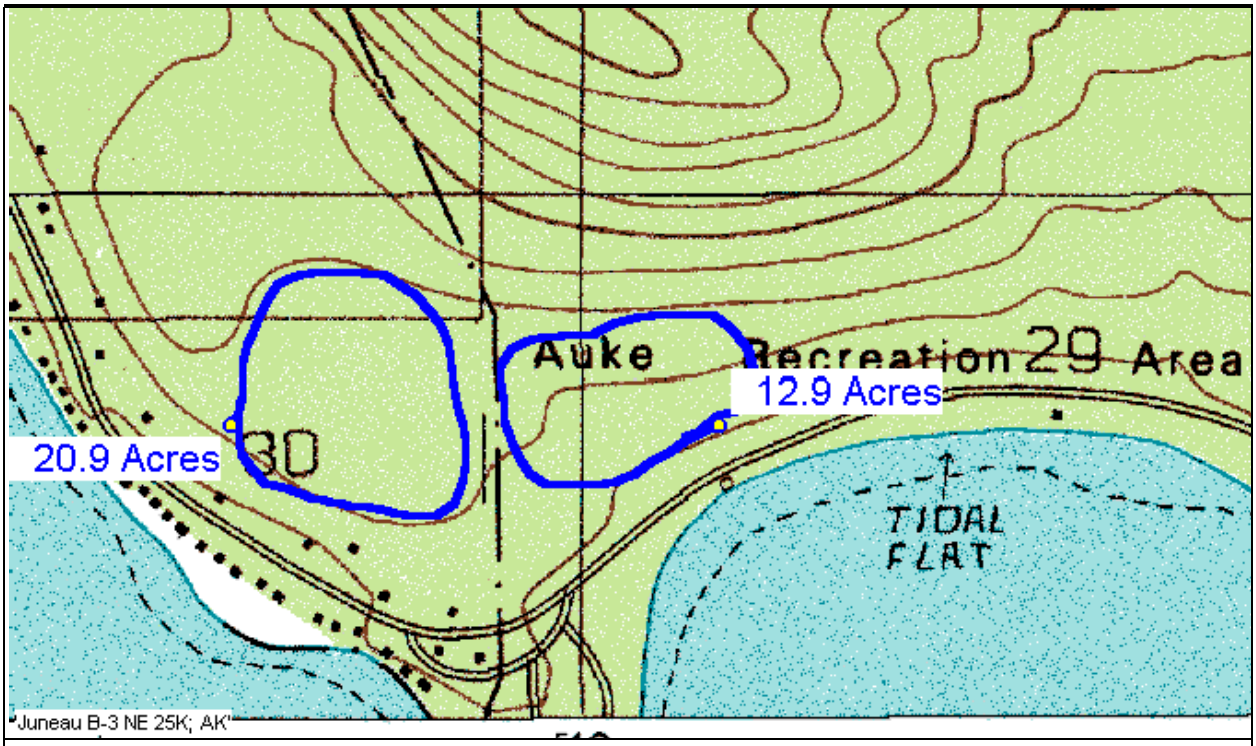
4.3 Level 3 Sites

4.3.1 Auke Recreational Area Cutoff Road



Land Ownership:	City owned uplands on the 20.9 acre site. National Forest uplands on the 12.9 acre site.	
Physical:	Two 12 to 20 acre site 20' to 60' elevation	
Terrain Features:	Gradually sloping timbered upland area.	
Adjacent Terrain Features:	Stephens Passage to the south, 1780' Auke Mountain to the northeast. Auke Recreational Area borders to the south and southeast. Residential area borders to the south, west and east.	
Existing Infrastructure:	Electricity City Water	
Access:	14.5 miles from Marine Park	21:30 minute drive from Marine Park
Road Description:	Northwest on Egan Highway, a four-lane freeway, for 9.5 miles. Egan turns into Glacier Highway, a two-lane road that continues northwesterly 5 miles to the Auke Recreational Cut Off.	
Type of Traffic:	Commercial and residential traffic.	
Nearest Fire Station:	Auke Bay Fire Department, 3 miles.	

The Auke Recreational Area Cut-Off Road site is located approximately 5.5 miles

west of the Juneau Airport at Indian Cove. There are two areas within the relatively level 34 total acres general site that were considered. The elevation ranges from 20 to 60 feet MSL. The grade slopes to the north toward Auke Mountain at about elevation 1,870 feet MSL.

