

APPENDIX 15B

Determinations of Eligibility and Findings of Effect



State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

DEPARTMENT OF TRANSPORTATION

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May 7, 2021

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

RE: UDOT Project No. S-R299(281)0; Little Cottonwood Canyon EIS, Salt Lake County, Utah (PIN 16092)
Determination of Eligibility and Finding of Adverse Effect.

Dear Mr. Hansen:

The Utah Department of Transportation (UDOT) in conjunction with the United States Forest Service, Uinta-Wasatch-Cache National Forest (USFS), 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 Utah Department of Transportation (UDOT) began an Environmental Impact Statement (EIS) in the spring of 2018 for Little Cottonwood Canyon and Wasatch Boulevard in partnership with Utah Transit Authority and the USDA Forest Service. The purpose of the EIS is to provide an integrated transportation system that improves the reliability, mobility, and safety for all users on SR-210 from Fort Union Boulevard through the town of Alta. UDOT has developed five action alternatives to meet the purpose and need for this project: Enhanced Bus Service Alternative (EBS), Enhanced Bus Service in Peak-period Shoulder Lanes Alternative (PPSL), Gondola Alternative A (GA), Gondola Alternative B (GB) and Cog Rail (COG). Additional information on the alternatives can be found at www.littlecottonwoodeis.udot.utah.gov/draft-alternatives.

Each action alternative includes the following items: widening of Wasatch Blvd, two mobility hubs, avalanche mitigation, changes to trailhead parking and no winter roadside parking (See attached Fact Sheet). There are two options for widening along Wasatch Blvd. which are discussed separately. The Imbalanced Lane Alternative (WIL)

would widen Wasatch Blvd. where necessary to between 3 to 5 lanes to achieve an improved level of service but with an inconsistent roadway corridor. The Five Lane Alternative (W5L) would add one additional travel lane in each direction and roundabout intersections at three cross-streets. Each action alternative requires passengers to park at a mobility hub and then board a bus that will transport them to the destination resorts or a gondola or rail terminal. The mobility hubs are located at 6200 S Wasatch Blvd. and 9400 S Highland Dr. and both include construction of a parking structure. In the EBS, PPSL, and GA Alternatives the 6200S Wasatch Blvd. mobility hub would provide 1,500 parking spaces in a structure 3-4 stories tall. The 9400 S Highland Dr. mobility hub would provide 1,000 parking spaces in a structure that is 3 stories tall. In the GB and COG Alternatives parking at the mobility hubs would be reduced due to additional spaces at the terminal and therefore the 6200 S Wasatch Blvd. mobility hub would provide 600 parking spaces in a structure 2-3 stories tall and the 9400 S Highland Dr. mobility hub would provide 400 parking spaces in a structure 2 stories tall.

Additional information on the alternatives can be found at www.littlecottonwoodeis.udot.utah.gov/draft-alternatives.

Enhanced Bus Service Alternative (EBS)

The Enhanced Bus Service Alternative includes frequent bus service from two mobility hubs (the gravel pit and 9400 South/Highland Drive), improvements to Wasatch Boulevard, avalanche mitigation, improvements to trailheads, and no winter parking.

Enhanced Bus Service in Peak-period Shoulder Lanes Alternative (PPSL)

The Enhanced Bus Service in Peak-period Shoulder Lane Alternative would be the same as with the Enhanced Bus Service Alternative. The only difference between the alternatives is that this alternative includes widening SR-210 from North Little Cottonwood Road to the Alta Bypass Road to add peak-period shoulder lanes.

Gondola Alternative A Alternative (GA)

Gondola Alternative A would include a gondola alignment from the intersection of SR-209/SR-210 to both the Snowbird and Alta ski resorts. The gondola facility will include a terminal station at the existing park-and-ride lot on the north side of SR-210 at the entrance of Little Cottonwood Canyon, an angle station west of the Tanners Flat Campground (no additional ground disturbance), 20 towers varying in height from 130 to 230 feet in height, and base stations at the Snowbird and Alta ski areas. The alternative would include frequent bus service from two mobility hubs to the gondola base station, improvements to Wasatch Boulevard, snow sheds, improvements to trailheads, and no winter parking.

Gondola Alternative B Alternative (GB)

Gondola Alternative B would be similar to Gondola Alternative A, but the terminal station would be located at a proposed development south of North Little Cottonwood Road near the La Caille restaurant, about 0.75 mile northwest of the intersection of S.R. 209 and S.R. 210. An additional segment of the gondola alignment would run for about 0.75 mile from the base station to the Little Cottonwood Canyon park-and-ride lot. Additional items in this alternative include a 1,500-stall parking structure at the terminal station, travel lanes from Wasatch Blvd. to the termination station, and a new trail segment to connect to the trails on Wasatch Blvd. and Fort Union Blvd.

Cog Rail Alternative (COG)

The Cog Rail Alternative would start at a terminal station located at a proposed development south of North Little Cottonwood Road near the La Caille restaurant, about 0.75 mile northwest of the intersection of S.R. 209 and S.R. 210, and would travel on the north side of S.R. 210 to both the Snowbird and Alta ski resorts. The rail alignment would include reconfiguration of the parking lots at the Little Cottonwood Canyon park and ride lot, Grit Mill trailhead, Gate Buttress trailhead, and Lisa Falls trailhead; and construction of an additional snow shed between the Snowbird and Alta ski areas. The alternative would include frequent bus service from two mobility hubs to the cog rail base station, improvements to Wasatch Boulevard, snow sheds, improvements to trailheads, and no winter parking.

AREA OF POTENTIAL EFFECT AND SURVEYS

The area of potential affects (APE) includes the proposed footprint of all active alternatives as well as all adjoining parcels. The APE is approximately 11 miles long and will extend 0.25mi to either side of the existing SR-210

centerline for a total of 791 ac. A study area (or physical impacts APE) was defined within the APE to delineate the area that was subject to archaeological inventory and extends 100 feet either side of the SR-210 centerline. This project also includes an APE for associated (visual) effects which includes the visual environment within Little Cottonwood Canyon and those areas within the viewshed of the Project.

This area has potential for cultural resources to be present due to its proximity to several mountain drainages, historic mining areas and development to the ski industry in Little Cottonwood Canyon. However, the APE has also experienced extensive ground disturbance from previous road construction and mine remediation activities.

An intensive-level archaeological inventory and a selective reconnaissance-level survey for historic architecture were performed for an area 100 feet either side of the project centerline, as well as adjacent project areas. The APE has been surveyed by SWCA, under State Antiquities Project Number U18ST218, and the complete results are reported in *Class III Archaeological Inventory for the Little Cottonwood Canyon Environmental Impact Statement, Salt Lake County, Utah* (see enclosed report). An intensive level pedestrian survey was conducted using 15 meter transects to identify archaeological resources as terrain allowed. A selective reconnaissance level survey was conducted to record architectural properties and those results are reported in *Selective Reconnaissance-Level Architectural Survey for the Little Cottonwood Canyon Environmental Impact Statement, Salt Lake County, Utah* (see enclosed report). Five parcels could not be effectively surveyed due to vegetation and/or terrain and these are assumed to be historic properties.

The surveys have resulted in the identification of 22 archaeological sites and 129 architectural properties. Of these, 9 archaeological sites and 84 architectural properties are eligible to the National Register of Historic Places (NRHP). Five previously documented archaeological sites were not re-located. 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 the following sections for each action alternative with impacts to archaeological sites listed in Table 1 and impacts to architectural resources listed in Table 2. Please see attached notification letter regarding Section 4(f) *de minimis* impacts.

An analysis was also conducted for all cultural resources within the visual effects APE and those results are reported in *Cultural Resources Visual Analysis for the Little Cottonwood Canyon Environmental Impact Statement* (see enclosed report). The analysis determined that five resources required evaluation, 2 archaeological sites and 3 historic buildings. Three of the resources (42SL102, Cliff Lodge, and Iron Blossam Lodge) have a strong contrast rating, one (Alta Lodge) has a moderate contrast rating, and one (42SL90) has a weak contrast rating. The GA and GB Alternatives are the only alternatives to pose a visual impact to cultural resources, and it was found that while they would alter the setting of these cultural resources, they would not diminish any character-defining features or aspects of integrity that qualify these resources for inclusion in the NRHP and will result in no adverse effects to these historic properties.

ENHANCED BUS SERVICE ALTERNATIVE

Archaeological Resources

The EBS Alternative will impact two archaeological sites: Site 42SL830 and 42SL419.

Site 42SL830 is the historic Salt Lake to Alta Road (SR-210) which is overlain with the modern pavement. This site is affected by the EBS along modern Wasatch Blvd and SR-210 to varying degrees based on the details of those alternatives. Since no historic road fabric or associated features or artifacts were observed, this alternative will result in a finding of a finding of No Adverse Effect.

Site 42SL419 is the Denver & Rio Grande Western Railroad, Alta Branch, which has been largely destroyed within the APE. In this alternative, both of the snow shed alternatives would impact approximately 0.19 ac. of an intact retaining wall (known colloquially as the “China Wall”). As this impact would remove the only remaining intact feature of this site, the proposed project will result in a finding of Adverse Effect.

Section 4(f) applies to Site 42SL419 as it is eligible for the NRHP only under Criterion A. Site 42SL830 is partly eligible for data potential and does not warrant preservation in place, therefore is exempt from Section 4(f) under 23CFR 774.13(b).

Architectural Resources

The EBS Alternative will impact a total of 10 historic properties. All impacts would be to a portion of the parcel and not impact the primary building. The acquisitions, temporary construction easement (TCE) 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. Thus, the proposed project will result in a finding of No Adverse Effect. Property acquisition at seven of these buildings will result in a Section 4(f) *de minimis* impact, three others would constitute Temporary Occupancy.

ENHANCED BUS SERVICE WITH IN PEAK-PERIOD SHOULDER LANES ALTERNATIVE

Archaeological Resources

The PPSL Alternative will impact five archaeological sites: Sites 42SL109, 42SL830, 42SL549, 42SL419 and 42SL916.

Site SL109 is the Little Cottonwood Grit Mill and Granite Quarry which lies on either side of SR-210. Impacts by the PPSL would include about 3.19ac. of disturbance along the road margins, a small portion of the site, and avoid all documented features. As a result of construction monitoring for a roadside project in 2020, several additional boulders with drill scars and imbedded tools were identified. If selected, construction monitoring will be conducted at this site. This alternative will not substantially impact or alter any contributing elements of the site or any of the character-defining features for which it was determined eligible for the NRHP. Thus, the proposed project will result in a finding of No Adverse Effect.

Site 42SL830 is the historic Salt Lake to Alta Road (SR-210) which is overlain with the modern pavement. This site is affected by the EBS along modern Wasatch Blvd and SR-210 to varying degrees based on the details of those alternatives. Since no historic road fabric or associated features or artifacts were observed, this alternative will result in a finding of a finding of No Adverse Effect.

Site 42SL549 is the historic Whitmore Temple Granite Power Plant and this alternative would only impact the northern portion of this site (<0.01ac.). At this location the alternative would encroach on the location of F-08, a wooden pipeline, but would not directly impact it. As this alternative would only impact a small portion of the site and will not substantially impact or alter any contributing elements of the site or any of the character-defining features for which it was determined eligible for the NRHP. Thus, the proposed project will result in a finding of No Adverse Effect.

Site 42SL419 is the Denver & Rio Grande Western Railroad, Alta Branch, which has been largely destroyed within the APE. In this alternative, both of the snow shed alternatives would impact approximately 0.19 ac. of an intact retaining wall (known colloquially as the “China Wall”). As this impact would remove the only remaining intact feature of this site, the proposed project will result in a finding of Adverse Effect.

Site 42SL916 is the historic wagon road to Alta, which has been partly converted to the Little Cottonwood Creek Trail. This alternative would impact approximately 0.02ac. within the site boundary for a temporary construction easement to construct drainage culverts. These culverts will be buried beneath the trail and all trail features restored. As this alternative would only impact a small portion of the site and will not substantially impact or alter any contributing elements of the site or any of the character-defining features for which it was determined eligible for the NRHP. Thus, the proposed project will result in a finding of No Adverse Effect.

Section 4(f) applies to Site 42SL419 as it is eligible for the NRHP only under Criterion A. The remaining sites are partly eligible for data potential and does not warrant preservation in place, therefore is exempt from Section 4(f) under 23CFR 774.13(b).

Architectural Resources

The PPSL Alternative will impact a total of 22 historic properties. The acquisitions, TCEs 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. Thus, the proposed project will result in a finding of No Adverse Effect. Property acquisition at 15 of these buildings will result in a Section 4(f) *de minimis* impact, seven others would constitute Temporary Occupancy.

GONDOLA A ALTERNATIVE

Archaeological Resources

The GA Alternative will impact 6 archaeological sites: Sites 42SL52, 42SL90, 42SL102, 42SL109, 42SL830, and 42SL419.

Site 42SL52 is the 79.8ac. historic Alta townsite, the boundary of which includes historic debris and structures as well as modern development. A gondola tower and the Alta destination station would be constructed within the site. The tower is currently impacting approximately 0.10ac. of Feature F-3, a large depression filled with historic debris. It is unclear if F-3 represents the remains of a demolished structure, adit, or refuse pit. The station will impact 0.52ac. but is not impacting any known site features in that area. This site has a high potential for buried deposits and therefore construction monitoring will be conducted for any project elements within the site boundary. Therefore, the proposed project would result in a finding of Adverse Effect.

Site 42SL90 is a prehistoric rock shelter and rock art panel. This site will not experience any physical impacts and all potential visual impacts would be screened by dense vegetation. Therefore the proposed project would result in a finding of No Historic Properties Affected.

Site 42SL102 is a historic hydroelectric plant. This site will not experience any physical impacts and all potential visual impacts would be screened by dense vegetation. Therefore the proposed project would result in a finding of No Historic Properties Affected.

Site SL109 is the Little Cottonwood Grit Mill and Granite Quarry which lies on either side of SR-210. Impacts by the GA would include a gondola tower and the base station which would be located in the existing parking lot. Approximately 2.42ac. would be necessary for the base station, the majority of which is within the current parking lot and is designed to avoid features that contribute to the NRHP eligibility of the site. The tower would impact 0.15ac. of the site and there are no known features in this area. As a result of construction monitoring for a roadside project in 2020, several additional boulders with drill scars and imbedded tools were identified. If selected, construction monitoring will be conducted at recommended for this site. As no known significant features would be impacted, the proposed project would result in a finding of No Adverse Effect.

Site 42SL830 is the historic Salt Lake to Alta Road (SR-210) which is overlain with the modern pavement. Since no historic road fabric or associated features or artifacts were observed, this alternative will result in a finding of a finding of No Adverse Effect.

Site 42SL419 is the Denver & Rio Grande Western Railroad, Alta Branch, which has been largely destroyed within the APE. In this alternative, both of the snow shed alternatives would impact approximately 0.19 ac. of an intact retaining wall (known colloquially as the "China Wall"). As this impact would remove the only remaining intact feature of this site, the proposed project will result in a finding of Adverse Effect.

Section 4(f) applies to Site 42SL419 as it is eligible for the NRHP only under Criterion A. The remaining sites are partly eligible for data potential and does not warrant preservation in place, therefore is exempt from Section 4(f) under 23CFR 774.13(b).

Architectural Resources

The GA Alternative will impact a total of 17 historic properties, including five at the Snowbird Ski and Summer Report. Property acquisition would be necessary to accommodate the gondola towers, TCEs and changes to the visual character of the property setting. In addition to the impact of gondola towers, impacts to historic architecture also include easements underneath the gondola cables. The acquisitions, TCEs 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. For Snowbird, SWCA and the UDOT Cultural Resources staff identified character-defining features within four

predominant themes: planning, ecological, modernism, and verticality. None of the GA Alternative impacts will adversely affect the Snowbird properties within the context of these themes. (A memorandum addressing the Snowbird properties is attached). Thus, the proposed project will result in a finding of No Adverse Effect. Property acquisition at 12 of these buildings will result in a Section 4(f) *de minimis* impact, three others would constitute Temporary Occupancy.

GONDOLA B ALTERNATIVE

Archaeological Resources

The GB Alternative will have an impact to the same 6 archaeological sites as GA: Sites 42SL52, 42SL90, 42SL102, 42SL109, 42SL830 and 42SL419.

Site 42SL52 is the 79.8ac. historic Alta townsite, the boundary of which includes historic debris and structures as well as modern development. A gondola tower and the Alta destination station would be constructed within the site. The tower is currently impacting approximately 0.10ac. of Feature F-3, a large depression filled with historic debris. It is unclear if F-3 represents the remains of a demolished structure, adit, or refuse pit. The station will impact 0.52ac. but is not impacting any known site features in that area. This site has a high potential for buried deposits and therefore construction monitoring will be conducted for any project elements within the site boundary. Therefore, the proposed project would result in a finding of Adverse Effect.

Site 42SL90 is a prehistoric rock shelter and rock art panel. This site will not experience any physical impacts and all potential visual impacts would be screened by dense vegetation. Therefore the proposed project would result in a finding of No Historic Properties Affected.

Site 42SL102 is a historic hydroelectric plant. This site will not experience any physical impacts and all potential visual impacts would be screened by dense vegetation. Therefore the proposed project would result in a finding of No Historic Properties Affected.

Site SL109 is the Little Cottonwood Grit Mill and Granite Quarry which lies on either side of SR-210. Impacts by the GB would include a gondola tower and the base station which would be located in the existing parking lot. Approximately 2.42ac. would be necessary for the base station, the majority of which is within the current parking lot and is designed to avoid features that contribute to the NRHP eligibility of the site. The tower would impact 0.15ac. of the site and there are no known features in this area. As a result of construction monitoring for a roadside project in 2020, several additional boulders with drill scars and imbedded tools were identified. If selected, construction monitoring will likely be recommended for this site. As no known significant features would be impacted, the proposed project would result in a finding of No Adverse Effect.

Site 42SL830 is the historic Salt Lake to Alta Road (SR-210) which is overlain with the modern pavement. This site is affected by the GB along modern Wasatch Blvd and SR-210 to varying degrees based on the details of those alternatives. Since no historic road fabric or associated features or artifacts were observed, this alternative will result in a finding of a finding of No Adverse Effect.

Site 42SL419 is the Denver & Rio Grande Western Railroad, Alta Branch, which has been largely destroyed within the APE. In this alternative, both of the snow shed alternatives would impact approximately 0.19 ac. of an intact retaining wall (known colloquially as the "China Wall"). As this impact would remove the only remaining intact feature of this site, the proposed project will result in a finding of Adverse Effect.

Section 4(f) applies to Site 42SL419 as it is eligible for the NRHP only under Criterion A. The remaining sites are partly eligible for data potential and does not warrant preservation in place, therefore is exempt from Section 4(f) under 23CFR 774.13(b).

Architectural Resources

The GB Alternative will impact a total of 20 historic properties, including 5 at the Snowbird Ski and Summer Resort. Property acquisition would be necessary to accommodate the gondola towers and base station, TCEs and changes to the visual character of the property setting. In addition to the impact of gondola towers, impacts to

historic architecture also include easements underneath the gondola cables. The acquisitions, TCEs 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. For Snowbird, SWCA and the UDOT Cultural Resources staff identified character-defining features within four predominant themes: planning, ecological, modernism, and verticality. None of the GB Alternative impacts will adversely affect the Snowbird properties within the context of these themes. (A memorandum addressing the Snowbird properties is attached). Thus, the proposed project will result in a finding of No Adverse Effect. Property acquisition at 15 of these buildings will result in a Section 4(f) *de minimis* impact, three others would constitute Temporary Occupancy.

COG RAIL ALTERNATIVE

Archaeological Resources

The COG Alternative will impact 4 archaeological sites: Sites 42SL109, 42SL830, 42SL419 and 42SL916.

Site SL109 is the Little Cottonwood Grit Mill and Granite Quarry which lies on either side of SR-210. Impacts by the COG Alternative would include the rail tracks, maintenance facility, and reconstruction of the current parking lot and trailhead, comprising 10.62ac (approximately 1/3 of the site area). Portions of the quarried canyon face and quarried stone boulders are scattered across the 31-acre site. As a result of construction monitoring for a roadside project in 2020, several additional boulders with drill scars and imbedded tools were identified. If selected, construction monitoring will be conducted at this site. Given the scale and distribution of impacts throughout the site boundary which would impact defining characteristics of the site, the proposed project would result in a finding of Adverse Effect.

Site 42SL830 is the historic Salt Lake to Alta Road (SR-210) which is overlain with the modern pavement. This site is affected by the COG along modern Wasatch Blvd and SR-210 to varying degrees based on the details of those alternatives. Since no historic road fabric or associated features or artifacts were observed, this alternative will result in a finding of a finding of No Adverse Effect.

Site 42SL419 is the Denver & Rio Grande Western Railroad, Alta Branch, which has been largely destroyed within the APE. In this alternative, both of the snow shed alternatives would impact approximately 0.19 ac. of an intact retaining wall (known colloquially as the “China Wall”). As this impact would remove the only remaining intact feature of this site, the proposed project will result in a finding of Adverse Effect.

Site 42SL916 is the historic wagon road to Alta, which has been partly converted to the Little Cottonwood Creek Trail. This alternative would impact approximately 0.02ac. within the site boundary for a temporary construction easement to construct drainage culverts. These culverts will be buried beneath the trail and all trail features restored. As this alternative would only impact a small portion of the site and will not substantially impact or alter any contributing elements of the site or any of the character-defining features for which it was determined eligible for the NRHP. Thus, the proposed project will result in a finding of No Adverse Effect.

Section 4(f) applies to Site 42SL419 as it is eligible for the NRHP only under Criterion A. The remaining sites are partly eligible for data potential and does not warrant preservation in place, therefore is exempt from Section 4(f) under 23CFR 774.13(b).

Architectural Resources

The COG Alternative will impact a total of 18 historic properties. The acquisitions, TCEs 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. Thus, the proposed project will result in a finding of No Adverse Effect. Property acquisition at 14 of these buildings will result in a Section 4(f) *de minimis* impact, four others would constitute Temporary Occupancy.

SECTION 4(f) EVALUATION

Under Section 4(f), use of a property includes permanent incorporation of land into a transportation facility, temporary uses, and constructive uses (i.e., severe proximity impacts). Uses that result in minor impacts without adverse effects are considered to have a *de minimis* impact. Uses that result in Greater than *de minimis* impacts result in adverse effects to the activities, features, or attributes qualifying a property for protection under Section 4(f). Additionally, some temporary occupancies of land are so minimal as to not constitute a use within the meaning of Section 4(f) when the scope of the work is minor and the magnitude of the changes to the Section 4(f) property are minimal. The land would also need to be fully restored to a condition at least as good as that which existed prior to the project.

The project will result in a use of Section 4(f) resources resulting in a *de minimis* impact of up to 15 buildings and temporary occupancy finding for up to 7 buildings as outlined in Table 3. An individual Section 4(f) evaluation is being prepared and will be included with the environmental document prepared for this project. The evaluation discusses the impact by the action alternative and measures taken to minimize harm to the Section 4(f) properties. This information is summarized below. A copy of the Section 4(f) evaluation will be provided upon request.

Section 4(f) applies to archeological sites that are on or eligible for the NRHP and that warrant preservation in place. Section 4(f) does not apply if FHWA determines, after consultation with SHPO and the ACHP (if participating) that the archeological resource is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place. None of the eight eligible archaeological sites within the study area retain appropriate integrity and significance to be considered Section 4(f) properties.

Table 3. Summary of Section 4(f) Impact by Build Alternative

	EBS	PPSL	GA	GB	COG
Greater than <i>de minimis</i> Impact	1	1	2	2	2
<i>De minimis</i> Impact	7	15	12	15	14
Temporary Occupancy (no Section 4(f) Use)	3	7	3	3	4
Total No. of Section 4(f) Impacts	8	16	14	17	16

CONSULTATION EFFORTS

Native American consultation was initiated through letters sent to the Uintah and Ouray Ute Tribes, Shoshone-Bannock Tribes, Eastern Shoshone Tribe of the Wind River Reservation, Northwestern Band of Shoshone Nation, Skull Valley Band of Goshute Indians, Confederated Tribes of the Goshute Reservation, and the Cedar and Shivwits Bands of the Paiute (sent March 7, 2018). No responses were received from this correspondence, but the Utah Division of Indian Affairs is a Participating Agency under NEPA for the EIS.

The following organizations were also invited to be consulting parties under Section 106: Friends of Alta, Alta Historical Society, Alta Community Enrichment, Cottonwood Heights Historic Committee, Cottonwood Heights CLG, Wasatch Mountain Club, Cottonwood Canyons, Foundation, Save Our Canyons, Preservation Utah, the Utah Professional Archaeological Council, and the Church of Jesus Christ of Latter-day Saints (sent March 7, 2018). The Cottonwood Heights Historic Committee, Cottonwood Heights CLG, and Church of Jesus Christ of Latter-day Saints agreed to be consulting parties.

Public open house meetings have been held at the NEPA Scoping (June 2019) and Alternatives Screening stages and the public was notified of potential impacts to cultural resources. To date, few comments about cultural resources have been submitted and express general concern about archaeological resources, and the 'China Wall' portion of

42SL419. Public comments will be solicited at other stages of the EIS with updated information on impacts to cultural resources as they are known and will be addressed throughout the project.

SUMMARY

All action alternatives equally impact Site 42SL419 resulting in a finding of Adverse Effect and a Section 4(f) use with Greater than *de minimis* impacts. In addition, the GA and GB alternatives result in an Adverse Effect to Site 42SL52 and the COG alternative results in an Adverse Effect to Site 42SL109. Table 4 summarizes these impacts on archaeological resources.

Table 4. Summary of Effect of Alternatives on Archaeological Resources

	EBS	PPSL	GA	GB	COG
Adverse Effect	1	1	2	2	2
No Adverse Effect	1	4	2	2	2
No Historic Properties Affected	0	0	2	2	0

All action alternatives require the partial acquisition of properties eligible for the NRHP resulting in a finding of No Adverse Effect and a Section 4(f) use with *de minimis* impacts. Table 5 summarizes these impacts on architectural resources.

