    - 3000 West (with east-west connectors)
- A narrower roadway cross-section; and
- A new in-corridor avoidance alternative.

The 2008 Section 4(f) Evaluation found that off-corridor alternatives and any narrower roadway cross-section alternative would result in greater uses of Section 4(f) properties or would not meet the purpose of and need of the project, or both. Regarding in-corridor avoidance, the 2008 analysis concludes (in Section 5.5.4.3), "because the Minimize 4(f) Impacts Alternative was developed to minimize 4(f) uses of properties, no avoidance alternatives were prudent or feasible for this alternative. … [Attempts to find] avoidance alternatives would collectively result in not only more 4(f) impacts but also in more overall residential and business relocations, which would result in unnecessary and other unacceptable social and economic impacts." In short, no feasible and prudent avoidance alternative was identified. The 2008 analysis remains current and applicable for this re-evaluation, and no further examination of alternatives that would avoid Section 4(f) properties altogether is necessary.

The discussion in Section 4.3 of the uses of the Section 4(f) properties, including those newly identified as part of the current re-evaluation, includes the potential avoidance of individual properties by altering the alignment. Any such alignment shift could be considered as a measure to minimize harm to Section 4(f) properties, but no value was found in shifting the Proposed Action beyond the alignment evaluated in the 2008 FEIS or in adopting any of the avoidance alternatives considered in that FEIS. Additional alterations to the Proposed Action to avoid properties also would not meet sound engineering judgment. Therefore, this re-evaluation has concluded, based on the same rationale and analysis used in the 2008 Section 4(f) analysis, that there are no feasible or prudent avoidance alternatives for the any of the previously and newly identified Section 4(f) properties that would have Section 4(f) use.

5.2 Measures to Minimize Harm

Design modifications, including minor shifts of the roadway alignment, reductions in the widths of travel lane, shoulders, sidewalks, and utility corridors, and elimination of bike lanes were evaluated in the 2008 FEIS and were implemented where feasible as part of the approved Minimize Section 4(f) Impacts Alternative, a portion of which constitutes the current Proposed Action. Some of these minimization measures were not adopted as they resulted in the placement of travel lanes sufficiently close to residential structures to constitute an unacceptable safety concern and in the elimination of desired pedestrian features, such as ADA-compliant sidewalks and protected bike lanes. Also, even with the minimized cross-section, impacts to Section 4(f) properties could not be avoided to a sufficient degree to avoid the use of these properties. As such, the Minimize Section 4(f) Impacts Alternative was designed using FHWA standard geometry. Additional measures were considered during the current re-evaluation to minimize impacts to Section 4(f) properties while still ensuring pedestrian and vehicular safety and meeting the purpose and need of the project. These measures included minor shifts to the SR-108 alignment, eliminating the previously approved two bike lanes in favor of a single multi-use trail, installation of retaining walls at the back of sidewalk to minimize right-of-way acquisition, reduction in park strip width, and eliminating the center turn lane. All but the last two of these measures were incorporated into the design of the current Proposed Action. The two measures that were considered but not implemented were eliminated due to a combination of safety concerns and failure to meet the purpose and need of improved traffic flow.

The mitigation (see Section 5.3.1) to be implemented for the greater than *de minimis* impacts discussed above minimizes harm to the Section 4(f) properties to the extent practical and demonstrates compliance with the "all possible planning to minimize harm" requirements of the Section 4(f) regulations (see 23 CFR 774.3(a)(2)).

5.3 Least Overall Harm Analysis

Because there are no feasible and prudent avoidance alternatives to the Proposed Action, and because for each of the remaining alternatives there would be uses with greater than *de minimis* impacts even after implementation of measures to minimize harm, UDOT must select the alternative that would result in the least overall harm, as described in Section 3.1.2, above.

Section 5.6 of the 2008 Section 4(f) Evaluation contained the least-overall-harm analysis for the project alternatives and examined each of the seven factors required in such analyses. The analysis concluded that the Minimize 4(f) Impacts Alternative (i.e., the current Proposed Action) would cause the least overall harm. The minor changes to the design of the Proposed Action as part of the current re-evaluation do not negate or otherwise alter that determination.

The West Alternative considered in the 2008 FEIS and Section 4(f) Evaluation was found to have more residential and business relocations than the Proposed Action and nearly double the number of Section 4(f) uses. The re-evaluation documented seven additional Section 4(f) resources (i.e., newly eligible historic sites) on the west side of SR-108 as well. When these additional resources are taken into account, along with previous historic sites on the west side of SR-108 that have been demolished since the 2008 FEIS and Section 4(f) Evaluation, the West Alternative would now have 16 uses of greater than *de minimis* impacts in relation to historic sites compared to the seven such uses under the Proposed Action. Impacts to other non-Section 4(f) resources were found to be substantially similar between the two alternatives.

5.3.1 Significance, Mitigation, and Severity of Section 4(f) Harm

As discussed in Section 3.1.2, above, least overall harm is considered within the context of several factors, including the significance of the Section 4(f) resource, the ability to mitigate the adverse impacts to the resource, and the relative severity of the remaining harm to the resource after reasonable mitigation is applied.

As stated previously, there are 32 Section 4(f) resources in the study area. Section 4(f) applies to all of them. The Proposed Action would have uses with a greater than *de minimis* impact on seven properties and uses with *de minimis* impacts on 22 properties. Three historic sites would be avoided in their entirety.

The significance of the historic sites along the re-evaluation project corridor was determined using the criteria set forth in 36 CFR 60 and National Register Bulletin 15 in conjunction with the Utah SHPO's architectural resource rating system. All of these sites were determined by UDOT, in consultation with the Utah SHPO and other consulting parties, to be significant for the same reasons and at the same level. As such, all of the historic sites, both those impacted by the Proposed Action and those avoided by it, are considered equally significant.

The 2008 FEIS and Section 4(f) Evaluation considered an alternative known as the West Alternative, which shifted the entire project alignment and all impacts to the west side of SR-108 as a potential means of minimizing harm to Section 4(f) resources and other resources along the project corridor. This alternative was considered heavily in the analysis of least overall harm but was found to have more Section 4(f)uses and impacts that the Proposed Action. This finding holds true within the context of the re-evaluation given that a greater number of Section 4(f) historic sites, including those newly identified as part of the re-evaluation, are located along the west side of the SR-108 project corridor than the east side. As noted above, the West Alternative would have 16 uses with greater than *de minimis* impacts to historic sites compared to seven such uses under the Proposed Action.

Mitigation would be completed for the historic sites incurring greater than *de minimis* impact from the Proposed Action. The nature of the expected mitigation was determined through the Section 106 process between UDOT, the Utah SHPO, and other consulting parties. A Memorandum of Agreement (MOA) for the overall SR-108 Project was executed in July 1, 2008 as part of the FEIS and ROD. That MOA was amended in 2013 and again in 2016 (see **Appendix A**). The mitigation outlined in the MOA includes intensive-level documentation of the adversely affected (greater than *de minimis*) properties. This existing MOA was amended a third time in conjunction with the current environmental re-evaluation to account for changes in affected resources and includes similar mitigation measures. This mitigation would resolve the adverse effects under the Section 106 process and reduce the severity of the Section 4(f) harm caused by the Proposed Action but not so much as to avoid a greater than *de minimis* impact. The mitigation would be applied equally to all adversely affected historic sites; thus, the remaining harm under Section 4(f) would be equal relative to the affected resources.

5.3.2 Views of Officials with Jurisdiction

As discussed in Section 4.3.1, UDOT consulted with Clinton City regarding the finding that anticipated impacts to the Clinton Community Trail qualify as temporary occupancy under 23 CFR 774.13(d). Also as noted in Section 4.3.1, the City concurred with the determination of temporary occupancy (see correspondence in **Appendix A**).

The only remaining Section 4(f) resources present in the study area are historic sites. Per 23 CFR 774.17, the official with jurisdiction over historic sites—when not located on lands under the oversight of a tribal historic preservation officer—is the SHPO. The Utah SHPO expressed its views on the project and agreed to UDOT's determinations of eligibility and findings of effect and Section 4(f) use for the Proposed Action through written concurrence documented in correspondence dated February 26, 2021 (see **Appendix A**).

5.3.3 Meeting Purpose and Need and Cost

The 2008 FEIS and Section 4(f) Evaluation found no significant cost difference between the Minimize Section 4(f) Impacts (a portion of which constitutes the Proposed Action for the re-evaluation) and the West Alternative. As the components of the Minimize Section 4(f) Impacts Alternative have not changed meaningfully as part of the Proposed Action for the re-evaluation—there was a minor reduction in costs related to eliminating the two bike lanes approved in the 2008 ROD and replacing them with a single multi-use trail—and as construction costs have escalated equally across the Minimize Section 4(f) Impacts Alternative and the West Alternative, the finding of no significant cost difference from the 2008 FEIS and Section 4(f) Evaluation remain valid. Both alternatives would meet the purpose and need of the project equally.

5.3.4 Magnitude of Impacts to Non-Section 4(f) Resources

The 2008 FEIS and Section 4(f) Evaluation evaluated the impact of the Minimize Section 4(f) Impacts Alternative (of which the current Proposed Action was a part) and West Alternative on non-Section 4(f) resources, including farmland, Agriculture Protection Areas, residential and

business relocations, and noise. The analysis found that the West Alternative would have more combined residential and business relocations and greater impact on other non-Section 4(f) resources than the Minimize Section 4(f) Impacts Alternative. A re-evaluation of current conditions shows that areas of agricultural land and several residential properties have been converted to commercial uses since the ROD was issued for the 2008 FEIS. In all, 12 commercial developments have been constructed on the west side of SR-108 since 2008. All of these commercial developments would be impacted by the West Alternative but would not be impacted by the current Proposed Action.

5.3.5 Finding of Least Overall Harm

The 2008 Section 4(f) Evaluation found that the Minimize Section 4(f) Impacts Alternative (i.e., the current Proposed Action) would result in less harm to Section 4(f) resources and fewer business and residential relocations than the West Alternative. It also found that impacts to other resources would be similar between the two with any differences being minor and statistically insignificant. These findings continue to hold true for the current re-evaluation.

Considering the similar impacts to non-Section 4(f) resources among the alternatives, and the ability to substantially and equally mitigate the impacts to each of the Section 4(f) properties regardless of alternative, UDOT has concluded that the Proposed Action constitutes the alternative with the least overall harm.

6.0 COORDINATION

Regulations implementing Section 4(f) require that UDOT coordinate with both the official with jurisdiction over affected Section 4(f) properties and the Department of the Interior (23 CFR 774.5(a)). As noted previously, the only Section 4(f) properties that would have a Section 4(f) use under the Proposed Action are historic sites, and the Utah SHPO is the designated official with jurisdiction. UDOT, on behalf of FHWA, has consulted with the Utah SHPO regarding the overall project, its study area, and the resources proposed for use for transportation purposes, including their NRHP eligibility and the Section 106 findings of effect of the Proposed Action on those properties. The Utah SHPO, on March 4, 2021, signed the determinations of eligibility/findings of effect (DOE/FOE) for the re-evaluation of the Proposed Action, which includes an assessment of these factors, and, in doing so, concurred with all of UDOT's findings and determinations under Section 106 and Section 4(f) regarding that Action. Changes to anticipated effects on historic properties were subsequently identified, and UDOT submitted new consultation to SHPO on March 30, 2021 and again on June 1, 2021 in the form amendments to the DOE/FOE. The June 1 DOE/FOE served only to notify the SHPO of an addition to the survey area within which no additional cultural resources were identified. The Utah SHPO indicated their concurrence with the amended findings in letters dated March 31 and June 2, 2021. The existing MOA for the project, which was signed in July 2008 and amended in 2013 and 2016, was amended again to address all newly identified and revised impacts to historic properties. That amended MOA was signed by UDOT and the Utah SHPO on April 9, 2021. No other non-tribal consulting parties participated in the review of the DOE/FOE or development of the MOA, and none provided comment on the project. Copies of correspondence with the Utah SHPO, including the DOE/FOE documentation, are provided in **Appendix A**.

Numerous Native American tribes have claimed cultural patrimony over lands in the general area of the Proposed Action. These include, but are not limited to, the Confederated Tribes of the Goshute Indian Reservation, the Skull Valley Band of Goshute Indians, the Eastern Shoshone Tribe of the Wind River Reservation, the Shoshone-Bannock Tribes, and the Northwestern Band of Shoshone Nation. UDOT notified and sought consultation with these tribes via letters sent September 15, 2020. To date, none of the tribes have responded to the letters or otherwise raised concerns about the project.

UDOT published an advertisement in the *Ogden Standard-Examiner* newspaper disclosing the effects on historic properties and soliciting public comment. This notice ran from March 6–13. 2021. See **Appendix A** for a copy of the notice. No public comments were received.

This Section 4(f) evaluation was provided to the Department of the Interior for a 60-day review and comment period as required by regulation. The Department's review period extended from April 2 to June 1, 2021. Because the Department did not object or otherwise respond during that 60 day period, UDOT has assumed a lack of objection and will proceed with the Proposed Action as per 23 CFR 774.5(a).

7.0 SECTION 4(F) DETERMINATIONS

Based on the analysis in this Section 4(f) Evaluation, UDOT makes the following determinations:

- The Proposed Action would result in Section 4(f) uses with greater than *de minimis* impacts to seven Section 4(f) properties;
- There is no feasible and prudent alternative that would avoid the use of Section 4(f) properties;
- The Proposed Action would have least overall harm for purposes of Section 774.3(c); and
- The Proposed Action includes all possible planning to minimize harm to the Section 4(f) properties resulting from these uses.

Based on these determinations, UDOT plans to approve and implement the Proposed Action including its uses with greater than *de minimis* impacts on seven Section 4(f) properties.

2000 West (SR-108); 300 North to 6000 South, Davis and Weber Counties, Utah Section 4(f) Re-evaluation

June 2021

APPENDIX A:

CONSULTATION RECORDS

State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director

TERIANNE S. NEWELL, P.E.
Deputy Director of Planning and Investment

LISA J. WILSON, P.E.
Deputy Director of Engineering and Operations

March 15, 2021

Mr. Dave Williams
Director, Public Works Department
Clinton City
1711 West 1740 North
Clinton, UT 84015

RE: UDOT Project No. S-0108(36)6; SR-108; 300 North to 1800 North, Davis County (PIN 15680)
Section 4(f) Temporary Occupancy Concurrence Request

Dear Mr. Dave Williams:

The Utah Department of Transportation (UDOT) is preparing to undertake the subject project and has been coordinating with Clinton City on the proposed design and impacts. **The purpose of this letter is to request your concurrence that impacts to the Clinton Community Trail qualify as temporary occupancy of land that are so minimal as not to constitute a use within the meaning of Section 4(f) of the Department of Transportation Act of 1966, 23 CFR 774.** In accordance with Part 3.2.1 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327* (executed January 17, 2017), the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 4(f) of the Department of Transportation Act of 1966, 23 U.S.C. § 138 (as amended) and 49 U.S.C. § 303 (as amended).

The Final Environmental Impact Statement and Section 4(f) Evaluation (FEIS) for SR-108 in Davis and Weber Counties evaluated the environmental impacts of improving SR-108 from SR-127 (Antelope Drive) to SR-126 (1900 West), an approximately 9.5-mile section of SR-108. The project is being completed through staged construction. With the current project, S-108(36)6 (PIN 15680), UDOT is updating the environmental analysis for the 2.5-mile section of SR-108 (2000 West) through Clinton, between Mile Point 6.0 (300 North in West Point) and Mile Point 8.5 (6000 South in Roy). The project area is illustrated on the attached map. This project is funded for construction to begin in Spring 2022; however, the available funding may only allow for construction of the segment between 300 North and 1800 North at this time.

The Section 4(f) resource affected by this project is the Clinton Community Trail. In various mapping resources, this trail or portions of it have been labeled the Clinton City Nature Trail, Clinton City Park Trail, and/or the Canal Trail. The trail perpendicularly intersects 2000 West at approximately 2050 North. As shown in Clinton City's 2013 General Plan, the trail is connected across 2000 West by use of sidewalks along 2000 West and a crosswalk at the signalized intersection at 1800 North. This is shown in the attached page from the General Plan.

UDOT assumes that the trail is used by the community as a connection to other formal and informal recreation areas. Reconstruction of the intersection at 1800 North and widening of 2000 West at this location may result in detouring and/or temporary access restriction for trail users. When construction is complete, the affected sidewalks and crosswalk at 1800 North will have been restored.

Impacts to trail users will be temporary during construction and will not affect the permanent function of or access to the trail. These impacts are so minimal they do not constitute a use within the meaning of Section 4(f) because the following conditions are satisfied:

1. The duration would be temporary, i.e., less than the time needed for construction of the of project, and there would be no change in ownership of the land;
2. Scope of the work would be minor, i.e., both the nature and the magnitude of the changes to the trail would be minimal;
3. There are no anticipated permanent adverse physical impacts, nor would there be interference with the protected activities, features, or attributes of the properties, on either a temporary or permanent basis;
4. The land being used would be fully restored, i.e., the property will be returned to a condition which is at least as good as that which existed prior to the project.

UDOT is required to consult with the official with jurisdiction over Section 4(f) resources potentially affected by the undertaking. Please review this document and, providing you agree with the findings contained herein, sign and date the signature line at the end of this letter. Should you have any questions or need additional information, please feel free to contact me at 801-910-2035 or lizrobinson@utah.gov.

Sincerely,

Liz Robinson

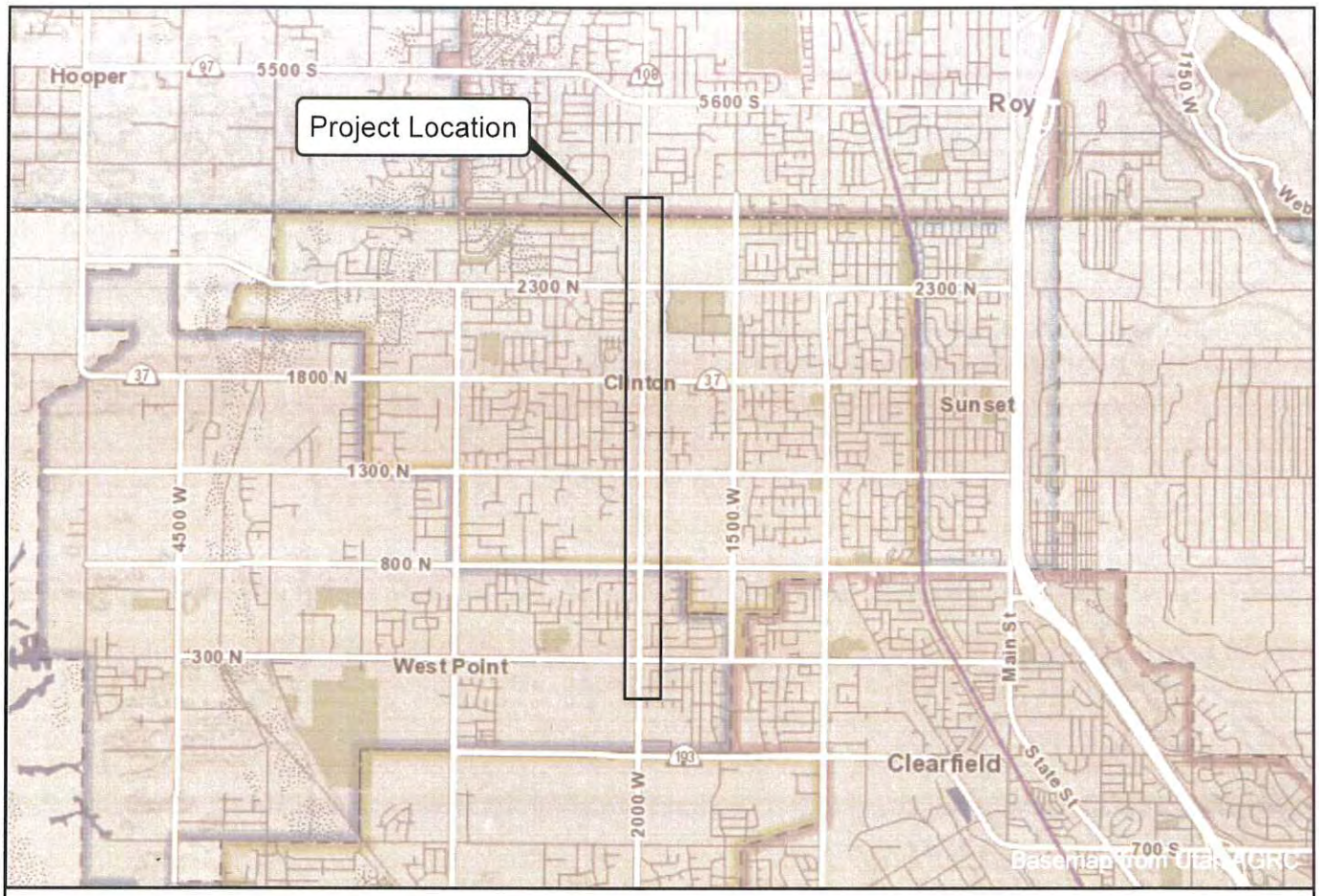
Liz Robinson
Cultural Resources Program Manager
UDOT Central Environmental
Enclosures

Regarding the Clinton Community Trail, located in Clinton City, I concur with the Section 4(f) evaluation described above.

DC Williams — 3-23-2021

Dave Williams
Director, Clinton City Public Works Department

Date



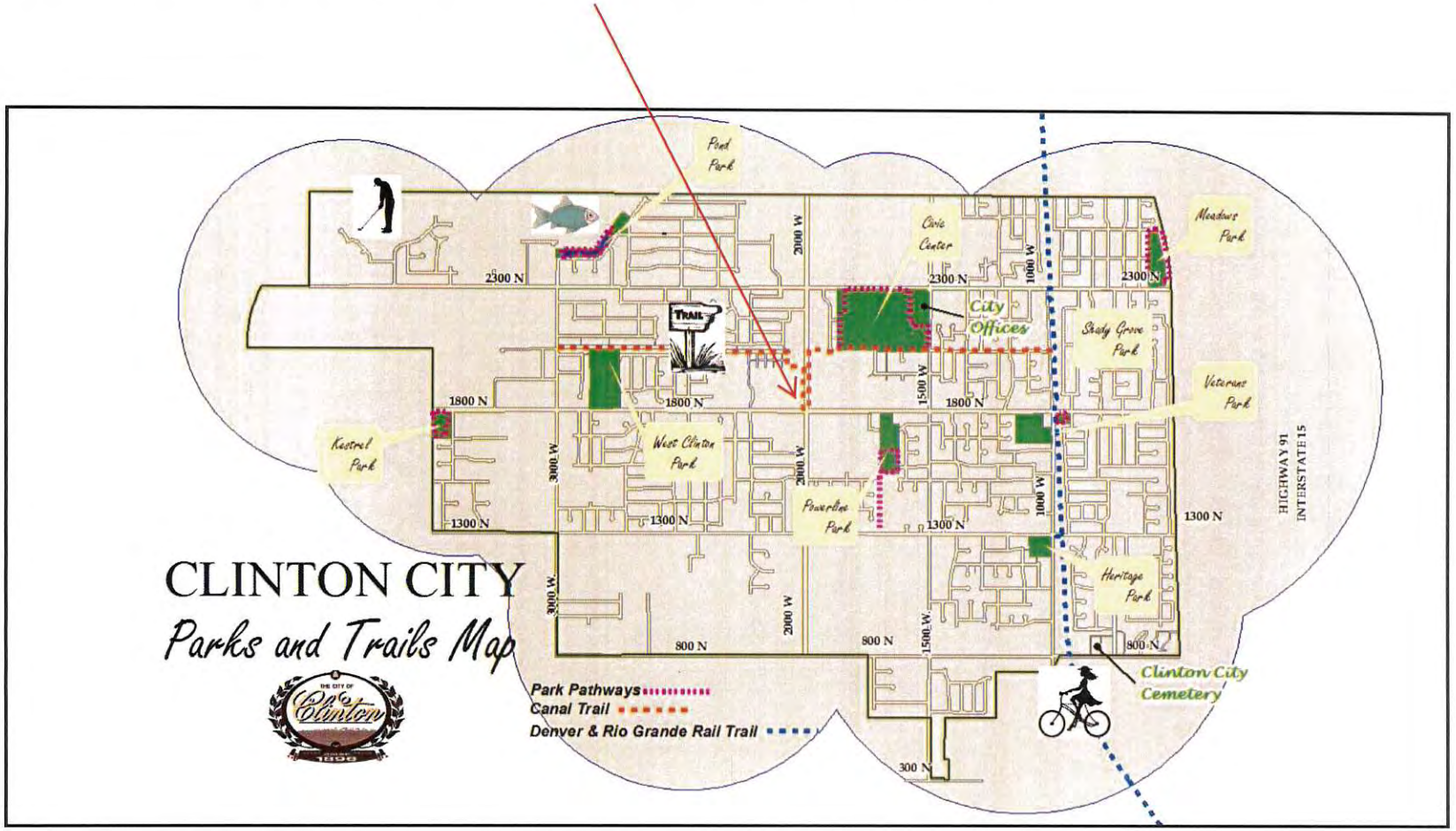
Keeping Utah Moving

2000 West (SR-108); 300 North to 6000 South

Project S-0108(36)6; PIN 15680
Project Location
Davis and Weber Counties, Utah

N

Page 77 from Clinton City, Utah General Plan 2013 showing route of Canal Trail (Clinton Community Trail) with connectivity across 2000 West at the signalized intersection and crosswalk at 1800 North



Public Notice

Standard-Examiner/Daily Herald Legals Print Ad Proof

ADNo: 7139 Customer Number:
Customer Name: Company: DAVID EVANS AND ASSO
Address: 10701 SOUTH RIVER FR SUITE 125
City/St/Zip: SOUTH JORDAN ,UT 84095
Phone: (385) 955-2818 Solicitor: JR
Category: 10 Class: 1000 Rate: LE-0 Start: 3-6-2021 Stop: 3-13-2021
Lines: 79 Inches: 8.23 Words: 403

Credit Card: Expire:
Order Number:
Cost: 590.40 Extra Charges: .00 Adjustments: .00
Payments: .00 Discount: .00
Balance: 590.40

PUBLIC NOTICE
NOTICE TO THE PUBLIC OF GREATER THAN DE MINIMIS FINDING
On proposed 2000 West (SR-108; 300 North to 6000 South) UDOT Project S-0108(36)6, PIN 15680

The Utah Department of Transportation (UDOT) is proposing improvements to a 2.5-mile segment of 2000 West (SR-108) between 300 North in West Point and 6000 South in Roy, through Clinton City. UDOT proposes to widen the segment from two lanes to five lanes, including improvements to signalized intersections and turn lanes. UDOT also proposes to include a 10- to 12-foot-wide multi-use path on the west side of the corridor and a four-foot sidewalk on the east side. The project is funded for construction to begin in Spring 2022. Available funding may only allow for construction of the segment between 300 North and 1800 North at this time. In accordance with Parts 3.1.1 and 3.2 of the Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327 (executed January 17, 2017), the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended.