This area offers good access from either the Auke Recreational Cut Off Road or by the newly constructed Auke Recreational Bi-Pass Road, not shown on map. Timber would need to be cleared and an access road and base facilities would need to be constructed. City water and electric hook up are easily accessible; a facility septic system would also be needed.

Since it is located just off of Auke Bay, the terrain is relatively clear to the south; however, the area is just to the north of the westerly approaches and departures at the Juneau airport. Being at a relatively low elevation, the site would remain below most of the low scattered or broken ceilings that tend to make up the inclement weather in the area. With the adjacent terrain protecting the site from the north, winds would be a relatively small factor at the Auke Recreational Area site.

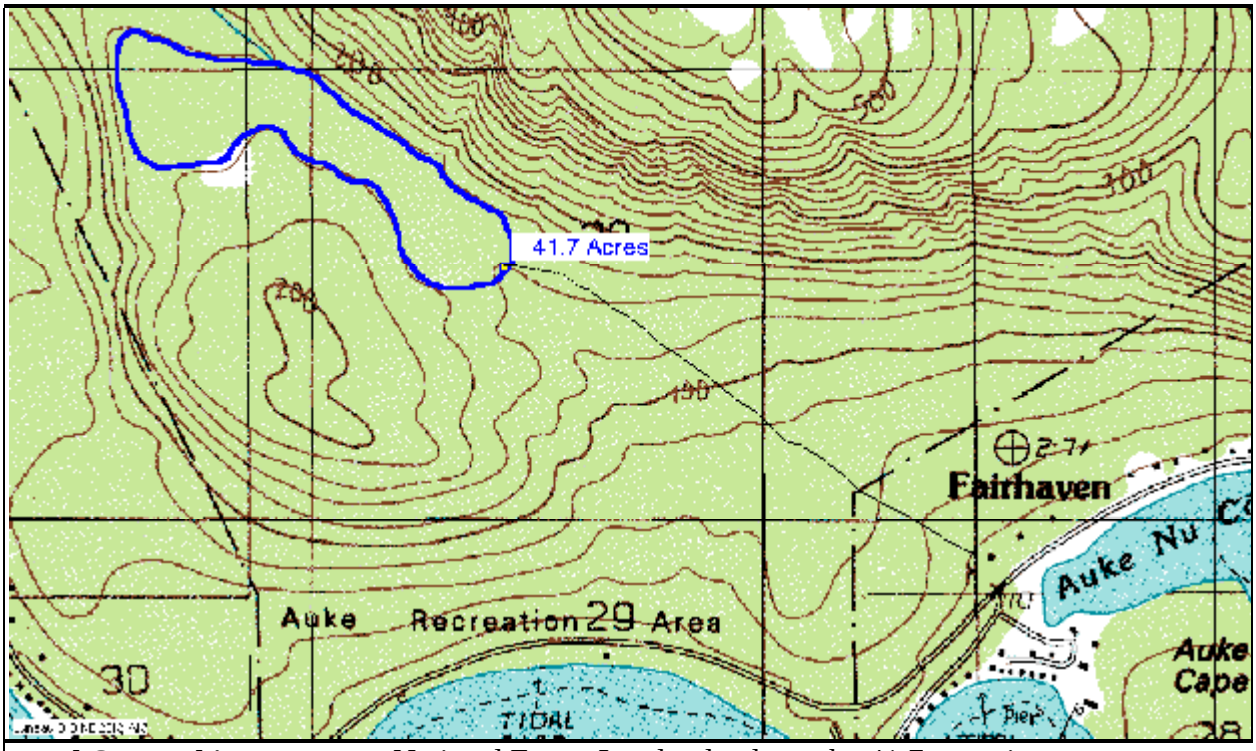
Approaches and departures would be inside the existing Class E airspace at the Juneau Airport. However, aircraft following the standard instrument approach procedures for Runway 8 would still be at about 2,000 feet MSL abeam this location. Typical flight paths for the flightseeing tours would remain to the north of the airport approach, and would produce minimal airspace conflicts with Juneau airspace or IFR approach/departure procedures. The Auke Recreational Area site would be able to meet the requirements set forth in FAA AC 150/5390-2A Heliport Design.