Table 5. Summary of Effect of Alternatives on Architectural Resources

	EBS	PPSL	GA	GB	COG
Adverse Effect	0	0	0	0	0
No Adverse Effect	10	22	17	20	18
No Historic Properties Affected	Varies	Varies	Varies	Varies	Varies

Therefore, the project will result in a finding of Adverse Effect for up to 2 archaeological sites, No Adverse Effect and Section 4(f) *de minimis* impact for up to 4 archaeological sites and 22 architectural properties, and a finding of No Historic Properties Affected for all remaining architectural properties and archaeological sites. Therefore, the potential Finding of Effect for the proposed UDOT Project No. S-R299(281)0; Little Cottonwood Canyon EIS, Salt Lake County, Utah, is **Adverse Effect**. UDOT will submit a final Finding of Effect and continue consultation for the project once a Preferred Alternative is selected.

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 801-965-4917 or egiraud@utah.gov.

Sincerely,

Liz Robinson

Liz Robinson
Cultural Resources Program Manager
UDOT Central Environmental

Elizabeth Giraud

Elizabeth Giraud, AICP
Architectural Historian
UDOT Central Environmental

Enclosures

cc: Joshua VanJura, Project Manager
Brandon Weston, Environmental Director

Little Cottonwood Canyon EIS DOE/FOE:

Archaeology Impact Table & Figures

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

Site Number	Site Type	Site Name	NRHP Evaluation	Alternative(s) Having Impact	Nature of Impact	Section 106 Effect	Section 4(f) Use/Impact	Warrants Preservation in Place	Figure Reference
42SL830	Road	Salt Lake to Alta Road/SR 210	Eligible	All Alternatives	31.24 acres of potential impact (WIL)	No adverse effect	N/A	No	Figure 36
					31.29 acres of potential impact (W5L)		N/A		
				All Alternatives except for COG	9.58 acres of potential impact (SSRR)	No adverse effect	N/A		Figure 37
					7.30 acres of potential impact (SSB)		N/A		
					1.81 acres of potential impact (TH)		N/A		Figure 38
				PPSL	50.52 acres of potential impact	No adverse effect	N/A		Figure 39
				GA	1.10 acres of potential impact	No adverse effect	N/A		Figure 41
				GB	7.31 acres of potential impact	No adverse effect	N/A		Figure 41 Figure 42
				COG	42.90 acres of potential impact	No adverse effect	N/A		Figure 43 Figure 44 Figure 45
					8.88 acres of potential impact (SSRR)	No adverse effect	N/A		Figure 45
					7.78 acres of potential impact (SSB)	No adverse effect	N/A		Figure 45
					0.29 acres of potential impact (TH)	No adverse effect	N/A		Figure 38

42SL109	Granite quarry	Little Cottonwood Grit Mill Property	Eligible	PPSL	3.19 acres of potential impact	No adverse effect	N/A	No	Figure 40
				GA, GB	2.57 acres of potential impact	No adverse effect	N/A		Figure 41
				COG	10.62 acres of potential impact	Adverse effect	N/A		Figure 44
42SL549	Power plant	Whitmore Temple Granite Power Plant	Eligible	PPSL	less than 0.01 acres of potential impact	No adverse effect	N/A	No	Figure 40
42SL52	Town site	Town Site of Alta	Eligible	GA, GB	0.63 acres of potential impact	No adverse effect	N/A	No	Figure 41
42SL90	Rock shelter/ rock art	Prehistoric rock shelter and rock art	Eligible	GA, GB	Visual	No adverse effect	N/A	No	Figure 41
42SL102	Power plant	Tanner Hill Site hydroelectric plant	Unevaluated	GA, GB	Visual	No adverse effect	N/A	N/A	Figure 41
42SL405	Power plant	Cottonwood Granite Company Power Plant #3	Not eligible	N/A	N/A	No historic properties affected	N/A	N/A	N/A
42SL419	Railroad	D&RGW Railroad/Wasatch & Jordan Valley Railroad/Salt Lake & Alta	Eligible	All alternatives	0.19 acres of potential impact (SSRR, SSB)	Adverse Effect	Yes	No	Figure 46
42SL473	Tramway	Michigan-Utah Mine Aerial Tramway	Not eligible	N/A	N/A	No historic properties affected	N/A	N/A	N/A
42SL507	Power plant	Whitmore Wasatch Power Plant	Not eligible	N/A	N/A	No historic properties affected	N/A	N/A	N/A
42SL538	Dam	Utah Granite and Marble Co./Whitmore Power Plant	Not eligible	N/A	N/A	No historic properties affected	N/A	N/A	N/A

42SL551	Road	Road to Little Cottonwood	Not eligible	N/A	N/A	No historic properties affected	N/A	N/A	N/A
42SL740	Road	Alta Prince of Wales Road	Eligible	N/A	Property avoided	No historic properties affected	N/A	No	N/A
42SL916	Road	Wagon Road to Alta	Eligible	PPSL	0.02 acres potential effect	No Adverse Effect	No	No	Figure 47
				COG	0.01acres potential effect	No Adverse Effect	No	No	Figure 47
42SL860	Mine	Emma Mine	Eligible	N/A	Property avoided	No historic properties affected	N/A	No	N/A
42SL915	Gravel Pit	Walker and Draper Gravel Pits	Not eligible	N/A	N/A	No historic properties affected	N/A	N/A	N/A
42SL393	Ditch	Butler Ditch	Not eligible	N/A	N/A	No historic properties affected	N/A	N/A	N/A

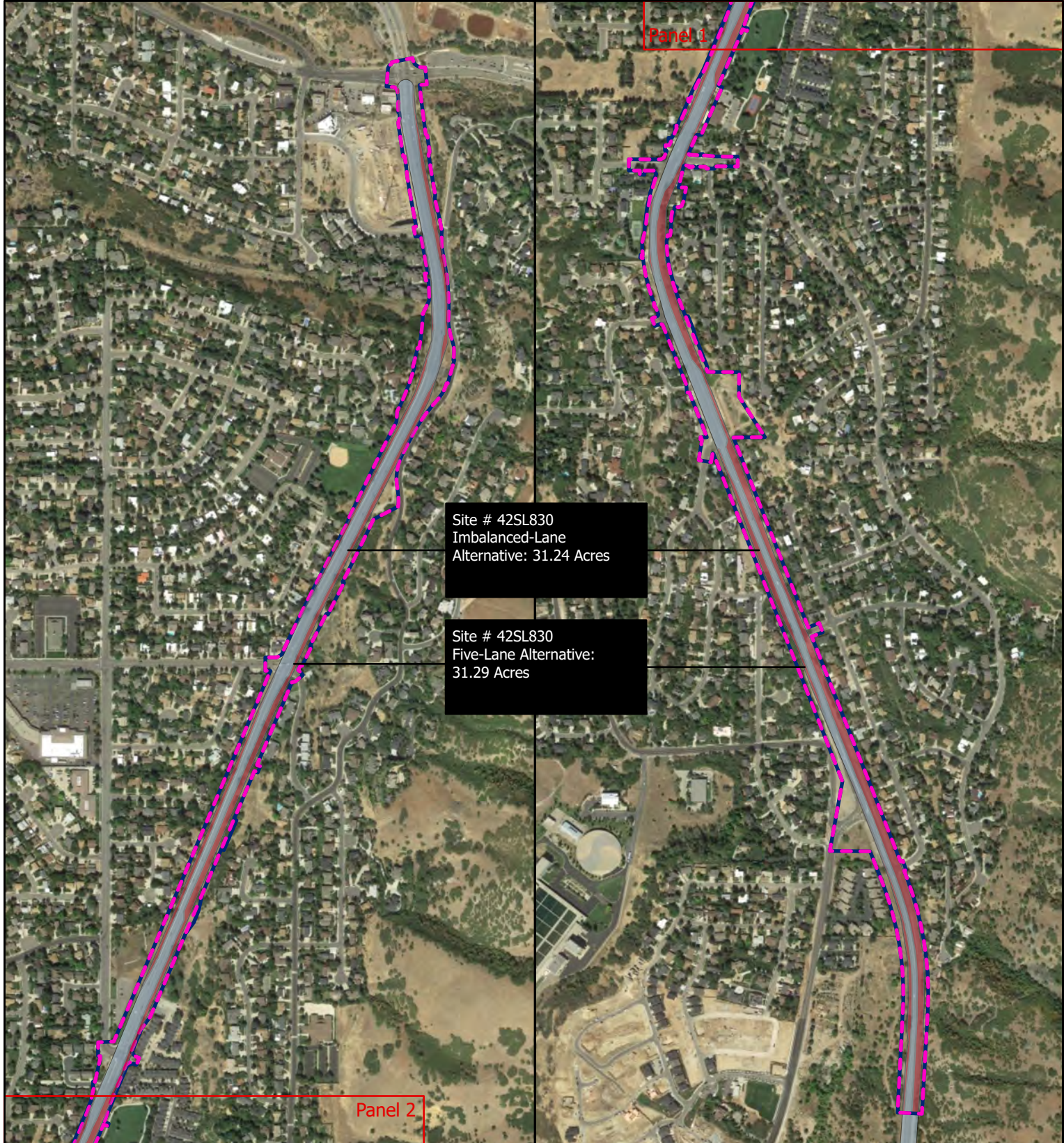
Alternative Abbreviations

Action Alternatives (main alternatives being evaluated in detail)

PPSL	Enhanced Bus Service in Peak-period Shoulder Lane Alternative
GA	Gondola Alternative A
GB	Gondola Alternative B
COG	Cog Rail Alternative

Sub-alternatives (alternative options that fall under action alternatives)

WIL	Wasatch Boulevard Imbalanced-lane Alternative (could apply to all action alternatives)
W5L	Wasatch Boulevard Five-lane Alternative (could apply to all action alternatives)
SSRR	Snow Sheds with Realigned Roads Alternative
SSB	Snow Sheds with Berms Alternative
TH	Trailhead Improvements



Site # 42SL830
Imbalanced-Lane
Alternative: 31.24 Acres

Site # 42SL830
Five-Lane Alternative:
31.29 Acres



- - - Imbalanced-Lane Alternative Total Impacts
- - - Five-Lane Alternative Total Impacts
- Impacted Area
- Archaeological Site Boundary (42SL830)

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
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FINDING OF EFFECT



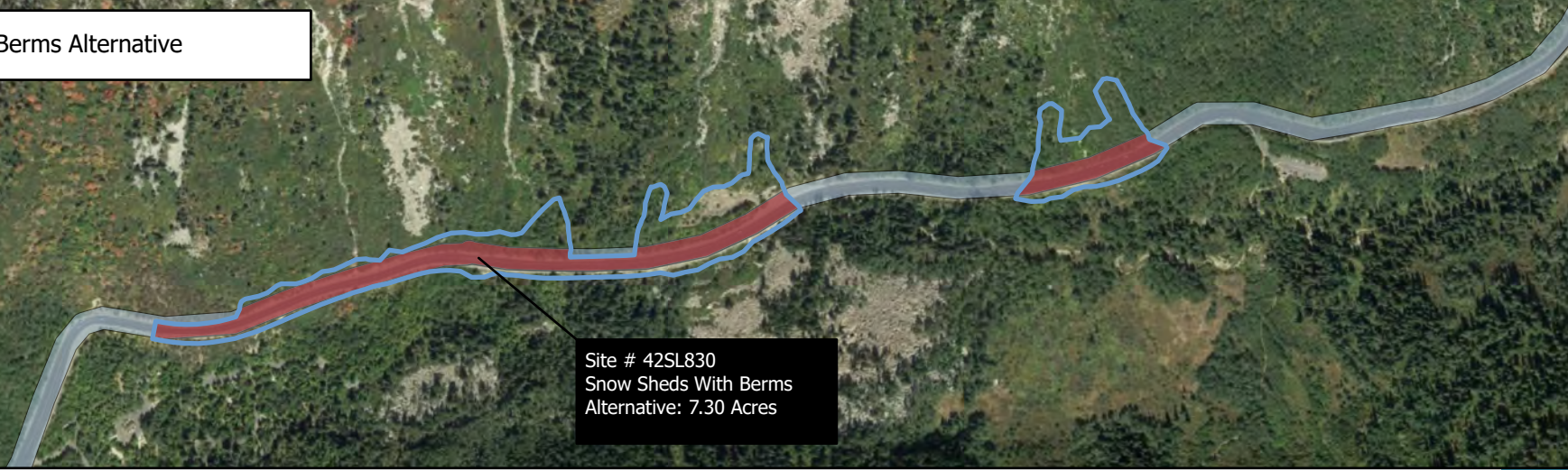
0 500 1000 Feet





*Impacts on this figure apply to all action alternatives.

Snow Sheds With Realigned Road Alternative

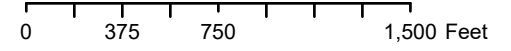


Snow Sheds With Berms Alternative

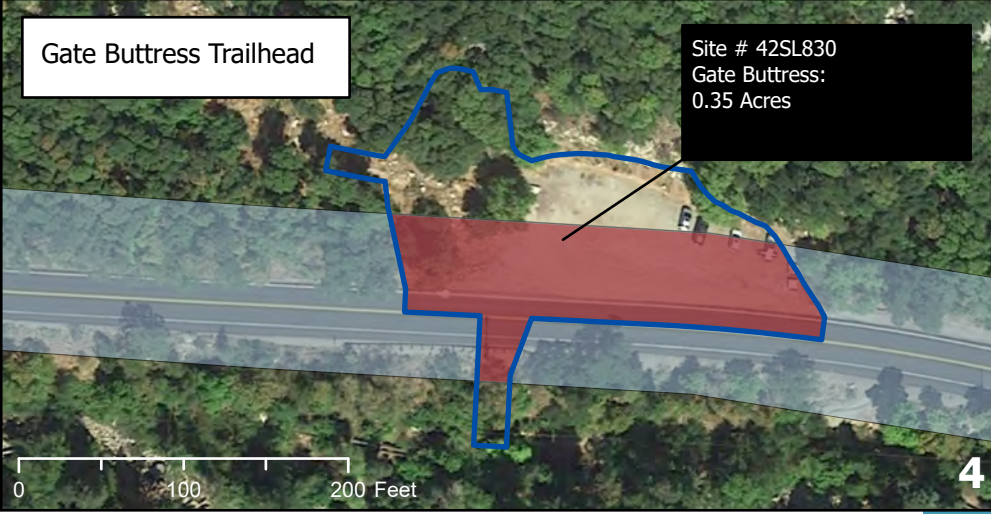
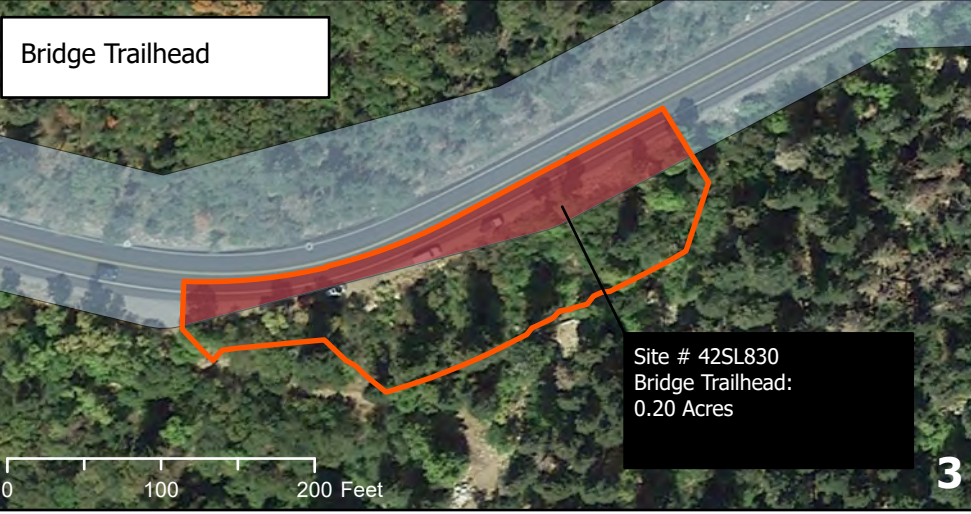
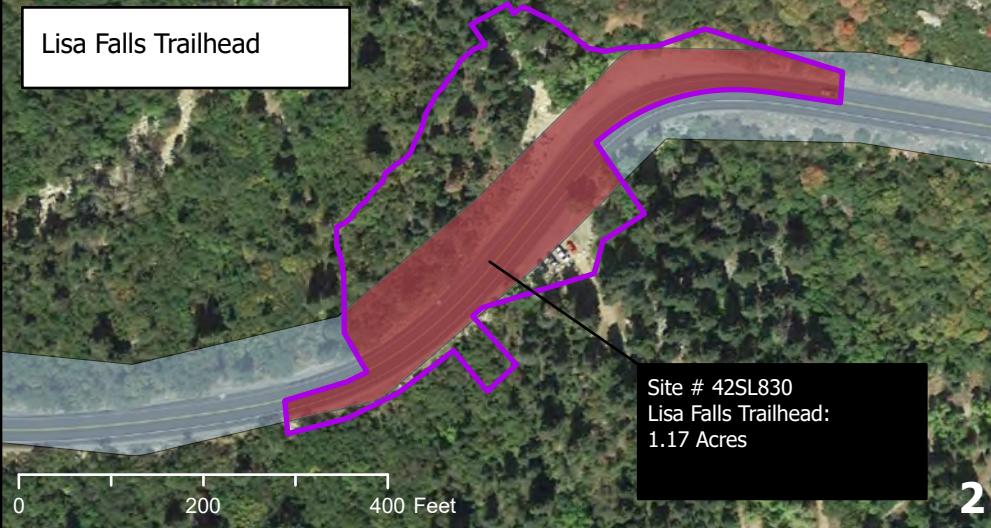
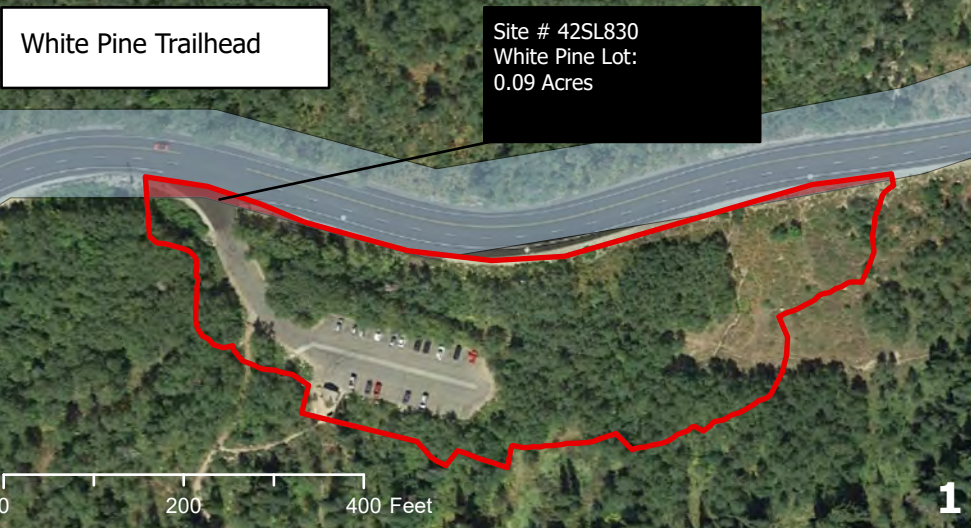


-  Snow Sheds with Berms Alternative Impact Area
-  Snow Sheds with Realigned Road Alternative Impact Area
-  Impacted Area
-  Archaeological Site Boundary (42SL830)

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*Impacts on this figure apply to all action alternatives except cog-rail.



- Trailhead Improvements**
- Parking - Bridge Trailhead
 - Parking - Gate Buttruss
 - Parking - Lisa Falls PPSL Option A
 - Parking - White Pine Option A

- Impacted Area
- Archaeological Site Boundary (42SL830)



**LITTLE COTTONWOOD CANYON EIS
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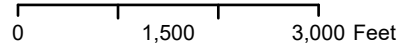
*Impacts for White Pine Trailhead and Bridge Trailhead apply to all action alternatives.

*Impacts for Lisa Falls Trailhead and Gate Buttruss Trailhead apply to all action alternatives except the Cog Rail Alternative.

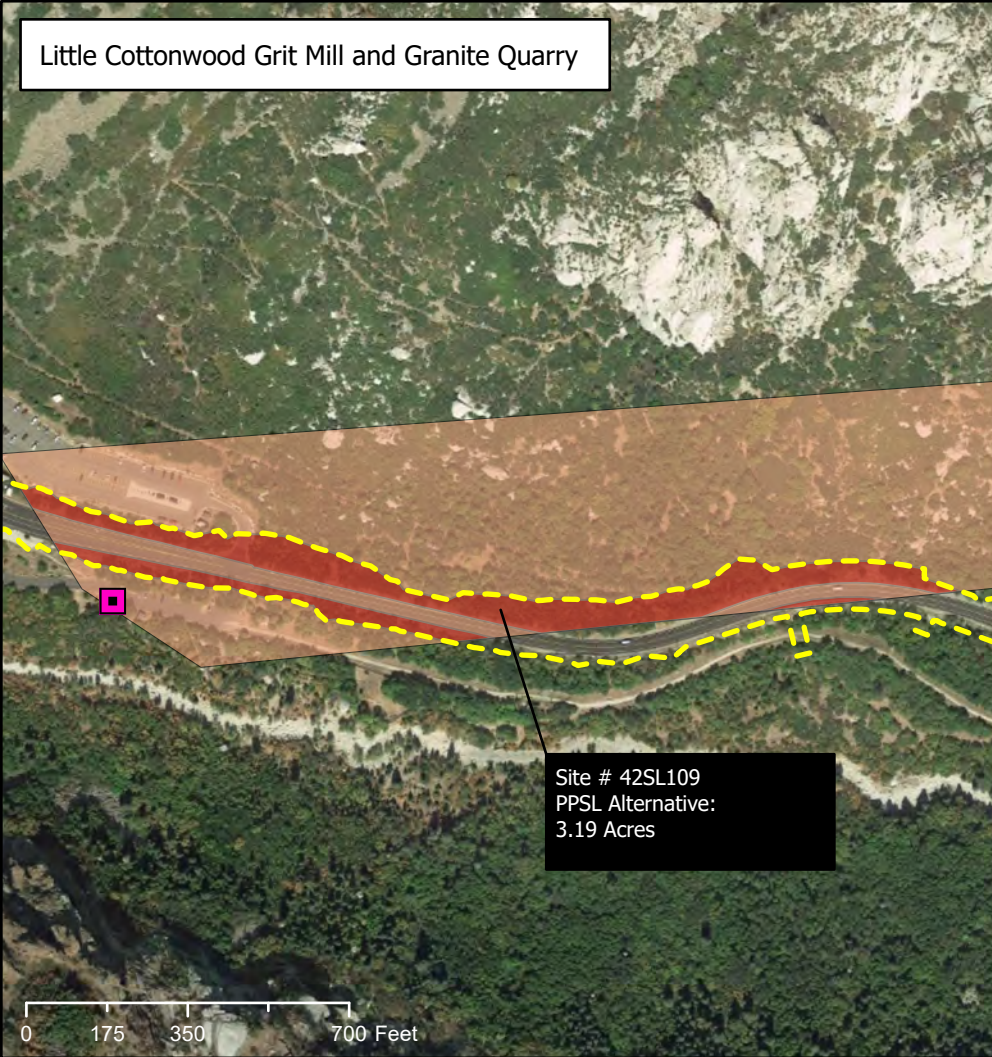


-  Impacted Area PPSL Alternative
-  Archaeological Site Boundary (42SL830)

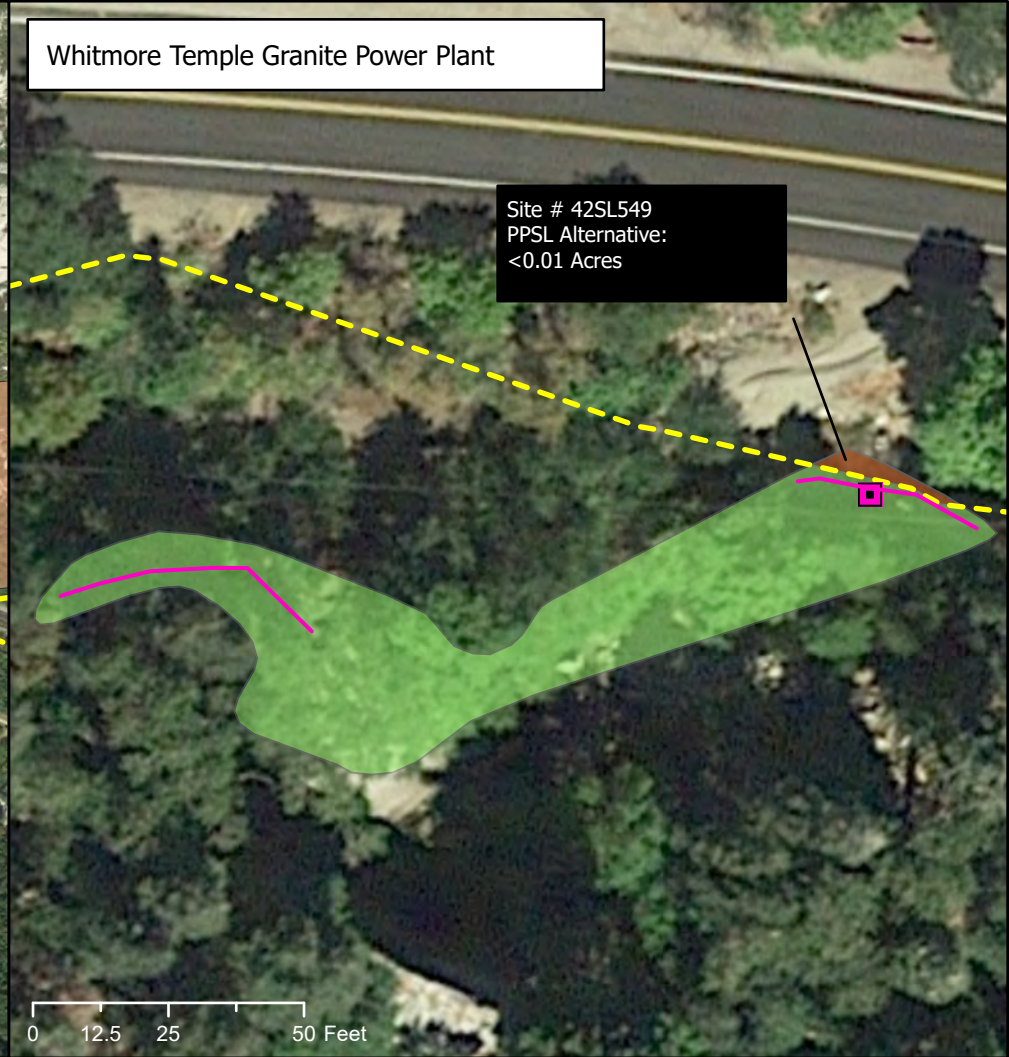
LITTLE COTTONWOOD CANYON EIS
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Little Cottonwood Grit Mill and Granite Quarry