The purpose of this public notice is to offer an opportunity for public comment, pursuant to Section 6009 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A legacy for Users (SAFETEA-LU) and the associated FHWA guidance dated Dec. 13, 2005, that a Section 4(f) greater than de minimis impact finding is appropriate for 10 architectural properties affected by the proposed improvements. These improvements require an individual evaluation under Section 4(f). This impact also qualifies as an adverse effect under Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 300101 et seq.). Any person or group wishing to submit comments regarding these findings may do so in writing. *The public comment period* is 14 days, beginning from the first date of publication of this notice. Comments should be directed to Liz Robinson, UDOT Cultural Resources Program Manager, UDOT Central Environmental, 4501 S. 2700 W., Box 148450, Salt Lake City, UT 84114-8450, or in the project website comment form https://publicinput.com/UDOT2000West or at 2000west@utah.gov. Letters and communication must be postmarked or submitted by March 20, 2021.

AdNo: 7139

Legal Notice 7139 Published in Standard Examiner on March 6, 13, 2021

MEMORANDUM OF AGREEMENT
BETWEEN
THE FEDERAL HIGHWAY ADMINISTRATION,
AND
THE UTAH STATE HISTORIC PRESERVATION OFFICE
REGARDING
PROJECT #: STP-0108(13)4E;
SR-108 FROM SR-127 TO SR-126; DAVIS AND WEBER COUNTIES, UTAH.

WHEREAS, the Federal Highway Administration (FHWA) has determined that **PROJECT #: STP-0108(13)4E; SR-108 FROM SR-127 TO SR-126; DAVIS AND WEBER COUNTIES, UTAH,** will have an adverse effect on fourteen (14) historic properties eligible for inclusion in the National Register of Historic Places. The FHWA has consulted with the Utah State Historic Preservation Officer (USHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, in accordance with 36 CFR 800.6(a)(1), the FHWA has notified the Advisory Council on Historic Preservation (Council) of its adverse effect determination with specified documentation and the Council has chosen not to participate in the consultation pursuant to 36 CFR 800.6(a)(1)(iii);

WHEREAS, the Utah Department of Transportation (UDOT) has participated in the consultation, and has been invited to concur;

NOW, THEREFORE, the FHWA and the USHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

The FHWA shall ensure that the following measures are carried out:

I. DOCUMENTATION OF HISTORIC PROPERTIES: The UDOT shall record the following fourteen (14) properties listed in Table 1 to the Utah State Intensive Level Survey (ILS) Standards in advance of construction activity. Submittals to the USHPO will include ILS forms and photographs according to USHPO standards:

Table 1. Architectural Properties with Adverse Effects.

Address	Date	Description/Type	USHPO Rating
1663 South 2000 West Syracuse	1926	1-part commercial block exhibiting early/ late 20th century style	Eligible: *Criterion A*
1609 South 2000 West Syracuse	1929	Bungalow style, Foursquare	B-rating
850 South 2000 West, Syracuse	1930	Warehouse, early 20th century style	B-rating
723 South 2000 West, Syracuse	1910	Cross-wing (T-cottage), Victorian style	B-rating
150 South 2000 West, West Point	1955	WWII-era Cottage, general Ranch/Rambler style	B-rating
58 South 2000 West, West Point	1935	Period Cottage, general Period Revival style	B-rating
796 North 2000 West, West Point	1945	WWII-era Cottage of vernacular style	B-rating
1197 North 2000 West, Clinton	1950	Duplex, general Ranch/Rambler style	B-rating
1318 North 2000 West, Clinton	1925	Period Cottage, English Cottage style	A-rating
1693 North 2000 West, Clinton	1945	Early Ranch/Rambler, Early Ranch style	B-rating
1993 North 2000 West, Clinton	1955	WWII-era Cottage, Post-WWII style	B-rating
2133 North 2000 West, Clinton	1920	Bungalow, general Bungalow and Arts and Crafts style	B-rating
5720 South 3500 West, Roy	1955	Contemporary type style	B-rating
3713 Midland Drive, West Haven	1930	Agricultural outbuildings, shed or possible milking barn	B-rating

II. REPORTING: The FHWA shall ensure that any/all reports on activities carried out pursuant to this agreement are provided to the USHPO, the Council, the signatories to this Memorandum of Agreement (MOA), and upon request, to any other interested parties.

III. PERSONNEL QUALIFICATIONS: The FHWA shall ensure that all historic work carried out pursuant to this agreement is completed by or under the direct supervision of a person or persons meeting or exceeding the Secretary of the Interior's Historic Preservation Professional Qualification Standards for History (36 CFR 61 Appendix A).

IV. DURATION: This agreement will be null and void if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, the FHWA may consult with the other signatories to reconsider the terms of the agreement and amend it in accordance with Stipulation VII below.

V. DISCOVERY: In accordance with 36 CFR 800.13(b), the UDOT and the FHWA are providing for the protection, evaluation, and treatment of any historic property discovered prior to or during construction. The UDOT Standard Specifications Section 01355, Part 1.13, Discovery of Historical, Archaeological, or Paleontological Objects, Features, Sites, Human Remains, or Migratory Avian Species will be enforced during this project. This specification stipulates procedures to be followed should any archaeological, historic, paleontological resources, and/or human remains be discovered during construction of the project. These procedures are as follows:

A. Immediately suspend construction operations in the vicinity (minimum 100-ft buffer around the perimeter) of the discovery if a suspected historic, archaeological, or paleontological item, feature, or site is encountered, or if suspected human remains are encountered.

B. Verbally notify the Engineer of the nature and exact location of the findings.

C. The Engineer contacts the UDOT Region staff archaeologist, who will assess the nature of the discovery and determine the necessary course of action.

D. Notify the Engineer who in turn notifies the Region Environmental Manager and the UDOT Wildlife Biologist if bats or migratory birds are discovered on structures.

1. Coordinate to determine the necessary course of action

E. Protect the discovered objects or features and provide written confirmation of the discovery to the Engineer within two calendar days.

F. The Engineer keeps the Contractor informed concerning the status of the restriction.

1. The time necessary for the Department to handle the discovered item, feature, or site is variable, dependent on the nature and condition of the discovered item.
2. The Engineer will provide written confirmation when work may resume in the area.

Should a discovery occur, the FHWA will consult with the USHPO and the Council in accordance with 36 CFR 800.13(b)(3) toward developing and implementing an appropriate treatment plan prior to resuming construction.

VI DISPUTE RESOLUTION: Should any party to this agreement object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, the FHWA shall consult with the objecting parties to resolve the objection. If the FHWA determines, within 30 days, that the objection(s) cannot be resolved, the FHWA will:

A. Forward all documentation relevant to the dispute to the Council in accordance with 36 CFR 800.2(b)(2). Upon receipt of adequate documentation, the Council shall review and advise the FHWA on the resolution of the objection within 30 days. Any comment provided by the Council, and all comments from the parties to the MOA, will be taken into account by the FHWA in reaching a final decision regarding the dispute.

B. If the Council does not provide comments regarding the dispute within 30 days after receipt of adequate documentation, the FHWA may render a decision regarding the dispute. In reaching its decision, the FHWA will take into account all comments regarding the dispute from the parties to the MOA.

C. The FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged. The FHWA will notify all parties of its decision in writing before implementing that portion of the undertaking subject to dispute under this stipulation. The FHWA's decision will be final.

Further, at any time during implementation of the measures stipulated in this agreement should an objection to any such measure be raised by a member of the public, the FHWA shall take the objections into account and consult as needed with the objecting party, the USHPO, or the Council to resolve the objection.

VII AMENDMENTS AND NONCOMPLIANCE: If any signatory to this MOA, including any invited signatory, determines that its terms will not or cannot be carried out or that an amendment to its terms must be made, that party shall immediately consult with the other parties to develop an amendment to this MOA pursuant to 36 CFR 800.6(c)(7) and 800.6(c)(8). The amendment will be effective on the date a copy signed by all of the original signatories is filed with the Council. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation VIII, below.

VIII. TERMINATION: If an MOA is not amended following the consultation set out in Stipulation VII, it may be terminated by any signatory or invited signatory. Within 30 days following termination, the FHWA shall notify the signatories if it will initiate consultation to execute an MOA with the signatories under 36 CFR 800.6(c)(1) or request the comments of the Council under 36 CFR 800.7(a) and proceed accordingly.

Execution of this MOA by the FHWA, the USHPO, and the UDOT, and the submission of documentation and filing of this MOA with the Council pursuant to 36 CFR 800.6(b)(1)(iv) prior to FHWA's approval of this undertaking, and implementation of its terms, serves as evidence that the FHWA has taken into account the effects of this undertaking on historic properties, and has afforded the Council an opportunity to comment on **PROJECT #: STP-0108(13)4E; SR-108 FROM SR-127 TO SR-126; DAVIS AND WEBER COUNTIES, UTAH.**

SIGNATORIES:

THE FEDERAL HIGHWAY ADMINISTRATION

7/1/08

FHWA Division Administrator — Date

FOR

UTAH STATE HISTORIC PRESERVATION OFFICE

6/18/2008

Utah SHPO — Date

INVITED SIGNATORIES:

UTAH DEPARTMENT OF TRANSPORTATION

6/10/08

UDOT Region 1 Director — Date

FIRST AMENDED MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
THE UTAH STATE HISTORIC PRESERVATION OFFICER,
AND THE UTAH DEPARTMENT OF TRANSPORTATION

REGARDING

PROJECT #: STP-0108(13)4E;
SR-108 FROM SR-127 TO SR-126; DAVIS AND WEBER COUNTIES, UTAH.

WHEREAS, the Federal Highway Administration (FHWA) has determined that **PROJECT #: STP-0108(13)4E; SR-108 FROM SR-127 TO SR-126; DAVIS AND WEBER COUNTIES, UTAH,** will have an adverse effect on fourteen (14) historic properties eligible for inclusion in the National Register of Historic Places. The FHWA has consulted with the Utah State Historic Preservation Officer (USHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, a Memorandum of Agreement (MOA) for the project was executed on July 1, 2008 which remains in effect and is attached to this agreement; and

WHEREAS, this amendment serves to extend the duration date of the original MOA by five (5) years; and

WHEREAS, in accordance with 36 CFR 800.6(a)(1), the FHWA has notified the Advisory Council on Historic Preservation (Council) in 2008 of its adverse effect determination with specified documentation and the Council has chosen not to participate in the consultation pursuant to 36 CFR 800.6(a)(1)(iii); and

WHEREAS, the Utah Department of Transportation (UDOT) has participated in the consultation, and has been invited to sign this MOA as an invited signatory; and

NOW, THEREFORE, the FHWA and the USHPO agree that the undertaking shall be implemented in accordance with the stipulations as stated in the original MOA, which are restated below, in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

The FHWA shall ensure that the following measures are carried out:

I. DOCUMENTATION OF HISTORIC PROPERTIES: The UDOT shall record the following fourteen (14) properties listed in Table 1 to the Utah State Intensive Level Survey (ILS) Standards in advance of construction activity. Submittals to the USHPO will include ILS forms and photographs according to USHPO standards:

Table 1. Architectural Properties with Adverse Effects.

Address	Date	Description/Type	USHPO Rating
1663 South 2000 West Syracuse	1926	1-part commercial block exhibiting early/ late 20th century style	Eligible: *Criterion A*
1609 South 2000 West Syracuse	1929	Bungalow style, Foursquare	B-rating
850 South 2000 West, Syracuse	1930	Warehouse, early 20th century style	B-rating
723 South 2000 West, Syracuse	1910	Cross-wing (T-cottage), Victorian style	B-rating
150 South 2000 West, West	1955	WWII-era Cottage, general Ranch/Rambler style	B-rating

Address	Date	Description/Type	USHPO Rating
Point			
58 South 2000 West, West Point	1935	Period Cottage, general Period Revival style	B-rating
796 North 2000 West, West Point	1945	WWII-era Cottage of vernacular style	B-rating
1197 North 2000 West, Clinton	1950	Duplex, general Ranch/Rambler style	B-rating
1318 North 2000 West, Clinton	1925	Period Cottage, English Cottage style	A-rating
1693 North 2000 West, Clinton	1945	Early Ranch/Rambler, Early Ranch style	B-rating
1993 North 2000 West, Clinton	1955	WWII-era Cottage, Post-WWII style	B-rating
2133 North 2000 West, Clinton	1920	Bungalow, general Bungalow and Arts and Crafts style	B-rating
5720 South 3500 West, Roy	1955	Contemporary type style	B-rating
3713 Midland Drive, West Haven	1930	Agricultural outbuildings, shed or possible milking barn	B-rating

II. REPORTING: The FHWA shall ensure that any/all reports on activities carried out pursuant to this agreement are provided to the SHPO, the Council, the signatories to this MOA, and upon request, to any other interested parties.

III. PERSONNEL QUALIFICATIONS: The FHWA shall ensure that all historic work carried out pursuant to this agreement is completed by or under the direct supervision of a person or persons meeting or exceeding the Secretary of the Interior's Historic Preservation Professional Qualification Standards for History (36 CFR 61 Appendix A).

IV. DURATION: This agreement will be null and void if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, the FHWA may consult with the other signatories to reconsider the terms of the agreement and amend it in accordance with Stipulation VII below.

V. DISCOVERY: The following measures regarding inadvertent discoveries of historic properties, archaeological sites, and paleontological resources will be implemented:

A. In accordance with Stipulation XI.B of the *Second Amended Programmatic Agreement among the FHWA, the Utah State Historic Preservation Officer, the Advisory Council on Historic Preservation, the USACE Sacramento District, and the UDOT Regarding Section 106 Implementation for Federal-Aid Transportation Projects in the State of Utah* (executed June 3, 2013), and pursuant to 36 CFR 800.13(b), the UDOT and the FHWA are providing for the protection, evaluation, and treatment of any historic property discovered prior to or during construction. Should a discovery occur, construction will stop immediately and the FHWA and the UDOT will consult with the SHPO, Native American tribes, and any other identified interested parties, toward developing and implementing an appropriate treatment plan prior to resuming construction. If neither the SHPO nor a Tribe files an objection within 72 hours to UDOT's plan for addressing the discovery, UDOT may carry out the requirements of 36 CFR 800.13 on behalf of FHWA, and the Council does not need to be notified.

B. UDOT Standard Specifications Section 01355, Part 3.8, Discovery of Historical, Archaeological or Paleontological Objects, Features, Sites, or Human Remains, will be enforced during this project. This specification stipulates procedures to be followed should any archaeological, historic, or paleontological resources be discovered during construction of the project. These procedures are as follows:
   1) Immediately suspend construction operations in the vicinity of the discovery if a suspected historic, archeological or paleontological item, feature, or site is encountered, or if suspected human remains or encountered.
   2) Verbally notify the engineer of the nature and exact location of the findings.

3) The Engineer contacts the UDOT region staff archaeologist, who will assess the nature of the discovery and determine the necessary course of action.
4) Protect the discovered objects or features and provide written confirmation of the discovery to the Engineer within two calendar days.
5) The Engineer keeps the Contractor informed concerning the status of the restriction: 1) the time necessary for the Department to handle the discovered item, feature, or site is variable, dependent on the nature and condition of the discovered item; and 2) the Engineer will provide written confirmation when work may resume in the area.

VI. DISPUTE RESOLUTION: Should any party to this agreement object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, the FHWA shall consult with the objecting parties to resolve the objection. If the FHWA determines, within 30 days, that the objection(s) cannot be resolved, the FHWA will:

A. Forward all documentation relevant to the dispute to the Council in accordance with 36 CFR 800.2(b)(2). Upon receipt of adequate documentation, the Council shall review and advise the FHWA on the resolution of the objection within 30 days. Any comment provided by the Council, and all comments from the parties to the MOA, will be taken into account by the FHWA in reaching a final decision regarding the dispute.

B. If the Council does not provide comments regarding the dispute within 30 days after receipt of adequate documentation, the FHWA may render a decision regarding the dispute. In reaching its decision, the FHWA will take into account all comments regarding the dispute from the parties to the MOA.

C. The FHWA's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged. The FHWA will notify all parties of its decision in writing before implementing that portion of the undertaking subject to dispute under this stipulation. The FHWA's decision will be final.

D. Further, at any time during implementation of the measures stipulated in this agreement should an objection to any such measure be raised by a member of the public, the FHWA shall take the objections into account and consult as needed with the objecting party, the SHPO, or the Council to resolve the objection.

VII. AMENDMENTS AND NONCOMPLIANCE: If any signatory to this MOA, including any invited signatory, determines that its terms will not or cannot be carried out or that an amendment to its terms must be made, that party shall immediately consult with the other parties to develop an amendment to this MOA pursuant to 36 CFR 800.6(c)(7) and 800.6(c)(8). The amendment will be effective on the date a copy signed by all of the original signatories is filed with the Council. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation VIII, below.

VIII. TERMINATION: If an MOA is not amended following the consultation set out in Stipulation VII and Stipulation VIII, it may be terminated by any signatory or invited signatory. Within 30 days following termination, the FHWA shall notify the signatories if it will initiate consultation to execute an MOA with the signatories under 36 CFR 800.6(c)(1) or request the comments of the Council under 36 CFR 800.7(a) and proceed accordingly.

IX. EXECUTION: Execution of this Memorandum of Agreement by the FHWA, the Utah SHPO, and the UDOT, and the submission of documentation and filing of this Memorandum of Agreement with the Council pursuant to 36 CFR 800.6(b)(1)(iv) prior to FHWA's approval of this undertaking, and implementation of its terms, serves as evidence that the FHWA has taken into account the effects of this undertaking on historic properties, and has afforded the Council an opportunity to comment on **PROJECT #: STP-0108(13)4E; SR-108 FROM SR-127 TO SR-126; DAVIS AND WEBER COUNTIES, UTAH.**

SIGNATORIES:

THE FEDERAL HIGHWAY ADMINISTRATION

7-10-13

FHWA Division Administrator — Date

UTAH STATE HISTORIC PRESERVATION OFFICE

7/30/13

Brad Westwood, Utah SHPO — Date

INVITED SIGNATORY:

UTAH DEPARTMENT OF TRANSPORTATION

6-24-13

Kris Peterson, UDOT Region Director — Date

SECOND AMENDED MEMORANDUM OF AGREEMENT
AMONG
THE FEDERAL HIGHWAY ADMINISTRATION,
THE UTAH STATE HISTORIC PRESERVATION OFFICER,
AND THE UTAH DEPARTMENT OF TRANSPORTATION

REGARDING

PROJECT #: STP-0108(13)4E;
SR-108 FROM SR-127 TO SR-126, DAVIS AND WEBER COUNTIES, UTAH

WHEREAS, the Federal Highway Administration (FHWA) has determined that **PROJECT #:STP-0108(13)4E; SR-108 FROM SR-127 TO SR-126, DAVIS AND WEBER COUNTIES, UTAH**, will have an adverse effect on twelve (12) historic properties eligible for inclusion in the National Register of Historic Places. The FHWA has consulted with the Utah State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, a Memorandum of Agreement (MOA) for the project was executed on July 1, 2008 and amended on July 30, 2013, which remains in effect and are attached to this agreement; and

WHEREAS, this amendment serves to include two additional properties for which the project will have an adverse effect, remove one property that is no longer eligible for inclusion in the National Register of Historic Places, provide an update from the 2008 MOA, and provide additional duration; and

WHEREAS, in accordance with 36 CFR 800.6(a)(1), the FHWA has notified the Advisory Council on Historic Preservation (Council) of its adverse effect determination with specified documentation and the Council has chosen not to participate in the consultation pursuant to 36 CFR 800.6(a)(1)(iii); and

WHEREAS, the Utah Department of Transportation (UDOT) has participated in the consultation, and has been invited to sign to this MOA as an invited signatory; and

NOW, THEREFORE, the FHWA and the Utah SHPO agree that the undertaking shall be implemented in accordance with the stipulations as stated in the original MOA, which are restated below, in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

The FHWA shall ensure that the following measures are carried out:

I. MITIGATION OF HISTORIC BUILDINGS
The UDOT shall record the following twelve (12) properties listed in Table 1 in advance of construction activity. Highlighted properties have changed status from the original MOA and those changes are detailed below. Those that have been demolished or will no longer be adversely affected do not require mitigation. The buildings requiring mitigation will be documented according to the Utah State Intensive Level Survey Standards (ILS) as required by SHPO. Documentation will include a completed ILS Historic Site Forms, which will be based partly on title searches and obituary research, photographs of the exterior of the buildings, photographs burned onto a gold CD, a sketch map of the property layout, aerial photograph maps indicating the location of the buildings, and a U.S. Geological Survey may (scale: 1:24,000) indicating the location of the buildings.

Table 1. Architectural Properties with Adverse Effects

Address	Date	Description/Type	Status
1663 South 2000 West, Syracuse	1926	1-Part commercial block	Changed to Not Eligible for NRHP
1609 South 2000 West, Syracuse	1929	Bungalow	Mitigation outstanding
850 South 2000 West, Syracuse	1930	Warehouse	Changed to No Adverse Effect
723 South 2000 West, Syracuse	1910	Cross-wing	Demolished
256 South 2000 West, Syracuse	1961	Ranch	Newly added
150 South 2000 West, West Point	1955	WWII-era cottage	Mitigation outstanding
58 South 2000 West, West Point	1935	Period cottage	Mitigation outstanding
10 South 2000 West, West Point	1967	Split-level	Newly added
796 North 2000 West, West Point	1945	WWII-era cottage	Mitigation outstanding
1197 North 2000 West, Clinton	1950	Duplex	Mitigation outstanding
1318 North 2000 West, Clinton	1925	Period cottage	Mitigation outstanding
1693 North 2000 West, Clinton	1945	Early Ranch/Rambler	Demolished
1993 North 2000 West, Clinton	1955	Early Ranch/Rambler	Mitigation outstanding
2133 North 2000 West, Clinton	1920	Bungalow	Mitigation outstanding
5720 South 3500 West, Roy	1955	Contemporary	Mitigation outstanding
3713 Midland Drive, West Haven	1930	Agricultural outbuildings	Mitigation outstanding

- 1663 South 2000 West, Syracuse: has been determined to be no longer eligible for the National Register of Historic Places by the UDOT. This property no longer requires mitigation.
- 850 South 2000 West, Syracuse: This property was described as being adversely affected by this project in the original MOA but during the re-evaluation the project was found to have No Adverse Effect. This property no longer requires mitigation.
- 723 South 2000 West, Syracuse and 1693 North 2000 West, Clinton: These buildings were demolished by the owner between 2008-2010 prior to UDOT acquisition and mitigation. These properties no longer require mitigation.
- 256 South 2000 West, Syracuse and 10 South 2000 West, West Point: These properties were newly documented during the re-evaluation and the project was found to result in an Adverse Effect.

II. REPORTING: The FHWA shall ensure that any/all reports on activities carried out pursuant to this agreement are provided to the SHPO, the Council, the signatories to this MOA, and upon request, to any other interested parties.

III. PERSONNEL QUALIFICATIONS: The FHWA shall ensure that all historic work carried out pursuant to this agreement is completed by or under the direct supervision of a person or persons meeting or exceeding the Secretary of the Interior's Historic Preservation Professional Qualification Standards for History (36 CFR 61 Appendix A).

IV. DURATION: This agreement will be null and void if its terms are not carried out within five (5) years from the date of its execution. This duration is in addition to the duration described in the previous MOA. Prior to such time, the FHWA may consult with the other signatories to reconsider the terms of the agreement and amend it in accordance with Stipulation VII below.

V. DISCOVERY: The following measures regarding inadvertent discoveries of historic properties, archaeological sites, and paleontological resources will be implemented:

A. In accordance with Stipulation XI.B of the *Second Amended Programmatic Agreement among the FHWA, the Utah State Historic Preservation Officer, the Advisory Council on Historic Preservation, the USACE Sacramento District, and the UDOT Regarding Section 106 Implementation for Federal-Aid Transportation Projects in the State of Utah* (executed June 3, 2013), and pursuant to 36 CFR 800.13(b), the UDOT and the FHWA are providing for the protection, evaluation, and treatment of any historic property

discovered prior to or during construction. Should a discovery occur, construction will stop immediately and the FHWA and the UDOT will consult with the SHPO, Native American tribes, and any other identified interested parties, toward developing and implementing an appropriate treatment plan prior to resuming construction. If neither the SHPO nor a Tribe files an objection within 72 hours to UDOT's plan for addressing the discovery, UDOT may carry out the requirements of 36 CFR 800.13 on behalf of FHWA, and the Council does not need to be notified.

B. UDOT Standard Specifications Section 01355, Part 3.8, Discovery of Historical, Archaeological or Paleontological Objects, Features, Sites, or Human Remains, will be enforced during this project. This specification stipulates procedures to be followed should any archaeological, historic, or paleontological resources be discovered during construction of the project. These procedures are as follows:
   1) Immediately suspend construction operations in the vicinity of the discovery if a suspected historic, archeological or paleontological item, feature, or site is encountered or if suspected human remains or encountered.
   2) Verbally notify the engineer of the nature and exact location of the findings.
   3) The Engineer contacts the UDOT region staff archaeologist, who will assess the nature of the discovery and determine the necessary course of action.
   4) Protect the discovered objects or features and provide written confirmation of the discovery to the Engineer within two calendar days.
   5) The Engineer keeps the Contractor informed concerning the status of the restriction: 1) the time necessary for the Department to handle the discovered item, feature, or site is variable, dependent on the nature and condition of the discovered item; and 2) the Engineer will provide written confirmation when work may resume in the area.

VI. DISPUTE RESOLUTION: Should any party to this agreement object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, the FHWA shall consult with the objecting parties to resolve the objection. If the FHWA determines, within 30 days, that the objection(s) cannot be resolved, the FHWA will:

A. Forward all documentation relevant to the dispute to the Council in accordance with 36 CFR 800.2(b)(2). Upon receipt of adequate documentation, the Council shall review and advise the FHWA on the resolution of the objection within 30 days. Any comment provided by the Council, and all comments from the parties to the MOA, will be taken into account by the FHWA in reaching a final decision regarding the dispute.