Because the sites at the Auke Rec. Cut Off Rd and the Auke Rec Bi-Pass are so close to each other, both were evaluated based on the same set of flight lines (Figure 4.3.1.2). Approximately 202 housing units would be within the 3,000-foot noise footprint (roughly 65 dBA) and 496 housing units would be within the 6,000 foot noise footprint (roughly 55 dBA).

Figure 4.3.1.2 Auke Recreational Area Cut Off Road and Auke Recreational Bi-Pass Road Helicopter Flight Routes and Noise Corridors

	3000' Noise Corridors	6000' Noise Corridors
Affected Land Parcels	256	619
Affected Housing Units	202	496

4.3.2 Auke Recreational Bi-Pass



Land Ownership:	National Forest Land uplands on the 41.7 acre site.
Physical:	Two 12 to 20 acre site
Terrain Features:	Relatively flat timbered upland saddle.
Adjacent Terrain Features:	Stephens Passage to the south, 1780' Auke Mountain to the northeast. Auke Recreational Area to the south. Residential areas down slope along coast to the southeast, south, and southwest.
Existing Infrastructure:	Electricity City Water
Access:	14 miles from Marine Park 21 minute drive from Marine Park
Road Description:	Northwest on Egan Highway, a four-lane freeway, for 9.5 miles. Egan turns into Glacier Highway, a two-lane road that continues northwesterly 5 miles to the Auke Recreational bi-pass road. An additional road would need to be constructed approximately .75 miles up slope to proposed site.
Type of Traffic:	Commercial and residential traffic.
Nearest Fire Station:	Auke Bay Fire Department, 3 miles.

The Auke Recreational Bypass Road site is located approximately 5.5 miles west of the Juneau Airport at Indian Cove. The general site is composed of a relatively level and linear site of about 42 acres, and ranges from elevation 420 to 480 feet MSL. The grade slopes steeply to the north toward Auke Mountain at about

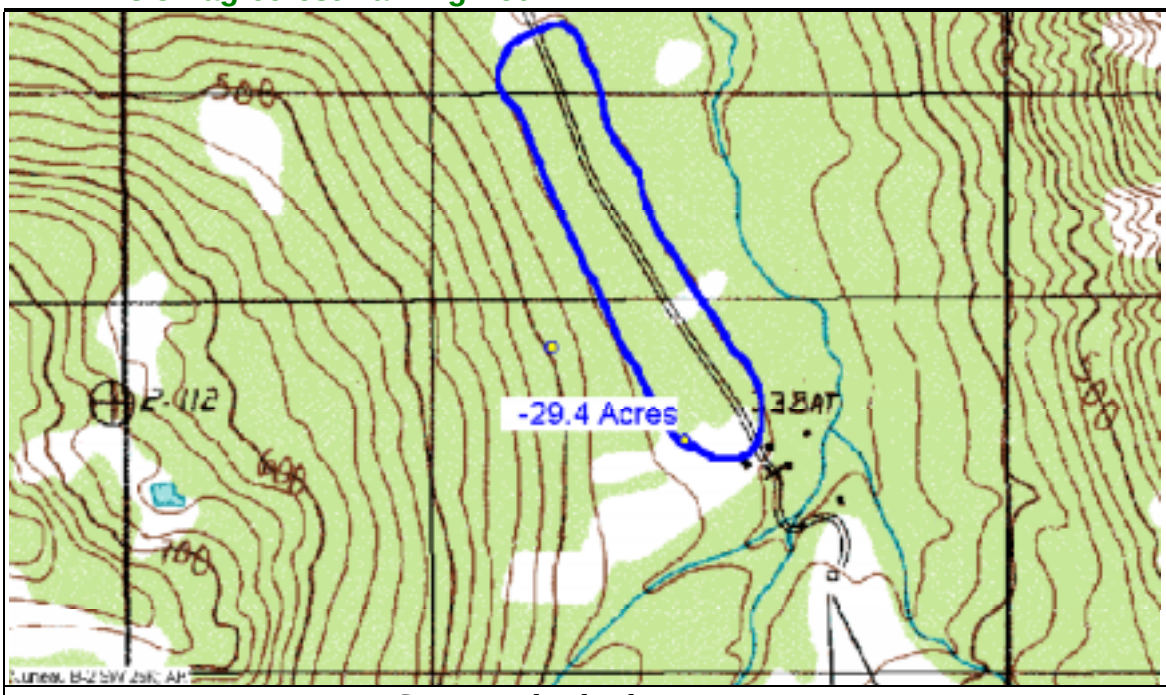
elevation 1,870 feet MSL. Timber would need to be cleared and an access road and base facilities would need to be constructed. City water and electric hook up are easily accessible; a facility septic system would also be needed.