Whitmore Temple Granite Power Plant




 PPSL Alternative Impacts

 Impacted Area


Archaeological Site Boundaries

 42SL109

 42SL549

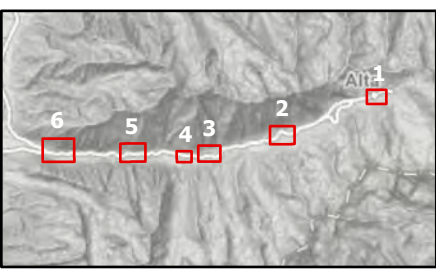
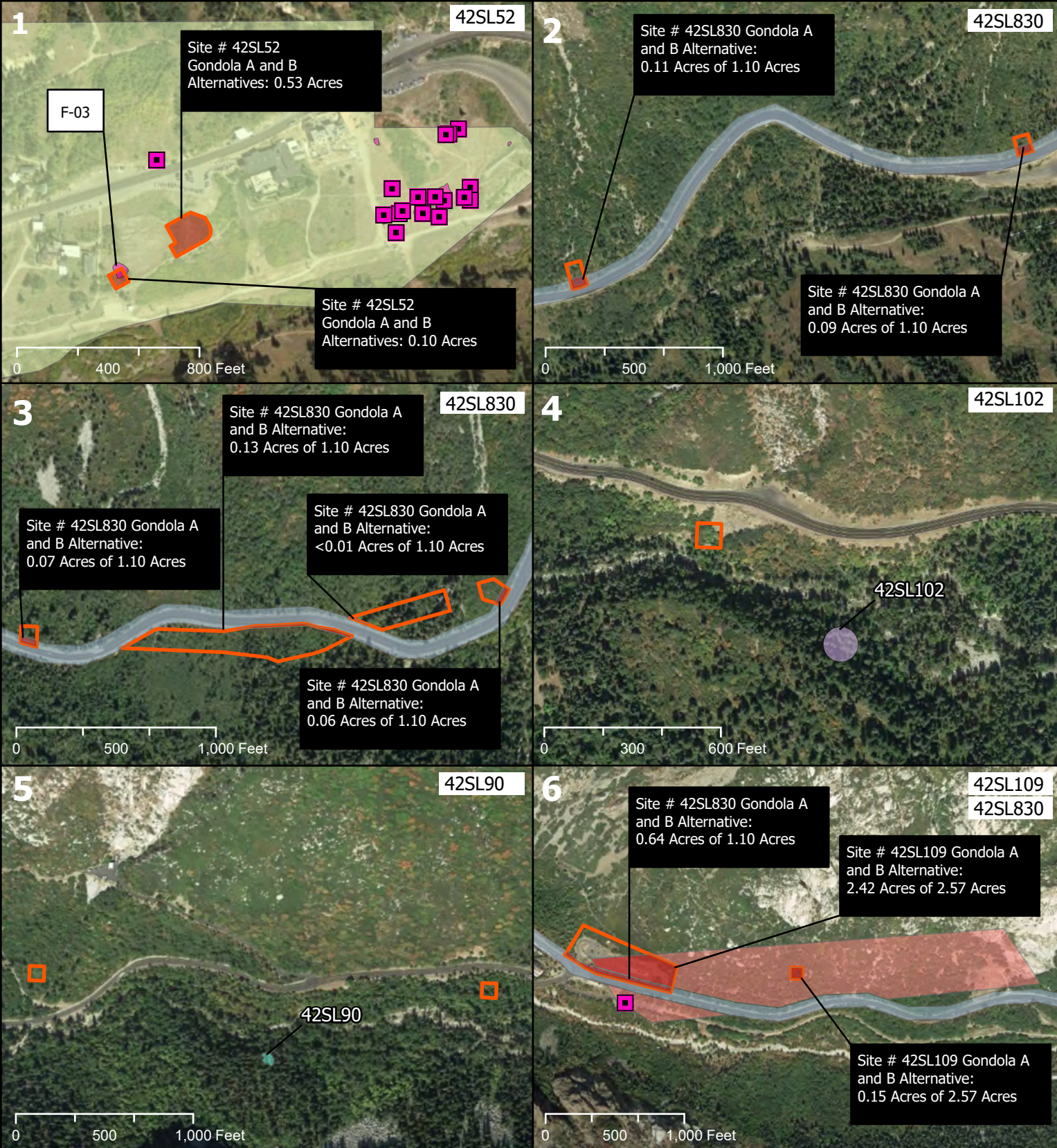
Archaeological Features

 Archaeological Points

 Archaeological Lines

LITTLE COTTONWOOD CANYON EIS
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FINDING OF EFFECT





- Gondola A and B Towers and Stations
- Impacted Area
- Archaeological Site Boundaries
- 42SL102
- 42SL109
- 42SL52
- 42SL830
- 42SL90
- Archaeological Features
- Archaeological Points
- Archaeological Lines
- Archaeological Area

**LITTLE COTTONWOOD CANYON EIS
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*Impacts on this figure apply to both gondola A and B alternatives.

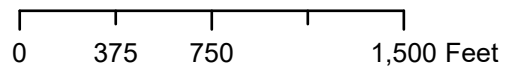


Site # 42SL830 Gondola B
(La Caille Area Only)
Alternative: 6.21 Acres



- Impacted Area
- Gondola B (La Caille Area Only)
- Archaeological Site Boundary (42SL830)

LITTLE COTTONWOOD CANYON EIS
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Lower Little Cottonwood Canyon



Panel 2



Site # 42SL830
Cog Rail Alternative:
33.55 Acres

Upper Little Cottonwood Canyon

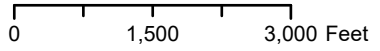


Panel 1



-  Impacted Area Cog Rail Alignment Alternative
-  Archaeological Site Boundary (42SL830)







LITTLE COTTONWOOD CANYON EIS
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Little Cottonwood Grit Mill and Granite Quarry

Rail Base Station



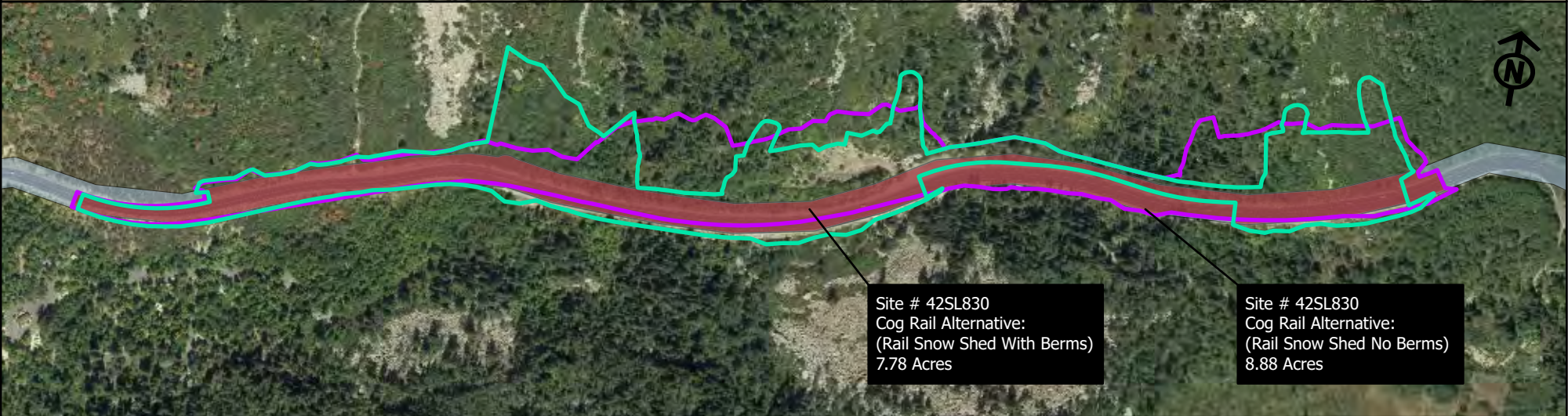
-  Archaeological Feature - Point
-  Rail Base Station
-  Rail Alignment Total Impacts Area
-  Impacted Area Cog Rail Alternative
-  Archaeological Site Boundary (42S109)
-  Archaeological Site Boundary (42S109)

LITTLE COTTONWOOD CANYON EIS
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FINDING OF EFFECT



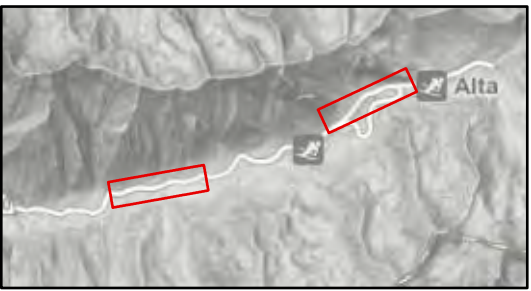


Site # 42SL830
Cog Rail Alternative:
(Upper Canyon Snow Shed)
2.44 Acres



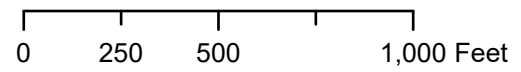
Site # 42SL830
Cog Rail Alternative:
(Rail Snow Shed With Berms)
7.78 Acres

Site # 42SL830
Cog Rail Alternative:
(Rail Snow Shed No Berms)
8.88 Acres



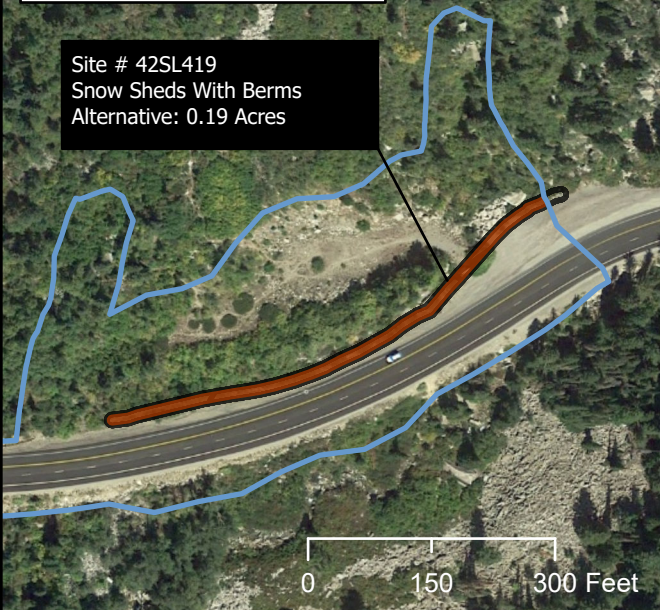
- Rail Snow Shed Upper Canyon
- Rail Snow Shed With Berms
- Rail Snow Shed No Berms
- Impacted Area Cog Rail Alternative
- Archaeological Site Boundary (42SL830)

LITTLE COTTONWOOD CANYON EIS
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FINDING OF EFFECT



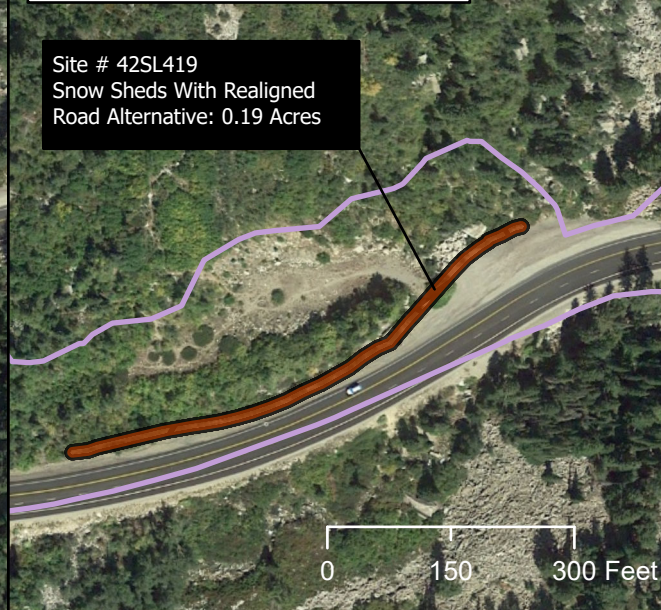
Snow Sheds With Berms

Site # 42SL419
Snow Sheds With Berms
Alternative: 0.19 Acres



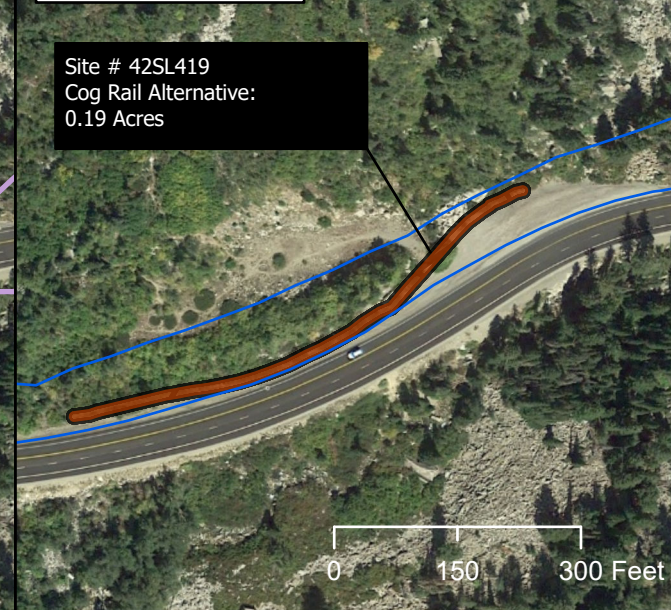
Snow Shed With Realigned Road

Site # 42SL419
Snow Sheds With Realigned
Road Alternative: 0.19 Acres

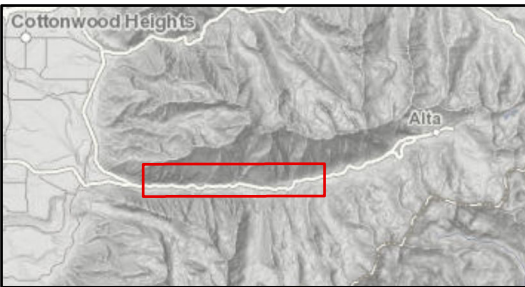







Cog Rail Impacts

Site # 42SL419
Cog Rail Alternative:
0.19 Acres



Overview



-  Snowsheds - Revised Curves
-  Rail Total Impacts without Pavement
-  Snowsheds - With Berms
-  Impacted Area (Snow Sheds With Berms, Snow Sheds with Realigned Road, and Cog Rail Alternatives)
-  Archaeological Site Boundary (42SL419)

LITTLE COTTONWOOD CANYON EIS
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FINDING OF EFFECT



Quarry Trail Cog Rail Alternative Impact

Site # 42SL916
Cog Rail Alternative:
0.01 Acres

0 150 300 Feet





Quarry Trail PPSL Alternative Impact

Site # 42SL916
PPSL Alternative:
0.02 Acres

0 100 200 Feet

Overview

0 1,250 2,500 Feet

-  PPSL Impacts Total
-  Rail Total Impacts without Pavement
-  Impacted Area (Cog Rail and PPSL Alternative)
-  Archaeological Site Boundary (42SL416)

LITTLE COTTONWOOD CANYON EIS
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DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT



**Little Cottonwood Canyon EIS DOE/FOE:
Architecture Impact Table and Figures**

Determinations of Eligibility and Findings of Effect

Address / ID	SHPO Rating /NRHP Eligibility	Year Built	Type / Style	Alternative(s) Having Impact	Nature of Impact	Section 106 Effect	Section 4(f) Use/Impact	Figure Reference
2039 East 9400 South (NC1)	NC/ Not eligible	1978	Vernacular grocery store.	N/A	N/A	No historic properties affected	N/A	N/A
6851 South Big Cottonwood Canyon Road (1)	ES/ Eligible	1880	NRHP-listed Granite Paper Mill.	All Alternatives	Partial acquisition: 4.01 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 1
6999 Gun Club Road (NC2)	NC/ Not eligible	1954	Gun club with one one-story historic-age vernacular building and five non-contributing buildings	N/A	N/A	No historic properties affected	N/A	N/A
3700 East Fort Union Boulevard (NC3)	NC/ Not eligible	1948	Commercial (general) establishment	N/A	N/A	No historic properties affected	N/A	N/A
3720 East Fort Union Blvd (NC4)	NC/ Not eligible	1975	Service station	N/A	N/A	No historic properties affected	N/A	N/A
7326 South Prospector Drive (2)	EC/ Eligible	1978	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
7527 South Brighton Point Drive (3)	EC/ Eligible	1974	Contemporary-style single-family dwelling	All Alternatives	Partial acquisition: 0.17 acres; temporary construction easement: 0.09 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 2

7537 South Brighton Point Drive (4)	EC/ Eligible	1975	Ranch-style single-family dwelling	All Alternatives	Partial acquisition: 0.12 acres; temporary construction easement: 0.04 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 2
7561 South Brighton Point Drive (5)	EC/ Eligible	1976	Ranch-style single-family dwelling	All Alternatives	Partial acquisition: 0.08 acres; temporary construction easement: 0.01 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 3
7659 South Avondale Drive (6)	EC/ Eligible	1974	Shed-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
7669 South Avondale Drive (7)	EC/ Eligible	1974	Shed-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
7685 South Avondale Drive (NC5)	NC/ Not eligible	1972	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
7699 South Avondale Drive (8)	EC/ Eligible	1971	Contemporary-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
7709 South Avondale Drive (9)	EC/ Eligible	1972	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
7719 South Avondale Drive (10)	EC/ Eligible	1975	Contemporary-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
7731-7733 South Avondale Drive (NC6)	NC/ Not eligible	1975	Late-twentieth-century other-style duplex	N/A	N/A	No historic properties affected	N/A	N/A
7743-7745 South Avondale Drive (11)	EC/ Eligible	1975	Contemporary-style duplex	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
3650 East Avondale Drive (12)	EC/ Eligible	1977	Contemporary-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A

3615 East Bengal Boulevard (NC7)	NC/ Not eligible	1977	Contemporary-style duplex	N/A	N/A	No historic properties affected	N/A	N/A
3625 East Bengal Boulevard (NC8)	NC/ Not eligible	1973	Contemporary-style duplex condominium	N/A	N/A	No historic properties affected	N/A	N/A
3637 East Bengal Boulevard (130)	EC/ Eligible	1973	Contemporary-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
3647 East Bengal Boulevard (NC9)	NC/ Not eligible	1975	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
3638-3648 East Bengal Boulevard (14)	EC/ Eligible	1977	late twentieth-century other-style duplex	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
7825-7827 South Honeycomb Road (15)	EC/ Eligible	1977	Split-level-style duplex	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
7835-7837 South Honeycomb Road (NC10)	NC/ Not eligible	1977	Late twentieth-century other-style duplex	N/A	N/A	No historic properties affected	N/A	N/A
7845 South Honeycomb Road (16)	EC/ Eligible	1976	Contemporary-style duplex	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
7855 South Honeycomb Road (17)	EC/ Eligible	1977	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
7865 South Honeycomb Road (18)	EC/ Eligible	1972	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8166 South Wasatch Boulevard (NC11)	NC/ Not eligible	1965	Ranch-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8282 South Wasatch Boulevard (NC12)	NC/ Not eligible	1944	Detached garage	N/A	N/A	No historic properties affected	N/A	N/A
8296 South Wasatch Blvd (19)	EC/ Eligible	1953	Early ranch-style single-family dwelling	All Alternatives	Partial acquisition: 0.04 acres; temporary construction easement: 0.02 acres (WIL)	No adverse effect	Yes/ <i>de minimis</i>	Figure 4

					Partial acquisition: 0.06 acres; temporary construction easement: 0.02 acres (W5L)	No adverse effect	Yes/ <i>de minimis</i>	Figure 4
8304 South Wasatch Boulevard (NC13)	NC/ Not eligible	1953	Early ranch-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
3461 East Kings Hill Drive (20)	EC/ Eligible	1974	Split-level-style single-family dwelling	All Alternatives	Temporary construction easement: 0.02 acres	No adverse effect	No/ Temporary occupancy	Figure 5
3475 East Kings Hill Drive (21)	EC/ Eligible	1971	Split-level-style single-family dwelling	All Alternatives	Temporary construction easement: less than 0.01 acres	No adverse effect	No/ Temporary occupancy	Figure 5
3485 East Kings Hill Drive (NC14)	NC/ Not eligible	1965	Ranch-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
3495 East Kings Hill Drive NC15)	NC/ Not eligible	1965	Ranch-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
3509 East Kings Hill Drive (NC16)	NC/ Not eligible	1972	Contemporary-style single family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8342 South Wasatch Blvd (22)	EC/ Eligible	1970	Ranch-style single-family dwelling	All Alternatives	Partial acquisition: 0.03 acres; temporary construction easement: 0.05 acres (WIL)	No adverse effect	Yes/ <i>de minimis</i>	Figure 6
					Partial acquisition: 0.05 acres; temporary construction easement: 0.04 acres (W5L)	No adverse effect	Yes/ <i>de minimis</i>	Figure 6
Fffdfa3454 East Kings Hill Drive (NC17)	NC/ Not eligible	1972	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A

3460 East Kings Hill Drive (NC18)	NC/ Not eligible	1972	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
3484 East Kings Hill Drive (23)	EC/ Eligible	1972	Contemporary-type single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
3492 East Kings Hill Drive (NC19)	NC/ Not eligible	1972	Contemporary-style single family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
3510 East Kings Hill Drive (NC20)	NC/ Not eligible	1971	Contemporary-style single family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8376 South Dynasty Way (NC21)	NC/ Not eligible	1949	Minimal Traditional-style, single-family dwelling	N/A	N/A	No Historic Properties Affected	N/A	N/A
8530 South Kings Cove Drive (25)	EC/ Eligible	1968	Contemporary-type single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8542 South Kings Cove Drive (25)	EC/ Eligible	1971	Split-level-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8552 South Kings Cove Drive (NC22)	NC/ Not eligible	1971	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8566-8568 South Wasatch Blvd (26)	EC/ Eligible	1977	American vernacular-style duplex	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8574 South Wasatch Blvd (27)	EC/ Eligible	1977	American vernacular-style duplex	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8566 South Kings Cove Dr (NC23)	NC/ Not eligible	1973	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8565 South Kings Cove Drive (NC24)	NC/ Not eligible	1977	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8590-8592 South Wasatch Boulevard (NV1)	EC/ Eligible	1977	Potential historic age duplex	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8640 South Russell Park (NV2)	EC/ Eligible	1972	Potential historic age single-family dwelling	All Alternatives	Temporary construction easement: 0.06 acres	No adverse effect	No/ Temporary occupancy	Figure 7

8660 South Alpen Circle (28)	EC/ Eligible	1974	Split-level-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8635 South Russell Park Road (NC25)	NC/ Not eligible	1977	Contemporary-style single family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8662 South Alpen Circle (29)	EC/ Eligible	1974	Split-level-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8664 South Alpen Circle (30)	EC/ Eligible	1975	Contemporary-style single family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8659 South Grand Oak Drive (31)	EC/ Eligible	1973	Contemporary-style single family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8672 South Alpen Circle (32)	EC/ Eligible	1976	Split-level-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8673 South Grand Oak Drive (NC26)	NC/ Not eligible	1965	Ranch-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8682 South Alpen Circle (NC27)	NC/ Not eligible	1976	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8730 South Alpen Way (NC28)	NC/ Not eligible	1968	Ranch-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8742 South Alpen Way (33)	EC/ Eligible	1970	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8754 South Alpen Way (34)	EC/ Eligible	1970	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
3575 East Golden Hills Ave (35)	EC/ Eligible	1968	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8800 South Alpen Way (36)	EC/ Eligible	1976	Ranch-style single-family dwelling	All Alternatives	Partial acquisition: 0.01 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 8
8816 South Alpen Way (37)	EC/ Eligible	1975	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A

8828 South Alpen Way (NC29)	NC/ Not eligible	1972	Ranch-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8840 South Alpen Way (38)	EC/ Eligible	1975	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8852 South Alpen Way (39)	EC/ Eligible	1972	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8864 South Alpen Way (40)	EC/ Eligible	1971	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8884 South Alpen Way (41)	EC/ Eligible	1976	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8894 South Alpen Way (42)	EC/ Eligible	1976	Contemporary-style single family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8906 South Alpen Way (NC30)	NC/ Not eligible	1976	Contemporary-style single family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8918 South Alpen Way (NC31)	NC/ Not eligible	1977	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8928 South Alpen Way (NC32)	NC/ Not eligible	1977	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
8940 South Alpen Way (43)	EC/ Eligible	1976	American vernacular-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8950 South Alpen Way (44)	EC/ Eligible	1976	Contemporary-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8962 South Alpen Way (45)	EC/ Eligible	1976	Contemporary-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
8974 South Alpen Way (NC33)	NC/ Not eligible	1976	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
3573 East Green Hills Drive (NC34)	NC/ Not eligible	1972	Split-level-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A

9008 South 3605 East (46)	EC/ Eligible	1976	Late twentieth-century other-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9018 South 3605 East (47)	EC/ Eligible	1976	Late twentieth-century other-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9005 South 3605 East (48)	EC/ Eligible	1976	Late twentieth-century other-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9015 South 3605 East (49)	EC/ Eligible	1976	Late twentieth-century other-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9025 South 3605 East (50)	EC/ Eligible	1976	Late twentieth-century other-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9035 South 3605 East (51)	EC/ Eligible	1976	Late twentieth-century other-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9041 South 3605 East (52)	EC/ Eligible	1976	Late twentieth-century other-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
3590 East 9050 South (53)	EC/ Eligible	1976	Late twentieth-century other-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
3598 East 9050 South (54)	EC/ Eligible	1976	Late twentieth-century other-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
3604 East 9050 South (55)	EC/ Eligible	1976	Late twentieth-century other-style duplex condominium	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9043 South Despain Way (NC35)	NC/ Not eligible	1971	Ranch-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
9057 South Despain Way (56)	EC/ Eligible	1974	Split-level-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9067 South Despain Way (57)	EC/ Eligible	1974	Contemporary-type single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9075 South Despain Way (58)	EC/ Eligible	1974	Split-level-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A