B. If the Council does not provide comments regarding the dispute within 30 days after receipt of adequate documentation, the FHWA may render a decision regarding the dispute. In reaching its decision, the FHWA will take into account all comments regarding the dispute from the parties to the MOA.

C. The FHWA's responsibilities to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged. The FHWA will notify all parties of its decision in writing before implementing that portion of the undertaking subject to dispute under this stipulation. The FHWA's decision will be final.

D. Further, at any time during implementation of the measures stipulated in this agreement should an objection to any such measure be raised by a member of the public, the FHWA shall take the objections into account and consult as needed with the objecting party, the SHPO, or the Council to resolve the objection.

VII. AMENDMENTS AND NONCOMPLIANCE: If any signatory to this MOA, including any invited signatory, determines that its terms will not or cannot be carried out or that an amendment to its terms must be made, that party shall immediately consult with the other parties to develop an amendment to this MOA pursuant to 36 CFR 800.6(c)(7) and 800.6(c)(8). The amendment will be effective on the date a

copy signed by all of the original signatories is filed with the Council. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation VIII, below.

VIII. TERMINATION: If an MOA is not amended following the consultation set out in Stipulation VI and Stipulation VII, it may be terminated by any signatory or invited signatory. Within 30 days following termination, the FHWA shall notify the signatories if it will initiate consultation to execute an MOA with the signatories under 36 CFR 800.6(c)(1) or request the comments of the Council under 36 CFR 800.7(a) and proceed accordingly.

IX. EXECUTION: Execution of this Memorandum of Agreement by the FHWA and the Utah SHPO, and the UDOT, and the submission of documentation and filing of this Memorandum of Agreement with the Council pursuant to 36 CFR 800.6(b)(1)(iv) prior to FHWA's approval of this undertaking, and implementation of its terms, serves as evidence that the FHWA has taken into account the effects of this undertaking on historic properties, and has afforded the Council an opportunity to comment on **PROJECT #:STP-0108(13)4E; SR-108 FROM SR-127 TO SR-126, DAVIS AND WEBER COUNTIES, UTAH.**

SIGNATORIES:

THE FEDERAL HIGHWAY ADMINISTRATION

for _____ 06-01-16
FHWA Division Administrator Date

UTAH STATE HISTORIC PRESERVATION OFFICE

_____ 6.7.16
P. Bradford Westwood, Utah SHPO Date

CJ for

INVITED SIGNATORIES:

UTAH DEPARTMENT OF TRANSPORTATION

_____ 5-24-16
Kris Peterson, UDOT Region Director Date

THIRD AMENDED MEMORANDUM OF AGREEMENT
AMONG
THE UTAH DEPARTMENT OF TRANSPORTATION AND
THE UTAH STATE HISTORIC PRESERVATION OFFICER

REGARDING

PROJECT #: STP-0108(13)4E;
SR-108 FROM SR-127 TO SR-126, DAVIS AND WEBER COUNTIES, UTAH

WHEREAS, the Federal Highway Administration (FHWA) has determined that **PROJECT #:STP-0108(13)4E; SR-108 FROM SR-127 TO SR-126, DAVIS AND WEBER COUNTIES, UTAH**, will have an adverse effect on twelve (12) historic properties eligible for inclusion in the National Register of Historic Places. The FHWA has consulted with the Utah State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, in accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327* (executed January 17, 2017), the Utah Department of Transportation (UDOT) assumes responsibility, assigned by the Federal Highway Administration, for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. As this amendment qualifies as additional environmental review, of which FHWA has assigned authority to UDOT in Part 3.3.1 of the MOU, FHWA has therefore withdrawn from participating in this amendment; and

WHEREAS, a Memorandum of Agreement (MOA) for the project was executed on July 1, 2008 and amended on July 30, 2013 and June 7, 2016, which remains in effect and are attached to this agreement; and

WHEREAS, this amendment serves to include six additional properties for which the project will have an adverse effect, remove one property that is no longer eligible for inclusion in the National Register of Historic Places, provide an update from the 2008 MOA, and provide additional duration; and

WHEREAS, in accordance with 36 CFR 800.6(a)(1), the UDOT has notified the Advisory Council on Historic Preservation (Council) of its adverse effect determination with specified documentation and the Council has chosen not to participate in the consultation pursuant to 36 CFR 800.6(a)(1)(iii); and

NOW, THEREFORE, the UDOT and the Utah SHPO agree that the undertaking shall be implemented in accordance with the stipulations as stated in the original MOA, which are restated below, in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

The UDOT shall ensure that the following measures are carried out:

I. MITIGATION OF HISTORIC BUILDINGS
The UDOT shall record the following seven properties highlighted in Table 1 in advance of construction activity for the current project. Those that have been demolished or will no longer be adversely affected do not require mitigation. The remaining properties will be subject to mitigation during a future project.

The buildings requiring mitigation will be documented according to the Utah State Intensive Level Survey Standards (ILS) as required by SHPO. Documentation will include a completed ILS Historic Site Forms, which will be based partly on title searches and obituary research, photographs of the exterior of the buildings, a sketch map of the property layout, aerial photograph maps indicating the location of the buildings, and a U.S. Geological Survey map (scale: 1:24,000) indicating the location of the buildings.

Table 1. Architectural Properties with Adverse Effects

Address	Date	Description/Type	Status
1663 South 2000 West, Syracuse	1926	1-Part commercial block	Changed to Not Eligible for NRHP
1609 South 2000 West, Syracuse	1929	Bungalow	Mitigation complete
850 South 2000 West, Syracuse	1930	Warehouse	Changed to No Adverse Effect
723 South 2000 West, Syracuse	1910	Cross-wing	Demolished
256 South 2000 West, Syracuse	1961	Ranch	Mitigation complete
150 South 2000 West, West Point	1955	WWII-era cottage	Mitigation complete
58 South 2000 West, West Point	1935	Period cottage	Mitigation complete
10 South 2000 West, West Point	1967	Split-level	Mitigation complete
475 North 2000 West, West Point	1970	Ranch	Newly added
525 North 2000 West, West Point	1965	Ranch	Newly added
678 North 2000 West, West Point	1975	Split-Entry	Newly added
796 North 2000 West, West Point	1945	WWII-era cottage	Demolished
914 North 2000 West, Clinton	1953	Ranch/Ranch-Rambler	Newly added
1197 North 2000 West, Clinton	1950	Duplex	Changed to No Adverse Effect
1318 North 2000 West, Clinton	1925	Period cottage	Demolished
1693 North 2000 West, Clinton	1945	Early Ranch/Rambler	Demolished
1988 North 2000 West, Clinton	1934	Period cottage	Newly added
1993 North 2000 West, Clinton	1955	Early Ranch/Rambler	Demolished
2133 North 2000 West, Clinton	1920	Bungalow	Mitigation outstanding
5986 South 3500 West, Roy	1912	Hall-Parlor	Newly added
5720 South 3500 West, Roy	1955	Contemporary	Mitigation outstanding
3713 Midland Drive, West Haven	1930	Agricultural outbuildings	Mitigation outstanding

II. REPORTING: The UDOT shall ensure that any/all reports on activities carried out pursuant to this agreement are provided to the SHPO, the Council, the signatories to this MOA, and upon request, to any other interested parties.

III. PERSONNEL QUALIFICATIONS: The UDOT shall ensure that all historic work carried out pursuant to this agreement is completed by or under the direct supervision of a person or persons meeting or exceeding the Secretary of the Interior's Historic Preservation Professional Qualification Standards for History (36 CFR 61 Appendix A).

IV. DURATION: This agreement will be null and void if its terms are not carried out within ten (10) years from the date of its execution. This duration is in addition to the duration described in the previous MOA. Prior to such time, the UDOT may consult with the other signatories to reconsider the terms of the agreement and amend it in accordance with Stipulation VII below.

V. DISCOVERY: The following measures regarding inadvertent discoveries of historic properties, archaeological sites, and paleontological resources will be implemented:

A. In accordance with Stipulation XI.B of the *Third Amended Programmatic Agreement among the UDOT, the Utah State Historic Preservation Officer, the Advisory Council on Historic Preservation, the USACE Sacramento District, and the UDOT Regarding Section 106 Implementation for Federal-Aid Transportation Projects in the State of Utah* (executed August 23, 2017), and pursuant to 36 CFR 800.13(b), the UDOT and the UDOT are providing for the protection, evaluation, and treatment of any historic property discovered prior to or during construction. Should a discovery occur, construction will

stop immediately and the UDOT and the UDOT will consult with the SHPO, Native American tribes, and any other identified interested parties, toward developing and implementing an appropriate treatment plan prior to resuming construction. If neither the SHPO nor a Tribe files an objection within 72 hours to UDOT's plan for addressing the discovery, UDOT may carry out the requirements of 36 CFR 800.13 on behalf of FHWA, and the Council does not need to be notified.

B. UDOT Standard Specifications Section 01355, Part 3.8, Discovery of Historical, Archaeological or Paleontological Objects, Features, Sites, or Human Remains, will be enforced during this project. This specification stipulates procedures to be followed should any archaeological, historic, or paleontological resources be discovered during construction of the project. These procedures are as follows:
   1) Immediately suspend construction operations in the vicinity of the discovery if a suspected historic, archeological or paleontological item, feature, or site is encountered or if suspected human remains or encountered.
   2) Verbally notify the engineer of the nature and exact location of the findings.
   3) The Engineer contacts the UDOT region staff archaeologist, who will assess the nature of the discovery and determine the necessary course of action.
   4) Protect the discovered objects or features and provide written confirmation of the discovery to the Engineer within two calendar days.
   5) The Engineer keeps the Contractor informed concerning the status of the restriction: 1) the time necessary for the Department to handle the discovered item, feature, or site is variable, dependent on the nature and condition of the discovered item; and 2) the Engineer will provide written confirmation when work may resume in the area.

VI. DISPUTE RESOLUTION: Should any party to this agreement object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, the UDOT shall consult with the objecting parties to resolve the objection. If the UDOT determines, within 30 days, that the objection(s) cannot be resolved, the UDOT will:

C. Forward all documentation relevant to the dispute to the Council in accordance with 36 CFR 800.2(b)(2). Upon receipt of adequate documentation, the Council shall review and advise the UDOT on the resolution of the objection within 30 days. Any comment provided by the Council, and all comments from the parties to the MOA, will be taken into account by the UDOT in reaching a final decision regarding the dispute.

D. If the Council does not provide comments regarding the dispute within 30 days after receipt of adequate documentation, the UDOT may render a decision regarding the dispute. In reaching its decision, the UDOT will take into account all comments regarding the dispute from the parties to the MOA.

E. The UDOT's responsibilities to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged. The UDOT will notify all parties of its decision in writing before implementing that portion of the undertaking subject to dispute under this stipulation. The UDOT's decision will be final.

F. Further, at any time during implementation of the measures stipulated in this agreement should an objection to any such measure be raised by a member of the public, the UDOT shall take the objections into account and consult as needed with the objecting party, the SHPO, or the Council to resolve the objection.

VII. AMENDMENTS AND NONCOMPLIANCE: If any signatory to this MOA, including any invited signatory, determines that its terms will not or cannot be carried out or that an amendment to its terms must be made, that party shall immediately consult with the other parties to develop an amendment to this MOA pursuant to 36 CFR 800.6(c)(7) and 800.6(c)(8). The amendment will be effective on the date a copy signed by all of the original signatories is filed with the Council. If the signatories cannot agree to

appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation VIV, below.

VIII. TERMINATION: If an MOA is not amended following the consultation set out in Stipulation VII and Stipulation VIII, it may be terminated by any signatory or invited signatory. Within 30 days following termination, the UDOT shall notify the signatories if it will initiate consultation to execute an MOA with the signatories under 36 CFR 800.6(c)(1) or request the comments of the Council under 36 CFR 800.7(a) and proceed accordingly.

IX. EXECUTION: Execution of this Memorandum of Agreement by the UDOT and the Utah SHPO, and the UDOT, and the submission of documentation and filing of this Memorandum of Agreement with the Council pursuant to 36 CFR 800.6(b)(1)(iv) prior to UDOT's approval of this undertaking, and implementation of its terms, serves as evidence that the UDOT has taken into account the effects of this undertaking on historic properties, and has afforded the Council an opportunity to comment on **PROJECT #:STP-0108(13)4E; SR-108 FROM SR-127 TO SR-126, DAVIS AND WEBER COUNTIES, UTAH.**

SIGNATORIES:

UTAH DEPARTMENT OF TRANSPORTATION

Robert Wight, UDOT Region 1 Director — Date: 04/06/2021

UTAH STATE HISTORIC PRESERVATION OFFICE

Christopher Hansen, Utah SHPO — Date: 04/09/2021

State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director

TERIANNE S. NEWELL, P.E.
Deputy Director of Planning and Investment

LISA J. WILSON, P.E.
Deputy Director of Engineering and Operations

February 26, 2021

Mr. Chris Hansen
Senior Historic Preservation Specialist
Utah Division of State History
300 Rio Grande
Salt Lake City, UT 84101-1182

RE: UDOT Project No S-0108(36)6; SR-108, 300 North to 1800 North, Davis County, Utah (PIN 15680).
Determination of Eligibility and Finding of No Adverse Effect.

Dear Mr. Hansen:

The Utah Department of Transportation (UDOT) is preparing to undertake the subject federal-aid project. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327* (executed January 17, 2017), the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. Also in accordance with the *Third Amended Programmatic Agreement among the FHWA, the Utah State Historic Preservation Officer, the Advisory Council on Historic Preservation, the USACE Sacramento District, and the UDOT Regarding Section 106 Implementation for Federal-Aid Transportation Projects in the State of Utah* (executed August 23, 2017), Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 300101 et seq.), and U.C.A.9-8-404, the UDOT has taken into account the effects of this undertaking on historic properties, and is affording the Utah State Historic Preservation Officer (SHPO) an opportunity to comment on the undertaking. Additionally, this submission is in compliance with Section 4(f) of the Department of Transportation Act of 1966, 23 U.S.C. § 138 (as amended) and 49 U.S.C. § 303 (as amended).

PROJECT DESCRIPTION

The proposed project will construct a portion of the area evaluated for the SR-108 EIS completed in 2008 (UDSH Case No. 06-1634). The proposed project is located along SR-108 (2000 West) from approximately 300 North in West Point extending northwards to the Weber-Davis County line (approximately 1700 North, Clinton; see the enclosed study area map). Due to the length of time that has passed, the section studied as part of this document will be re-evaluated under the National Environmental Policy Act (NEPA). Safety and transportation improvements are needed to address current identified design deficiencies and current and projected 2050 travel demand along SR-108. The improvements may include roadway widening, intersection improvements and accommodation for active transportation.

The APE for cultural resources will include the proposed footprint of all active alternatives as well as all adjoining parcels (see attached map). The APE includes approximately 2.5 linear miles and extends one parcel deep from the roadway centerlines. The APE was previously surveyed for the original SR-108 EIS and portions of subsequent

projects overlap this area. This APE will accommodate any grading, cutting, or filling needed to install project components and blend improvements with the existing residential and commercial landscaping.

The APE has been surveyed for archaeology by Certus Environmental Solutions, under State Antiquities Project Number U20HY0810, and the results are reported in *An Archaeological Resources Assessment for the 2000 West (SR-108); 300 North to 6000 South Project, Davis and Weber Counties, Utah* (see enclosed report). An intensive level pedestrian survey was conducted using 15 meter transects to identify archaeological resources. A selective reconnaissance level survey was conducted to record architectural properties, and the results are reported in *A Selective Reconnaissance-Level Historic Structures Inventory for the 2000 West (SR-108); 300 North to 6000 South Project, Davis and Weber Counties, Utah* (see enclosed report). This inventory documented properties that have become historic since the 2008 EIS and documented any changes to previously reported properties.

The surveys have resulted in the identification of 3 archaeological sites and 40 architectural properties. Of these, 0 archaeological sites and 32 architectural properties are eligible to the National Register of Historic Places (NRHP). No known traditional cultural properties are located in the APE. The Determinations of Eligibility and Findings of Effects (for both Section 106 and Section 4(f)) are provided in Table 1 for archaeological resources and in Table 2 for architectural properties.

ARCHAEOLOGICAL RESOURCES

Table 1. Determinations of Eligibility and Findings of Effect for Archaeological Resources.

Site	Name or Description	NRHP Eligibility	Finding of Effect	Section 4(f) Use	Section 4(f) Impact
42DV132	Central Irrigation Ditch System	Not Eligible	No Historic Properties Affected	N/A	N/A
42DV144	Clinton South 8 Ditch System	Not Eligible	No Historic Properties Affected	N/A	N/A
42DV118	Historic Residence	Not Eligible (Destroyed)	No Historic Properties Affected	N/A	N/A

None of the archaeological sites identified within the APE are eligible for the NRHP. Site 42SV118 was destroyed in 2015 by land development on the parcel.

ARCHITECTURAL PROPERTIES

Description of Effects: This proposed project requires minor right of way acquisitions along the frontage from 19 properties eligible to the NRHP. All of these properties are considered Eligible Contributing (EC) and are therefore equally significant. Temporary construction easements (TCE) to reconstruct driveways and landscaping are also necessary to accommodate changes to the roadway elevation. The acquisitions and associated construction affect a relatively small portion of each property and will not substantially impact or alter any contributing elements of the properties or any of the character-defining features for which each were determined eligible for the NRHP.

This proposed project requires full acquisition and demolition of 10 properties eligible for the NRHP. This action will completely remove all contributing elements and the character-defining features for which they were determined eligible for the NRHP. Therefore, the proposed project will result in a finding of Adverse Effect.

Table 2. Determinations of Eligibility and Findings of Effect for Architectural Properties.

Address	Date	Type/Style	UDSH Rating/NRHP Eligibility	Nature of Effect	Finding of Effect	Section 4f Use/Impact
2048 W 300 N	c. 1969	Ranch/Ranch-Rambler	EC/Eligible	Property avoided	No Historic Properties Affected	No/N/A
2032 W 300 N	c. 1969	Split Entry/Ranch-Rambler and Split Entry	EC/Eligible	Property avoided	No Historic Properties Affected	No/N/A
475 N 2000 W	c. 1970	Ranch/Ranch-Rambler	EC/Eligible	Demolition of the structure (UDOT-owned property)	Adverse Effect	Yes/Greater-than *de minimis*
525 N 2000 W	c. 1965	Ranch/Ranch-Rambler	EC/Eligible	Demolition of the structure (UDOT-owned property)	Adverse Effect	Yes/Greater-than *de minimis*
561 N 2000 W	c. 1965	Ranch/Ranch-Rambler	EC/Eligible	Partial acquisition: 3,263 sq. ft. (0.07 acres) out of 0.42 acres. TCE: 1,174 sq. ft.	No Adverse Effect	Yes/*de minimis*
647 N 2000 W	c. 1952	WWII-Era Cottage/Minimal Traditional	EC/Eligible	Partial acquisition: 1,207 sq. ft. (0.03 acres) out of 0.34 acres. TCE: 1,027 sq. ft.	No Adverse Effect	Yes/*de minimis*
667 N 2000 W	c. 1949	Early Ranch/Early Ranch	EC/Eligible	Partial acquisition: 749 sq. ft. (0.02 acres) out of 0.35 acres. TCE: 1,375 sq. ft.	No Adverse Effect	Yes/*de minimis*
685 N 2000 W	c. 1965	Ranch/Ranch-Rambler	EC/Eligible	Partial acquisition: 541 sq. ft. (0.01 acres) out of 0.50 acres. TCE: 1,043 sq. ft.	No Adverse Effect	Yes/*de minimis*
678 N 2000 W	c. 1975	Split Entry/Split Entry and Ranch/Rambler	EC/Eligible	Full acquisition; structure would be removed	Adverse Effect	Yes/Greater-than *de minimis*
695 N 2000 W	c. 1966	Ranch/Ranch-Rambler	NC/Ineligible	N/A	No Historic Properties Affected	N/A
714 N 2000 W	c. 1920	Period Cottage/Minimal Traditional and Period Revival	NC/Ineligible	N/A	No Historic Properties Affected	N/A
755 N 2000 W	c. 1948	WWII-Era Cottage/Minimal Traditional	EC/Eligible	No permanent acquisition TCE: 1,340 sq. ft.	No Adverse Effect	Yes/*de minimis*
783 N 2000 W	c. 1900	Hall-Parlor/Classical: Other	NC/Ineligible	N/A	No Historic Properties Affected	N/A
817 N 2000 W	c. 1950	Ranch/Ranch-Rambler	EC/Eligible	Full acquisition; structure would be removed	Adverse Effect	Yes/Greater-than *de minimis*
851 N 2000 W	c. 1945	Early Ranch/Early Ranch	EC/Eligible	Partial acquisition: 553 sq. ft. (0.01 acres) out of 1.56 acres. TCE: 1,723 sq. ft.	No Adverse Effect	Yes/*de minimis*
881 N 2000 W	c. 1953	Early Ranch/Early Ranch	EC/Eligible	Partial acquisition: 1,459 sq. ft. (0.03 acres) out of 0.47 acres. TCE: 1,871 sq. ft.	No Adverse Effect	Yes/*de minimis*
914 N 2000 W	c. 1953	Ranch/Ranch-Rambler	EC/Eligible	Full acquisition; structure would be removed	Adverse Effect	Yes/Greater-than *de minimis*
1141 N 2000 W	c. 1958	Early Ranch/Early Ranch	EC/Eligible	No permanent acquisition TCE: 3,580 sq. ft.	No Adverse Effect	Yes/*de minimis*

Address	Date	Type/Style	UDSH Rating/NRHP Eligibility	Nature of Effect	Finding of Effect	Section 4f Use/Impact
1193 N 2000 W	c. 1944	Other Residential/Minimal Traditional	NC/Ineligible	N/A	No Historic Properties Affected	N/A
1197 N 2000 W	c. 1952	Other Residential/Ranch-Rambler	EC/Eligible	No permanent acquisition TCE: 513 sq. ft.	No Adverse Effect	Yes/*de minimis*
1221 N 2000 W	c. 1920/1952	Foursquare or Central Block with Projecting Bays/Other	NC/Ineligible	N/A	No Historic Properties Affected	N/A
1253 N 2000 W	c. 1958	Ranch/Ranch-Rambler	EC/Eligible	No permanent acquisition TCE: 1,186 sq. ft.	No Adverse Effect	Yes/*de minimis*
2084 N 2000 W	c. 1950	Early Ranch/Early Ranch	EC/Eligible	Partial acquisition: 1,038 sq. ft. (0.03 acres) out of 0.86 acres. TCE: 1,261 sq. ft.	No Adverse Effect	Yes/*de minimis*
2133 N 2000 W	c. 1921	Bungalow/Bungalow	EC/Eligible	Full acquisition; structure would be removed	Adverse Effect	Yes/Greater-than *de minimis*
2162 N 2000 W	c. 1957	Ranch/Ranch-Rambler	EC/Eligible	Partial acquisition: 588 sq. ft. (0.01 acres) out of 0.88 acres. TCE: 1,262 sq. ft.	No Adverse Effect	Yes/*de minimis*
2184 N 2000 W	c. 1961	Ranch/Ranch-Rambler and Minimal Traditional	EC/Eligible	Partial acquisition: 425 sq. ft. (0.01 acres) out of 0.89 acres. TCE: 1,274 sq. ft.	No Adverse Effect	Yes/*de minimis*
2212 N 2000 W	c. 1961	Ranch/Ranch-Rambler and Post-WWII: Other	EC/Eligible	Partial acquisition: 376 sq. ft. (0.01 acres) out of 0.24 acres. TCE: 1,285 sq. ft.	No Adverse Effect	Yes/*de minimis*
2282 N 2000 W	c. 1937	Early Ranch/Ranch-Rambler and Post-WWII: Other	EC/Eligible	Partial acquisition: 930 sq. ft. (0.02 acres) out of 1.77 acres. TCE: 2,861 sq. ft.	No Adverse Effect	Yes/*de minimis*
1988 W 2300 N	c. 1934	Period Cottage/Tudor Revival	EC/Eligible	Full acquisition; structure would be demolished	Adverse Effect	Yes/Greater-than *de minimis*
1956 W 2300 N	c. 1950	Ranch/Ranch-Rambler	EC/Eligible	Property avoided	No Historic Properties Affected	No/N/A
2342 N 2000 W	c. 1945	WWII-Era Cottage/Minimal Traditional	EC/Eligible	Partial acquisition: 1,822 sq. ft. (0.04 acres) out of 0.38 acres. TCE: 1,207 sq. ft.	No Adverse Effect	Yes/*de minimis*
2404 N 2000 W	c. 1958	Ranch/Ranch-Rambler	EC/Eligible	No permanent acquisition TCE: 781 sq. ft.	No Adverse Effect	Yes/*de minimis*
2422 N 2000 W	c. 1961	Ranch/Ranch-Rambler	EC/Eligible	No permanent acquisition TCE: 786 sq. ft.	No Adverse Effect	Yes/*de minimis*
2466 N 2000 W	c. 1914	Bungalow/Ranch-Rambler	NC/Ineligible	N/A	No Historic Properties Affected	Yes/*de minimis*
2541 N 2000 W	c. 1949	WWII-Era Cottage/Minimal Traditional	EC/Eligible	Full acquisition; structure would be demolished	Adverse Effect	Yes/Greater-than *de minimis*
2637 N 2000 W	c. 1950	WWII-Era Cottage/Early Ranch and Minimal Traditional	NC/Ineligible	N/A	No Historic Properties Affected	N/A

Address	Date	Type/Style	UDSH Rating/NRHP Eligibility	Nature of Effect	Finding of Effect	Section 4f Use/Impact
2647 N 2000 W	c. 1924	Bungalow/Bungalow and Prairie School	EC/Eligible	Full acquisition; structure would be demolished	Adverse Effect	Yes/Greater-than *de minimis*
2657 N 2000 W	c. 1972	Split Entry/Ranch-Rambler and Split Entry	EC/Eligible	Partial acquisition: 6,022 sq. ft. (0.14 acres) out of 1.44 acres. TCE: 1973 sq. ft.	No Adverse Effect	Yes/*de minimis*
1936 W 2300 N	c. 1972	Ranch/Ranch-Rambler	NC/Ineligible	N/A	No Historic Properties Affected	N/A
5986 S 3500 W	c. 1912	Hall-Parlor/Classical: Other	EC/Eligible	Full acquisition; structure would be demolished	Adverse Effect	Yes/Greater-than *de minimis*

CONSULTATION EFFORTS

Native American consultation was initiated through letters sent to the Confederated Tribes of the Goshute Reservation, Skull Valley Band of Goshute Indians, Shoshone-Bannock Tribes, and Eastern Shoshone of the Wind River Reservation, and the Northwestern Band of Shoshone Nation (sent September 15, 2020). Public involvement is ongoing for this project but to date no comments have been received concerning cultural resources.