9046 South Kings Hill Place (59)	EC/ Eligible	1977	Ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9060 South Kings Hill Place (NC36)	NC/ Not eligible	1977	Contemporary-style single family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
9086 South Kings Hill Place (60)	EC/ Eligible	1978	Contemporary-style single family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9338 South North Little Cottonwood Road (84)	ES/ Eligible	1908	Victorian Eclectic-style side-passage type single-family dwelling	GB	Partial acquisition: 0.04 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 26
				COG	Partial acquisition: 0.04 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 29
3742 East North Little Cottonwood Road (61)	ES/ Eligible	1898	Victorian Eclectic-style single-family dwelling	PPSL	Temporary construction easement: 0.19 acres	No adverse effect	No/ Temporary occupancy	Figure 9
				GB	Partial acquisition: 0.4336 acres	No adverse Effect	Yes/ <i>de minimis</i>	Figure 27
				COG	Partial acquisition: 0.4336 acres	No adverse Effect	Yes/ <i>de minimis</i>	Figure 30
3744 East North Little Cottonwood Road (NC37)	NC/ Not eligible	1975	Ranch-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
4261 Little Cottonwood Road (NV3)	EC/ Eligible	1973	Potential historic age single-family dwelling	GB	Partial acquisition: 0.05 acres; perpetual easement: 0.163 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 28
				COG	Partial acquisition: 0.03 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 31
4306 Little Cottonwood Road (62)	EC/ Eligible	1947	Early ranch-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A

4700 East Little Cottonwood Canyon (63)	EC/ Eligible	1934	Temple Granite Quarry Historical Marker	PPSL	Temporary construction easement: 0.71 acres	No adverse effect	No/ Temporary occupancy	Figure 10
				COG	Temporary construction easement: 0.14 acres	No adverse effect	No/ Temporary occupancy	Figure 32
4526 East Little Cottonwood Canyon (64)	EC/ Eligible	1930	Twentieth-century other-style hydroelectric energy facility (Whitmore Power Plant)	PPSL	Temporary construction easement: 0.01 acres	No adverse effect	No/ Temporary occupancy	Figure 11
4883 East Wasatch Resort Road (NC38)	NC/ Not eligible	1945	Shed-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
4921 East Granite Cliffs Road (NC39)	NC/ Not eligible	1926	I-house-type single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
4964 East Little Cottonwood Road (NV4)	EC/ Eligible	—	—	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
4945 East Granite Cliffs Road (65)	EC/ Eligible	1975	Shed-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
4967 East Granite Cliffs Road (NC40)	NC/ Not eligible	1925	Colonial Revival-style single-family dwelling	N/A	N/A	No historic properties affected	N/A	N/A
5002 East Little Cottonwood Canyon (66)	EC/ Eligible	1936	Tudor-style single-family dwelling	PPSL	Temporary construction easement: 0.02 acres	No adverse effect	No/ Temporary occupancy	Figure 12
5070 East Granite Cliffs Road (NC41)	NC/ Not eligible	1930	Single-family dwelling with no style, but it features elements of Period Revival and ranch styles	N/A	N/A	No historic properties affected	N/A	N/A
6279 East Little Cottonwood Road (NV5)	EC/ Eligible	1968	Potential historic age commercial building	PPSL	Partial acquisition: 0.06 acres; temporary construction easement: 0.82 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 13
				GA, GB	Partial acquisition: 0.15 acres; perpetual easement: 2.01 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 21

				COG	Partial acquisition: 2.22 acres; temporary construction easement: 1.23 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 33
?7490 E Little Cottonwood Rd (NC42)	NC/ Not eligible	1950	Park Service Modern-style toll both	N/A	N/A	No historic properties affected	N/A	N/A
9111 East Little Cottonwood (67)	ES/ Eligible	1970	Organic-style single dwelling	PPSL	Partial acquisition: less than 0.01 acres; temporary construction easement: 0.01 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 14
				COG	Partial acquisition: 0.08 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 34
9121 East Snowbird Center Drive (68)	ES/ Eligible	1975	Brutalist-style timeshare/condominium (Iron Blossam Lodge)	PPSL	Partial acquisition: 0.12 acres; temporary construction easement: 0.13 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 15
				GA, GB	Visual	No adverse effect	No/ N/A	N/A
				COG	Partial acquisition: 0.36 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 35
9180 East Lodge Drive (69)	EC/ Eligible	1967	Brutalist-style condominium	PPSL	Partial acquisition: 0.05 acres; temporary construction easement: 0.03 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 16
9202 East Lodge Drive (70)	EC/ Eligible	1971	Brutalist-style hotel/condominium (The Inn at Snowbird)	PPSL,	Partial acquisition: less than 0.01 acres; temporary construction easement: less than 0.01 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 17
				GA, GB	Perpetual easement: 0.01 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 22

9260 East Lodge Drive (71)	ES/ Eligible	1970	Brutalist-style hotel/condominium (The Lodge at Snowbird)	PPSL,	Partial acquisition: 0.1 acres; temporary construction easement: 0.35 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 18
				GA, GB	Perpetual Easement: 0.40 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 23
9385 South Snowbird Center Drive (72)	ES/ Eligible	1977	Brutalist-style Commercial and Recreation/Culture building (Snowbird Center)	PPSL	Partial acquisition: 0.05 acres; temporary construction easement: 0.78 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 19
				GA, GB	Partial acquisition: 0.15 acres; perpetual easement: 1.31 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 24
				COG	Partial acquisition: 1.61 acres; temporary construction easement: 0.02 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 36
9320 South Cliff Lodge Drive (73)	ES/ Eligible	1974	Brutalist-style hotel/condominium (Cliff Lodge)	GA, GB	Visual	No adverse effect	No/ N/A	N/A
9425 East Bypass Road (74)	EC/ Eligible	1975	Brutalist-style apartment/condominium	PPSL	Partial acquisition: less than 0.01 acres; temporary construction easement: 0.01 acres	No adverse effect	Yes/ <i>de minimis</i>	Figure 20
9650 East Little Cottonwood (75)	EC/ Eligible	1970	Shed-style condominium unit (Hellgate Condominiums)	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9670 East Little Cottonwood (76)	EC/ Eligible	1970	Shed-style condominium unit (Hellgate Condominiums)	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
9920 East Peruvian Acre Road (77)	EC/ Eligible	1978	Side-gabled, vernacular-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A

9931 East Peruvian Acre Road (78)	EC/ Eligible	1978	Vernacular (chalet-style) single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
10000 East Little Cottonwood (79)	ES/ Eligible	1945	Mansard-style hotel (Alta Peruvian Lodge)	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
?10161 East Little Cottonwood (80)	EC/ Eligible	1965	Contemporary-style single family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
10160 East Little Cottonwood (81)	EC/ Eligible	1960	Late-twentieth century other-style hotel (Goldminer's Daughter)	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
10220 East Little Cottonwood (NC43)	NC/ Not eligible	1968	Vernacular ski shop/commercial building (Deep Powderhouse)	N/A	N/A	No historic properties affected	N/A	N/A
10230 East Little Cottonwood (82)	ES/ Eligible	1939	Swiss chalet and International style hotel (Alta Lodge)	GA, GB	Partial acquisition: 0.06 acres; perpetual easement: 0.35 acres; visual	No adverse effect	Yes/ <i>de minimis</i>	Figure 25
10231 East Little Cottonwood (83)	EC/ Eligible	1968	Restaurant with modern stylistic elements (Shallow Shaft), and two-story shed-style single-family dwelling	N/A	Property avoided	No historic properties affected	No/ N/A	N/A
10380 East Little Cottonwood (NC44)	NC/ Not eligible	1973	Brutalist-style hotel (Rustler Lodge)	N/A	N/A	No historic properties affected	N/A	N/A
?10499 East Little Cottonwood (NC45)	NC/ Not eligible	1918	Mine adit (Bay City Tunnel)	N/A	N/A	No historic properties affected	N/A	N/A

Alternative Abbreviations

Action Alternatives (main alternatives being evaluated in detail)

EBS Enhanced Bus Service

PPSL Peak-period Shoulder Lane Alternative

GA Gondola Alternative A

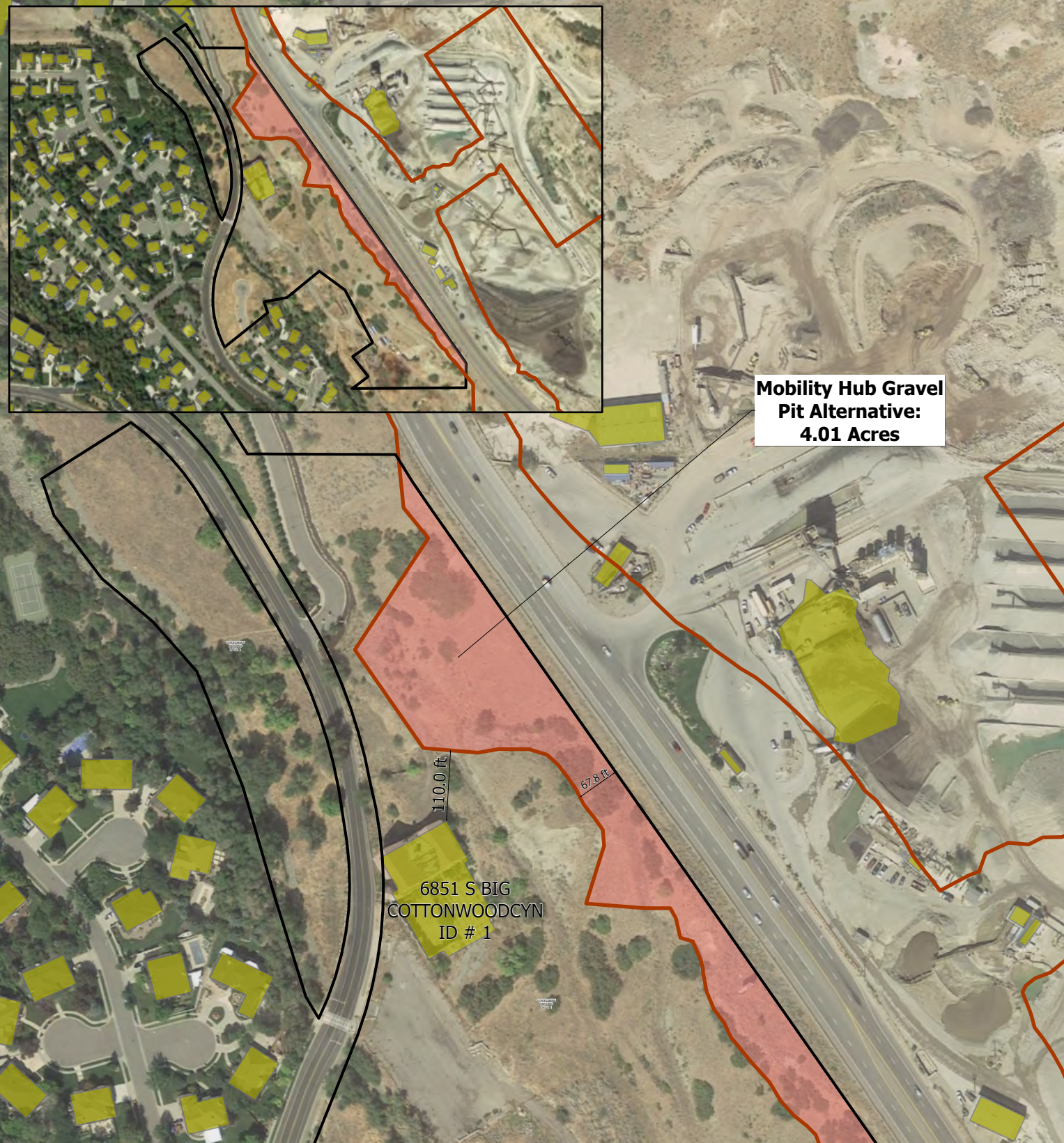
GB Gondola Alternative B

COG Cog Rail Alternative

Sub-alternatives (alternative options that fall under action alternatives)

WIL Wasatch Boulevard Imbalanced-lane Alternative (could apply to all action alternatives)

W5L Wasatch Boulevard Five-lane Alternative (could apply to all action alternatives)

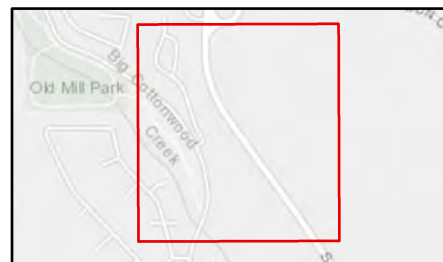


**Mobility Hub Gravel Pit Alternative:
4.01 Acres**

6851 S BIG
COTTONWOODCYN
ID # 1

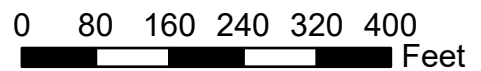
110.0 ft

67.9 ft



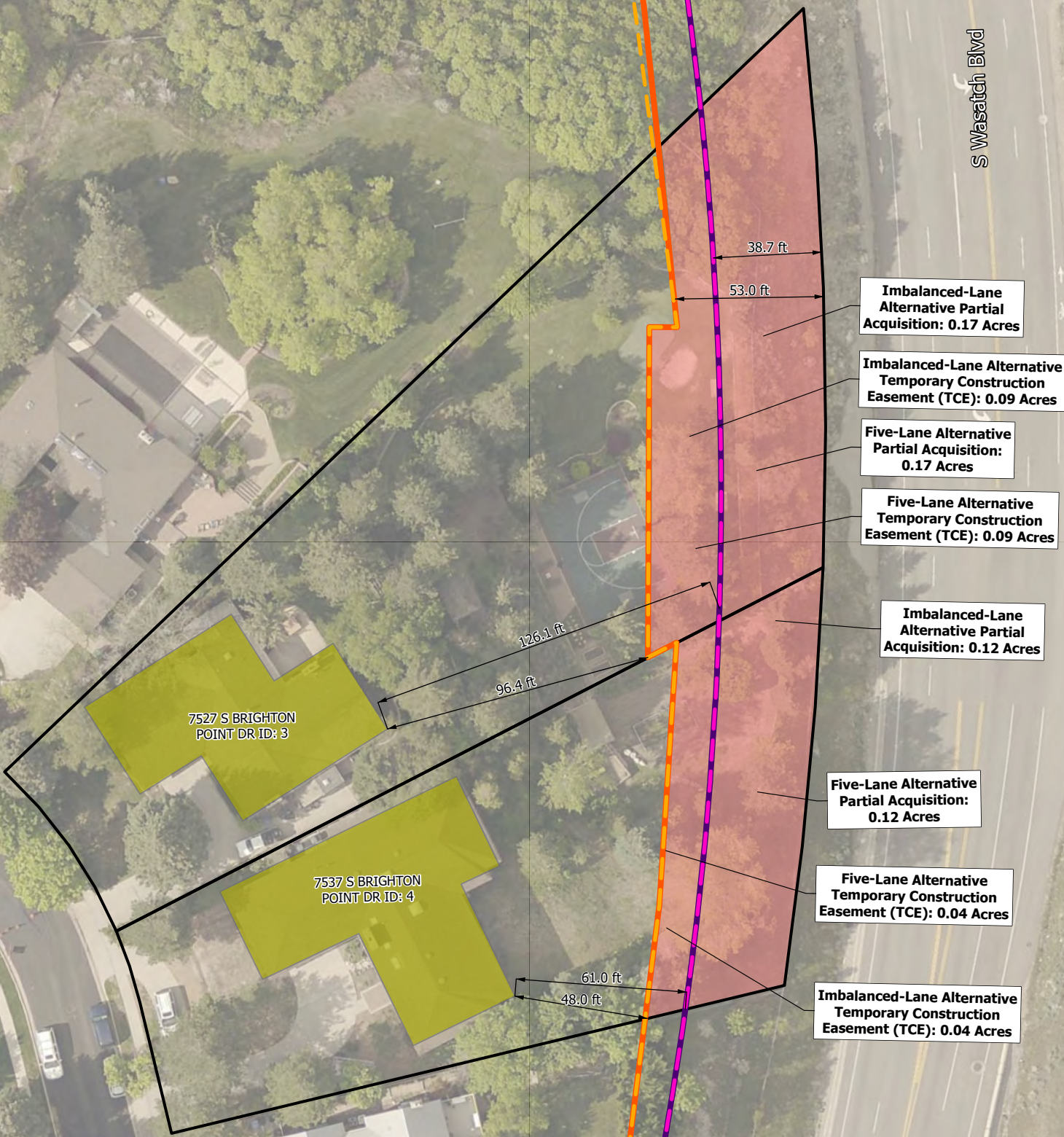
- NRHP-Eligible Historic Building
- Impacted Area
- Historic Parcels
- Gravel Pit Interchange

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT



FIVE-LANE ALTERNATIVE AND IMBALANCED-LANE ALTERNATIVE IMPACTS ARE THE SAME IN THIS AREA.

S Wasatch Blvd



Imbalanced-Lane Alternative Partial Acquisition: 0.17 Acres

Imbalanced-Lane Alternative Temporary Construction Easement (TCE): 0.09 Acres

Five-Lane Alternative Partial Acquisition: 0.17 Acres

Five-Lane Alternative Temporary Construction Easement (TCE): 0.09 Acres

Imbalanced-Lane Alternative Partial Acquisition: 0.12 Acres

Five-Lane Alternative Partial Acquisition: 0.12 Acres

Five-Lane Alternative Temporary Construction Easement (TCE): 0.04 Acres

Imbalanced-Lane Alternative Temporary Construction Easement (TCE): 0.04 Acres

126.1 ft

96.4 ft

38.7 ft

53.0 ft

61.0 ft

48.0 ft

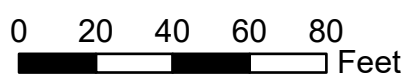
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POINT DR ID: 3

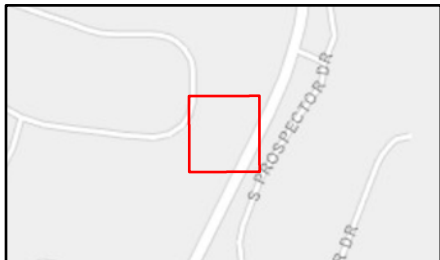
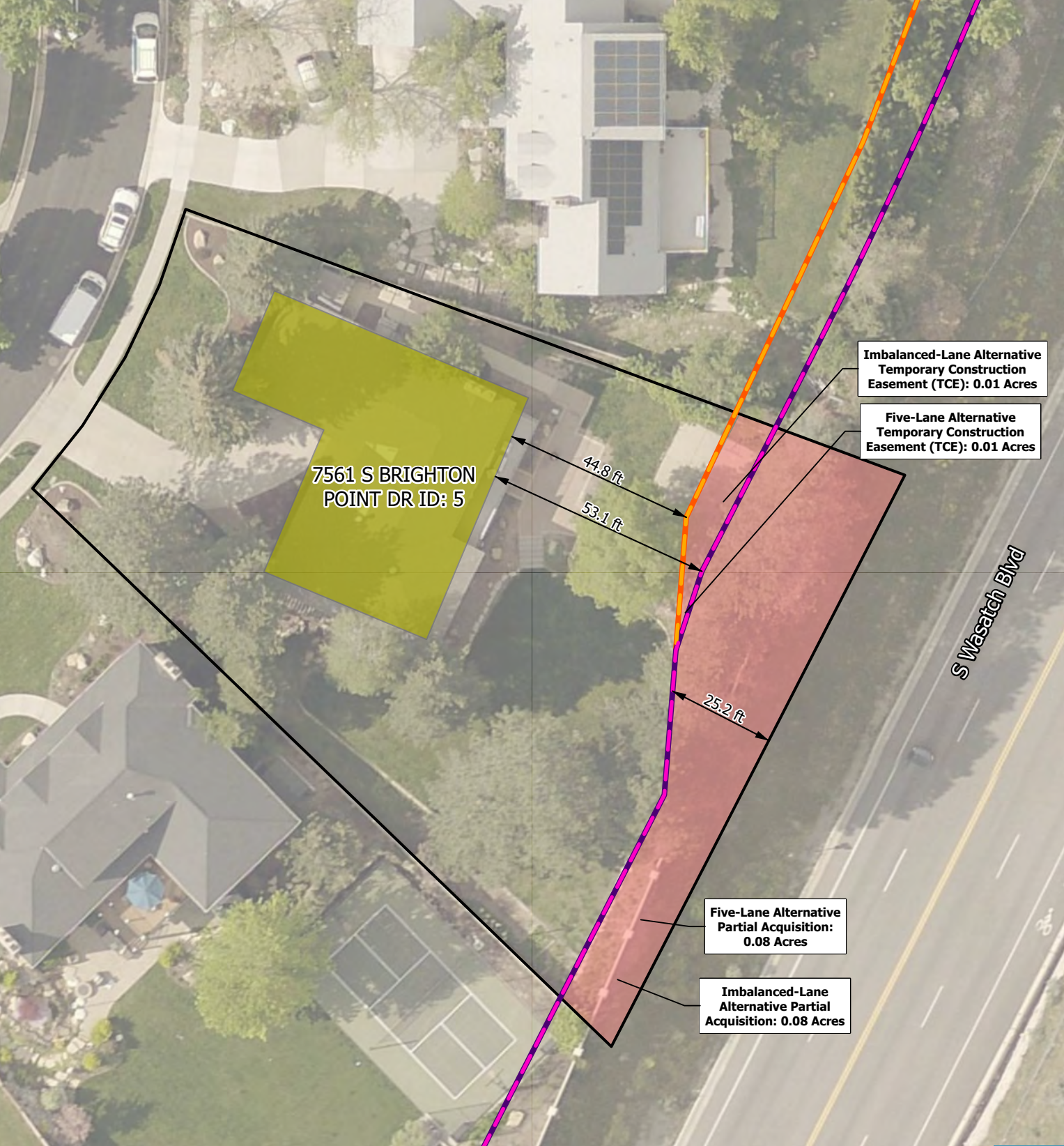
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POINT DR ID: 4



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Five-Lane Alternative TCE
- Five-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative TCE

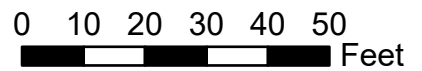
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT

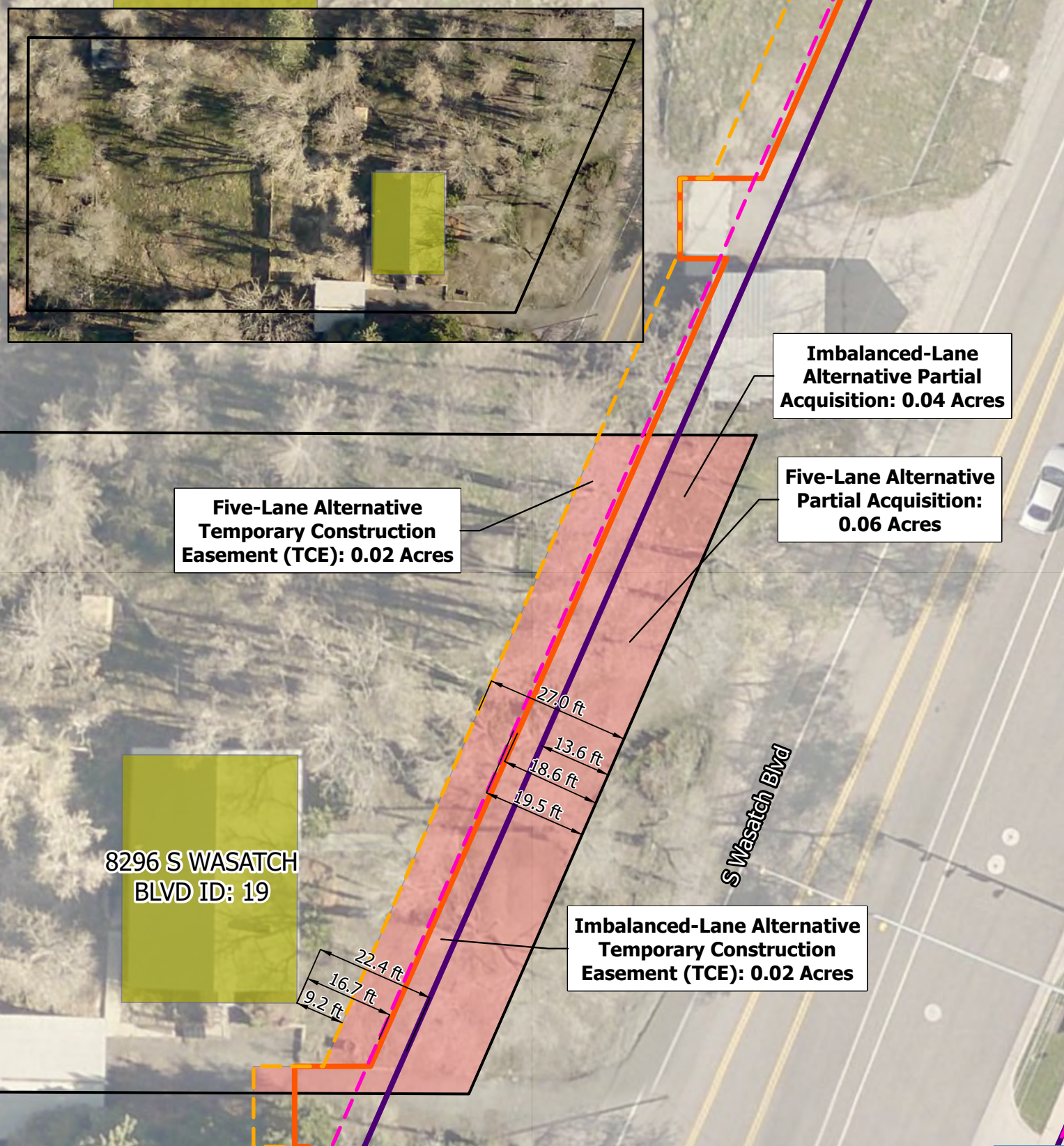




- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Five-Lane Alternative TCE
- Five-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative TCE

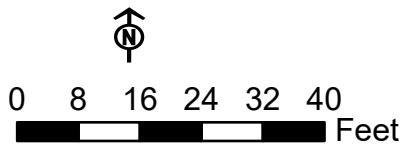
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DETERMINATION OF ELIGIBILITY AND
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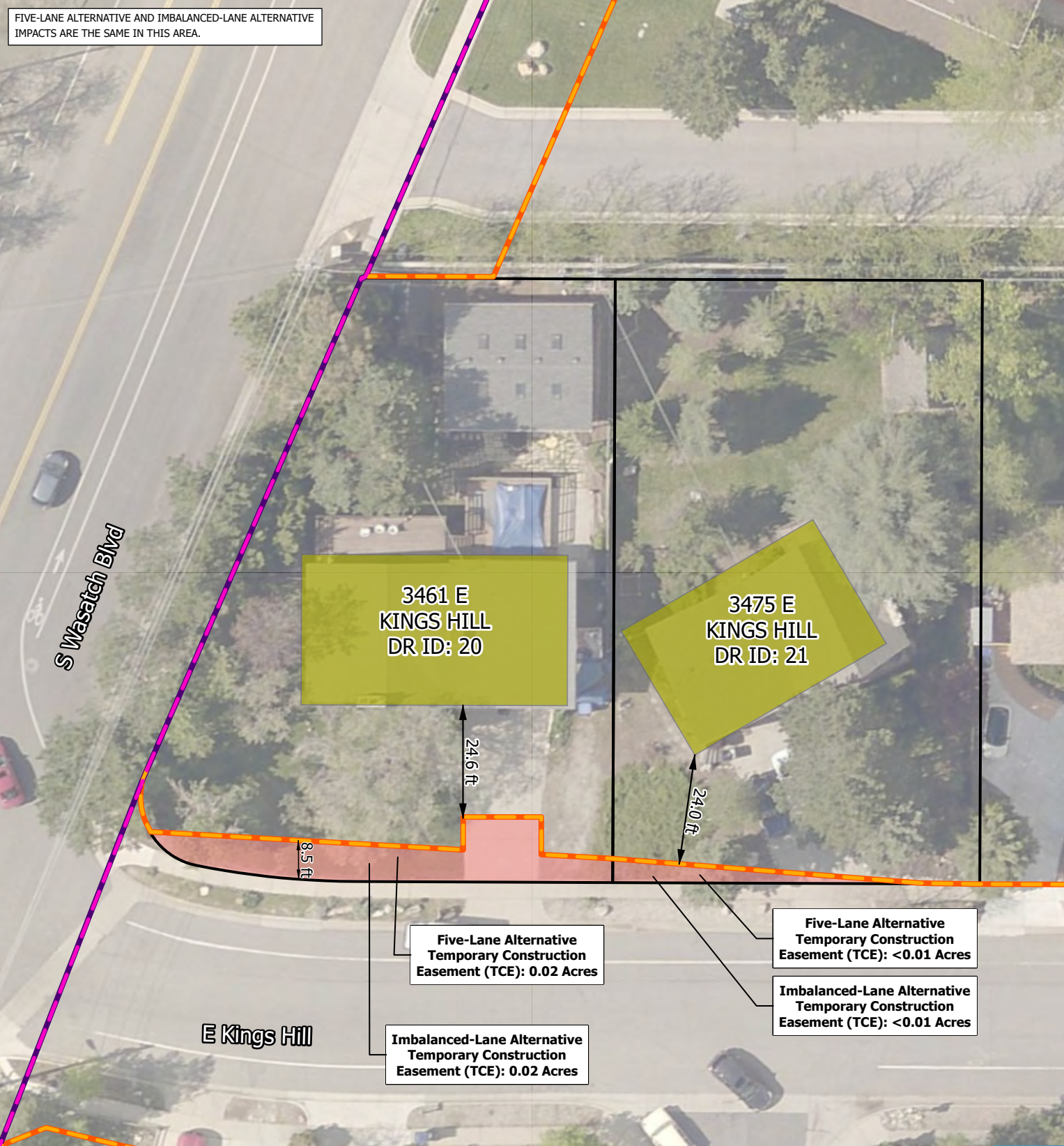


- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Five-Lane Alternative TCE
- Five-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative TCE

LITTLE COTTONWOOD CANYON EIS
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FIVE-LANE ALTERNATIVE AND IMBALANCED-LANE ALTERNATIVE IMPACTS ARE THE SAME IN THIS AREA.



E Kings Hill

3461 E
KINGS HILL
DR ID: 20

3475 E
KINGS HILL
DR ID: 21

Five-Lane Alternative
Temporary Construction
Easement (TCE): 0.02 Acres

Five-Lane Alternative
Temporary Construction
Easement (TCE): <0.01 Acres

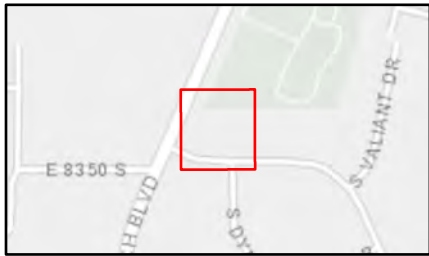
Imbalanced-Lane Alternative
Temporary Construction
Easement (TCE): 0.02 Acres

Imbalanced-Lane Alternative
Temporary Construction
Easement (TCE): <0.01 Acres

8.5 ft

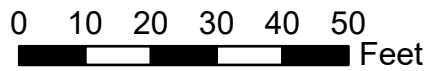
24.6 ft

24.0 ft



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Five-Lane Alternative TCE
- Five-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative TCE

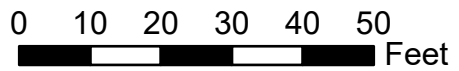
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
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FINDING OF EFFECT

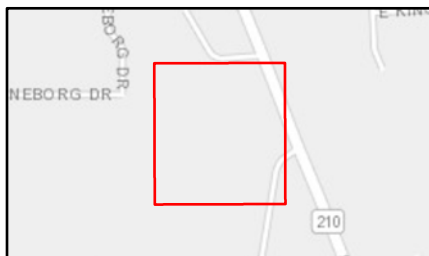
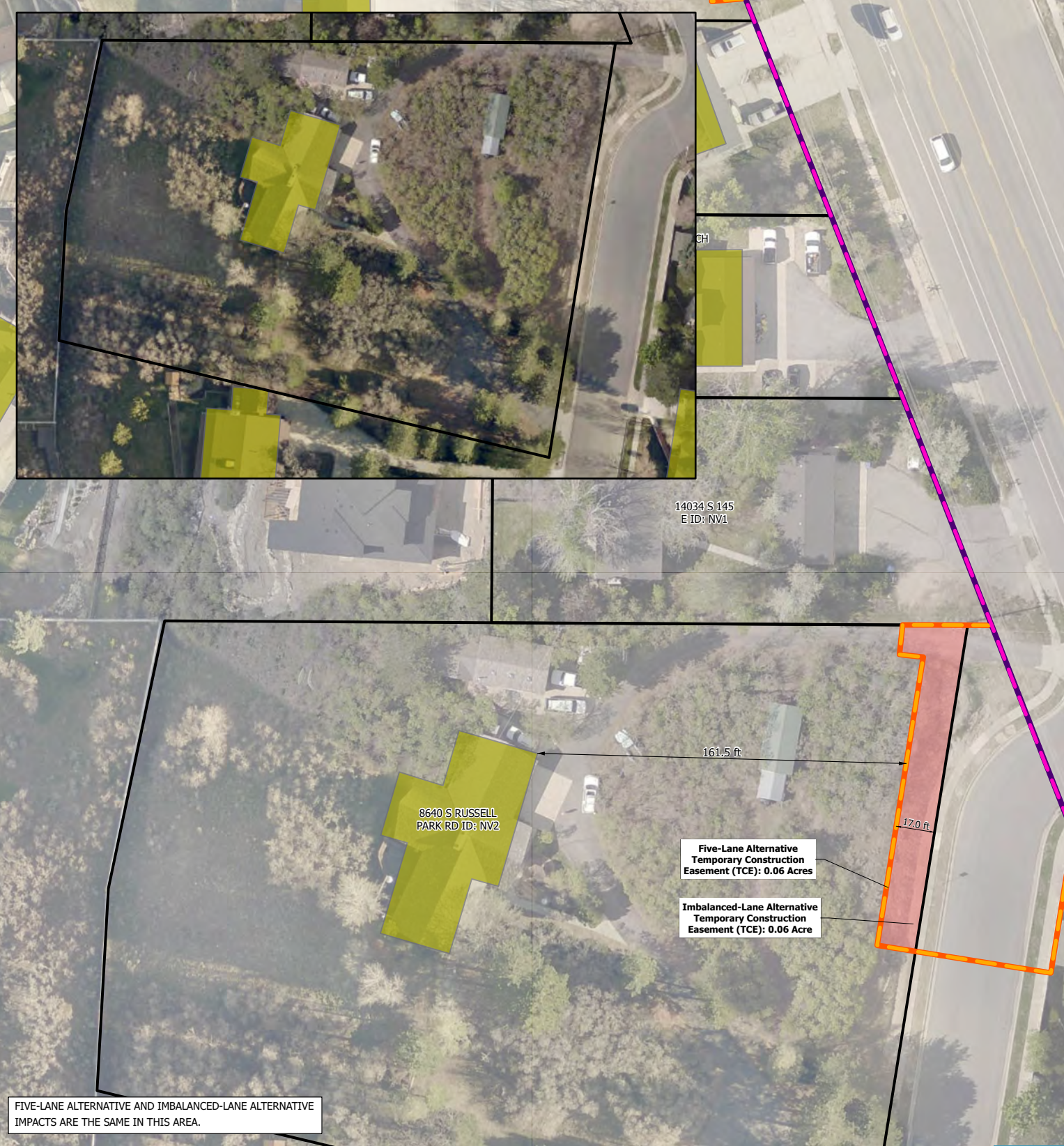




- NRHP-Eligible Historic Building
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- Five-Lane Alternative TCE
- Five-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative TCE

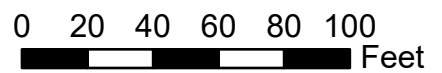
LITTLE COTTONWOOD CANYON EIS
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- Five-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative Partial Acquisition
- Imbalanced-Lane Alternative TCE

LITTLE COTTONWOOD CANYON EIS
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FINDING OF EFFECT










FIVE-LANE ALTERNATIVE AND IMBALANCED-LANE ALTERNATIVE IMPACTS ARE THE SAME IN THIS AREA.

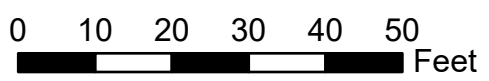
Five-Lane Alternative Partial Acquisition: 0.01 Acres

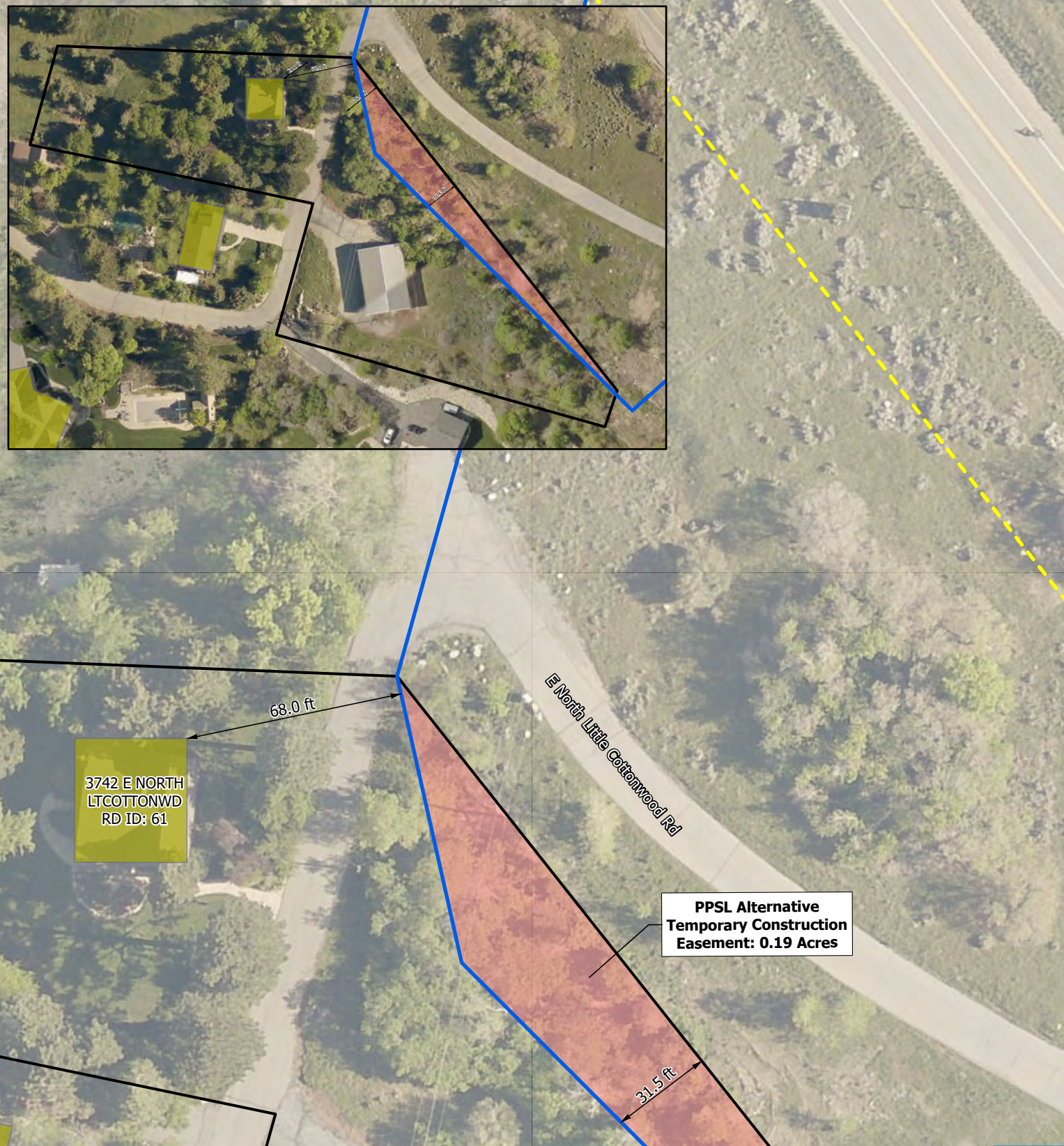
Imbalanced-Lane Alternative Partial Acquisition: 0.01 Acres



-  NRHP-Eligible Historic Building
-  Historic Parcels
-  Impacted Area
-  Five-Lane Alternative TCE
-  Five-Lane Alternative Partial Acquisition
-  Imbalanced-Lane Alternative Partial Acquisition
-  Imbalanced-Lane Alternative TCE

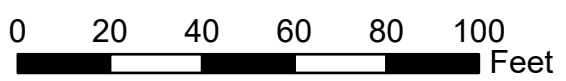
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT

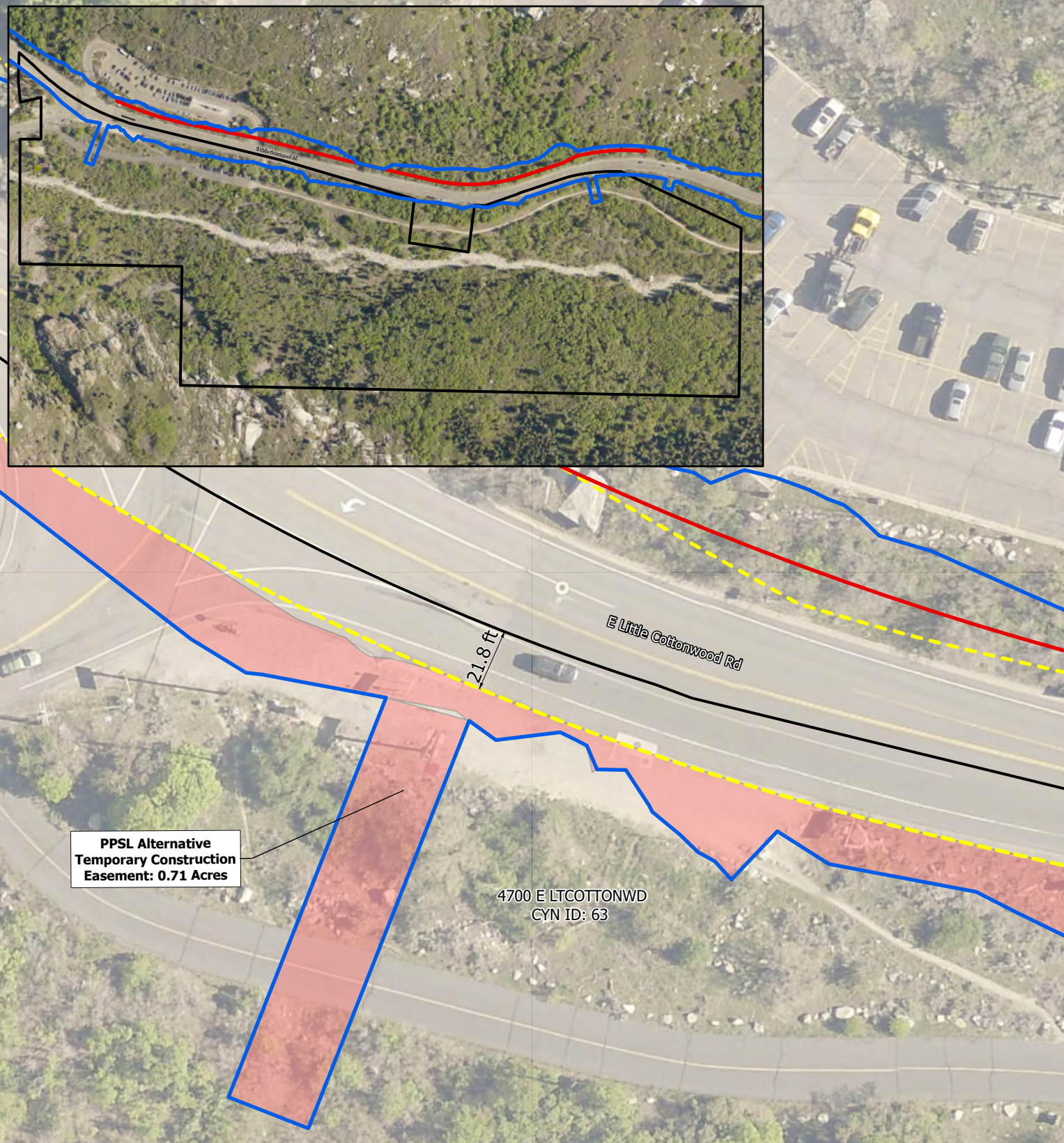




- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





PPSL Alternative Temporary Construction Easement: 0.71 Acres

4700 E LTCOTTONWD
CYN ID: 63

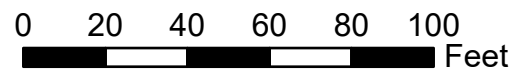
E Little Cottonwood Rd

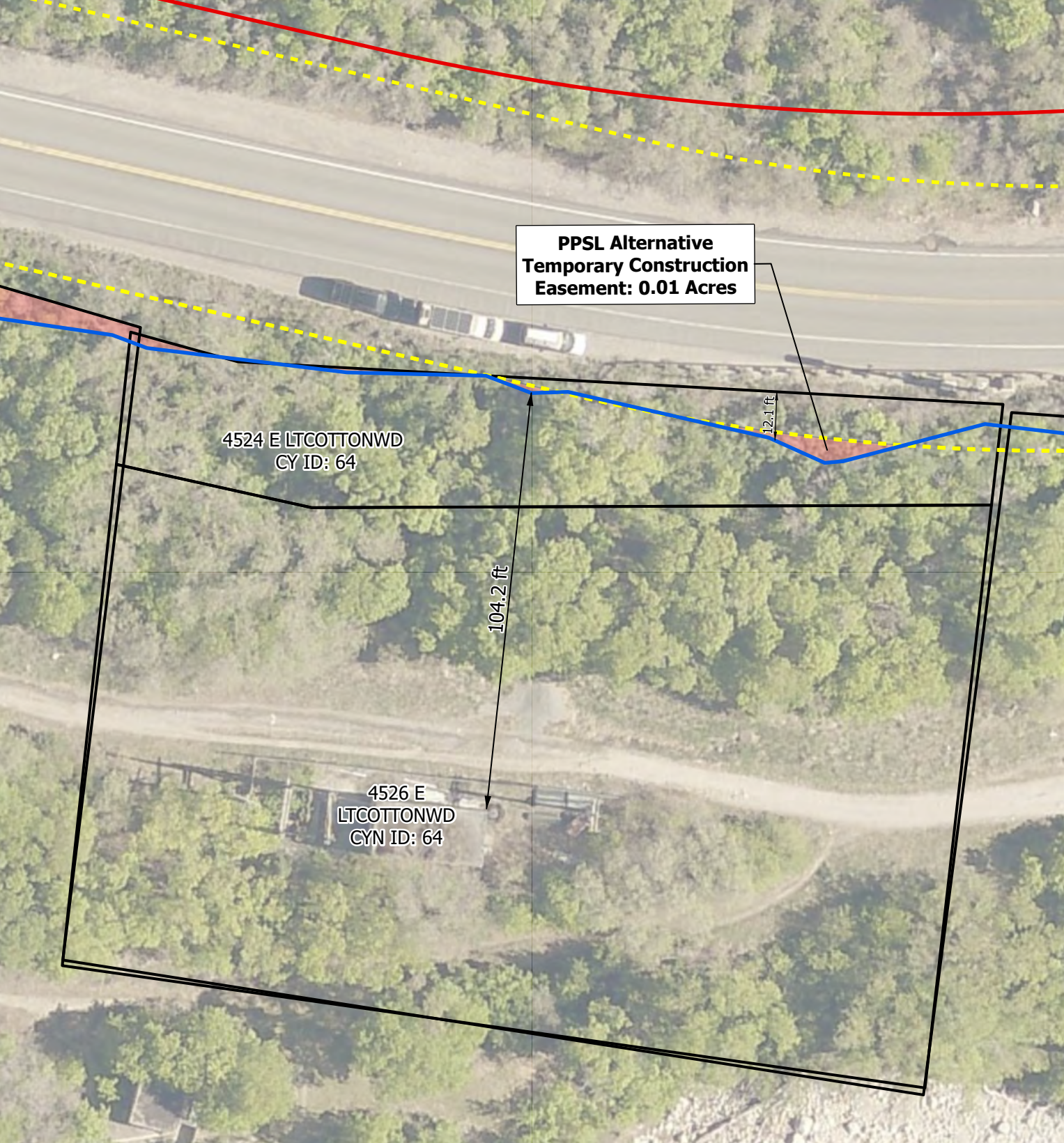
21.8 ft



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW

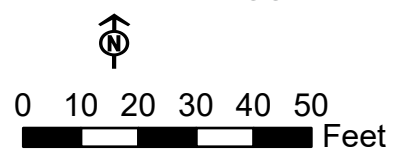
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT

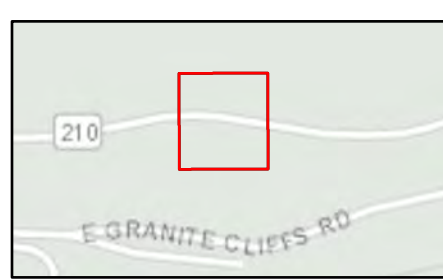




- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW

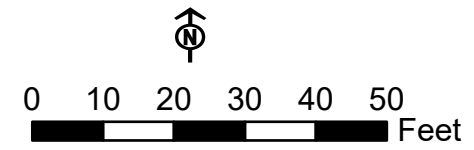
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT

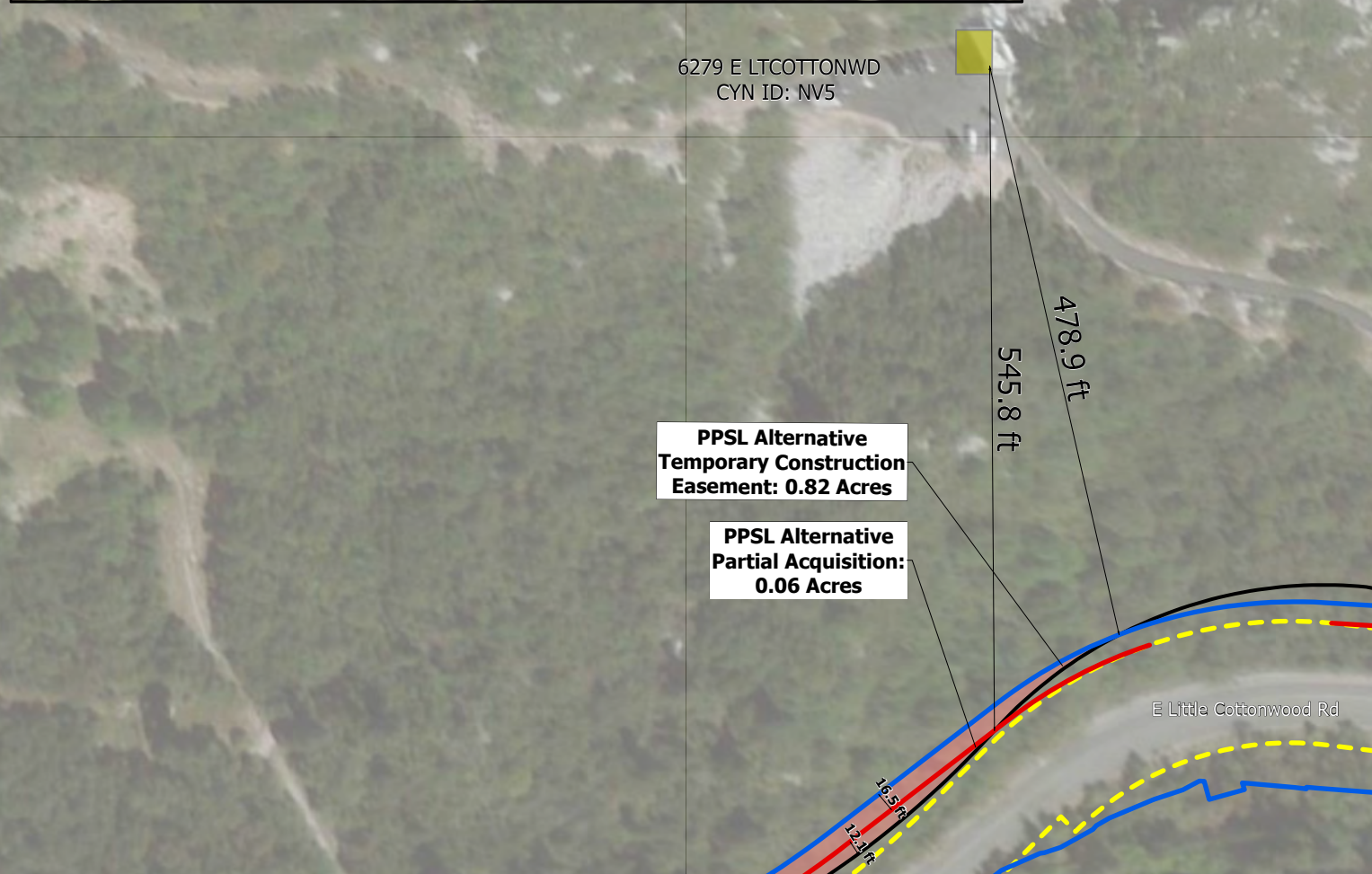




- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





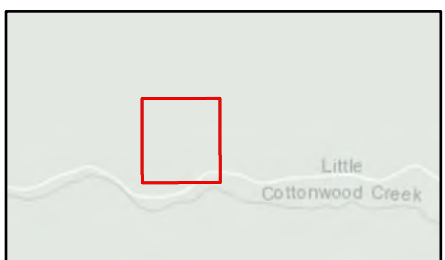
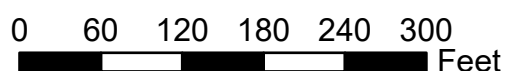
6279 E LTCOTTONWD
CYN ID: NV5