SUMMARY

To summarize, the project will result in a finding of **Adverse Effect** and Section 4(f) Greater than *de minimis* impacts for 10 architectural properties, a finding of **No Adverse Effect** and Section 4(f) *de minimis* impacts for 19 architectural properties, and a finding of **No Historic Properties Affected** for all remaining architectural properties and archaeological sites. Therefore, the Finding of Effect for the proposed UDOT Project No. S-0108(36)6; SR-108, 300 North to 1800 North, Davis County, Utah, is **Adverse Effect**.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 *USC §327* and a Memorandum of Understanding dated January 17, 2017, and executed by FHWA and UDOT.

Please review this document and, providing you agree with the findings contained herein, provide written concurrence. Should you have any questions or need additional information, please feel free to contact Liz Robinson at 801-910-2035 or lizrobinson@utah.gov; or Elizabeth Giraud at 801-633-8484 or egiraud@utah.gov.

Sincerely,

Liz Robinson, M.A., RPA
Cultural Resources Program Manager
UDOT Environmental Services

Elizabeth Giraud, AICP
Architectural Historian
UDOT Environmental Services

Enclosures

cc: David Adamson, Project Manager
Elisa Albury, Environmental Manager

Nature of Effect

- Full Acquisition
- Partial Acquisition
- TCE

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- Proposed Right-of-Way
- Temporary Construction Easement
- Parcel Line
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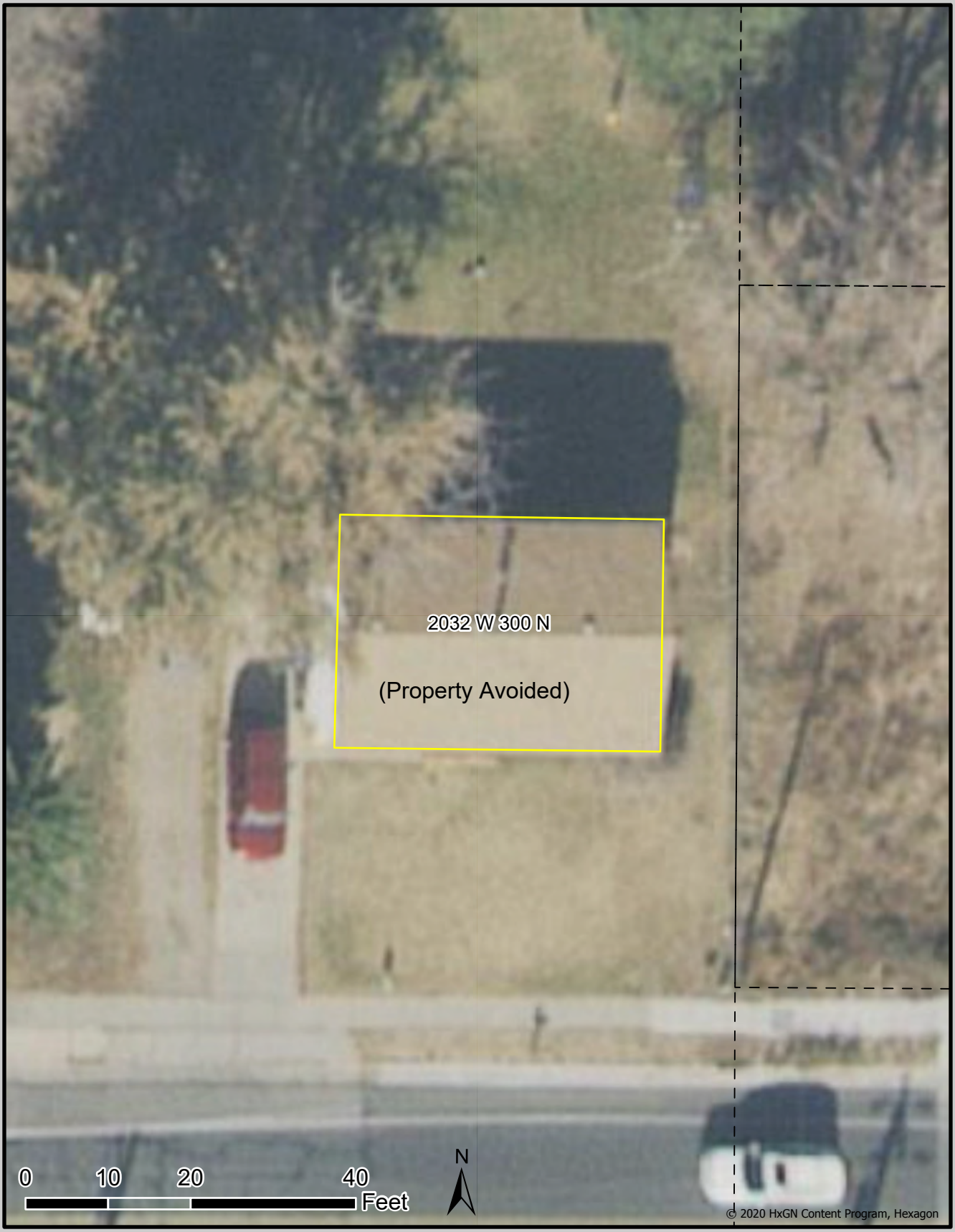
2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 1 of 32



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UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 2 of 32

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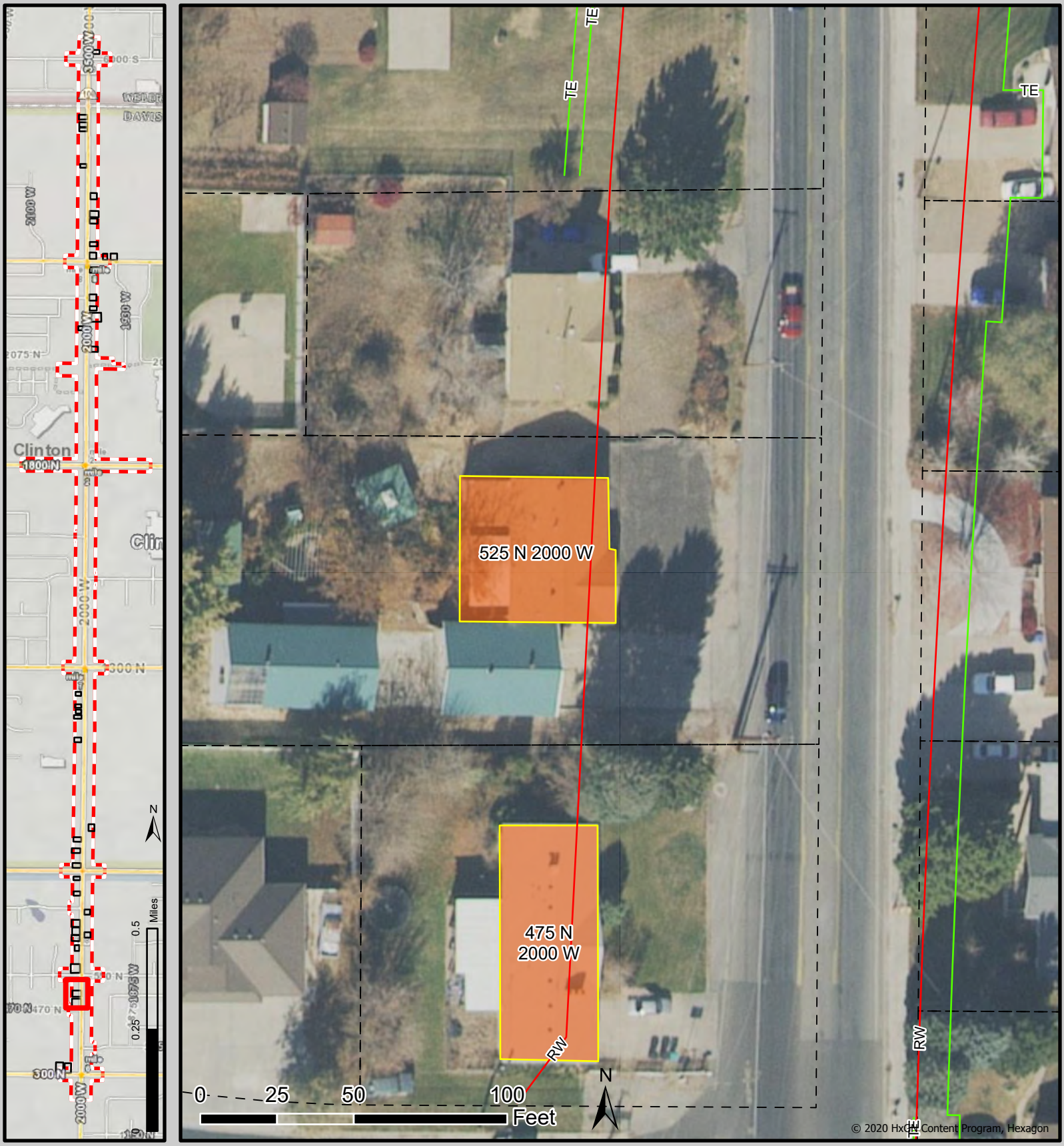
2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 3 of 32



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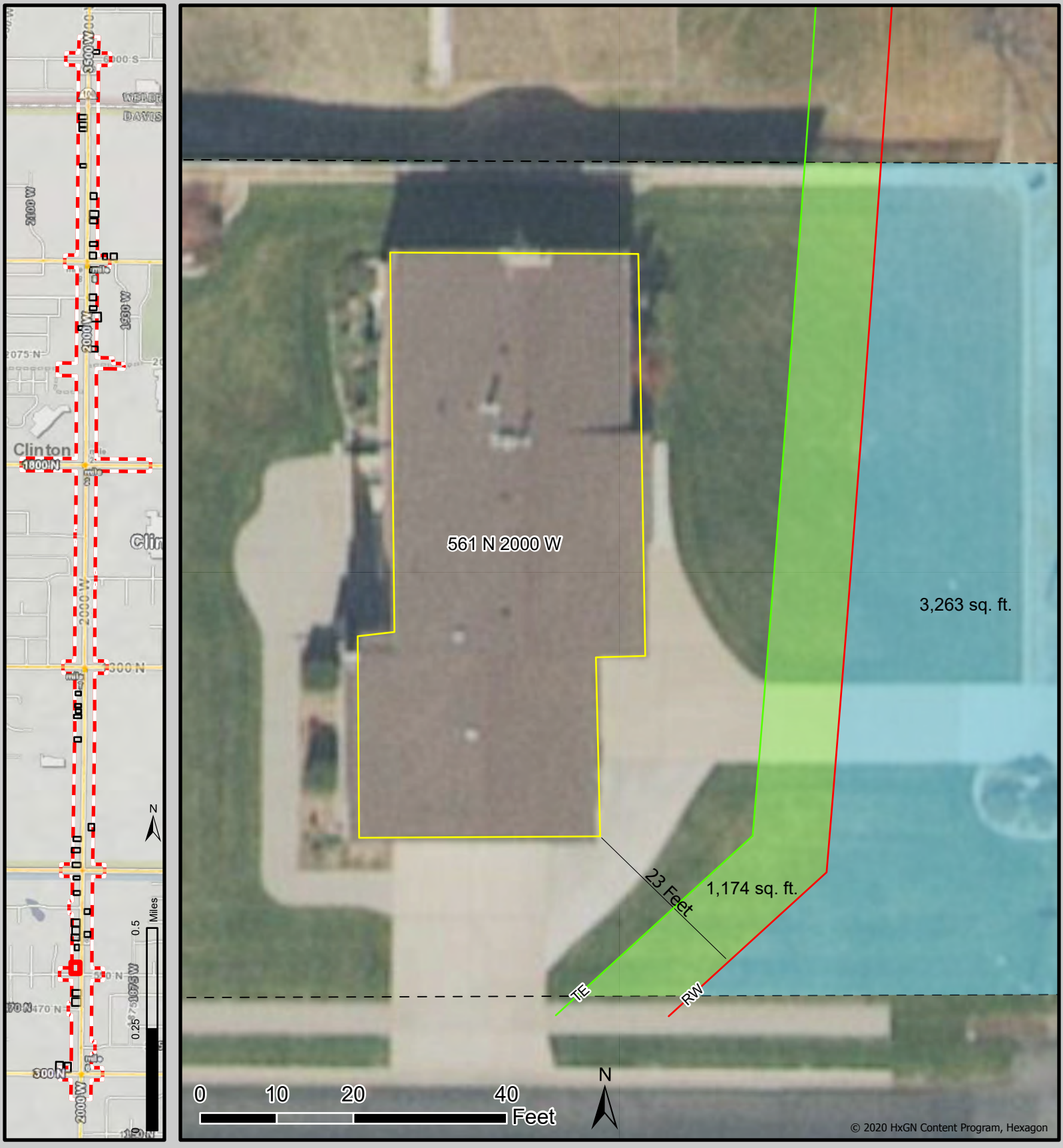
UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 4 of 32



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UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 5 of 32

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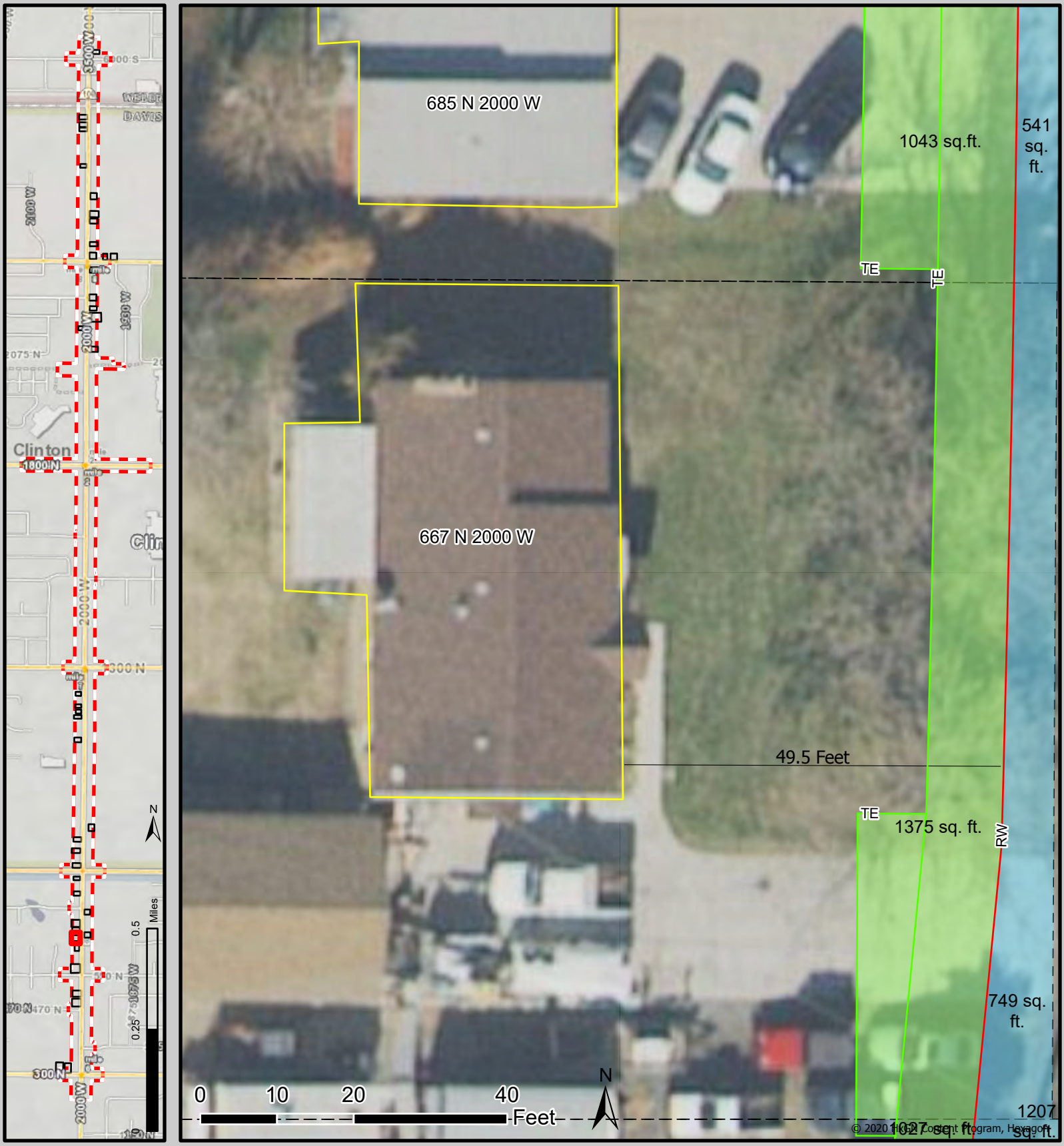
UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 6 of 32



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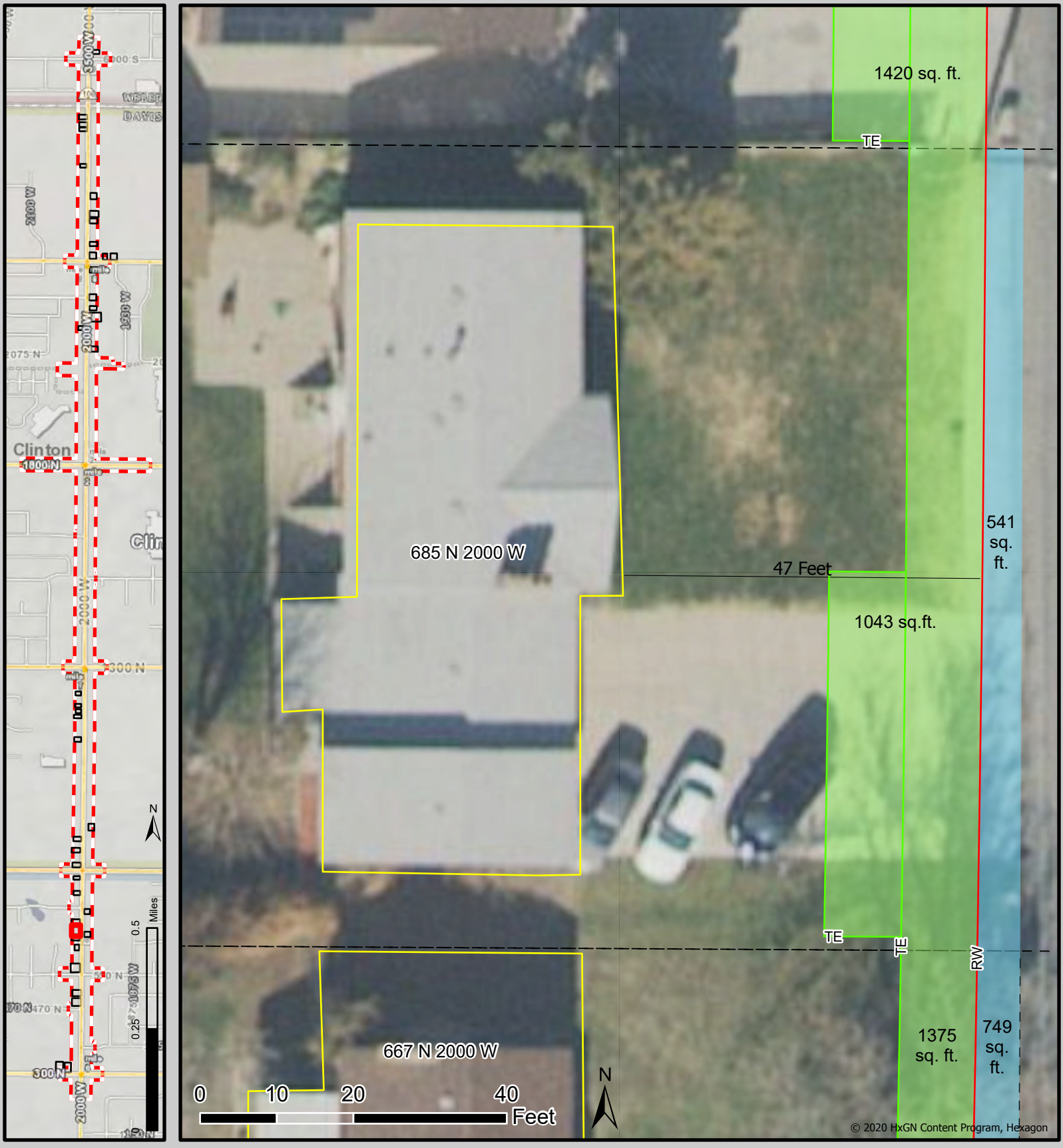
UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 7 of 32



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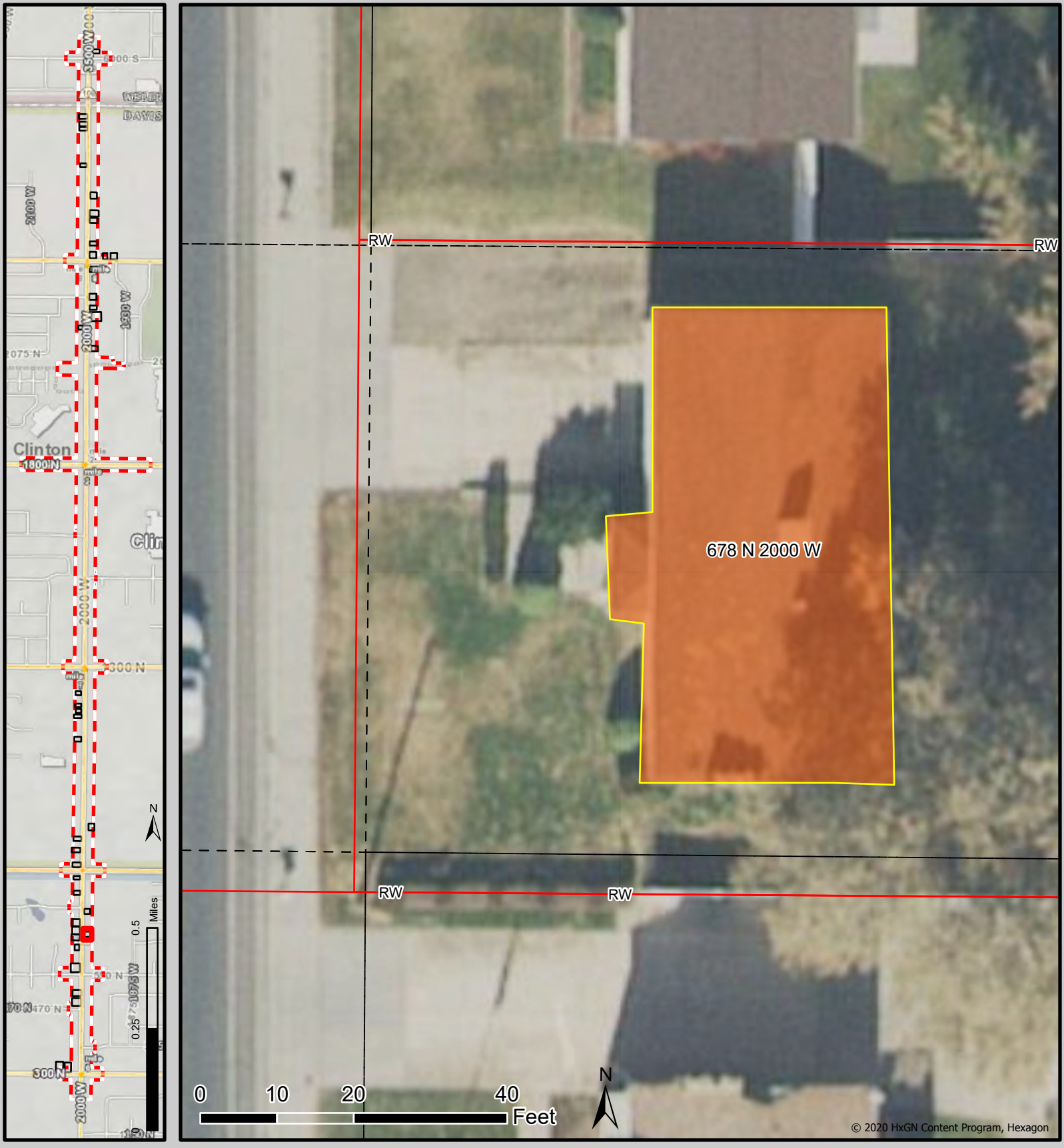
UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 8 of 32



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UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 9 of 32

Nature of Effect

- Full Acquisition
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- TCE

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2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 10 of 32

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- Full Acquisition
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- TCE

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- Proposed Right-of-Way
- Temporary Construction Easement
- Parcel Line
- Area of Potential Effects

2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 11 of 32

Nature of Effect

- Full Acquisition
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- TCE

- Eligible Structures
- Proposed Right-of-Way
- Temporary Construction Easement
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2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 12 of 32