**PPSL Alternative
Temporary Construction
Easement: 0.82 Acres**

**PPSL Alternative
Partial Acquisition:
0.06 Acres**

E Little Cottonwood Rd

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW



**PPSL Alternative
Partial Acquisition:
<0.01 Acres**

**PPSL Alternative
Temporary Construction
Easement: 0.01 Acres**

9111 E Little
Cottonwood
ID: 67

78.1 ft
74.1 ft

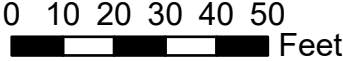
6.1 ft
2.2 ft

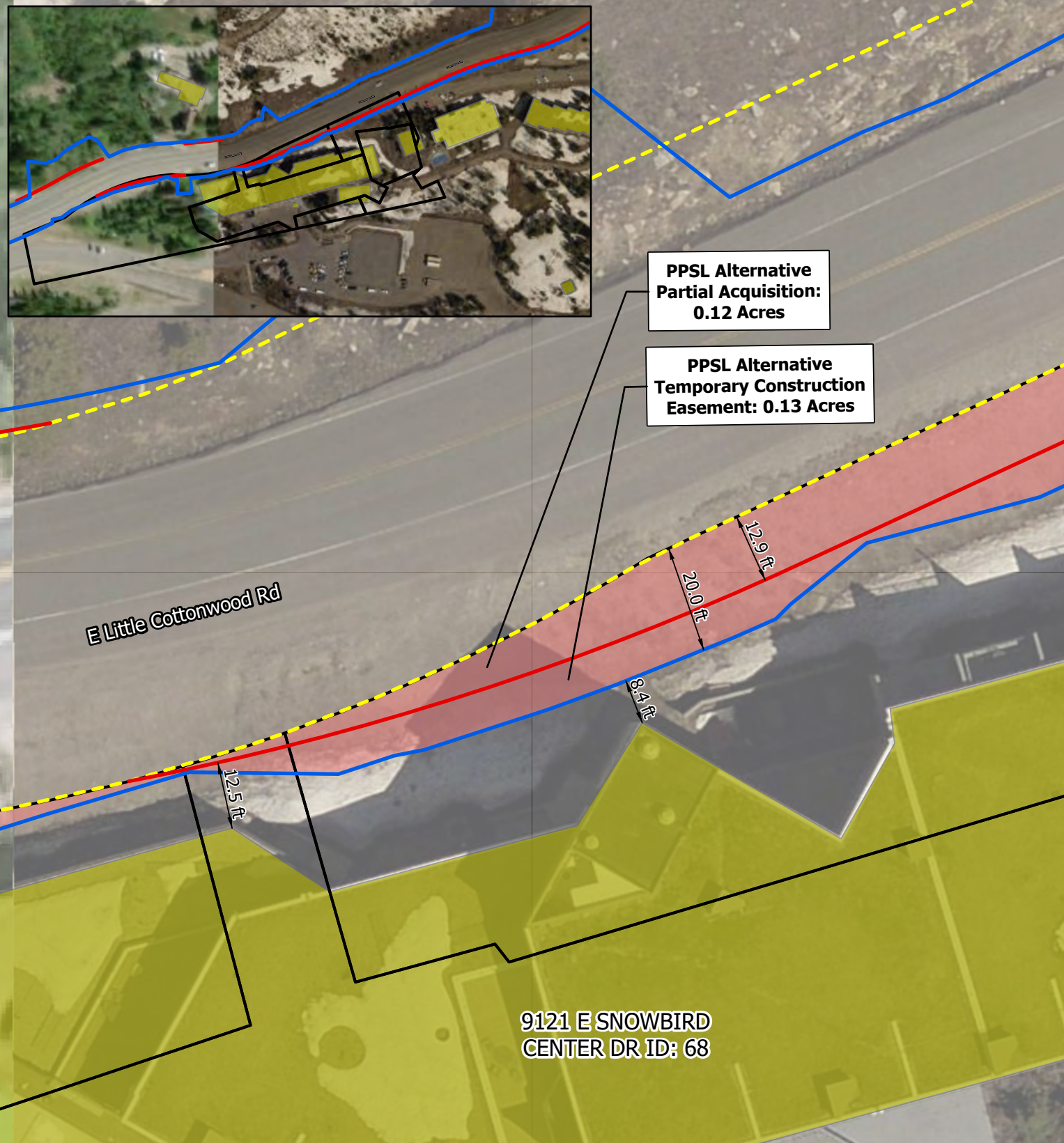
E Little Cottonwood Rd



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





**PPSL Alternative
Partial Acquisition:
0.12 Acres**

**PPSL Alternative
Temporary Construction
Easement: 0.13 Acres**

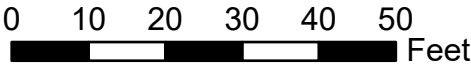
E Little Cottonwood Rd

**9121 E SNOWBIRD
CENTER DR ID: 68**



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW

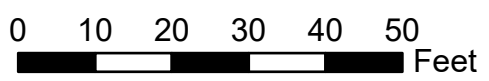
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT

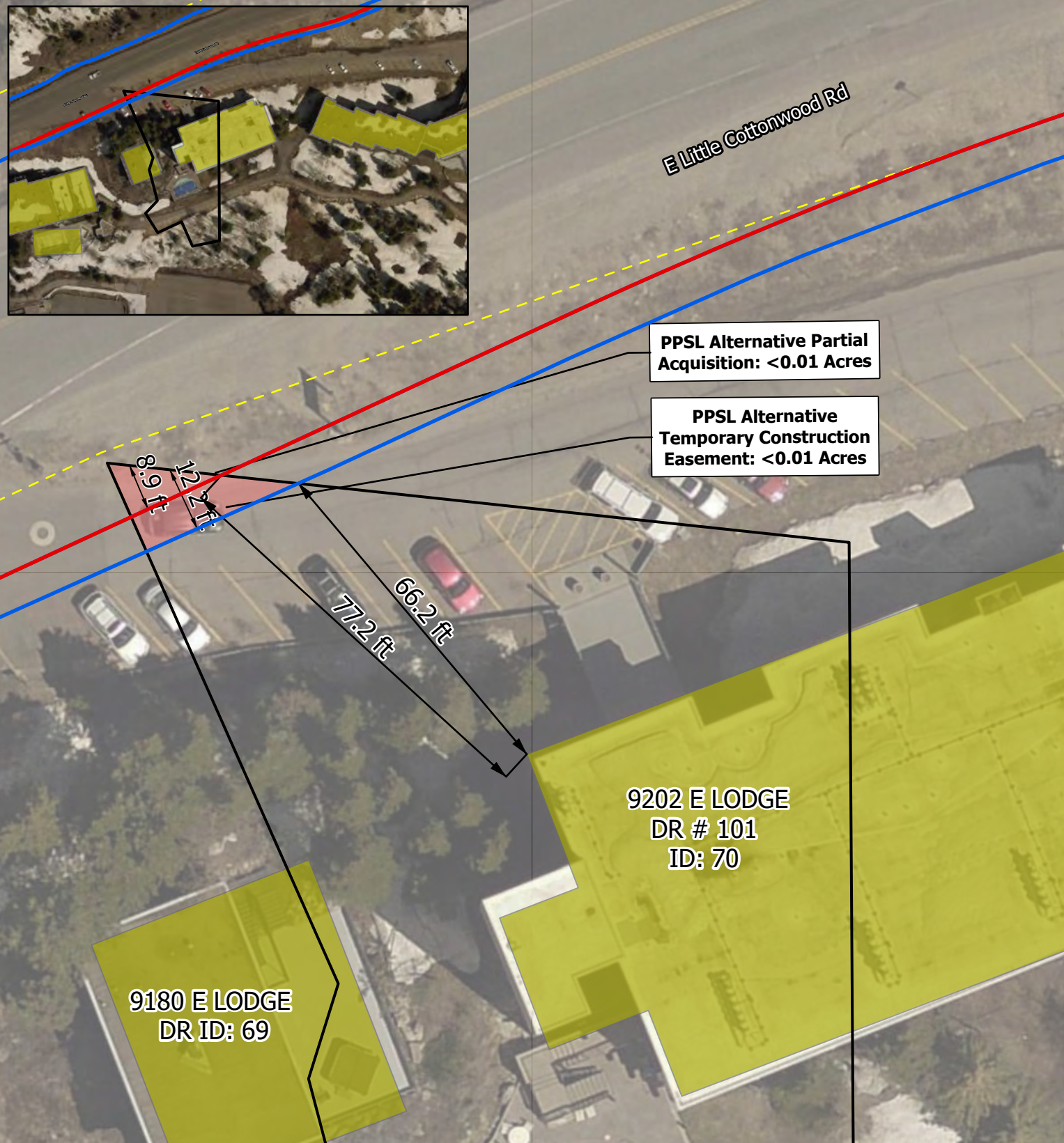




- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW

LITTLE COTTONWOOD CANYON EIS
 PROJECT S-R299(281); PIN 16092
 DETERMINATION OF ELIGIBILITY AND
 FINDING OF EFFECT





PPSL Alternative Partial Acquisition: <0.01 Acres

PPSL Alternative Temporary Construction Easement: <0.01 Acres

9180 E LODGE DR ID: 69

9202 E LODGE DR # 101 ID: 70

E Little Cottonwood Rd

8.9 ft

12.2 ft

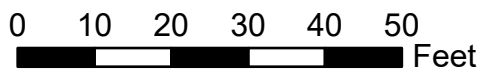
77.2 ft

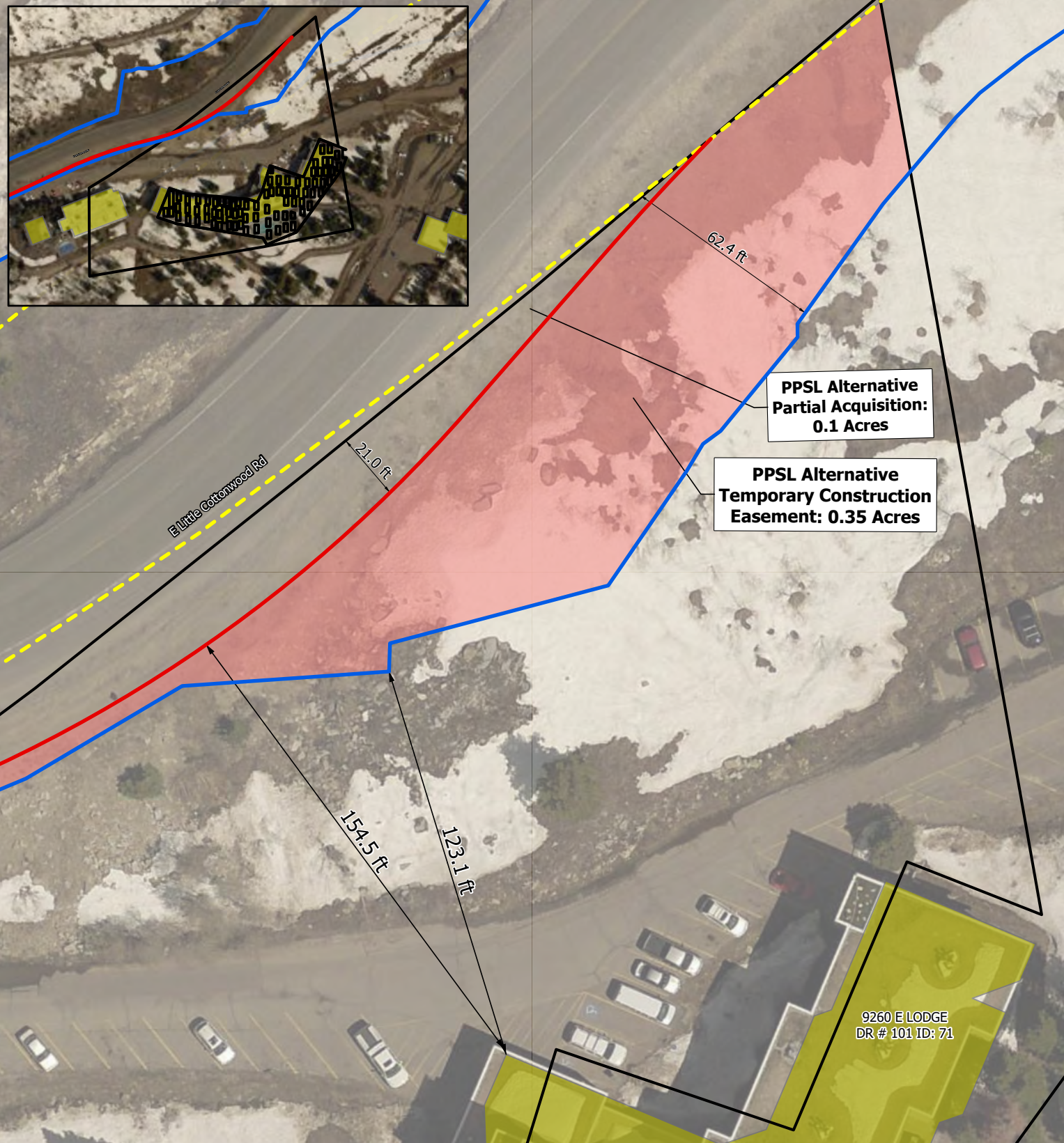
66.2 ft



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





**PPSL Alternative
Partial Acquisition:
0.1 Acres**

**PPSL Alternative
Temporary Construction
Easement: 0.35 Acres**

9260 E LODGE
DR # 101 ID: 71

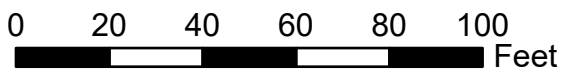
E Little Cottonwood Rd

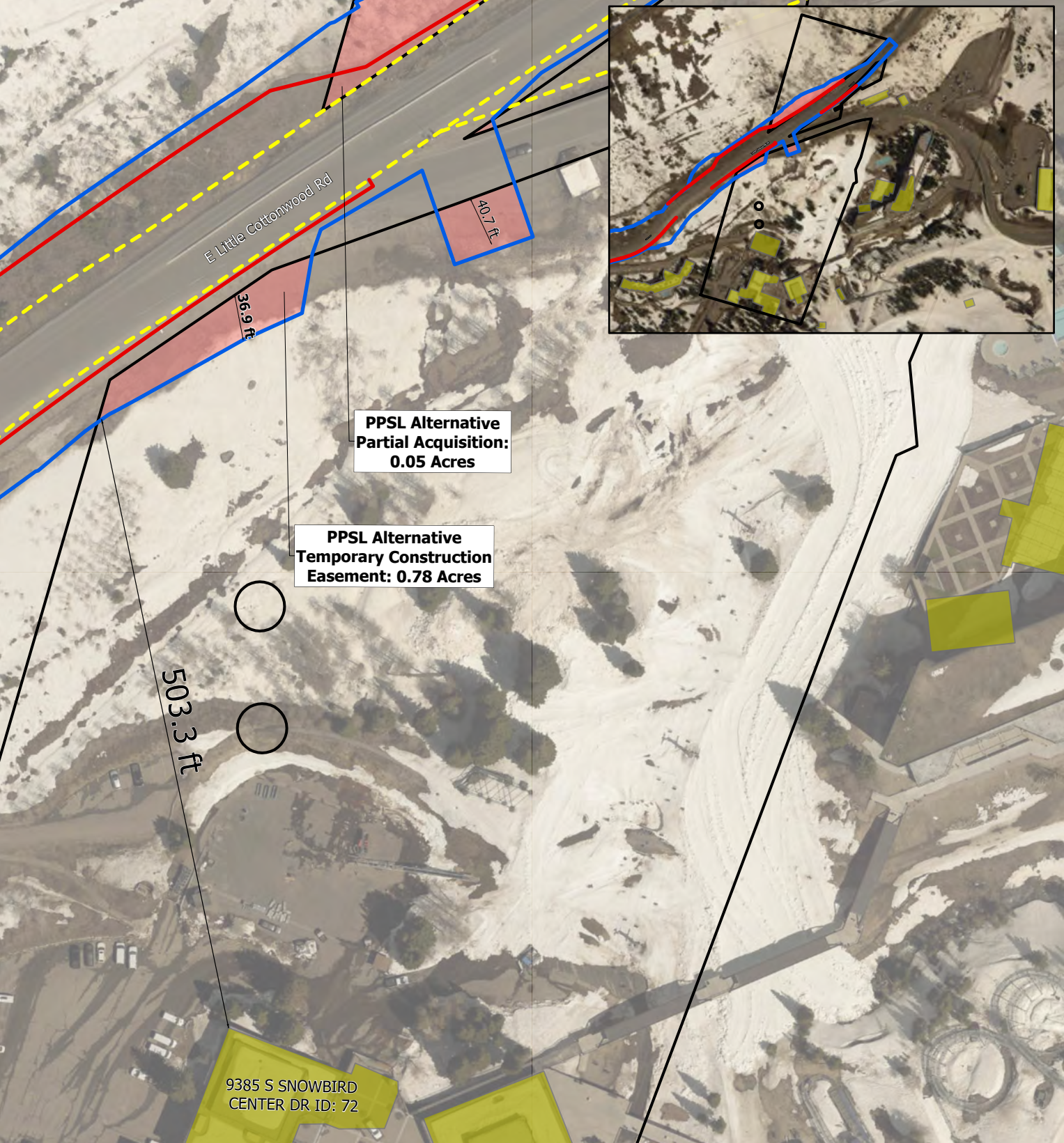
21.0 ft
62.4 ft
154.5 ft
123.1 ft



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





**PPSL Alternative
Partial Acquisition:
0.05 Acres**

**PPSL Alternative
Temporary Construction
Easement: 0.78 Acres**

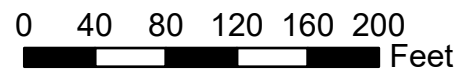
503.3 ft

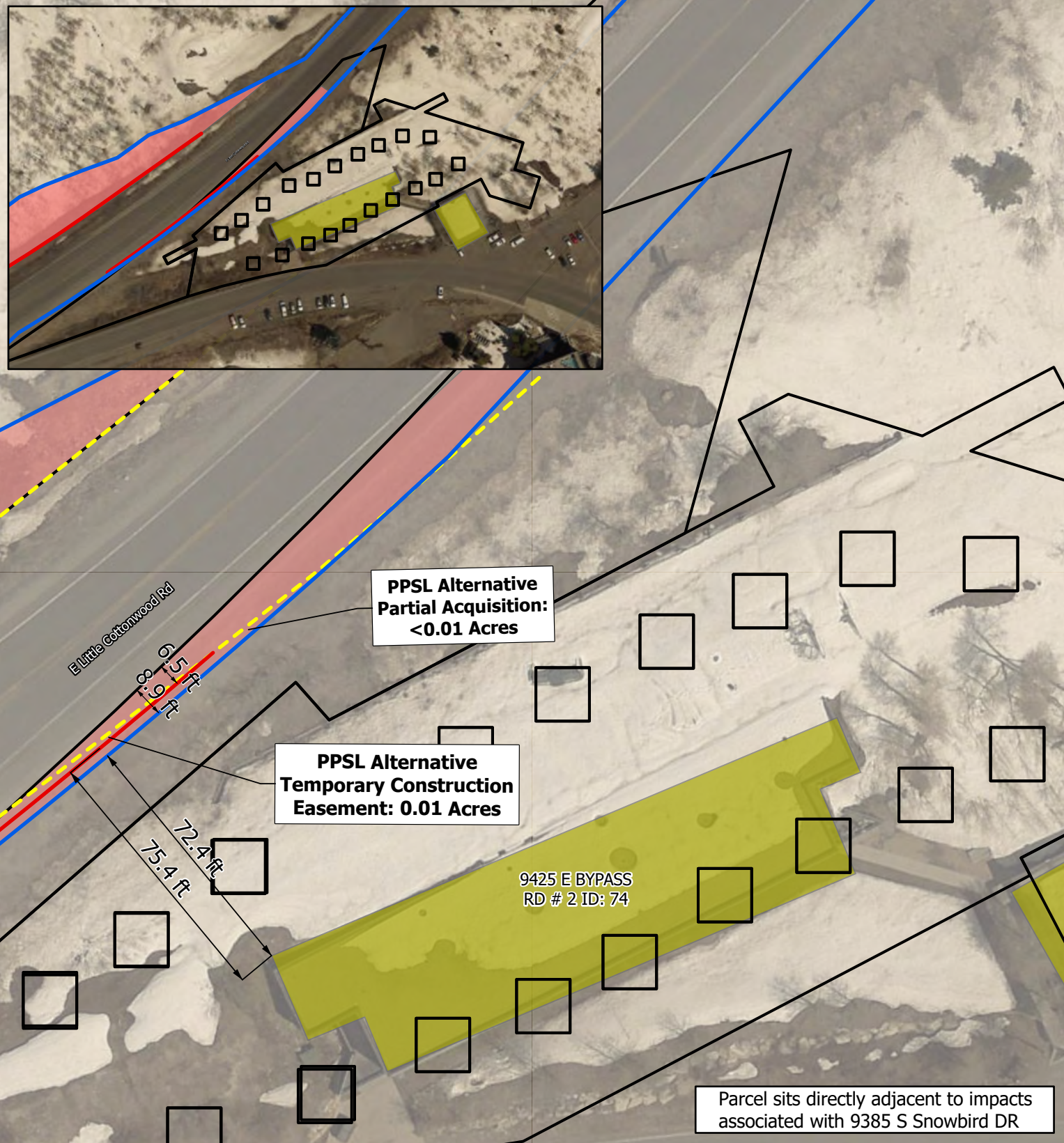
9385 S SNOWBIRD
CENTER DR ID: 72



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW

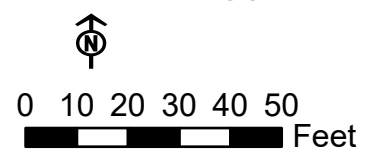
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT

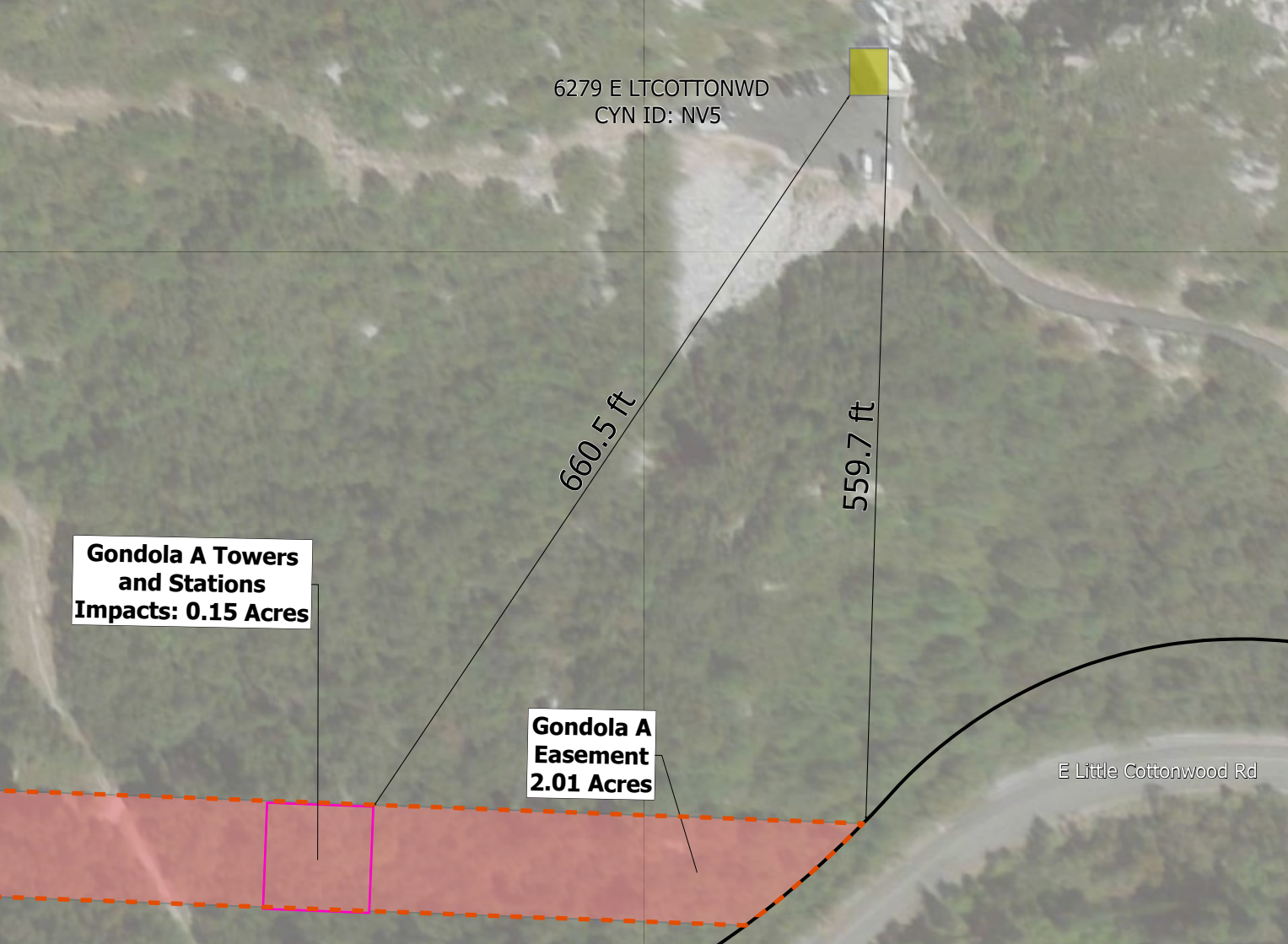




- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- PPSL New ROW
- PPSL Easement
- PPSL Existing ROW

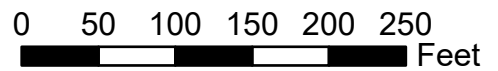
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT

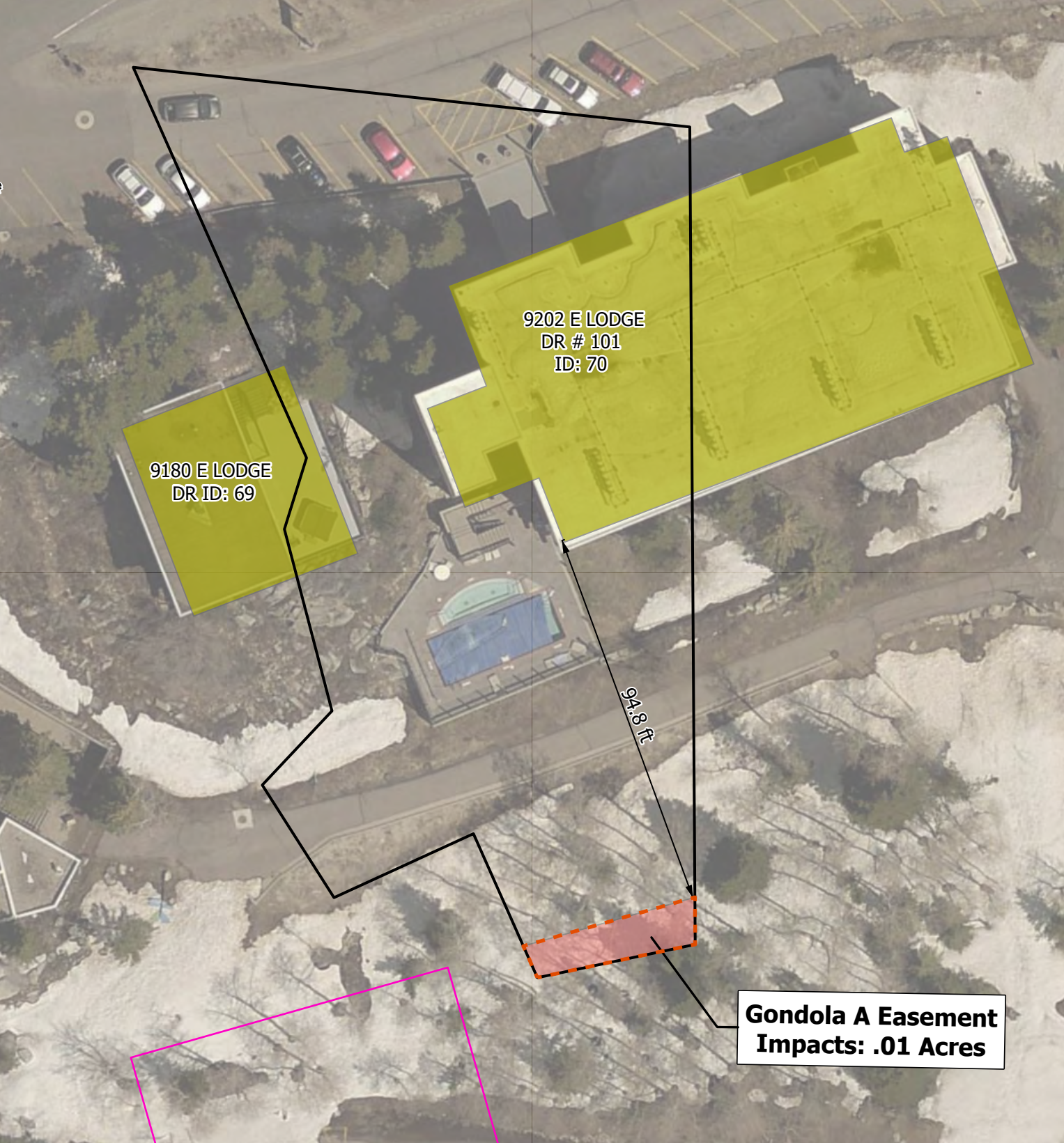




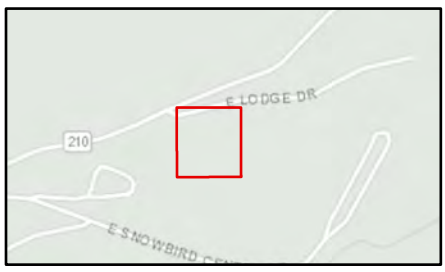
- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Gondola A Towers and Stations
- Easement Boundary

LITTLE COTTONWOOD CANYON EIS
 PROJECT S-R299(281); PIN 16092
 DETERMINATION OF ELIGIBILITY AND
 FINDING OF EFFECT



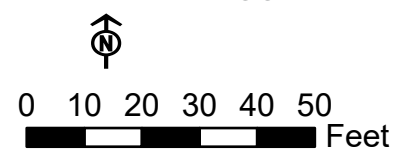


**Gondola A Easement
Impacts: .01 Acres**



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Gondola A Towers and Stations
- Easement Boundary

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT



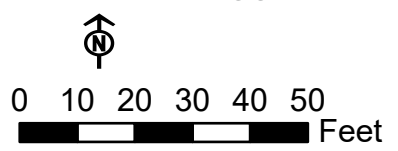


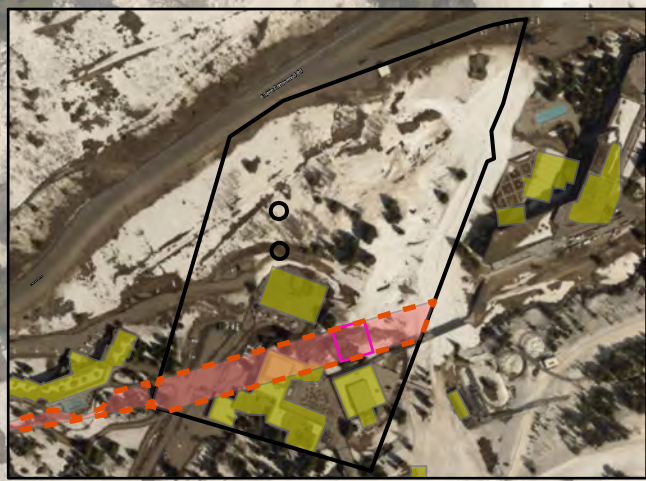
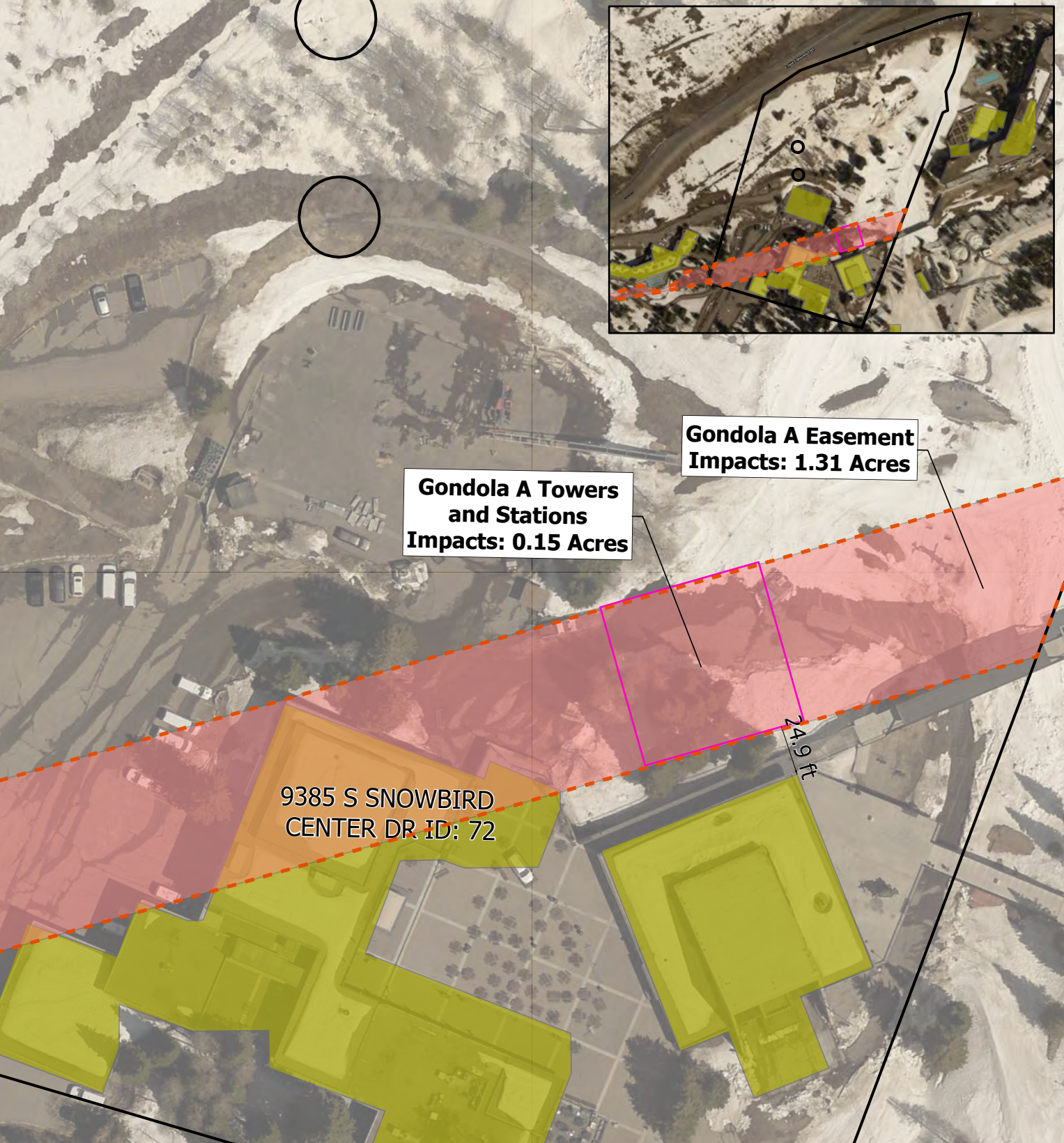
**Gondola A Easement
Impacts: .4 Acres**



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Gondola A Towers and Stations
- Easement Boundary

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





**Gondola A Towers and Stations
Impacts: 0.15 Acres**

**Gondola A Easement
Impacts: 1.31 Acres**

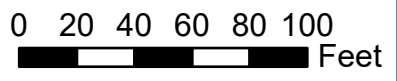
9385 S SNOWBIRD
CENTER DR ID: 72

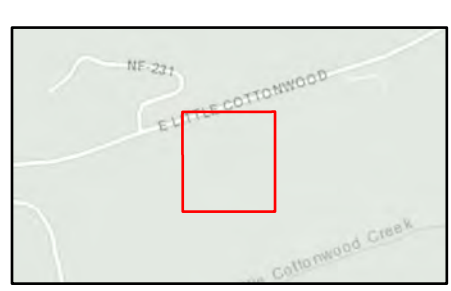
24.9 ft



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Gondola A Towers and Stations
- Easement Boundary

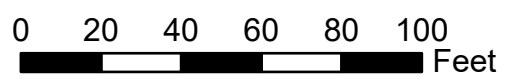
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Easement Boundary
- Gondola A Towers and Stations

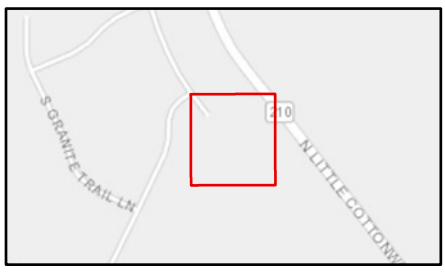
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





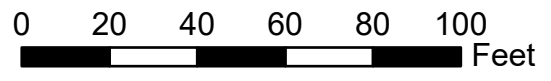
9338 S NORTH
LITTLE COTTONWOOD
RD ID: 84

**Gondola B Alternatives
Partial Acquisition:
0.04 Acres**



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Gondola A Towers and Stations
- Gondola A Easement
- Gondola B (La Caille Area Only)
- Gondola B Easement

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





3742 E NORTH
LTCOTTONWD
RD ID: 61

Gondola B Alternatives
Partial Acquisition:
0.43 Acres

Garage

12.9 ft

28.1 ft

68.0 ft

35.9 ft

E North Little Cottonwood Rd



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Gondola A Towers and Stations
- Gondola A Easement
- Gondola B (La Caille Area Only)
- Gondola B Easement

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT

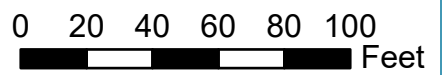


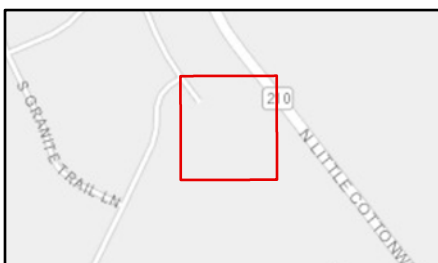
0 10 20 30 40 50
Feet



- NRHP-Eligible Historic Building
- Impacted Area
- Historic Parcels
- Gondola B Easement

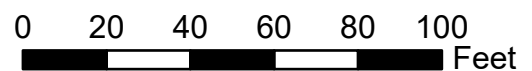
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





- NRHP-Eligible Historic Building
- Historic Parcels
- Rail Base Station
- Impacted Area

LITTLE COTTONWOOD CANYON EIS
 PROJECT S-R299(281); PIN 16092
 DETERMINATION OF ELIGIBILITY AND
 FINDING OF EFFECT





Rail Base Station Impacts: 0.43 Acres

3742 E NORTH LTCOTTONWD RD ID: 61

E North Little Cottonwood Rd

28.1 ft

35.9 ft

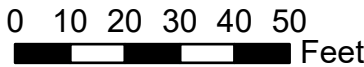
12.9 ft

Garage



- NRHP-Eligible Historic Building
- Historic Parcels
- Rail Base Station
- Impacted Area

**LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT**





4261 LTCOTTONWD
RD ID: NV3

75.1 ft

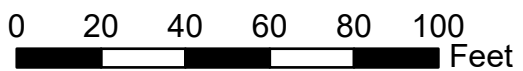
Rail New ROW
Impacts:
0.03 Acres

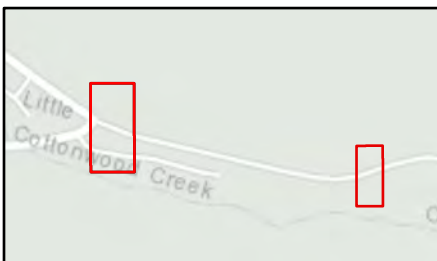
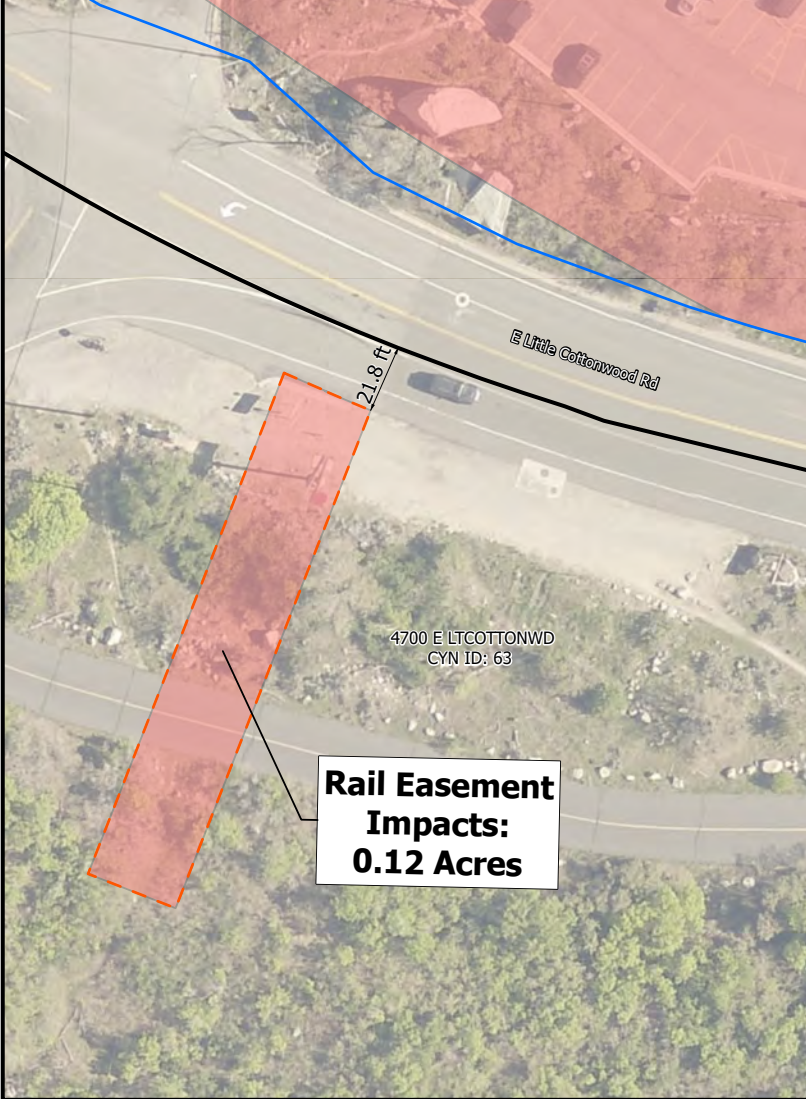
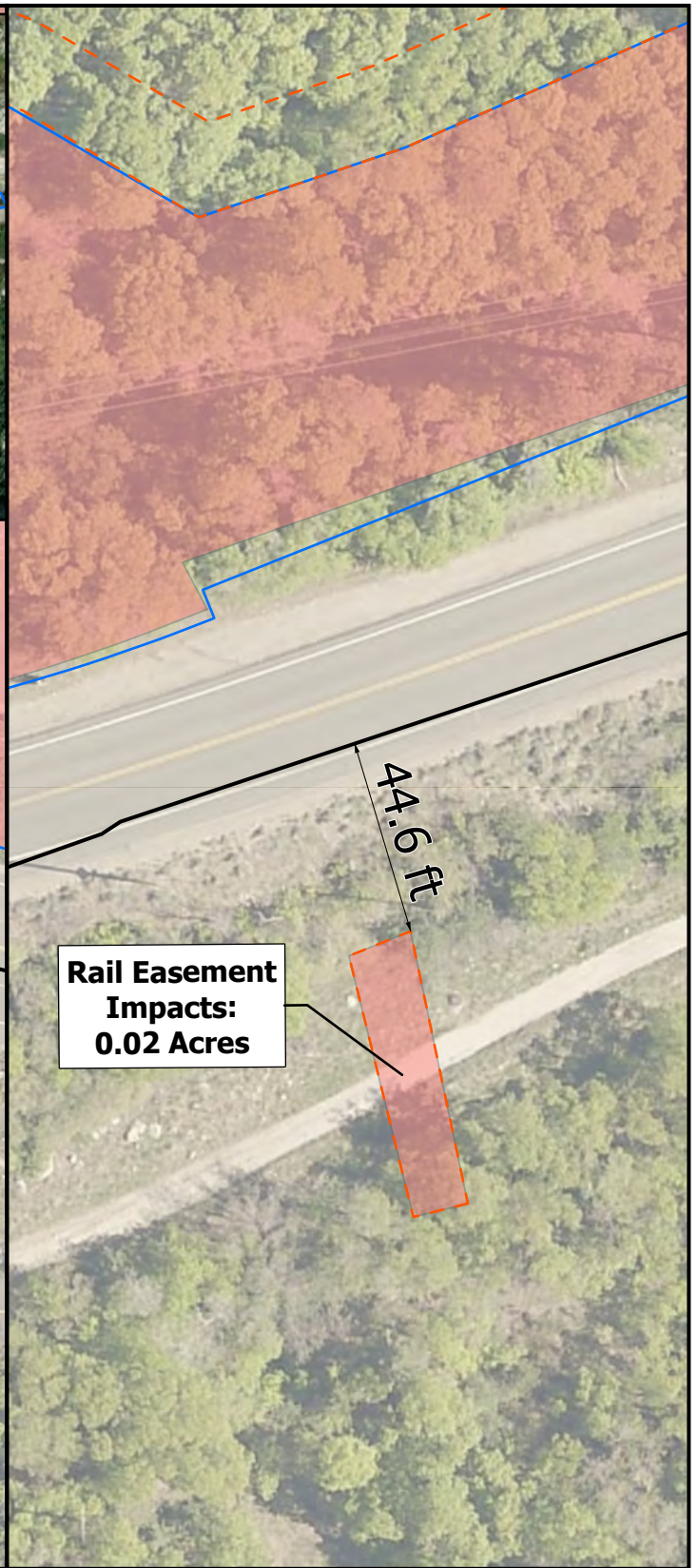
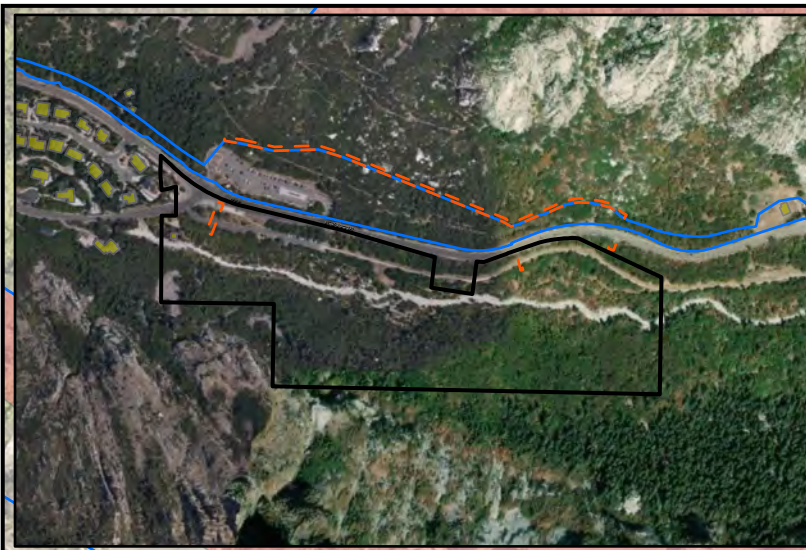
3.0 ft







- NRHP-Eligible Historic Building
- Historic Parcels
- Rail New ROW
- Impacted Area

LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





-  Historic Parcels
-  Impacted Area
-  Rail Easement
-  Rail New ROW

LITTLE COTTONWOOD CANYON EIS
 PROJECT S-R299(281); PIN 16092
 DETERMINATION OF ELIGIBILITY AND
 FINDING OF EFFECT



0 20 40 60 80 100
 Feet



6279 E LTCOTTONWD
CYN ID: NV5



414.2 ft

434.4 ft

Rail Easement
Impacts:
1.23 Acres






Rail New
ROW Impacts:
2.22 Acres

23.7 ft

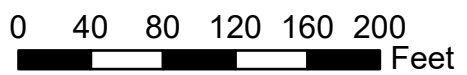
44.8 ft

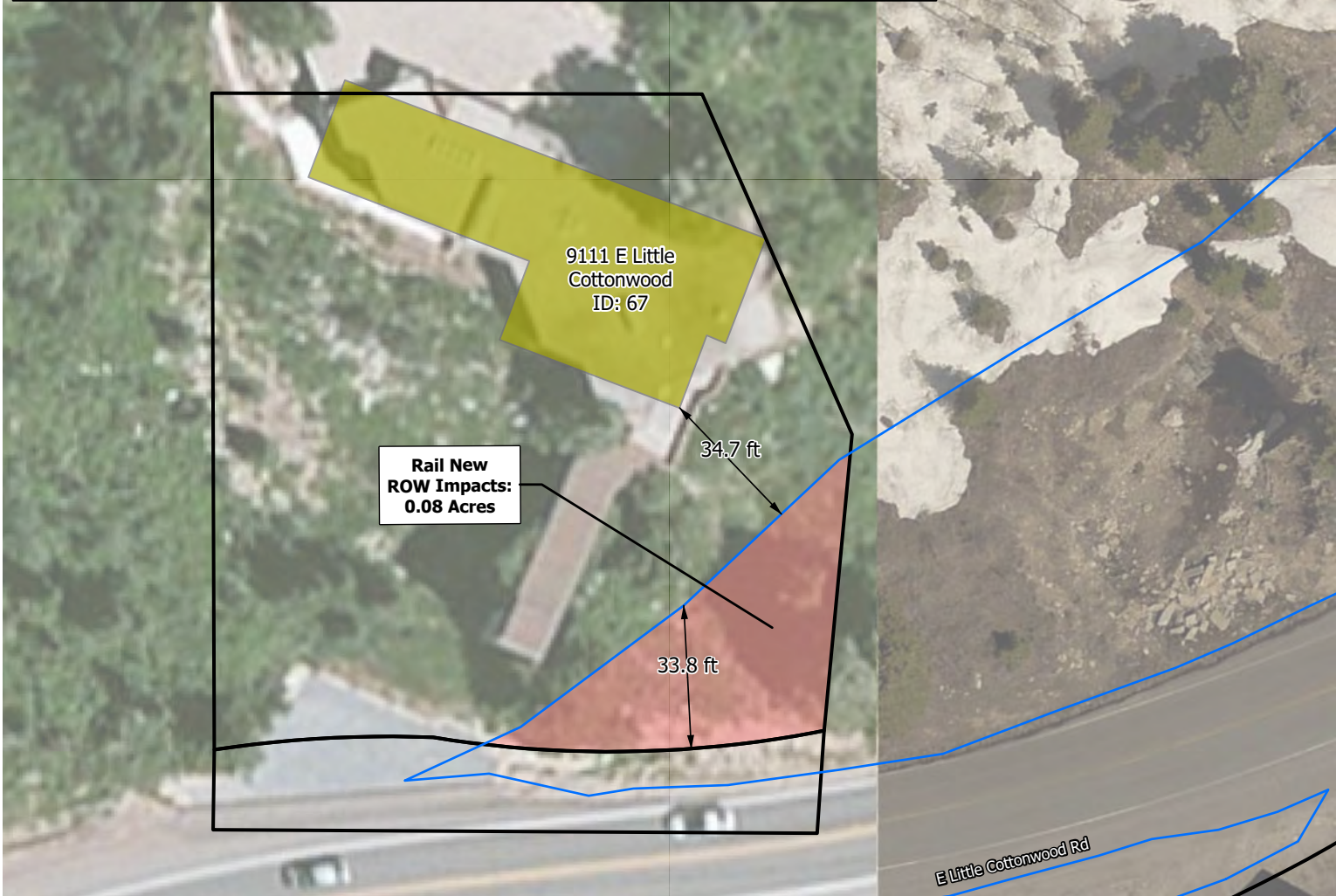
E Little Cottonwood Rd



-  NRHP-Eligible Historic Building
-  Historic Parcels
-  Rail Easement
-  Rail New ROW
-  Impacted Area