Nature of Effect

- Full Acquisition
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- Eligible Structures
- Proposed Right-of-Way
- Temporary Construction Easement
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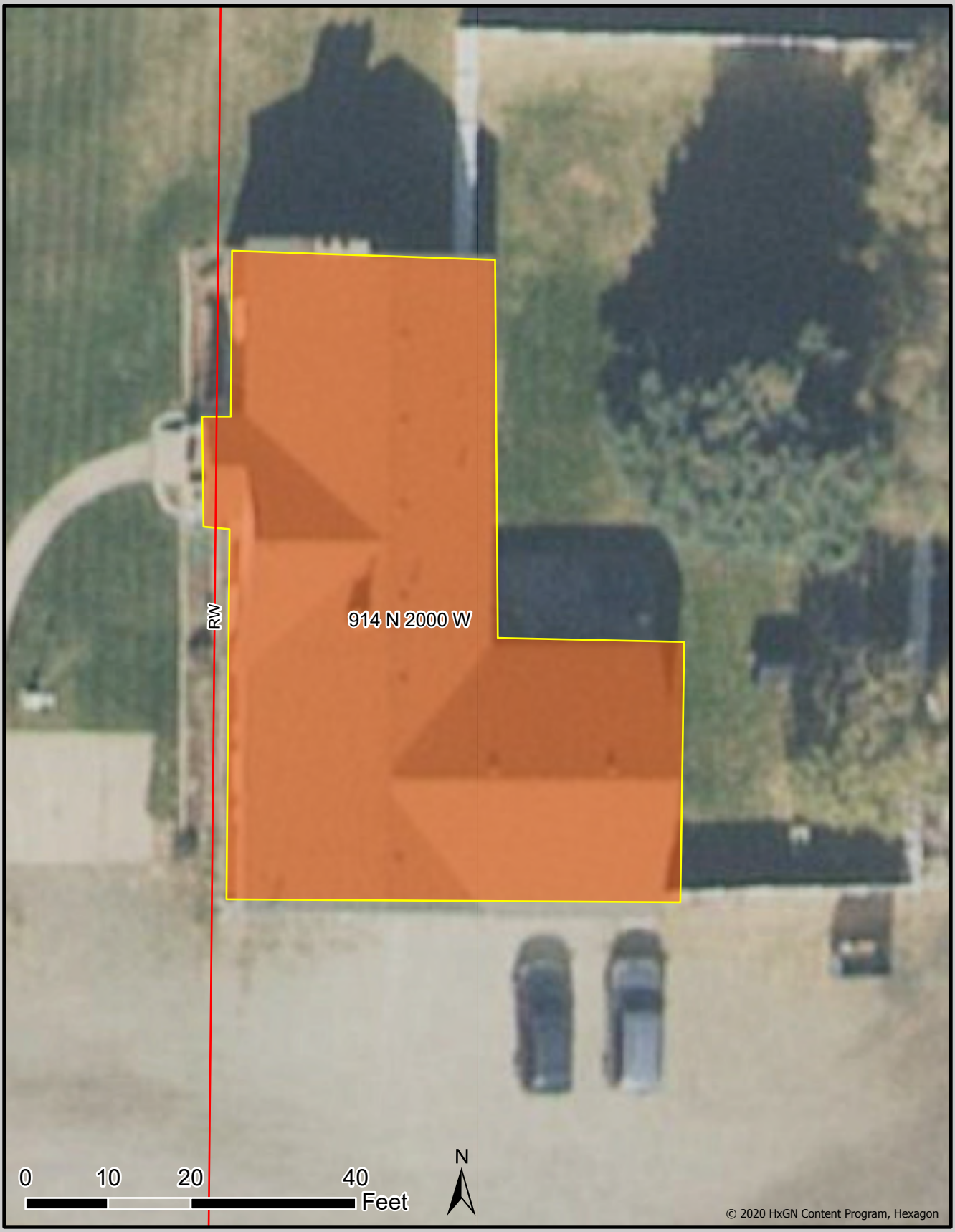
UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 13 of 32



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UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 14 of 32

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- Eligible Structures
- Proposed Right-of-Way
- Temporary Construction Easement
- Parcel Line
- Area of Potential Effects

2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 15 of 32

Nature of Effect

- Full Acquisition
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- Eligible Structures
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- Temporary Construction Easement
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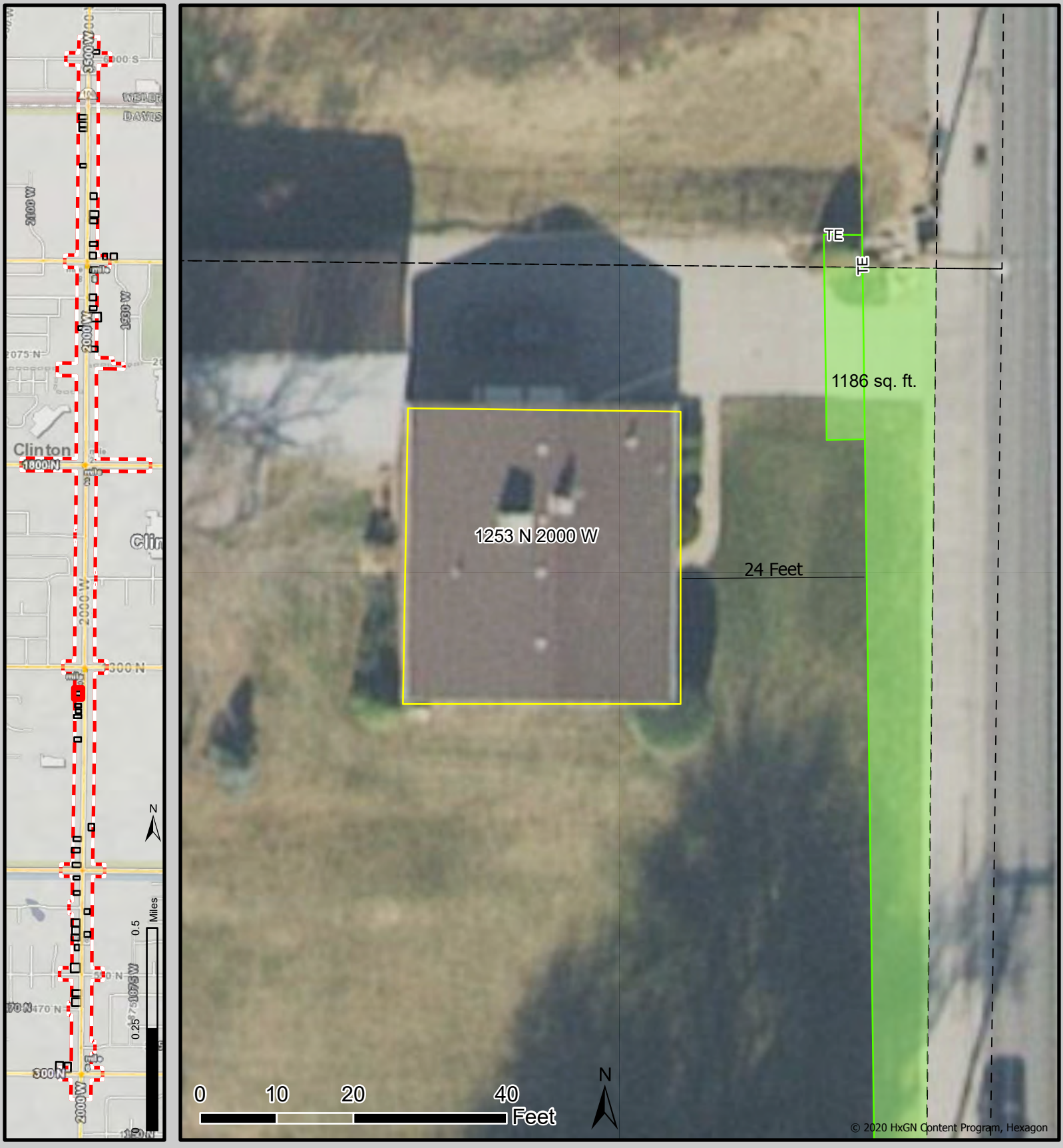
2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 16 of 32



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UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 17 of 32

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- Temporary Construction Easement
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UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 18 of 32

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- Proposed Right-of-Way
- Temporary Construction Easement
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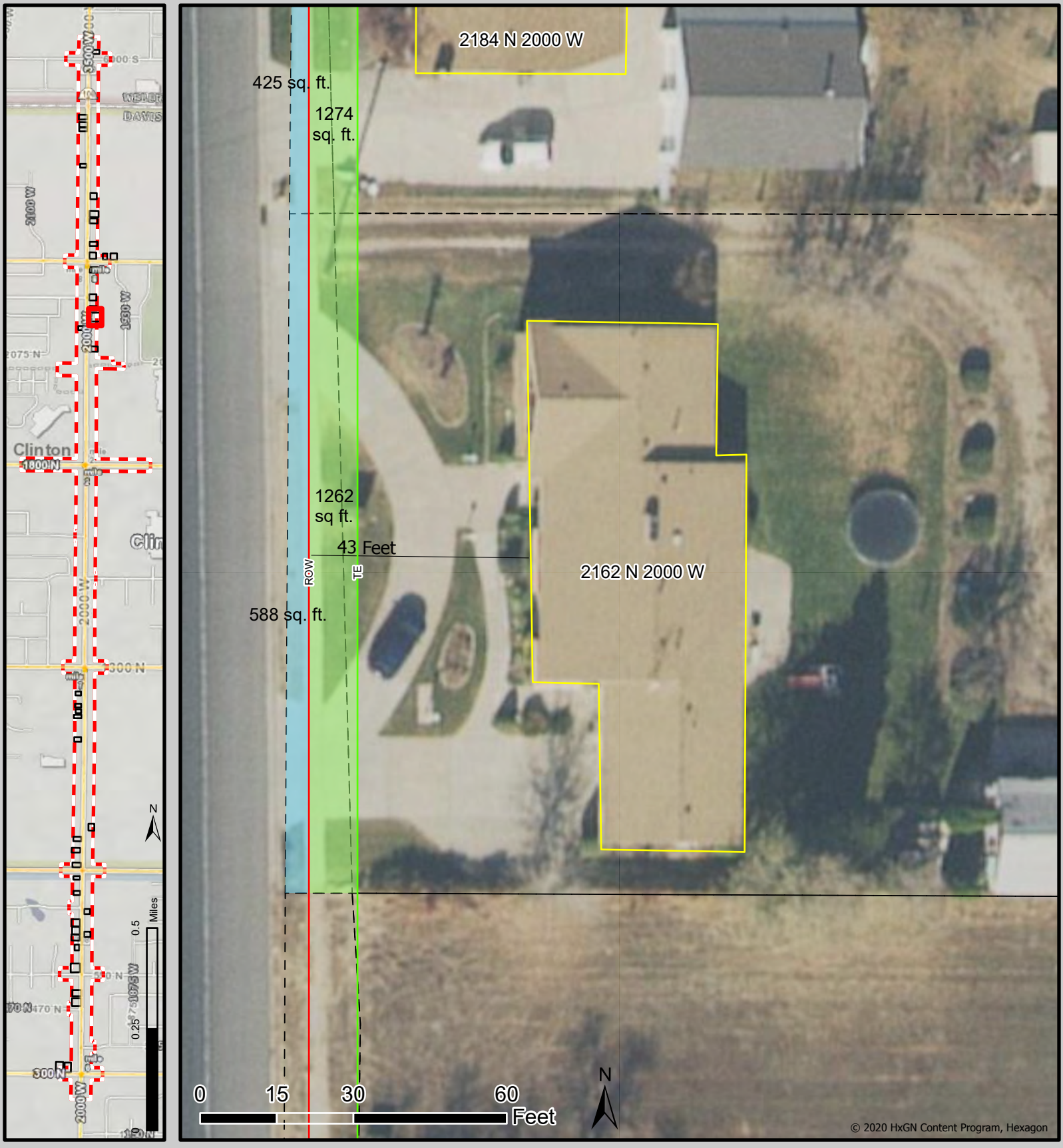
Map Date 2/12/2021
Page 19 of 32



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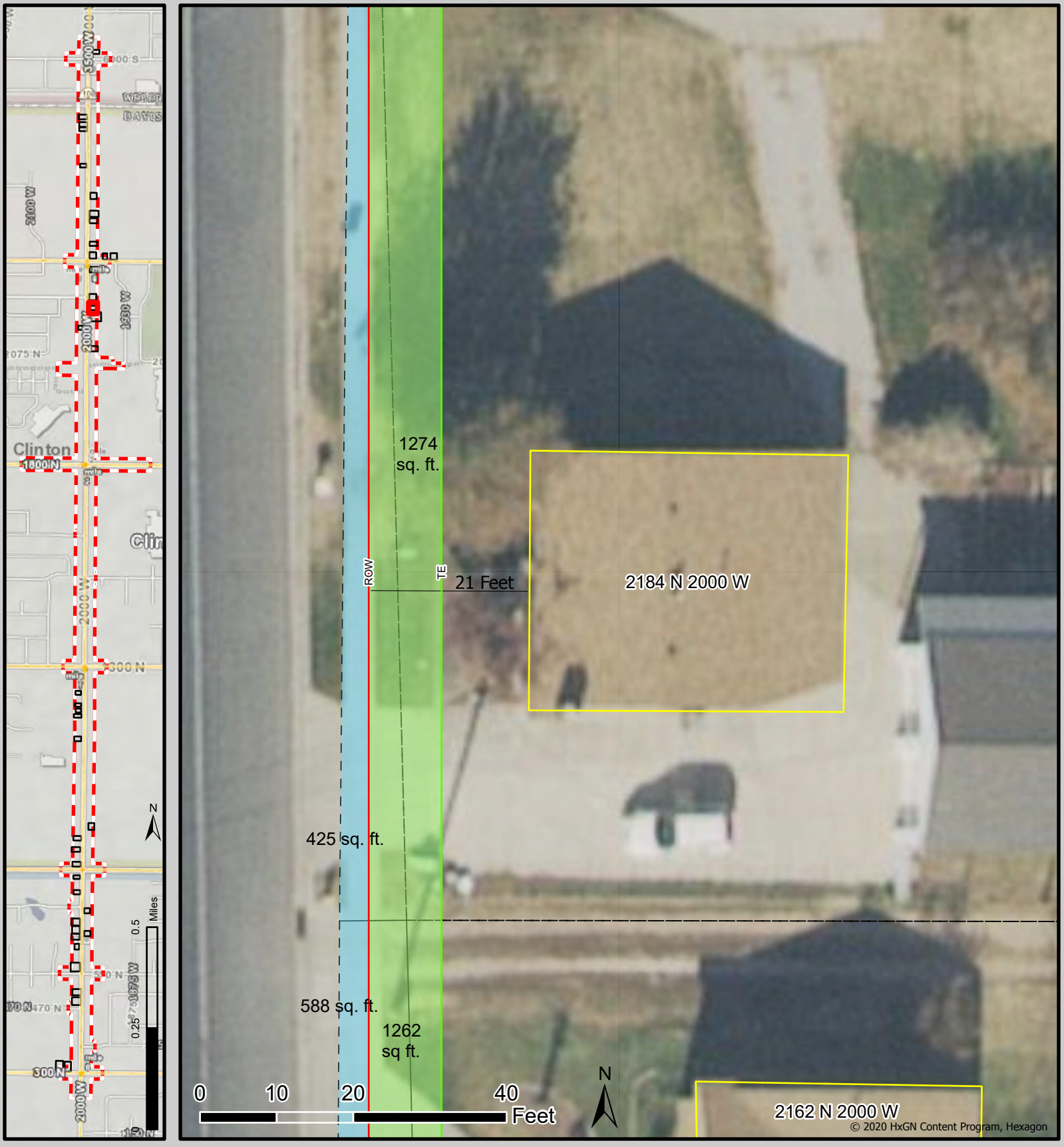
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 20 of 32



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Map Date 2/12/2021
Page 21 of 32

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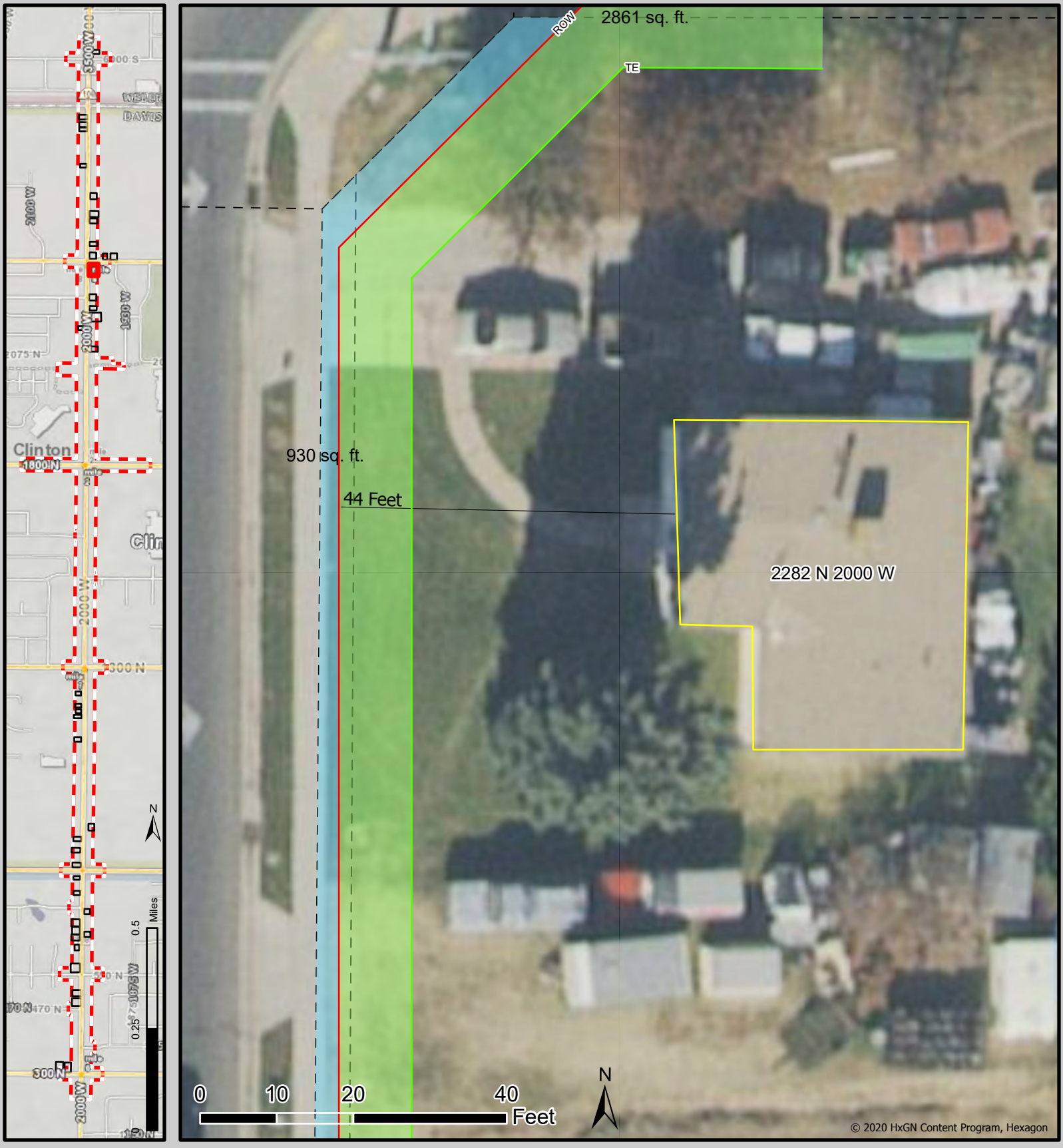
Map Date 2/12/2021
Page 22 of 32



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- Parcel Line
- Area of Potential Effects

2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 23 of 32

Nature of Effect

- Full Acquisition
- Partial Acquisition
- TCE

- Eligible Structures
- Proposed Right-of-Way
- Temporary Construction Easement
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UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 24 of 32

Nature of Effect

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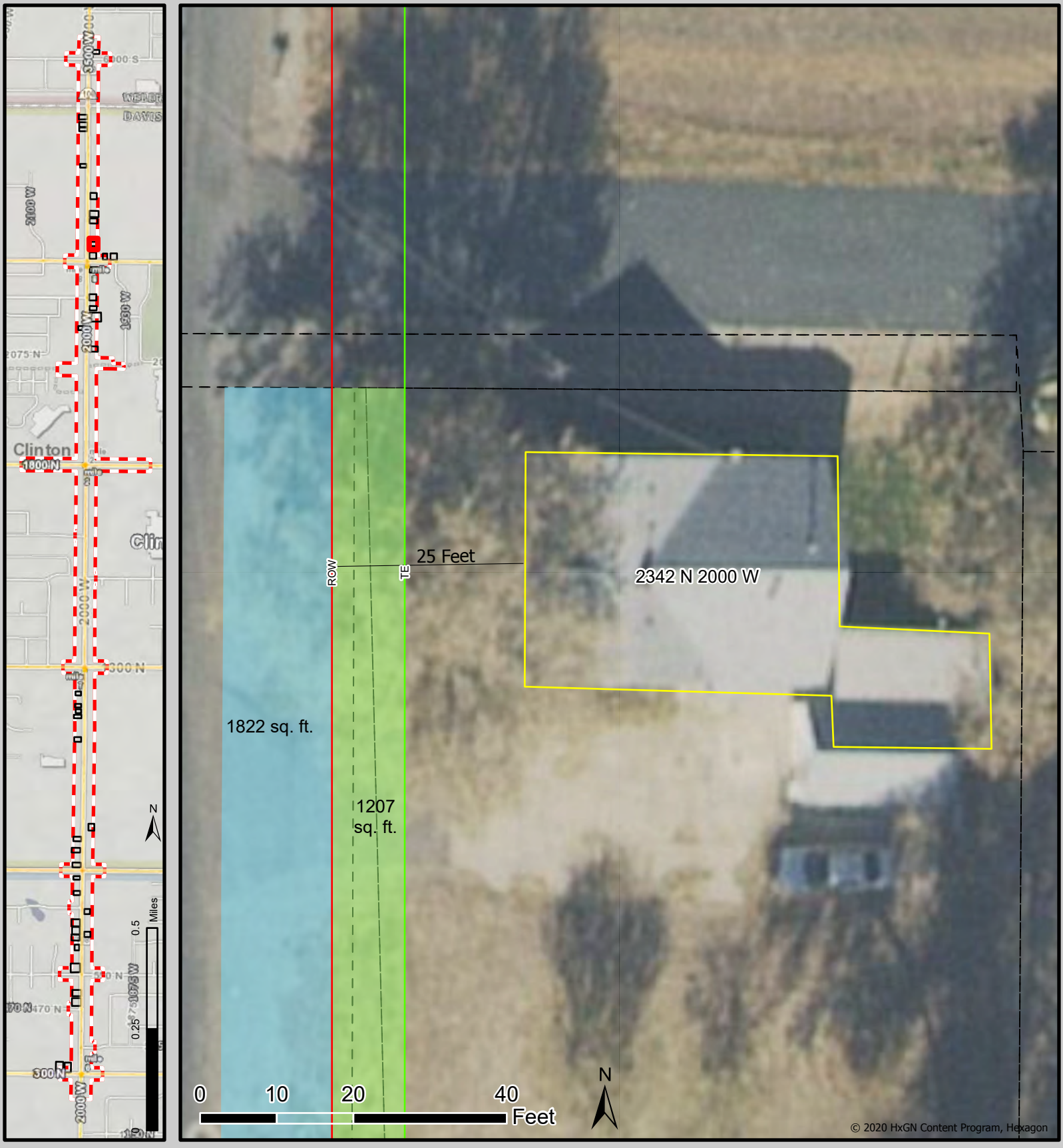
2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 25 of 32



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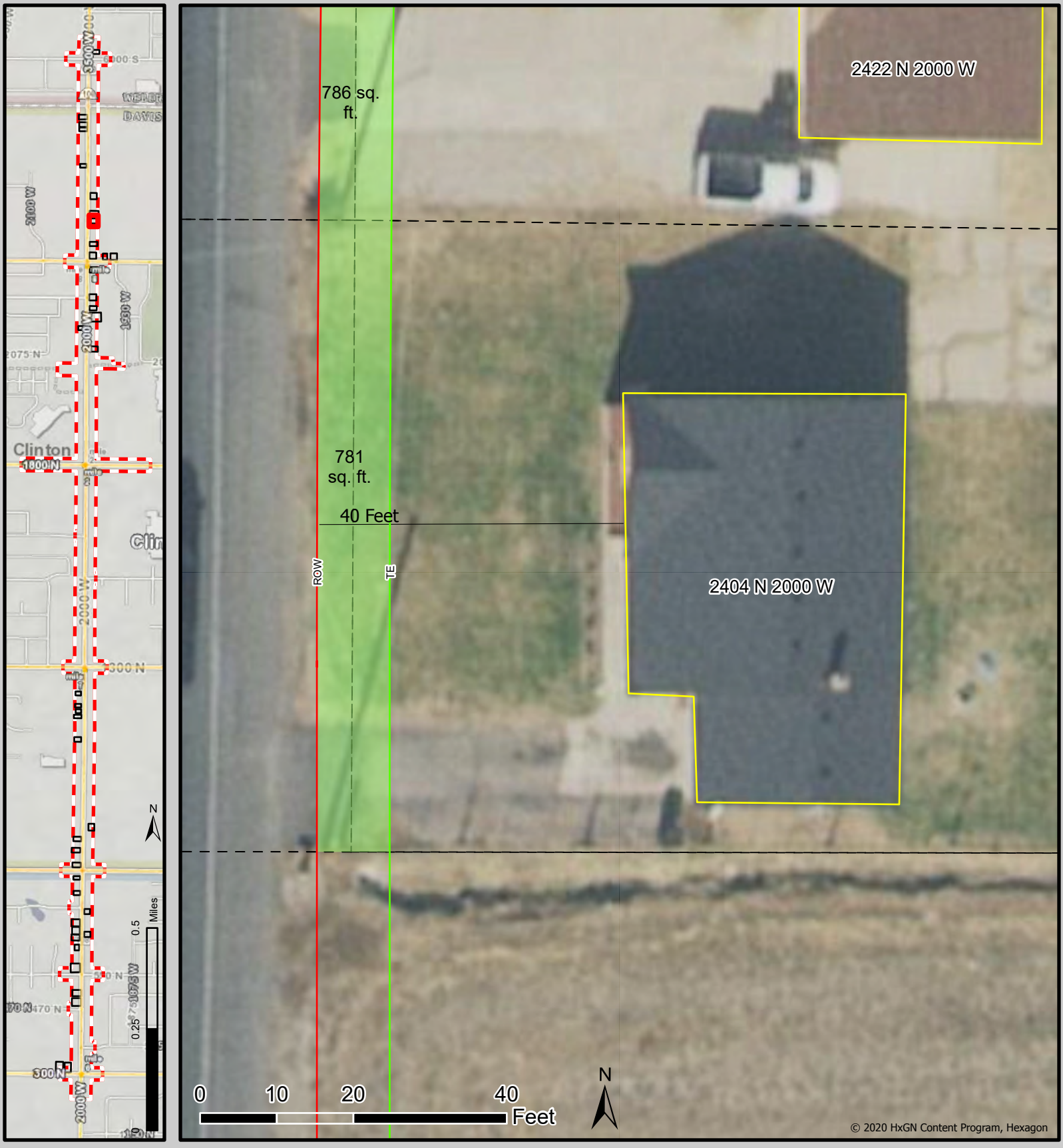
UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 26 of 32