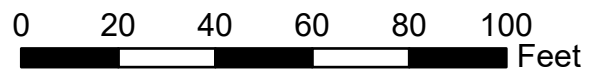
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT

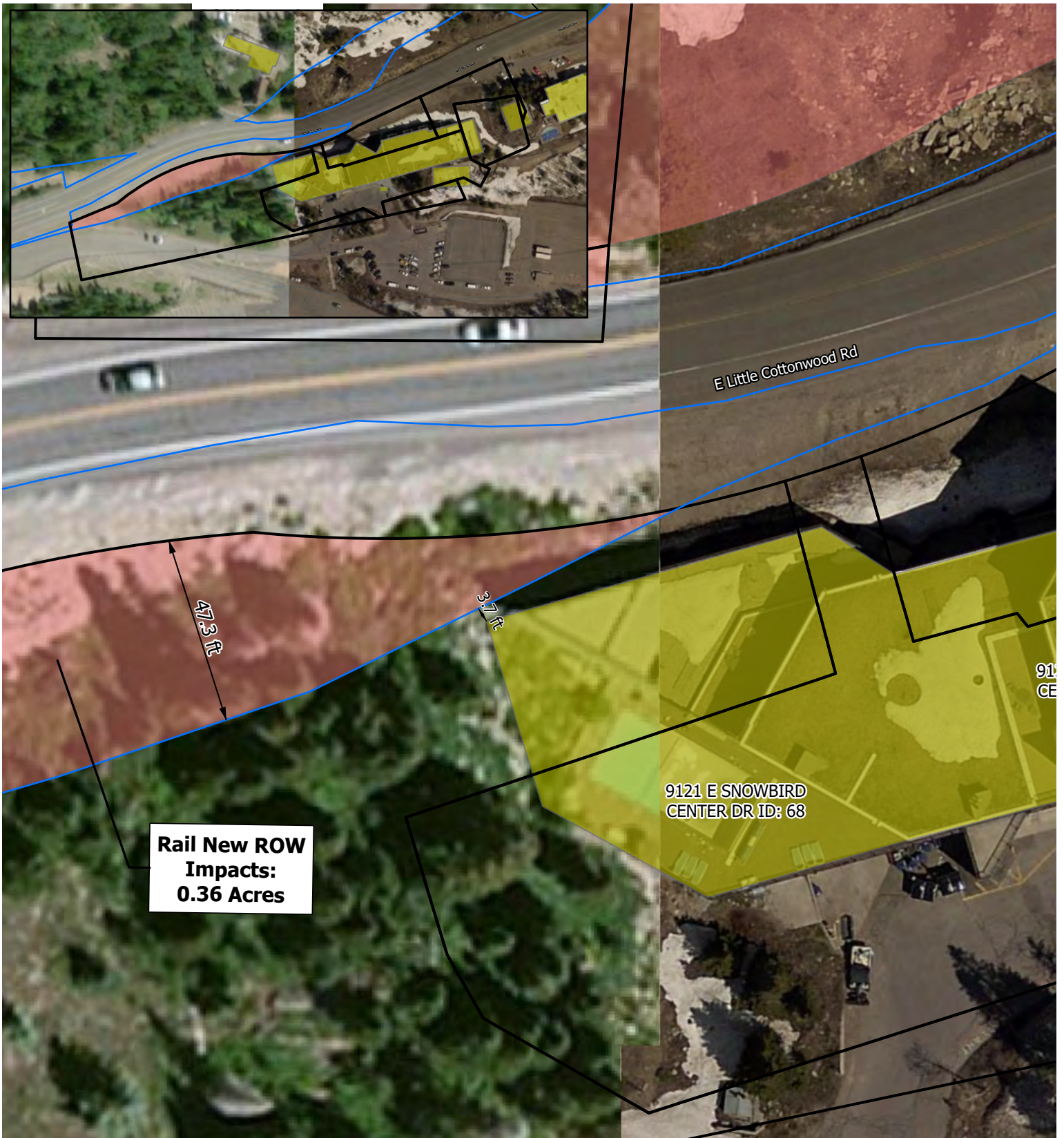




- NRHP-Eligible Historic Building
- Historic Parcels
- Rail New ROW
- Impacted Area

LITTLE COTTONWOOD CANYON EIS
 PROJECT S-R299(281); PIN 16092
 DETERMINATION OF ELIGIBILITY AND
 FINDING OF EFFECT





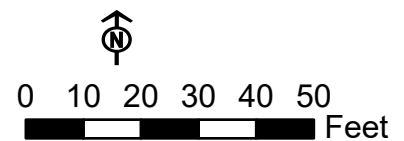
**Rail New ROW
Impacts:
0.36 Acres**

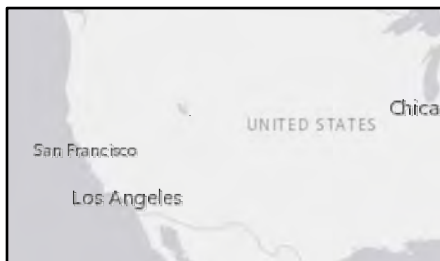
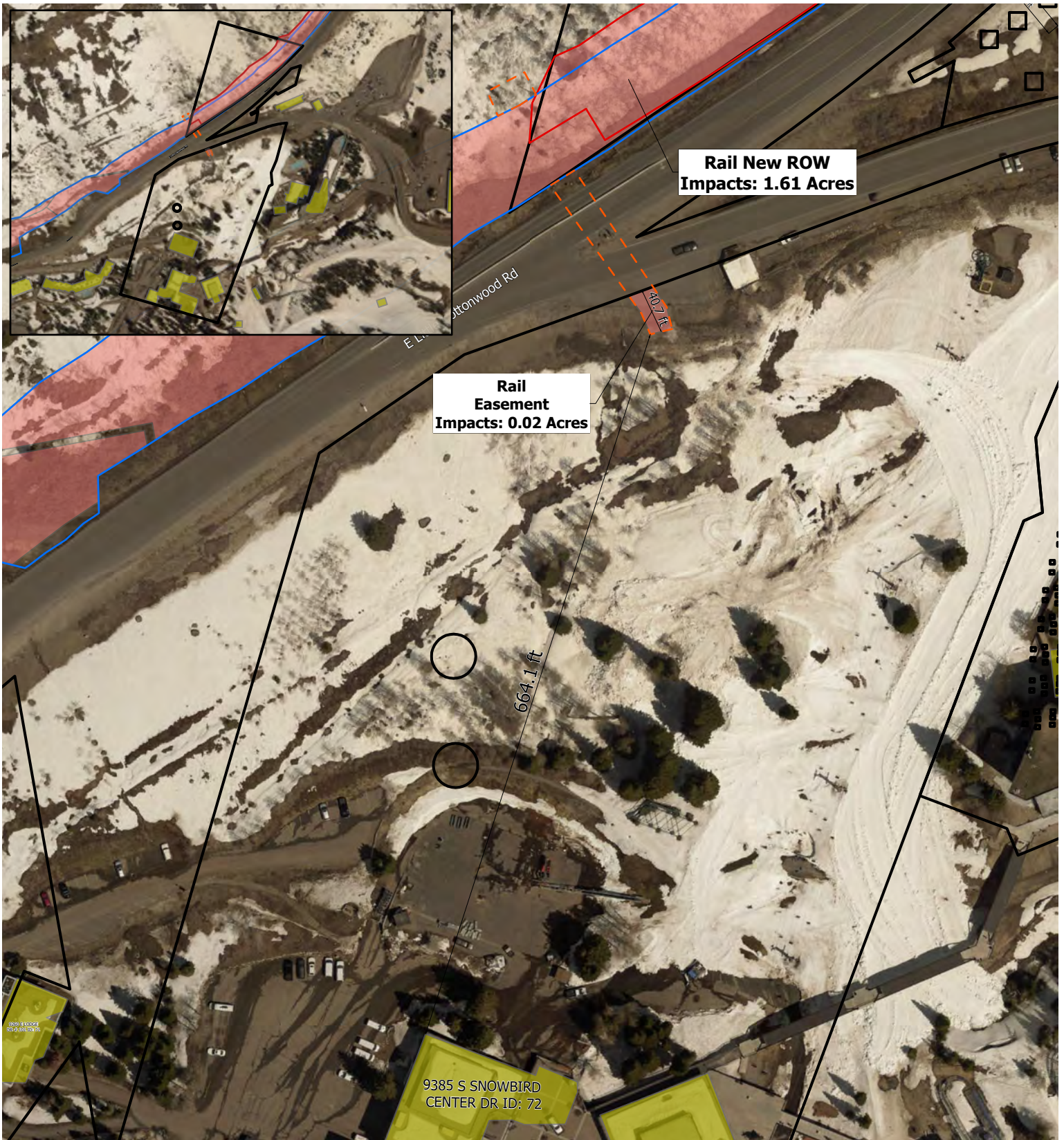
9121 E SNOWBIRD
CENTER DR ID: 68



- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Rail New ROW

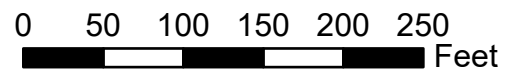
LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT





- NRHP-Eligible Historic Building
- Historic Parcels
- Impacted Area
- Rail Easement
- Rail New ROW
- Rail Snow Shed Upper Canyon

**LITTLE COTTONWOOD CANYON EIS
PROJECT S-R299(281); PIN 16092
DETERMINATION OF ELIGIBILITY AND
FINDING OF EFFECT**



Little Cottonwood Canyon EIS DOE/FOE:
Snowbird Historic Property Memo

TECHNICAL MEMORANDUM

To: Elizabeth Giraud, AICP
Utah Department of Transportation
4501 South 2700 West
Box 148450
Salt Lake City, Utah 84114-8450

From: Megan Daniels, Architectural Historian

Date: November 6, 2020

Re: **Significance of Snowbird Ski Resort: Little Cottonwood Canyon SR-210 Environmental Impact Statement / SWCA Project No. 45832**

RESEARCH SUMMARY

Due to the sensitive nature of the historic architectural resources and their potential to be impacted by the Gondola Alternatives, additional research was conducted on the Snowbird Ski Resort (Snowbird). This memorandum summarizes SWCA Environmental Consultants' findings on the construction sequence and design intent of Snowbird and is intended to 1) establish the themes relevant to the resort's significance and 2) evaluate the potential effects to its historic integrity posed by the Gondola Alternatives of the Little Cottonwood Canyon SR-210 project.

Significance

Margaret Supplee Smith, architectural historian and author of *American Ski Resort: Architecture, Style and Experience*, notes, "Ski resorts rarely are considered architecturally significant, but Snowbird was so unusual—for its era—so ecologically sound that it attracted extensive media attention and widespread acclaim" (Smith 2013:119). She describes the architecture as using "unabashedly brute concrete" designed by architects that, "were young, committed modernists, passionate environmentalists, and expert skiers" (Threndyle 2014). The resort is described as "following in the French pattern . . . planning all the structure and integrating them all into a single compact, connected entity" (Smith 2013:125). Described by Smith as "[h]igh-rise and high-density, Snowbird opened in December 1971, after years of environmental and architectural planning" (Smith 2013:119). The research revealed the following overarching themes: planning, ecological compatibility, modernism, and verticality.

Planning

Avid skier and manager of Alta Lodge, Ted Johnson conceptualized Snowbird in the early 1960s (Smith 2013). Johnson was adamantly opposed to a traditional "alpine lodge" theme with individual chalets sprawled throughout the canyon defacing acres of land with numerous small buildings requiring access roads and utility lines. He considered them impractical and realized their vulnerability in the path of Little Cottonwood Canyon's avalanche zones (McFall 2016). Instead, Johnson envisioned a dense, compact resort that would fit into the limited available land without disrupting the landscape. With the help of Jack

Smith, architect and ski cohort of Johnson's, and avalanche expert Ed LaChapelle, Johnson laid out a preliminary design with buildings, lifts, and runs to accommodate the conditions of Little Cottonwood Canyon within the narrow strip mining claims he had quietly purchased one by one beginning in 1963 (Smith 2013). Smith developed a relationship with renowned modernist landscape architect and avid skier, Dan Kiley, while teaching at the University of Utah. At Kiley's suggestion, Smith formed the Snowbird Design Group (SDG) with Robert Bliss, Martin Brixen, and James Christopher. Kiley served as SDG's site planning consultant during the initial stages of design (Cultural Landscape Foundation 2013). By 1967, the SDG developed the initial master plan for a year-round resort that would then be branded for marketing the resort to potential investors (Huffaker 2012; Smith 2013). Initially, "Smith envisioned a megastructure, one big hotel turned on its side to make a bridge that would span the canyon walls. . . . Skiers would leave their cars seven miles down the canyon, take a tram up to the resort, and then another tram up the mountain to ski" (Smith Associates 2020; Smith 2013:121). However, Johnson ultimately vetoed the concept for more realistic ideas that could be pitched to potential investors (Smith 2013). In 1969, Dick Bass, a Texas oil and gas mogul, avid skier, and Vail investor agreed to finance Snowbird (Smith 2013).

With funding secured, Smith and M. Ray Kinston—both architects with Brixen & Christopher—left the firm to form the partnership, Enteleki Architects (Enteleki), that would work solely on further developing the master plan for Snowbird. They were joined by Franklin T. Ferguson and John Irving Perkins. In 1971, the U.S. Forest Service (USFS) approved Enteleki's Snowbird Master Plan, of which "the heart was the megastructure [tram terminal]" (Smith 2013:123). Johnson recalled in 2001, "The awesome massiveness of the tramway and its terminal buildings-to-be set the stage for the bold architectural statements of all of Snowbird" (Snowbird 2020). The plan included an integrated series of multi-level buildings that provide commerce and lodging. The vertical lodges were arranged in a linear fashion following the contours of the natural landscape and were connected to the village plaza by gently sloping pedestrian trails (Allen 1974). The architects heeded Kiley's suggestion to place the tram terminal and the village plaza north of the creek and connect it to the mountain by a skier's bridge to take advantage of a gentle ski run out in the natural terrain (Cultural Landscape Foundation 2013; Smith 2013). The architects involved from the conception of the master plan subsequently collaborated on the buildings at Snowbird, "which the architects planned as vertical villages" (Smith 2013:123). These signature buildings were constructed between 1971 and 1974 (Figure 1 and Table 1).

Snowbird Ski Resort

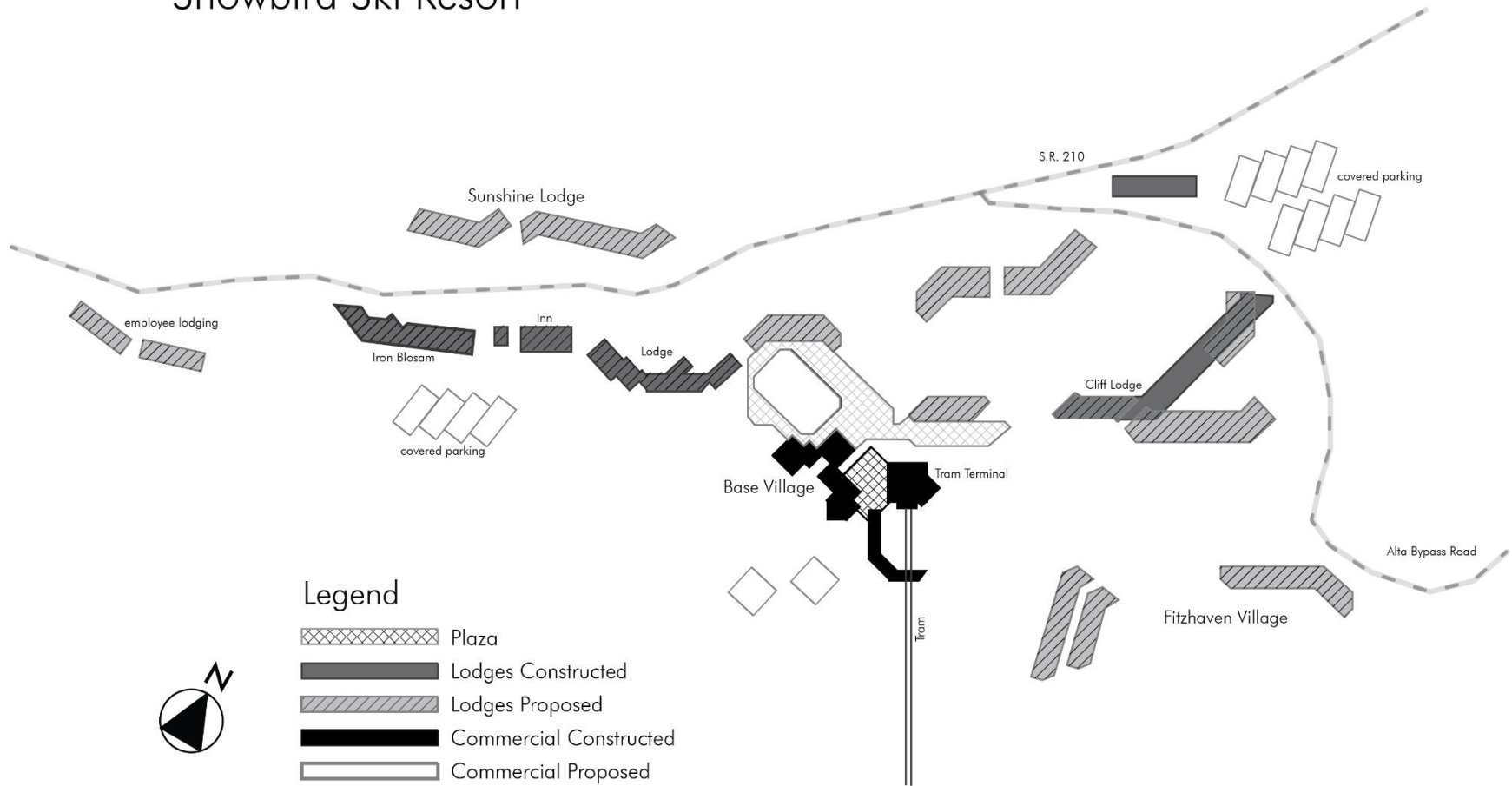


Figure 1. Diagram of buildings proposed in the 1971 Snowbird Master Plan and buildings constructed.

Table 1. Snowbird Ski Resort Construction Summary

Year	Description	Architect / Firm	Reference
1967	Unfinished site design for Snowbird	Robert Bliss / Bliss & Campbell	UCFA 2016b
1967	Snowbird Model building	Snowbird Design Group	Smith 2013; Oliver 2012
1971	Snowbird Master Plan	Enteleki Architects	Smith 2013 Smith Associates 2020
1971	Snowbird Tram Terminal	Jim Christopher / Brixen & Christopher	UCFA 2016a
1971	Snowbird Village Plaza and Bridge	Jim Christopher / Brixen & Christopher	UCFA 2016a
1971	Inn at Snowbird	Jim Christopher / Brixen & Christopher	UCFA 2016a
1971	Lodge at Snowbird	Jim Christopher / Brixen & Christopher	Smith 2013
1973, 1985	Cliff Lodge	M. Ray Kinston / Enteleki Architects	Smith 2013
1974	Iron Blossam	John Irving Perkins / Enteleki Architects	Smith 2013
1974	Mid-Gad Valley Restaurant and Gad Valley Warming Hut	Franklin Ferguson / Enteleki Architects	Huffaker 2012; Smith 2013

Ecological Compatibility

Johnson envisioned a resort composed of a unified grouping of avalanche-proof, reinforced concrete structures, narrow and long, multilevel and fireproof, yet large enough to be a resort (Smith 2013). Johnson’s vision for an ecologically compatible resort was influenced by his travels to the French Alps where he witnessed the negative impacts of sprawling resorts and multitudinous chalets on the natural landscape (Huffaker 2012). The master plan focused on a megastructure concept concentrating development on fewer acres and keeping as much land as possible in its virgin state (McFall 2016). The architects further sought to preserve as many trees as possible and minimize water run off (Allen 1974). Jim Christopher, architect and partner of Brixen & Christopher, described Snowbird as a “high-density project” that the design team was forced into by the limited fee simple land amidst the USFS land (Oliver 2012). Thus, Snowbird was designed on a narrow footprint to withstand the perils of the avalanche-prone canyon, earthquake dangers, heavy snows, and strong winds while consciously minimizing impacts to the natural environment and the Little Cottonwood Canyon watershed (Allen 2014; Smith 2013).

Modernism

Snowbird is rare among American ski resorts for its emulation of the modern, brutalist high-rise buildings akin to those designed by Marcel Breuer in the French Alps (Smith 2013). A modernist and environmentalist, Smith was influential in the modernist concept of Snowbird and the connection between Johnson and Brixen & Christopher. Christopher acknowledged that “modern was a given for us” and that the design team “bought into the concept of a concrete frame with cedar and glass infill panels and an accent of granite. That’s it. That’s Snowbird” (Oliver 2012). In addition to modernism, context was an important factor for Christopher. When observing Little Cottonwood Canyon, he noted that the predominant feature was rock, not forests or woods (McFall 2016). Based on this context and interpretation, Christopher’s Snowbird megastructure design featured the lavish use of concrete, representing his intent to blend the buildings into the surroundings canyon walls and mountain peaks.

Over forty years after Snowbird opened, Margaret Supplee Smith hailed Snowbird as “a perfect time capsule of mid-century modernism” as it continues to emulate the bold modernist ideals of its designers (Threndyle 2014).

Verticality

In 1974 *Architectural Record* described Snowbird as “in scale with the mountains,” mimicking the surrounding peaks with vertically oriented buildings that preserved the vulnerable landscape with minimal footprints (Smith 2013: 120). Tantamount to ecological compatibility and modernism, Snowbird was conceptualized with narrow, multilevel buildings that would limit disruption of the terrain while creating the capacity for a resort. The vertical megastructure concept for Snowbird precluded piecemeal, replication of small cabins or chalets sprawling across the canyon and destroying the natural landscape with access roads and utilities. Instead, vertical lodges were designed and constructed in scale with the surrounding mountains to provide necessary residential accommodations (Allen 1974).

Evaluation

UDOT and SHPO are evaluating the impacts of the proposed Gondola Alternatives on Snowbird. Particular concern was raised about the visual intrusion of the gondola towers into the viewshed from the lodges to the ski slopes. The literature revealed only two references to the buildings being designed to take advantage of the mountain views. In *Architectural Record*, the Lodge condominium units are described as being, “arranged along single-loaded corridors so that they all have the advantage of facing the sun and the ski runs,” and the Cliff Lodge is described as, “skewed from rectangle to parallelogram in order to attain longer views up and down the canyon” (Allen 1974: 124-125). However, in the same article, greater emphasis is placed on the design principles of Snowbird as high-density through vertically oriented buildings and ecologically compatibility. It is also worth noting that the Snowbird Master Plan proposed three lodges with 150 to 200 rooms each to be constructed south of the Cliff Lodge within the Fitzhaven Village. Presumably, the unbuilt phase of development would have been constructed with similar modernist, vertical design principles and would have been in the Cliff Lodge viewshed toward the mountains, further reinforcing the fact that uninterrupted natural views were not a primary concern of the designers.

Instead, the research firmly and consistently reiterates that the predominant focus of Johnson and the architects of Snowbird was emulating modernist and environmentalist ideals. For this reason, the character-defining features of Snowbird are the planning, ecological compatibility, modernism, and verticality of megastructures with narrow footprints. These interrelated features qualify the Snowbird campus and buildings for listing in the National Register of Historic Places as they embody Snowbird’s significance as a high-density, brutalist, high-rise resort designed to preserve and withstand the ecological conditions of the site in Little Cottonwood Canyon.

Although the proposed Gondola Alternatives would place towers within the viewshed of the lodges, the towers would not change the original spatial layout of the masterplan, modernist design, ecological compatibility, or verticality. Further, the focal point of the Snowbird Master Plan was the tram terminal and the aerial tram, which consists of 70 to 140 foot lattice towers carrying passenger cabins from the village to the mountain. The Gondola Alternatives are compatible with the original bold statement of the megastructure terminal and one of the longest and largest aerial tramways in the world (Snowbird 2020). The gondola towers would also be consistent with Snowbird’s modernist megastructure concept, in regard to the transparent structural appearance of modernist architecture—particularly brutalist—and in regard to the limited footprint within the landscape. The proposed Gondola Alternatives are compatible with the intent of the approved master plan to maintain as much natural landscape as possible and eliminate the need for future surface parking lots. And finally, the proposed Gondola Alternatives appear consistent

with Jack Smith's original vision of an aerial tram transporting patrons from a parking lot at the base of the canyon to Snowbird Ski Resort.

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May 14, 2021

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

RE: PIN 16092_Little Cottonwood Canyon EIS_ S-R299(281)0

For future correspondence, please reference Case No. 21-0815

Dear Ms. Robinson,

The Utah State Historic Preservation Office received your submission and request for our comment on the above-referenced undertaking on April 14, 2021. Based on the information provided to our office, we concur with your determinations of eligibility for the project area, and we concur with a finding of Adverse Effect for the undertaking. We'll look forward to further consulting with you and developing a Memorandum of Agreement to address effects to historic properties.

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