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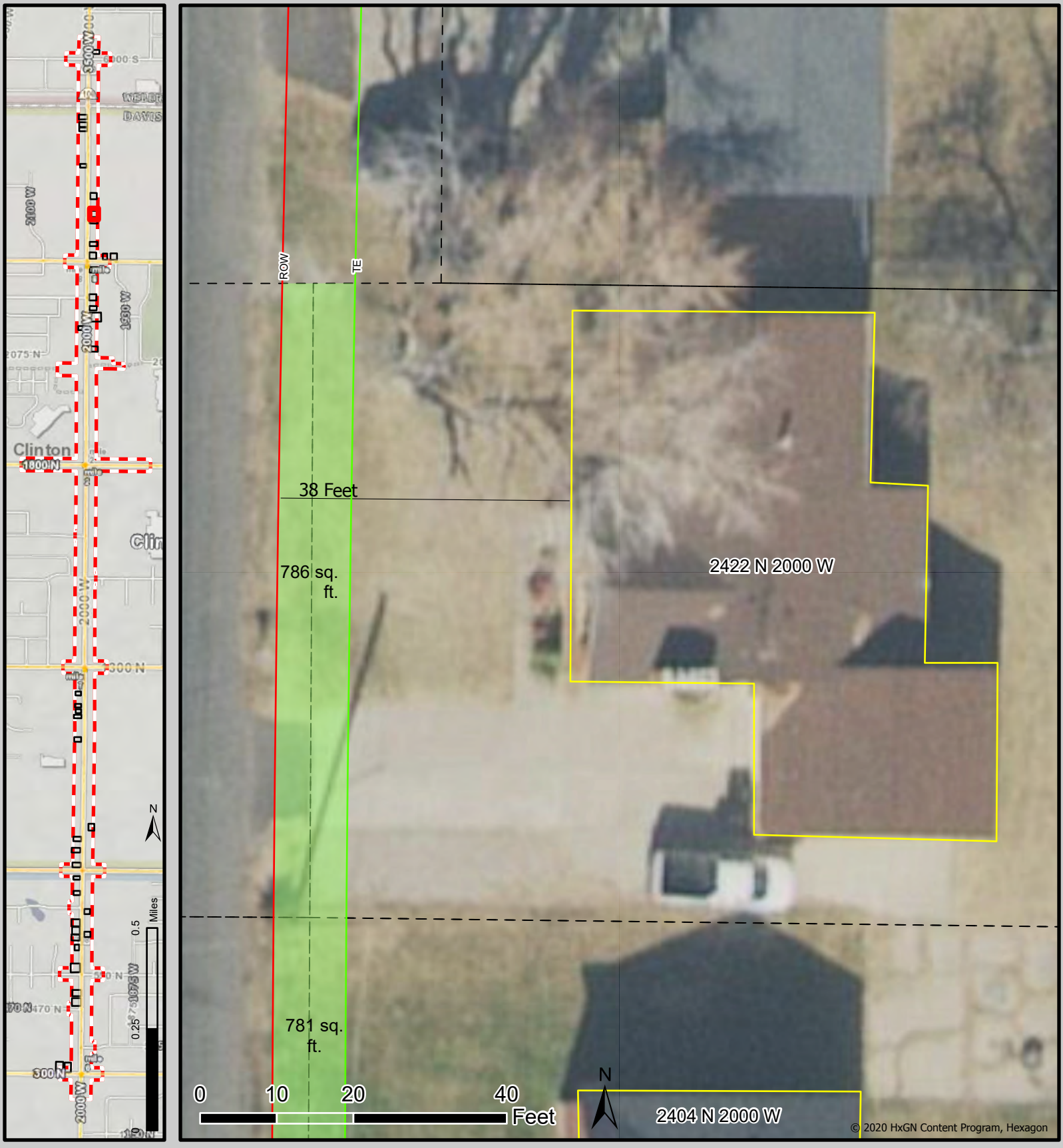
2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 27 of 32



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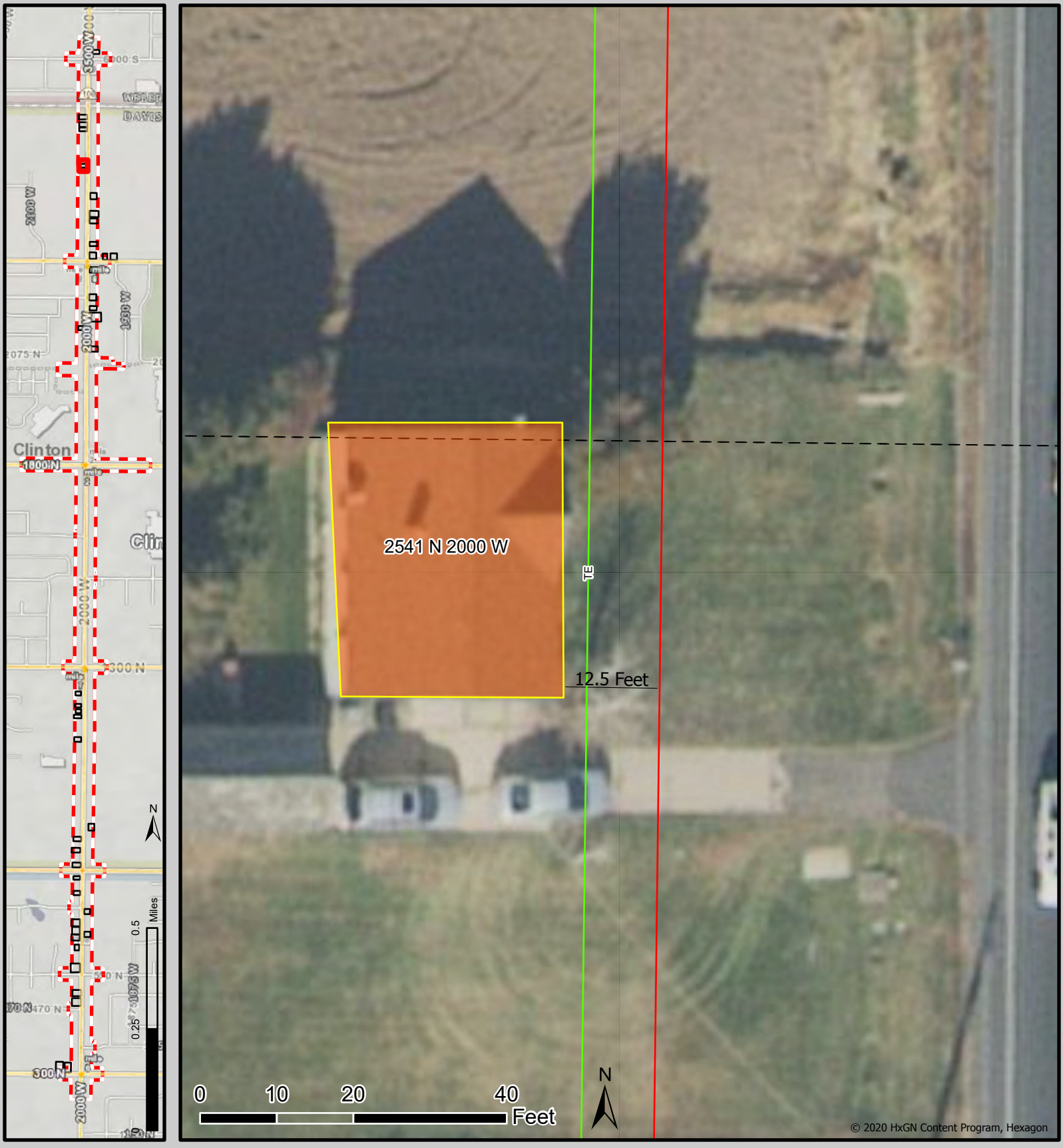
UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 28 of 32



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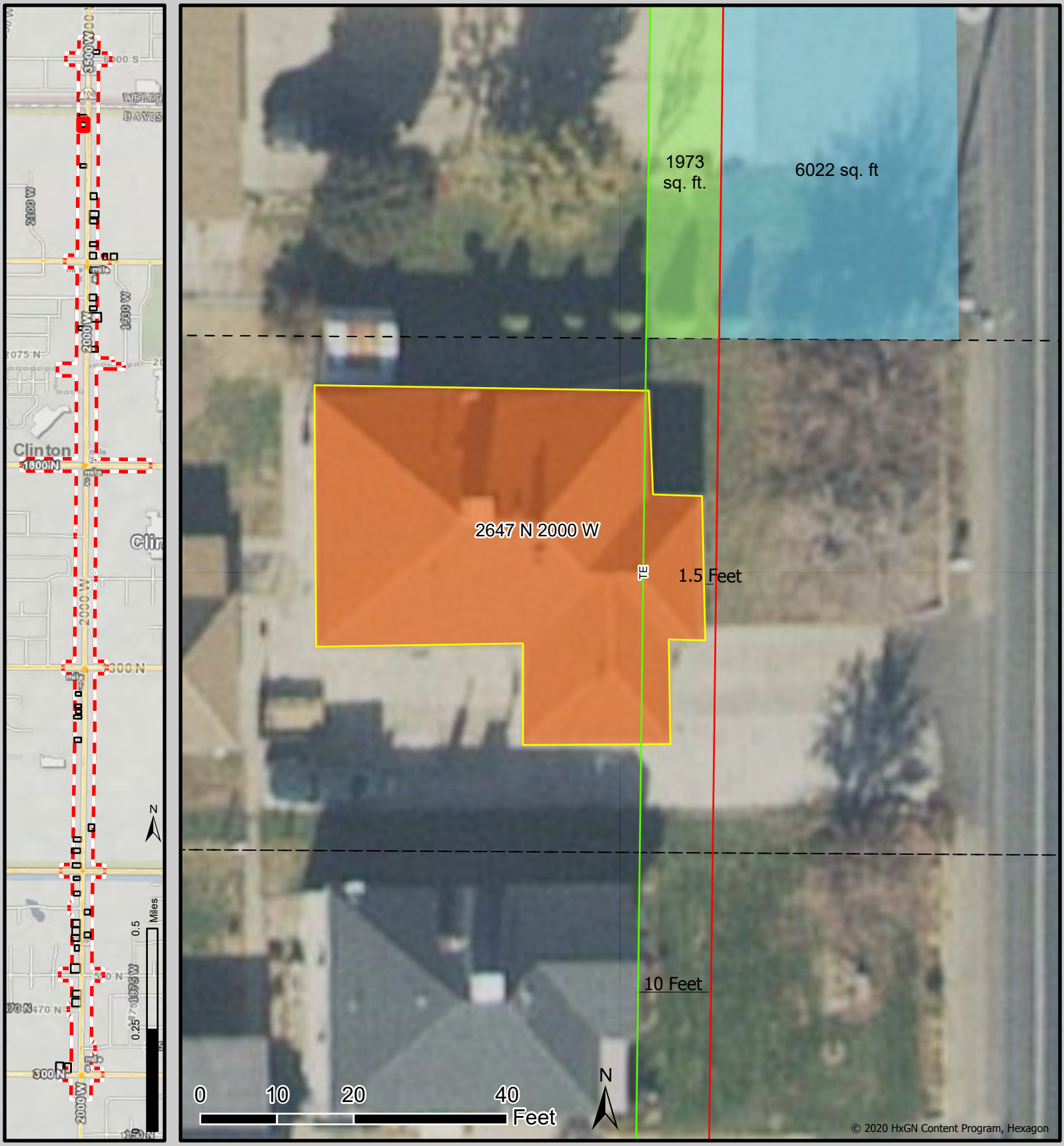
2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 29 of 32



Nature of Effect

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UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 30 of 32

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UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 31 of 32

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UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Map Date 2/12/2021
Page 32 of 32

Spencer J. Cox
Governor

Deidre M. Henderson
Lieutenant Governor

Jill Remington Love
Executive Director
Department of
Heritage & Arts

Utah Division of State History

Christopher Merritt
State Historic Preservation Officer

Kevin Fayles
Interim Director

March 4, 2021

Liz Robinson
Cultural Resources Program Manager
Utah Dept of Transportation (UDOT)
4501 Constitution Blvd
Salt Lake City, UT 84119

RE: PIN 15680_ SR-108, 300 North to 1800 North, Davis County_S-0108(36)6

For future correspondence, please reference Case No. 21-0433

Dear Ms. Robinson,

The Utah State Historic Preservation Office received your submission and request for our comment on the above-referenced undertaking on March 02, 2021. Based on the information provided to our office, we concur with your determinations of eligibility and with a finding of Adverse Effect. We will look forward to further consulting on this project to address the effect.

This information is provided to assist with Section 106 responsibilities as per §36CFR800. If you have questions, please contact me at (801) 245-7239 or by email at clhansen@utah.gov.

Sincerely,

Christopher Hansen
Preservation Planner/Utah SHPO

2021 DOE/FOE Amendment

State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director

TERIANNE S. NEWELL, P.E.
Deputy Director of Planning and Investment

LISA J. WILSON, P.E.
Deputy Director of Engineering and Operations

March 30, 2021

Mr. Chris Hansen
Senior Historic Preservation Specialist
Utah Division of State History
300 Rio Grande
Salt Lake City, UT 84101-1182

RE: UDOT Project No S-0108(36)6; SR-108, 300 North to 1800 North, Davis County, Utah (PIN 15680).
Amended Determination of Eligibility and Finding of No Adverse Effect.

Dear Mr. Hansen:

The Utah Department of Transportation (UDOT) is preparing to undertake the subject federal-aid project. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327* (executed January 17, 2017), the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. Also in accordance with the *Third Amended Programmatic Agreement among the FHWA, the Utah State Historic Preservation Officer, the Advisory Council on Historic Preservation, the USACE Sacramento District, and the UDOT Regarding Section 106 Implementation for Federal-Aid Transportation Projects in the State of Utah* (executed August 23, 2017), Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 300101 et seq.), and U.C.A.9-8-404, the UDOT has taken into account the effects of this undertaking on historic properties, and is affording the Utah State Historic Preservation Officer (SHPO) an opportunity to comment on the undertaking. Additionally, this submission is in compliance with Section 4(f) of the Department of Transportation Act of 1966, 23 U.S.C. § 138 (as amended) and 49 U.S.C. § 303 (as amended).

PROJECT DESCRIPTION

The proposed project will construct a portion of the area evaluated for the SR-108 EIS completed in 2008 (UDSH Case No. 06-1634). The proposed project is located along SR-108 (2000 West) from approximately 300 North in West Point extending northwards to the Weber-Davis County line (approximately 1700 North, Clinton; see the enclosed study area map). Due to the length of time that has passed, the section studied as part of this document will be re-evaluated under the National Environmental Policy Act (NEPA). Safety and transportation improvements are needed to address current identified design deficiencies and current and projected 2050 travel demand along SR-108. The improvements may include roadway widening, intersection improvements and accommodation for active transportation. The original Determination of Eligibility/Finding of Effect (DOE/FOE) for this project was submitted to the Utah SHPO who concurred with that document on March 4, 2021 (UDSH Case No. 21-0433). This amendment is submitted to document changes in the effects to three properties that were originally described as being adversely affected by the project but due to ongoing design work, are able to remain with only minor land acquisition (see Table 1).

The APE and survey areas remain as defined in the original DOE/FOE and no additional survey was conducted in association with this amendment. There are no changes to the determinations for archaeological resources.

ARCHITECTURAL PROPERTIES

Description of Effects: This proposed project requires minor right of way acquisitions along the frontage from 3 properties eligible to the NRHP which were previously designated for full property acquisition and demolition. All of these properties are considered Eligible Contributing (EC) and are therefore equally significant. Temporary construction easements (TCE) to reconstruct driveways and landscaping are also necessary to accommodate changes to the roadway elevation. The acquisitions and associated construction affect a relatively small portion of each property and will not substantially impact or alter any contributing elements of the properties or any of the character-defining features for which each were determined eligible for the NRHP.

SUMMARY

To summarize, the project as a whole will now result in a finding of **Adverse Effect** and Section 4(f) Greater than *de minimis* impacts for 7 architectural properties, a finding of **No Adverse Effect** and Section 4(f) *de minimis* impacts for 22 architectural properties, and a finding of **No Historic Properties Affected** for all remaining architectural properties and archaeological sites. Therefore, the Finding of Effect for the proposed UDOT Project No. S-0108(36)6; SR-108, 300 North to 1800 North, Davis County, Utah, remains **Adverse Effect**.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 *USC §327* and a Memorandum of Understanding dated January 17, 2017, and executed by FHWA and UDOT.

Please review this document and, providing you agree with the findings contained herein, provide written concurrence. Should you have any questions or need additional information, please feel free to contact Liz Robinson at 801-910-2035 or lizrobinson@utah.gov; or Elizabeth Giraud at 801-633-8484 or egiraud@utah.gov.

Sincerely,

Liz Robinson, M.A., RPA
Cultural Resources Program Manager
UDOT Environmental Services

Elizabeth Giraud, AICP
Architectural Historian
UDOT Environmental Services

Enclosures

cc: David Adamson, Project Manager
Elisa Albury, Environmental Manager

Table 1. Determinations of Eligibility and Findings of Effect for Architectural Properties.

Address	Date	Type/Style	UDSH Rating/NRHP Eligibility	Nature of Effect	Finding of Effect	Section 4f Use/Impact
817 N 2000 W	c. 1950	Ranch/Ranch-Rambler	EC/Eligible	Partial acquisition: 974 sq. ft. (0.02 acres) out of 1.0 acres. TCE: 2,334 sq. ft.	No Adverse Effect	Yes/ *de minimis*
2541 N 2000 W	c. 1949	WWII-Era Cottage/Minimal Traditional	EC/Eligible	Partial acquisition: 3,443 sq. ft. (0.07 acres) out of 0.50 acres. TCE: 1,148 sq. ft.	No Adverse Effect	Yes/ *de minimis*
2647 N 2000 W	c. 1924	Bungalow/Bungalow and Prairie School	EC/Eligible	Partial acquisition: 858 sq. ft. (0.02 acres) out of 0.23 acres. TCE: 645 sq. ft.	No Adverse Effect	Yes/ *de minimis*

Nature of Effect

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2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Addendum
Map Date 3/25/2021
Page 1 of 3

Nature of Effect

- Full Acquisition
- Partial Acquisition
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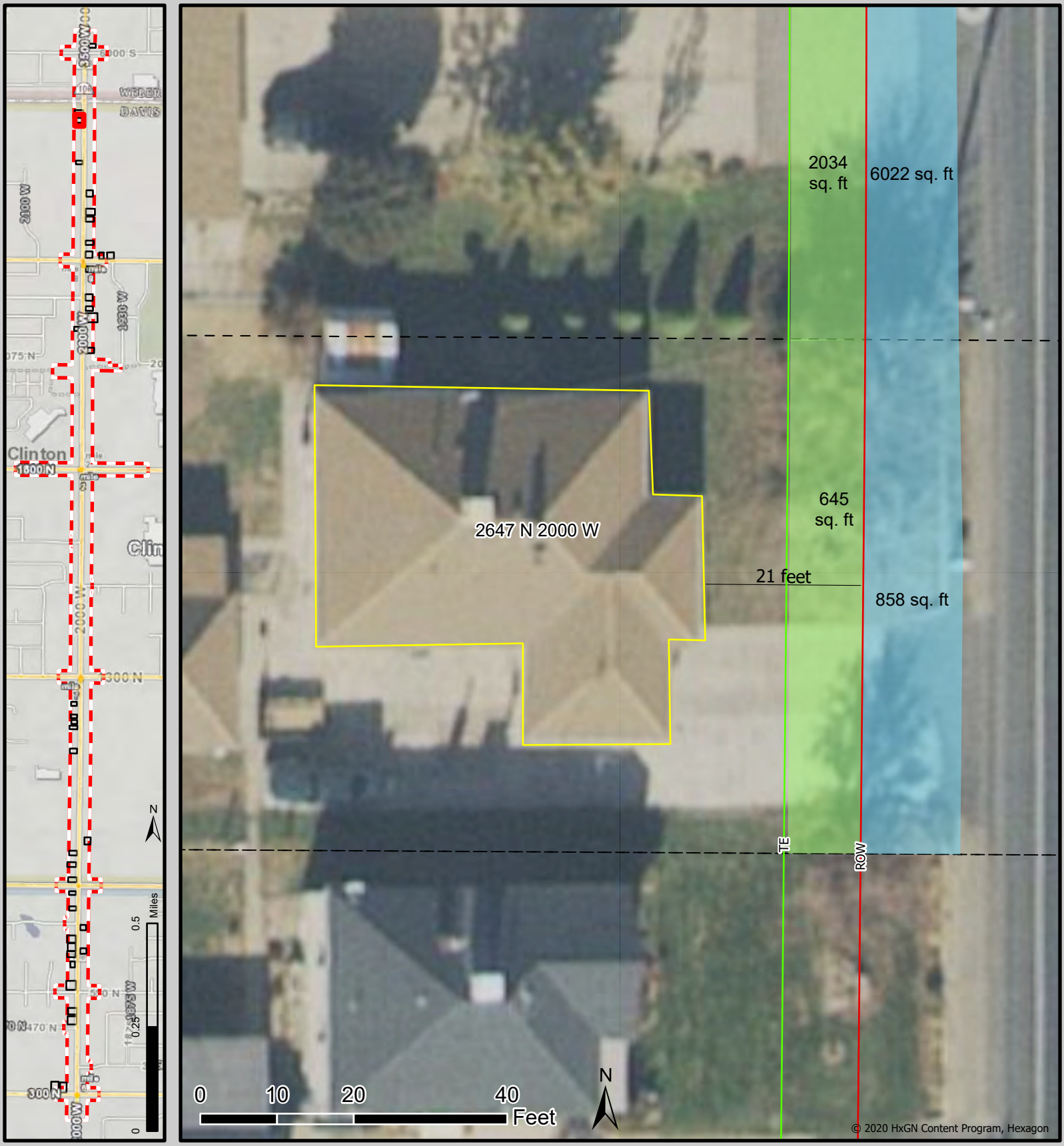
2000 West (SR-108); 300 North to 6000 South

UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Addendum
Map Date 3/25/2021



Nature of Effect

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UDOT Project S-0108(36)6; PIN 15680
Determination of Eligibility and Finding of Effect
Addendum
Map Date 3/25/2021

Spencer J. Cox
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Department of
Heritage & Arts

Utah Division of State History

Christopher Merritt
State Historic Preservation Officer

Kevin Fayles
Interim Director

March 31, 2021

Liz Robinson
Cultural Resources Program Manager
Utah Dept of Transportation (UDOT)
4501 Constitution Blvd
Salt Lake City, UT 84119

RE: PIN 15680_ SR-108 300N to 1800N Addendum_S-0108(36)6

For future correspondence, please reference Case No. 21-0721

Dear Ms. Robinson,

The Utah State Historic Preservation Office received your submission and request for our comment on the above-referenced undertaking on March 30, 2021. Based on the updated and amended information provided to our office, we concur with your determinations of eligibility and we still concur with a finding of Adverse Effect for the proposed undertaking.

This information is provided to assist with Section 106 responsibilities as per §36CFR800. If you have questions, please contact me at (801) 245-7239 or by email at clhansen@utah.gov.

Sincerely,

Christopher Hansen
Preservation Planner/Utah SHPO

Second Amended DOE/FOE

State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director

TERIANNE S. NEWELL, P.E.
Deputy Director of Planning and Investment

LISA J. WILSON, P.E.
Deputy Director of Engineering and Operations

June 1, 2021

Ms. Savanna Agardy
Compliance Archaeologist
Utah Division of State History
300 Rio Grande
Salt Lake City, UT 84101-1182

RE: UDOT Project No S-0108(36)6; SR-108, 300 North to 1800 North, Davis County, Utah (PIN 15680).
Second Amended Determination of Eligibility and Finding of No Adverse Effect.

Dear Mr. Hansen:

The Utah Department of Transportation (UDOT) is preparing to undertake the subject federal-aid project. In accordance with Parts 3.1.1 and 3.2 of the *Memorandum of Understanding Between the Federal Highway Administration and the Utah Department of Transportation Concerning State of Utah's Participation in the Surface Transportation Project Delivery Program Pursuant to 23 USC §327* (executed January 17, 2017), the UDOT assumes responsibility, assigned by the Federal Highway Administration (FHWA), for ensuring compliance with Section 106 of the NHPA and with Section 4(f) of the DOT Act of 1966, as amended. Also in accordance with the *Third Amended Programmatic Agreement among the FHWA, the Utah State Historic Preservation Officer, the Advisory Council on Historic Preservation, the USACE Sacramento District, and the UDOT Regarding Section 106 Implementation for Federal-Aid Transportation Projects in the State of Utah* (executed August 23, 2017), Section 106 of the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 300101 et seq.), and U.C.A.9-8-404, the UDOT has taken into account the effects of this undertaking on historic properties, and is affording the Utah State Historic Preservation Officer (SHPO) an opportunity to comment on the undertaking. Additionally, this submission is in compliance with Section 4(f) of the Department of Transportation Act of 1966, 23 U.S.C. § 138 (as amended) and 49 U.S.C. § 303 (as amended).

PROJECT DESCRIPTION

The proposed project will construct a portion of the area evaluated for the SR-108 EIS completed in 2008 (UDSH Case No. 06-1634). The proposed project is located along SR-108 (2000 West) from approximately 300 North in West Point extending northwards to the Weber-Davis County line (approximately 1700 North, Clinton; see the enclosed study area map). Due to the length of time that has passed, the section studied as part of this document will be re-evaluated under the National Environmental Policy Act (NEPA). Safety and transportation improvements are needed to address current identified design deficiencies and current and projected 2050 travel demand along SR-108. The improvements may include roadway widening, intersection improvements and accommodation for active transportation. The original Determination of Eligibility/Finding of Effect (DOE/FOE) for this project was submitted to the Utah SHPO who concurred with that document on March 4, 2021 (UDSH Case No. 21-0433). This amendment is submitted to document inclusion of additional area required for storm water detention (see Table 1).

The additional APE includes a 8.7ac. polygon north of the intersection of 1800 North and 2225 West in Clinton, UT. The APE has been surveyed for archaeology by Certus Environmental Solutions, under State Antiquities Project

Number U21HY0373, and the results are reported in *An Archaeological Resource Assessment for the SR-108; 300 North to 6000 South Project Detention Basin, Davis County, Utah* (see enclosed report). An intensive level pedestrian survey was conducted using 15 meter transects to identify archaeological resources; however, none were observed. No resources with historic architecture were observed.

SUMMARY

To summarize, the portion of the project described in this amendment will result in a finding of No Historic Properties affected. However, the Finding of Effect for the proposed UDOT Project No. S-0108(36)6; SR-108, 300 North to 1800 North, Davis County, Utah, as a whole remains **Adverse Effect**.

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by UDOT pursuant to 23 *USC §327* and a Memorandum of Understanding dated January 17, 2017, and executed by FHWA and UDOT.

Please review this document and, providing you agree with the findings contained herein, provide written concurrence. Should you have any questions or need additional information, please feel free to contact Liz Robinson at 801-910-2035 or lizrobinson@utah.gov; or Elizabeth Giraud at 801-633-8484 or egiraud@utah.gov.

Sincerely,

Liz Robinson, M.A., RPA
Cultural Resources Program Manager
UDOT Environmental Services

Elizabeth Giraud, AICP
Architectural Historian
UDOT Environmental Services

Enclosures

cc: David Adamson, Project Manager
Elisa Albury, Environmental Manager

Figure 3. Location of survey area; aerial map

Spencer J. Cox
Governor

Deidre M. Henderson
Lieutenant Governor

Jill Remington Love
Executive Director
Department of
Heritage & Arts

Utah Division of
State History

Christopher Merritt
State Historic Preservation Officer

Kevin Fayles
Interim Director

June 2, 2021

Liz Robinson
Cultural Resources Program Manager
Utah Department of Transportation (UDOT)
4501 Constitution Blvd
Salt Lake City, UT 84119

RE: PIN 15680_ SR-108, 300 North to 6000 South, 2nd Amended DOEFOE_ S-108(36)6 (U21HY0373)

For future correspondence, please reference Case No. 21-1255

Dear Ms. Robinson,

The Utah State Historic Preservation Office received your request for our comment on the above-referenced undertaking amendment on June 01, 2021.

Given that there were no cultural resources identified in the amended portion surveyed under State Project Number U21HY0373, we concur with your determination of "No Historic Properties Affected" for the amended undertaking portion. We acknowledge that the overall undertaking determination still remains "Adverse Effect".

This letter serves as our comment on the determination you have made within the consultation process specified in §36CFR800.4. Additionally, Utah Code 9-8-404(1)(a) denotes that your agency is responsible for all final decisions regarding cultural resources for this undertaking. Our comments here are provided as specified in U.C.A. 9-8-404(3)(a)(i).

If you have questions, please contact me at 801-245-7246 or by email at sagardy@utah.gov.

Sincerely,

Savanna Agardy
Compliance Archaeologist

2000 West (SR-108); 300 North to 6000 South, Davis and Weber Counties, Utah Section 4(f) Re-evaluation

June 2021

APPENDIX B:

SECTION 4(F) IMPACTS FIGURES

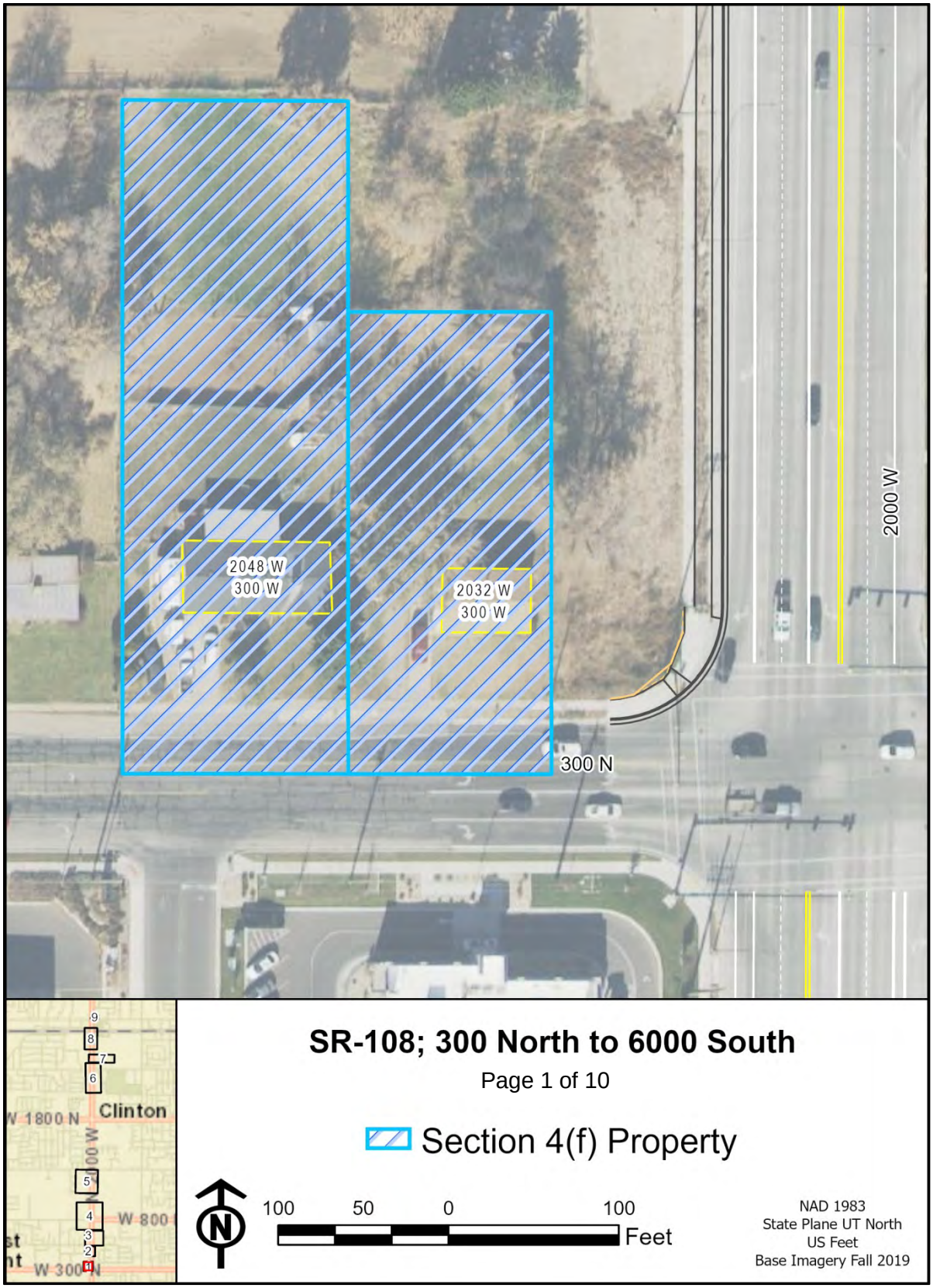

Figure 6. Section 4(f) impacts; Map 1 of 10

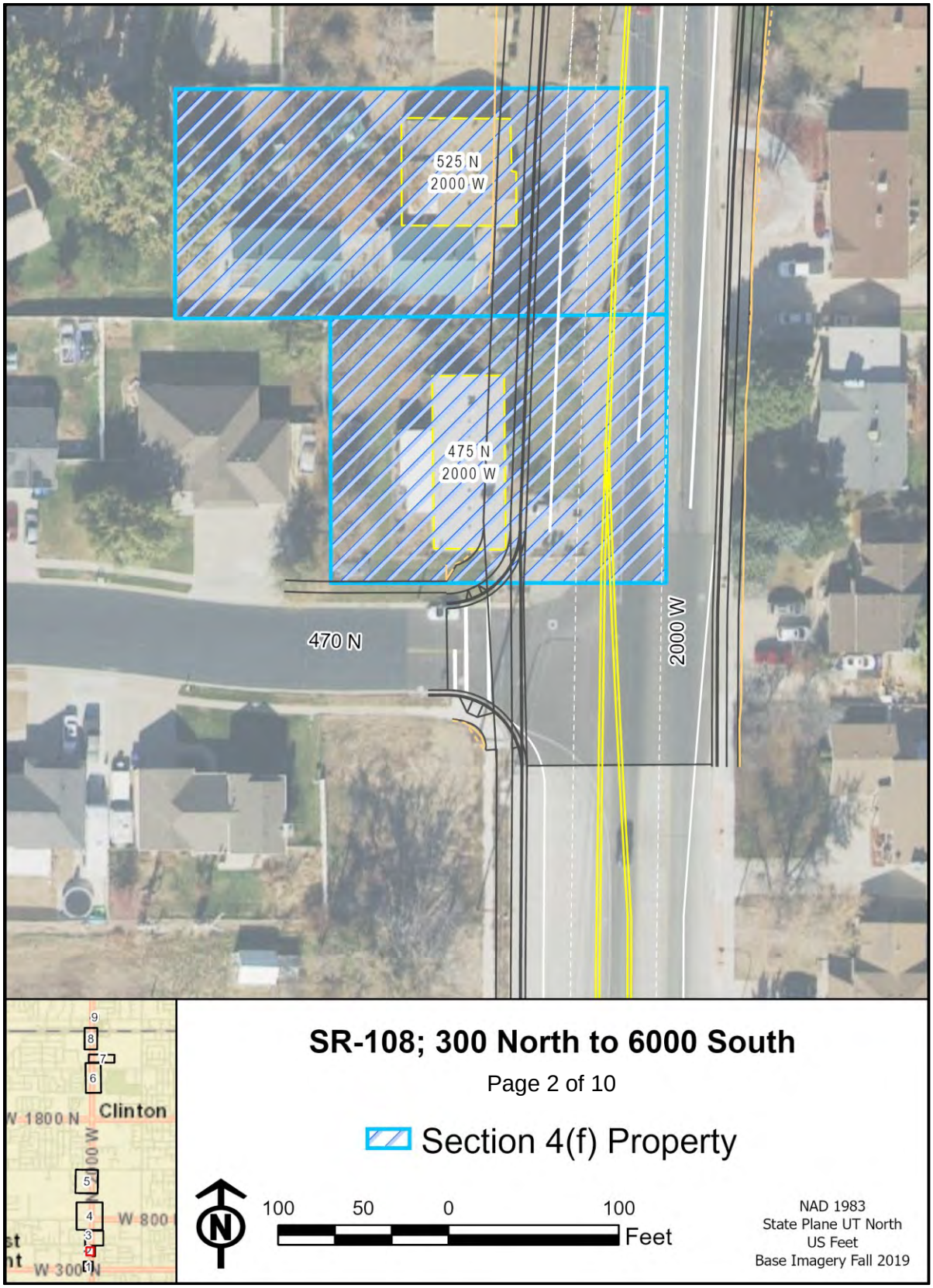

Figure 7. Section 4(f) impacts; Map 2 of 10

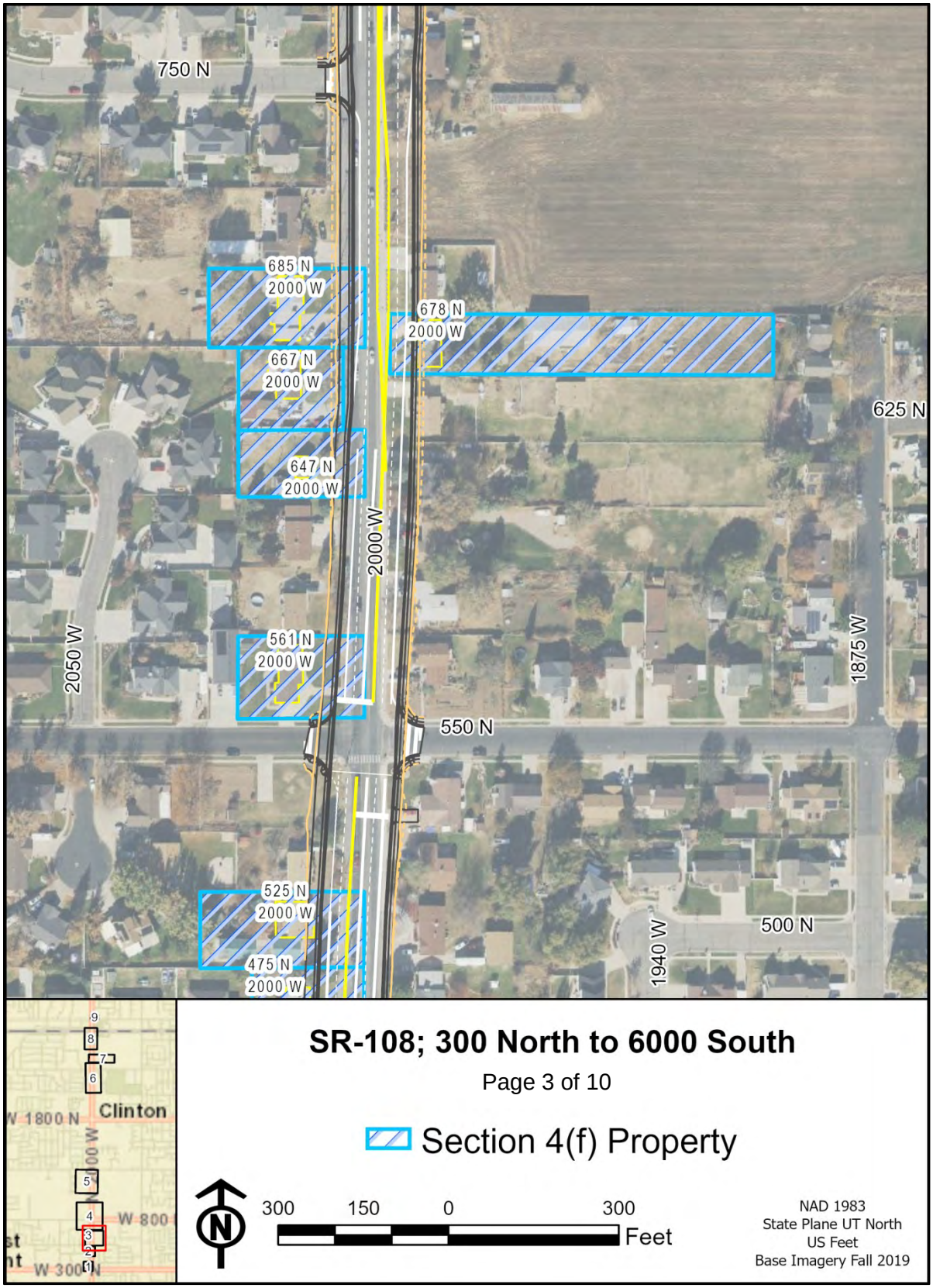

Figure 8. Section 4(f) impacts; Map 3 of 10

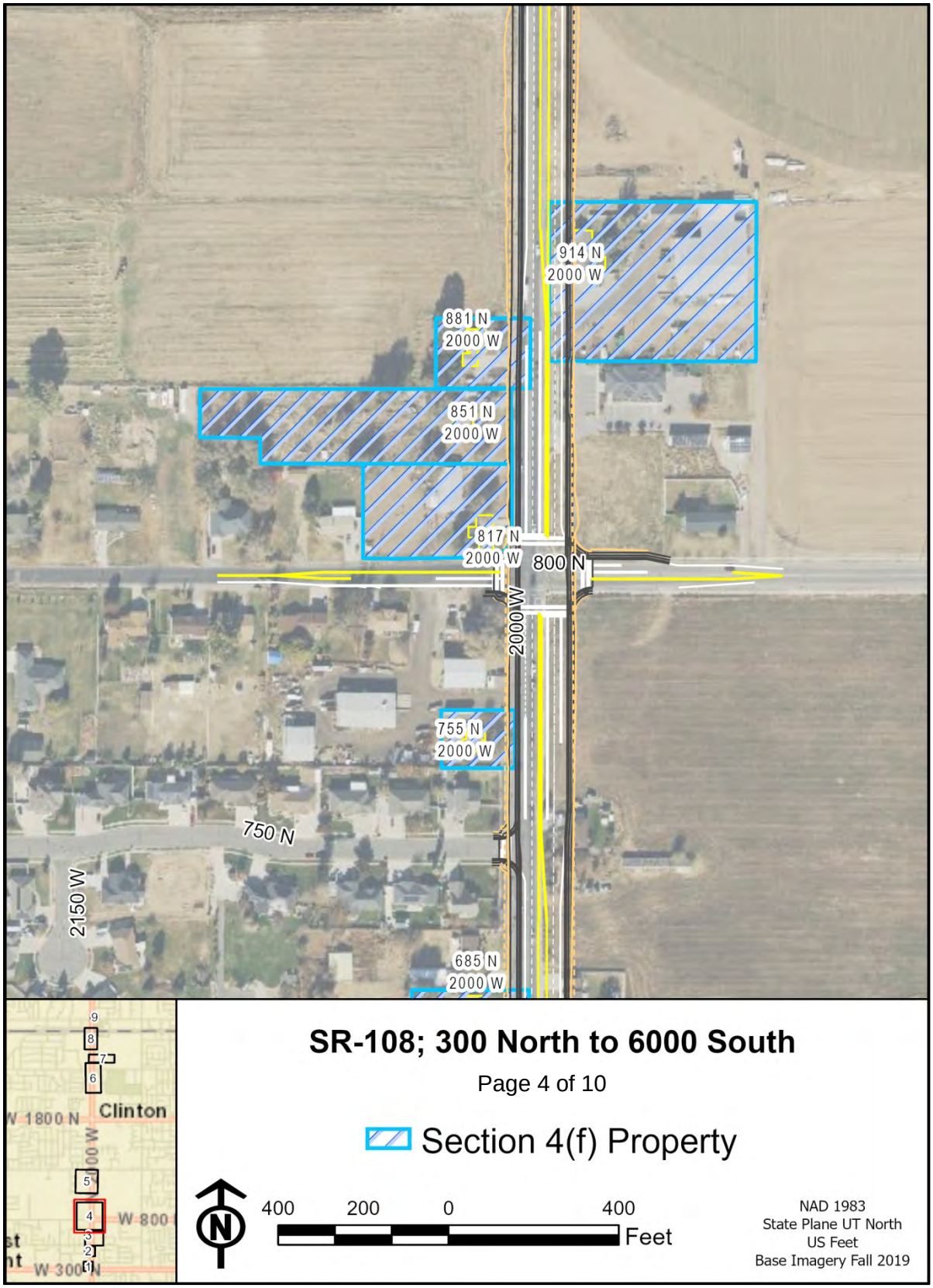

Figure 9. Section 4(f) impacts; Map 4 of 10

Figure 10. Section 4(f) impacts; Map 5 of 10

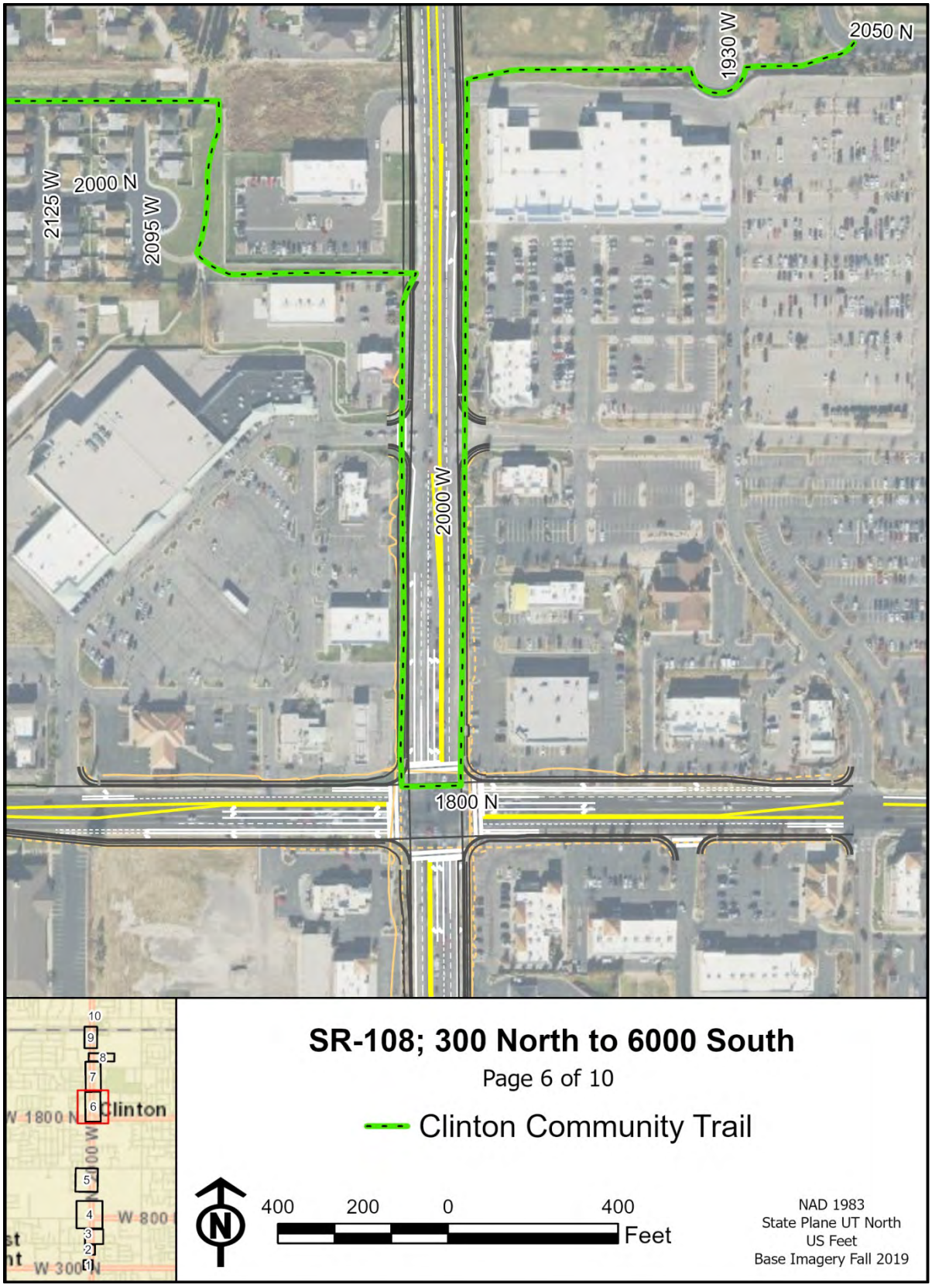

Figure 11. Section 4(f) impacts; Map 6 of 10

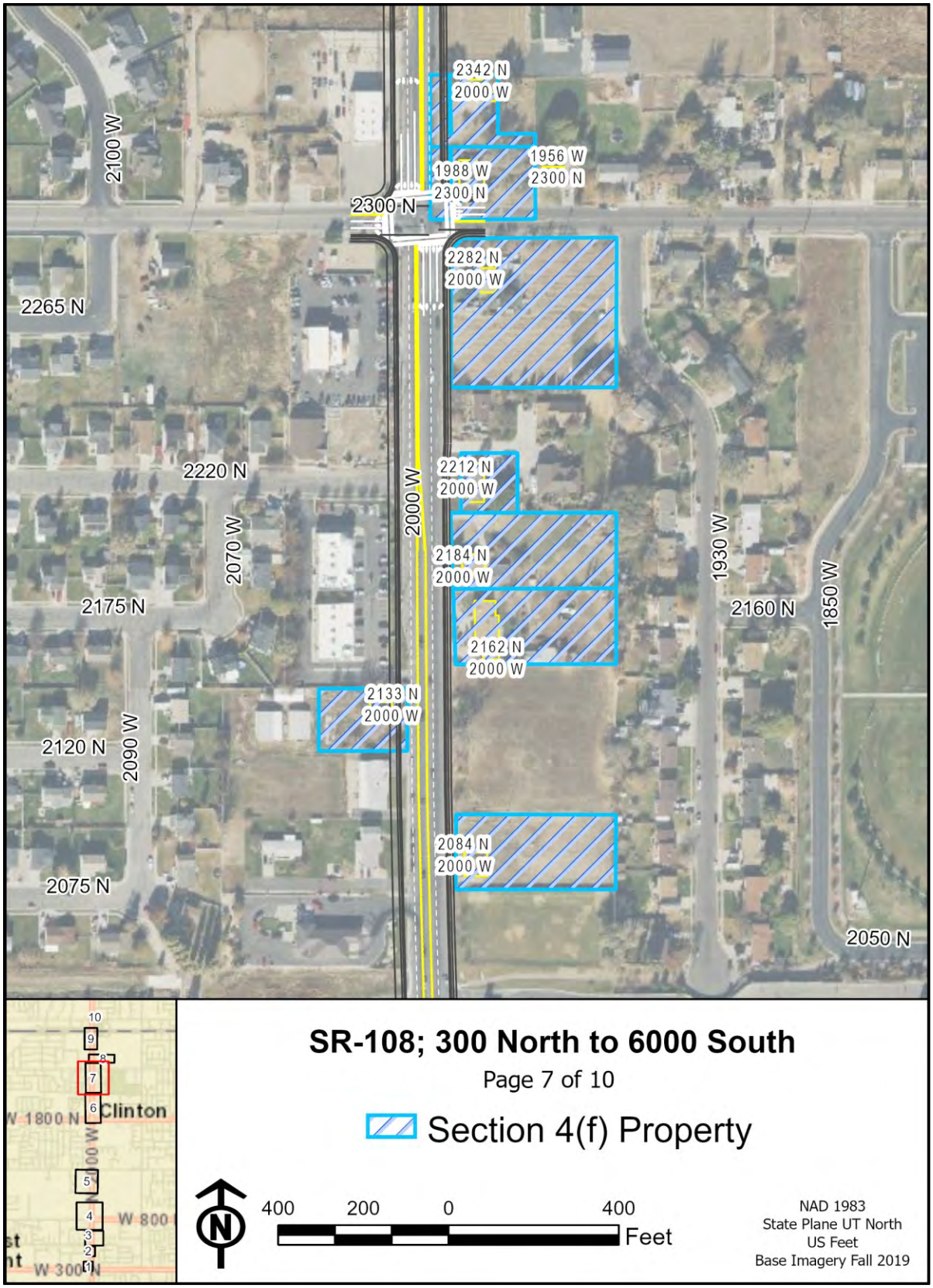

Figure 12. Section 4(f) impacts; Map 7 of 10

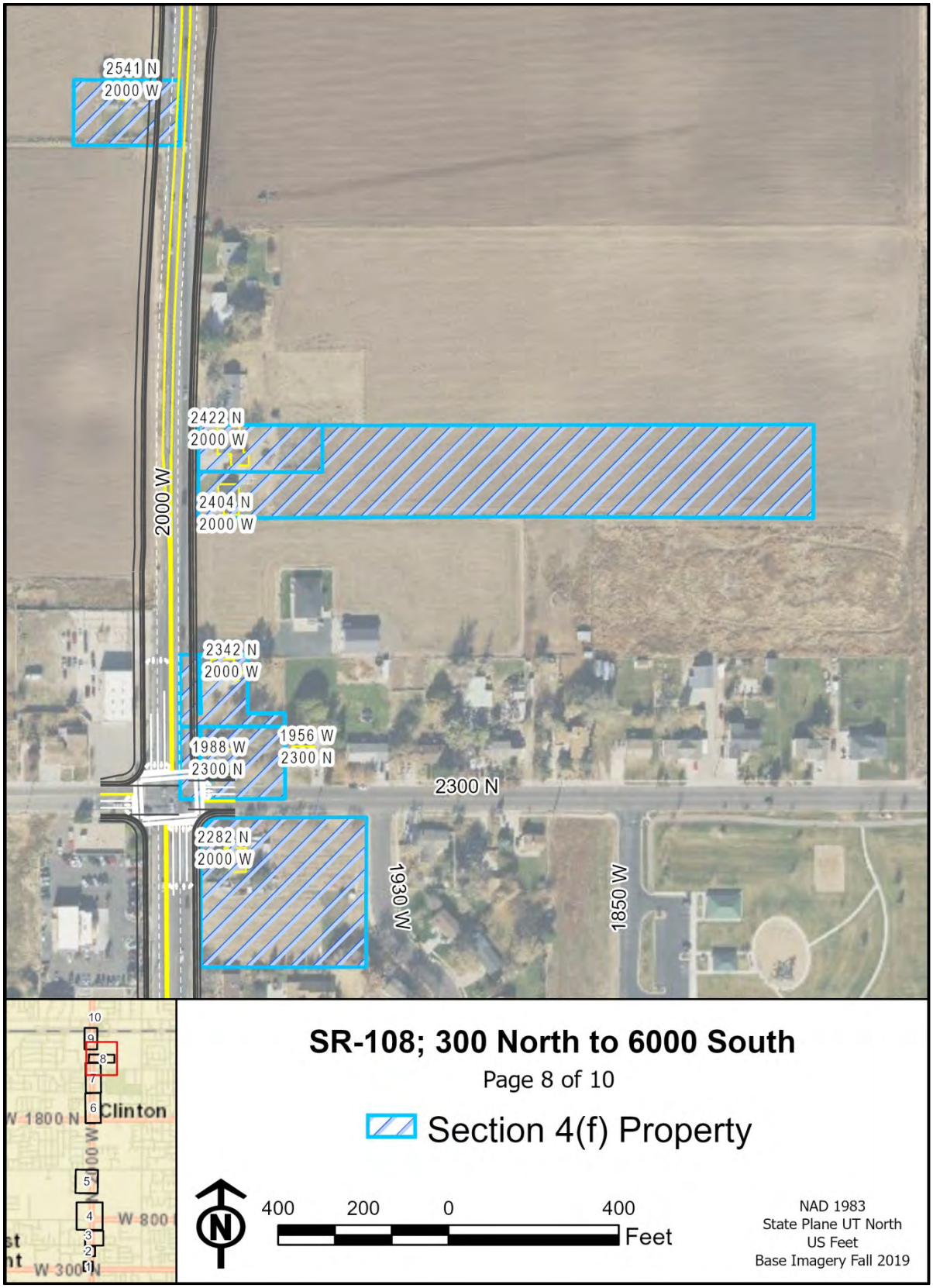

Figure 13. Section 4(f) impacts; Map 8 of 10

Figure 14. Section 4(f) impacts; Map 9 of 10

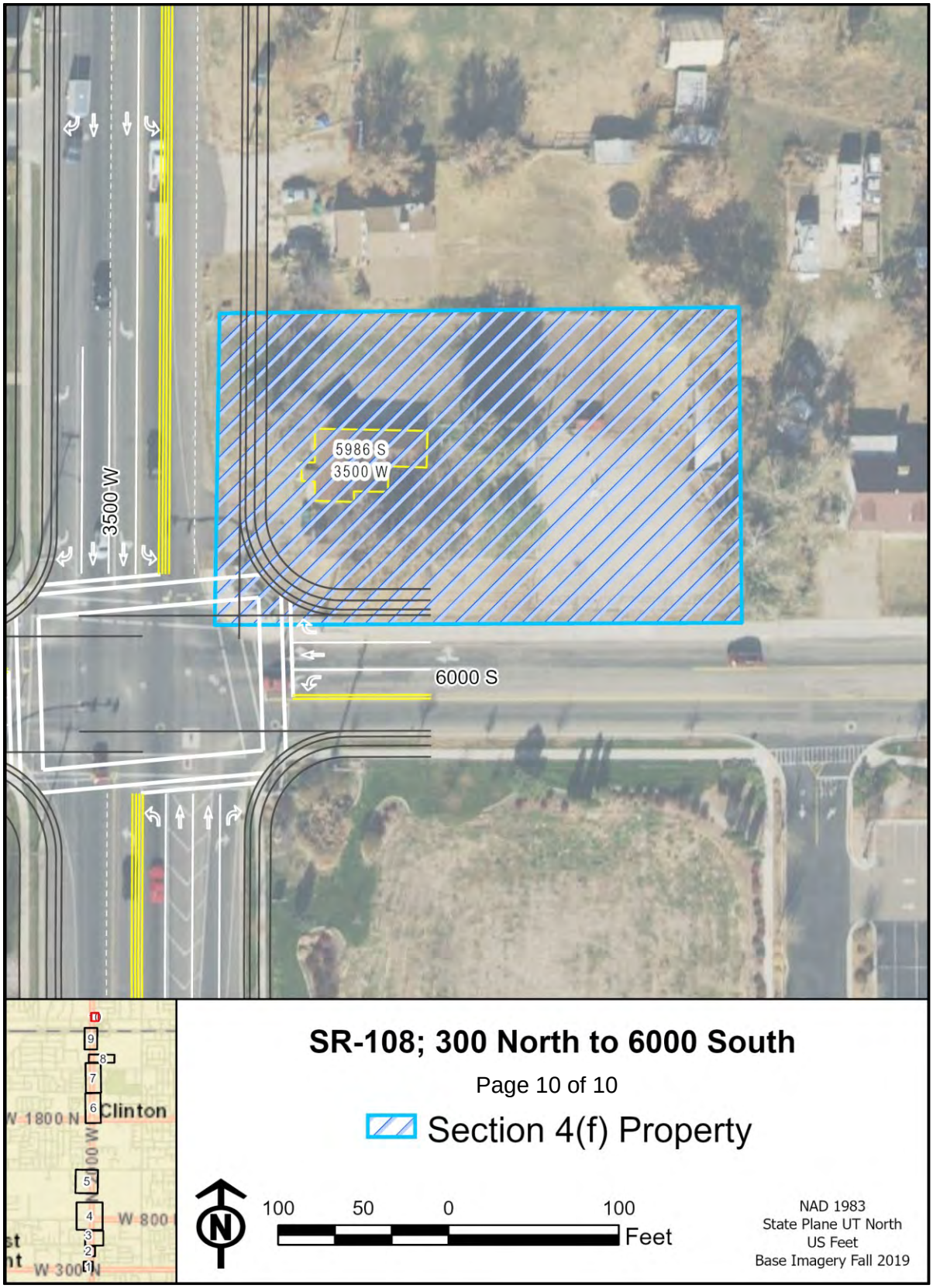

Figure 15. Section 4(f) impacts; Map 10 of 10

Attachment 6
Social Impacts and Environmental Justice

BIO-WEST, Inc.

1063 West 1400 North
Logan, Utah
84321-2291
Ph: 435.752.4202
Fx: 435.752.0507
www.bio-west.com

Coastal Ecology and Marine Biology

Environmental Analysis and Permitting

Geology/ Hydrogeology and Remediation

Fisheries and Aquatic Ecology

GIS Planning and Analysis

Landscape Architecture and Environmental Planning

Vegetation Resources

Watershed Sciences

Wetland Resources

Wildlife Resources

MEMORANDUM

Date: April 19, 2021

From: Sean Keenan, Environmental Analyst

To: David Adamson, Project Manager, Utah Department of Transportation Region 1

RE: SR-108; 300 North to 6000 South, PIN 15680 – Social/Community Impacts and Environmental Justice

The Utah Department of Transportation is preparing an environmental Re-evaluation for the segment of SR-108 from 300 North in West Point (Davis County) to 6000 South in Roy (Weber County). A Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) were completed in 2008. Since the 2008 FEIS and ROD, modifications have been made to the alignment of the Selected Alternative which have changed the number, location, and types of relocations that would be caused by the project. Additional development has also occurred and more recent demographic data has become available to assess potential effects on communities and populations.

The Refined Selected Alternative developed for the environmental Re-evaluation includes:

- Improving SR-108 between 300 North and 6000 South to a 5-lane cross section with two travel lanes in each direction and a center median lane
- Constructing a 110-foot-wide typical cross section that includes a 12-foot multi-use path on the west side, a 5-foot sidewalk on the east side, and 8-foot shoulder on each side to better accommodate bus service and on-road bicycling
- Including turn lanes at appropriate locations and lengths to accommodate existing and 2050 design year traffic volumes
- Installing raised medians at high-traffic intersections:
    - 1800 North: raised medians in all four directions for the length of the center turn lanes.
    - 1300 North: raised medians on 2000 West only, north and south of the intersection.
    - 800 North: raised medians on 2000 West only, north and south of the intersection.
- Installing a high-intensity activated crosswalk (HAWK) signal at the 550 North school crossing in West Point

Social/Community Impacts

The Refined Selected Alternative would provide mobility for the community comparable to or better than the 2008 Selected Alternative. The multi-use path would further enhance pedestrian mobility and encourage multimodal use within the corridor, including easier access to transit stops.

The cross-section of the Refined Selected Alternative is consistent in width with that of the 2008 Selected Alternative. However, the Refined Selected Alternative requires a larger number of full acquisitions of properties due to necessary shifts in the alignment to reduce the number of full acquisitions of historically eligible structures and Section 4(f) properties. Between 300 North and 6000 South, the 2008 Selected Alternative identified 6 relocations (full acquisitions) of residential properties, 1 commercial relocation, 9 potential residential relocations, and 1 potential commercial

relocation. Of those, 8 residential properties have subsequently been demolished or redeveloped. The Refined Selected Alternative would require 15 residential relocations, 2 potential residential relocations, and 1 commercial relocation. Three of the residential relocations are properties that have been previously purchased by UDOT. Two vacant properties would also be acquired for constructing stormwater detention facilities. Thus, some residents would be relocated and, depending on the circumstances, this could have some effect on local or neighborhood cohesion by altering formal relationships, such as neighborhood associations, and informal relationships, such as friendships. However, the anticipated relocations are not expected to have widespread or long-term effects on local cohesiveness or ability of residents to interact. No schools, churches, recreation facilities, or other gathering places would be relocated. Public services and utilities could be temporarily disrupted during construction but would not be permanently affected. These social/community impacts are not substantially different from the effects that were identified in the 2008 FEIS and ROD.

Environmental Justice

In the 2008 FEIS, UDOT determined that most persons living in the project region were not minorities and identified variability of proportions by Census block group. No concentration of minorities was identified in the potentially affected area between 300 North and 6000 South. Percentages of minorities living in Census block groups near SR-108 between 300 North and 6000 South ranged from less than 5 percent to about 10 percent based on the 2000 Census as reported in the 2008 FEIS; that range appears to have grown in the most recently available American Community Survey data (2019 5-year estimates) for census tracts adjacent to 2000 West, ranging from 10 percent to 19 percent (estimates not available at the block-group level). This appears to be primarily associated with a growth in the proportion of persons of Hispanic or Latino origin, increasing from around 6–9 percent in the 2000 Census to 11–15 percent in the 2019 data. These changes are also evident at the county and state levels. The Davis County population was 5.4 percent Hispanic/Latino in 2000, increasing to 10 percent in the 2019 5-year estimates. Statewide Hispanic/Latino persons were about 11 percent of the population in 2000, increasing to 14 percent in 2019. Proportions of other minority race or ethnicities also increased. Copies of Census data and environmental justice screening reports from the U.S. Environmental Protection Agency are included in the project record.

The 2008 FEIS did not identify any concentrations of persons in poverty for block groups adjacent to SR-108 between 300 North and 6000 South. One block group in this area had proportions of persons in poverty of 7 percent, which was slightly higher than the countywide percentage, 5.1 percent, but lower than the statewide average of 9.4 percent. The 2019 5-year estimates were 5.5 percent or less for Census tracts adjacent to SR-108 between 300 North and 6000 South, similar to the countywide estimate, 5.4 percent, and less than the statewide estimate, 9.8 percent.

In summary, race/ethnicity and income appear to vary in the neighborhoods adjacent to SR-108 between 300 North and 6000 South, but there do not appear to be any concentrations of minority or low-income populations in the potentially affected area based on Census estimates. The Refined Selected Alternative would not be expected to cause disproportionately high and adverse effects on any environmental justice populations. Consistent with the 2008 Selected Alternative, the Refined Selected Alternative would have beneficial effects on all populations in the impact analysis area, including minority and low-income persons.

Attachment 7
Water Resources

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Coastal Ecology and Marine Biology

Environmental Analysis and Permitting

Geology/ Hydrogeology and Remediation

Fisheries and Aquatic Ecology

GIS Planning and Analysis

Landscape Architecture and Environmental Planning

Vegetation Resources

Watershed Sciences

Wetland Resources

Wildlife Resources

MEMORANDUM

Date: April 19, 2021

From: Sean Keenan, Environmental Analyst

To: David Adamson, Project Manager, Utah Department of Transportation Region 1
Rod Hess, Utah Department of Transportation Senior Landscape Architect

RE: SR-108; 300 North to 6000 South, PIN 15680 – Water Resources

The Utah Department of Transportation is preparing an environmental Re-Evaluation for the segment of SR-108 from 300 North in West Point (Davis County) to 6000 South in Roy (Weber County). A Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) were completed in 2008.

The re-evaluation segment of SR-108 does not cross any natural streams. Streams data from the National Hydrography Dataset shows two east-west water conveyance facilities crossing underneath SR-108. The first occurs at the intersection with 1300 North, shown as a ditch/canal east of 2000 West running along the south side of 1300 North and then an underground pipeline west of 2000 West along the north side of 1300 North. The second conveyance is shown as a canal/ditch along the south side of 6000 South; however, there are no surface conveyances currently present at this location; the canal may now be in an underground pipeline. There is also conveyance of Clinton City stormwater under 2000 West at 2050 West, which surfaces into a canal (Clinton Drain/Canal) west of 2000 West. There are also remnant segments of irrigation canals along portions of the west side of 2000 West, which appear to be in disrepair and not actively used for water conveyance.

Runoff from SR-108 would be controlled through the use of detention features. As part of the re-evaluation, UDOT identified two locations for storm water detention features, a vacant parcel at 2212 West 1800 North and the other at 2029 North 2000 West. The property at 2029 North is a currently vacant property currently being These properties would be acquired by UDOT for construction of stormwater facilities.

The 2008 FEIS identified two wetlands for the SR-108 impact analysis area, both of which were outside of the impact analysis area for the current re-evaluation. All of the potentially affected area for the Refined Selected Alternative was inventoried for potential occurrence of wetlands. Only one location was observed to have wetland vegetation and surface water present; however, this wetland did not meet regulatory criteria for a jurisdictional wetland. Therefore, UDOT requested an Approved Jurisdictional Determination; The U.S. Army Corps of Engineers approved the non-jurisdictional determination on April 13, 2021.

Because there are no jurisdictional wetlands or navigable waters in the project area, the re-evaluation project will not require a Section 404 Wetland Permit or a Section 401 Water Quality Certification. The project will also not require a Stream Alteration Permit.

Mitigation measures for water-quality impacts of the Selected Alternative identified in the 2008 FEIS were:

- A Utah Pollution Discharge Elimination System (UPDES) permit would be required because construction disturbs more than 1 acre. The permit would require best management practices to prevent sediments and other contaminants from leaving the construction site.

- Detention features would be provided where the capacity of the existing stormwater system is inadequate to convey runoff flows.

- UDOT would work with each property owner to determine the appropriate mitigation measure if a well head or other water right point of diversion is affected. Mitigation could include (1) relocating a well head or surface water diversion to continue to provide irrigation water to any land that is not acquired or (2) abandoning the well and compensating the owner for the value of the associated water right.

These mitigation measures would not be changed for the Refined Selected Alternative.

UDOT Region 1 Project
SR-108; SR-127 (Antelope Drive) to SR-126 (1900 West), Davis/Weber Counties
S-0108(36)6, PIN 15680

MEMORANDUM

Date: Wednesday, April 21, 2021

To: Elisa Albury
UDOT Environmental Program Manager

From: Rod Hess
UDOT Senior Landscape Architect 2021.04.21 09:13:29 -06'00'

RE: **Environmental Re-Evaluation of Water Resources for a segment of SR-108 from 300 North in West Point (Davis County) to 6000 South in Roy (Weber County)**

PROJECT PURPOSE, DESCRIPTION AND SCOPE OF WORK

The Utah Department of Transportation (UDOT) proposes an Environmental Re-Evaluation of the SR-108 Refined Selected Alternative design associated with the SR-108 Record of Decision (ROD) Selected Alternative. Through the SR-108 Refined Selected Alternative, the following design modifications have been identified to differ from the original 2008 Selected Alternative:

- including lengthened turn lanes in appropriate locations to accommodate existing and 2050 design year turning traffic volumes;
- specifying locations for raised medians to improve safety;
- identifying new locations for stormwater detention basins;
- updating the design of the intersection at 1800 North consistent with the 2015 selected alternative for 1800 North;
- adding bike lanes on each side of 1800 North at the intersection, consistent with the WFRC 2019-2050 Regional Transportation Plan; and
- including a multi-use path on the west side of 2000 West in lieu of striped bike lanes on each side.

The above SR-108 Refined Selected Alternative design modifications have been reviewed for water resources within the environmental study area by UDOT and Bio-West, a hired environmental consultant, as part of this Environmental Re-Evaluation. UDOT provides the following summary of findings and mitigation commitments for the proposed project:

Water Resources and Wetlands:

Bio-West completed an Aquatic Resources Delineation Report of the SR-108 environmental study area based on the changes proposed in the Redefined Selected Alternative. The Bio-West Aquatic Resources Delineation identified only one (1) Palustrine Emergent Wetland (PEM) within the survey area. No other WOTUS or wetland habitat areas are found within the SR-108 project limits. (See attached Bio-West Aquatic Resources Delineation Report).

This PEM habitat does meet the definition of a wetland and included a total area of 0.054 acres. To determine if this wetland habitat was considered a jurisdictional Waters of the United States (WOTUS) as an "adjacent wetland", according to Title 33 CFR Part 328, and that may require an Army Corps permit, UDOT submitted an Approved Jurisdictional Determination (AJD) request to the Army Corps on February 11, 2021 (see attached). As part of this AJD request, UDOT proposed that this wetland would not be considered jurisdictional because it was supported only by groundwater and it did not abut or touch another downstream (a)(1) jurisdictional water as defined in Title 33 CFR Part 328 and therefore would not require any type of Army Corps permit for impacts to this wetland.

The Army Corps did respond to the UDOT's AJD request on April 13, 2021 via letter (see attached). In their AJD verification letter, the Army Corps did determine that the identified 0.054 acre PEM wetland is not a jurisdictional WOTUS regulated under Section 404 of the Clean Water Act.

With this AJD letter verifying that identified PEM wetland is not considered a jurisdictional WOTUS by the Army Corps, the SR-108 project is not required to obtain any type of Army Corps permit for impacts to this non-jurisdictional wetland.

Mitigation Commitments:
None

Federal Emergency Management Agency (FEMA) Floodplains:

There are no FEMA Floodplains or Special Flood Hazard Areas (SFHA) found within the SR-108 project limits. Therefore the project is NOT required to obtain a Floodplain Development Permit from the Local Floodplain Authority.

Mitigation Commitments:

None

Attachment 8
Ecosystem Resources

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Wetland Resources

Wildlife Resources

MEMORANDUM

Date: April 19, 2021

From: Sean Keenan, Environmental Analyst

To: David Adamson, Project Manager, Utah Department of Transportation Region 1
Matt Howard, Utah Department of Transportation Natural Resources Manager

RE: SR-108; 300 North to 6000 South, PIN 15680 – Ecosystem Resources

The Utah Department of Transportation is preparing an environmental Re-Evaluation for the segment of SR-108 from 300 North in West Point (Davis County) to 6000 South in Roy (Weber County). A Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) were completed in 2008. Due to the amount of time that has passed since the FEIS and ROD, BIO-WEST obtained a new list of potentially occurring threatened and endangered species from the U.S. Fish and Wildlife Service (USFWS) and species occurrence records from the Utah Natural Heritage Database. Copies of these lists are included as attachments.

In the 2008 FEIS, the ecosystem impact analysis area was described as highly developed and urbanized, consisting of residential and commercial areas with a few remaining agricultural remnants, many of which were idle and planned for development. The dominant vegetation types were landscaped, ornamental plants; agricultural species; invasive weedy species on disturbed sites; native plants, pasture grasses, and invasive species on active or idle pastureland; and emergent plants in drainage ditches and stormwater collection ponds. There was no fish habitat in the impact analysis area. There was also no pristine wildlife habitat in the impact analysis area, only areas that have been converted to urban uses or agriculture. This disturbed and fragmented habitat provided very little benefit to most species except those that have adapted to an urban environment.

Generally, these conditions are still present along the re-evaluation segment of SR-108. As described for land use, commercial development has expanded adjacent to SR-108, but there are still some agricultural parcels that are actively cultivated and some idle agricultural lands are also still present. In 2008, UDOT determined that the Selected Alternative would have minor impacts to wildlife, primarily by impacting pasture lands that provide some habitat value. The mostly urbanized land use of the corridor did not provide much useful wildlife habitat because these areas were dominated by either weedy and invasive plants or ornamental plants. No threatened and endangered species were known to occur.

For the re-evaluation, an updated species list was obtained from the USFWS. One species is listed as potentially occurring in the re-evaluation project area, Ute Ladies'-Tresses (*Spiranthes diluvialis*); however, in conducting field reconnaissance of the potentially affected area, no suitable habitat for Ute Ladies'-Tresses was identified.

The Utah Natural Heritage Database was also queried for any observations of federal or state-listed species; no species observations were found within 0.5 miles of the potentially affected area. Two

records of raptors are recorded within 2 miles of the re-evaluation project area, Peregrine falcon (*Falcon peregrinus*) and Bald eagle (*Haliaeetus leucocephalus*). No raptor nests were observed within 0.5 miles of the project area.

The 2008 ROD identified marginal effects of the Selected Alternative on wildlife habitat, no effects to federally listed threatened and endangered species, and no effects to state-listed sensitive species. Based on field inventory and available species occurrence data, these determinations remain valid for the re-evaluation segment of SR-108.

Memorandum

Environmental Services

DATE: May 4, 2021

TO: Sean Keenan, Bio-West Inc.

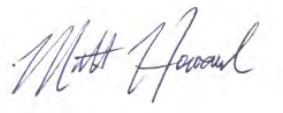
FROM: Matt Howard, Natural Resources Manager

SUBJECT: S-0108(36)6 Re-evaluation for SR-108 from 300 N in West Point to 6000 S in Roy PIN 15680

Sean,

I have reviewed the environmental re-evaluation regarding the segment of SR-108 from 300 North in West Point to 6000 South in Roy and the project's potential impacts to species protected by the Endangered Species Act (ESA) and concur with its findings. I agree with the summary's findings that the project would have no effect on species protected by the ESA. The project would not impact species protected by the MBTA or BGEPA. I have also reviewed the project to assess impacts to greater sage-grouse and have found that the project would have no impact on sage-grouse.

Sincerely,



Matt Howard
Natural Resource Manager

Attachment 9
Hazardous Waste

BIO-WEST, Inc.

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MEMORANDUM

Date: May 10, 2021

From: Sean Keenan, Environmental Analyst

To: David Adamson, Project Manager, Utah Department of Transportation Region 1

RE: SR-108; 300 North to 6000 South, PIN 15680 Hazardous Waste File Searches

The Utah Department of Transportation is preparing an environmental Re-Evaluation for the segment of SR-108 from 300 North in West Point (Davis County) to 6000 South in Roy (Weber County). A Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) were completed in 2008. Due to the amount of time that has passed since the FEIS and ROD, BIO-WEST obtained new searches of available data for known hazardous waste sites and environmental conditions. There are seven records of underground storage tank locations, three with records of leaks, and two other hazardous chemical spills. There are no open files for any of these sites. Copies of file search results are included in the project record.

Underground Storage Tanks:

- Smith's 217 North 2000 West—currently in use, no records of leaks
- 7-Eleven 310 North 2000 West—currently in use, no records of leaks
- Utah State Fuel Network, 2057 West 1800 North—permanently closed, tanks removed, two records of leaks:
    - Gasoline leak of unknown quantity in 1989, file closed 2/7/1996
    - Diesel soil staining and vapors/odors noted during UST closure, 8/26/2006, unknown quantity, file closed 1/4/2017
- 7-Eleven, 1829 North 2000 West—currently in use, no records of leaks
- Dee's Service, 1793 North 2000 West—permanently closed gasoline and used oil tanks, two records:
    - Gasoline leak of unknown quantity in 1990, file closed 1/15/1996
    - Gasoline leak of unknown quantity in 1996, limited off site migration of dissolved phase contamination onto adjoining bank property and street, file closed 6/18/2002
- Clinton City, 1906 West 1800 North—permanently closed diesel and gasoline tanks, one record:
    - Diesel leak of unknown quantity in 1990, file closed 11/27/1995
- Patterson Excavation 2044 West 2300 North—permanently closed diesel tank removed 4/19/1996, no records of leaks

Environmental incident records:

- 1903 North 2000 West—mercury release of unknown quantity, 1 impacted media: hard surface (asphalt/cement), 2/11/2020.
- 1986 North 2000 West—hydraulic oil, 6 gallons, 1 impacted media: hard surface (asphalt/cement), 8/2/2016.

Previously unidentified sites or contamination could be encountered during construction. In such a case, all work would stop in the area of the contamination according to UDOT Standard Specifications, and the contractor would consult with UDOT and The Utah Division of Environmental Response and Remediation (DERR) to determine the appropriate remedial measures. Hazardous wastes would be handled according to UDOT Standard Specifications and the requirements and regulations of DERR. This commitment from the 2008 FEIS and ROD has not changed for the Refined Selected Alternative.