Since it is located near Auke Bay, the terrain is relatively clear to the south, with the exception of a small knob at elevation 690 feet MSL; however, the area is just to the north of the westerly approaches and departures at the Juneau airport. Being at a relatively low elevation, the site would remain below most of the low scattered or broken ceilings that tend to make up the inclement weather in the area. With the adjacent terrain protecting the site from the north, winds would be a relatively small factor at the Auke Recreational Bypass Road site.

Approaches and departures would be inside of the existing Class E airspace at the Juneau Airport. However, aircraft following the standard instrument approach procedures for Runway 8 would still be at about 2,000 feet MSL abeam this location. Typical flight paths for the flightseeing tours would remain to the north of the airport approach, and would produce minimal airspace conflicts with Juneau airspace or IFR approach/departure procedures. The Auke Recreational Bypass Road site would be able to meet the requirements set forth in FAA AC 150/5390-2A Heliport Design.

Because the sites at both the Auke Rec. Cut Off Road and the Auke Rec. Bi-Pass came so close to each other, they were evaluated based on the same set of flight lines (Figure 4.3.1.2). As with the Auke Recreational Area Cut-Off Road site discussed above, approximately 202 housing units would be within the 3,000 foot noise footprint (roughly 65 dBA) and 496 housing units would be within the 6,000 foot noise footprint (roughly 55 dBA).

4.3.3 Eaglecrest Parking Lot



Land Ownership:	City owned uplands		
Physical:	12 to 20+ acre site		1100’ elevation
Terrain Features:	Established ski area facility parking lot and surrounding area on upslope side of valley.		
Adjacent Terrain Features:	2500’ to 3000’ mountains surround to the west, south, and east.		
Existing Infrastructure:	Eaglecrest Lodge and maintenance shop.	Existing water treatment system.	Existing hydroelectric and diesel electric generation systems.
Access:	13 miles from Marine Park.		21 minute drive from Marine Park.
Road Description:	Northwest on Egan Highway, a four-lane freeway, for 1.1 miles. West across the Douglas Bridge to North Douglas Highway, a two lane road, 6.9 miles. South on the Eaglecrest, two lane, road 5 miles.		
Type of Traffic:	Commercial and residential traffic.		
Nearest Fire Station:	Downtown Juneau Fire Department, 12 miles.		

The Eaglecrest Parking Lot site is located approximately 6.0 miles southeast of the Juneau Airport at the Eaglecrest Ski Lodge. The general site is composed of a relatively level and linear site of about 29 acres at elevation 1,100 feet MSL. The grade slopes steeply up on most sides of the site to ridges ranging in elevation of 2,500 to 4,000 feet MSL. The access drive follows Fish Creek from a location directly across the Gastineau Channel from the Juneau Airport. The development of this site would be the least costly of all sites under consideration, due to existing Eaglecrest Ski Area infrastructure. The summer use of the area by a flightseeing heliport and the winter use by the ski area could dovetail, with mutual advantage to both.

This site offers good access with the existing two lane paved road. Base facilities would need to be constructed adjacent to the existing parking lot, but a modification of the existing lodge might be possible. Water, electric and septic systems are developed for the Eaglecrest Base Lodge and could be made available for a heliport operation. On good weather days, helicopters could fly south through the cut in the Douglas ridgeline to the west side of Douglas Island, crossing back over the Douglas ridgeline and heading up the Sheep Creek Valley. Approximately 17 housing units would be within the 3,000 foot noise footprint (roughly 65 dBA) and 6 additional housing units would be within the 6,000 foot noise footprint (roughly 55 dBA) (Figure 4.3.3.2). If the helicopters did not cut back over the Douglas ridgeline, it would eliminate noise impacts on any residences other than the Eaglecrest caretaker's cabin (where it would be very noisy). That would be a longer, more expensive route for the helicopters to fly, and it is unlikely the operators would do so.

Unfortunately these advantages are outweighed by the difficulties presented by bad weather. With the approach and departure path routed through a relatively narrow approach at elevation 1,100 feet MSL, the site would be significantly affected by the common low scattered or broken ceilings that tend to make up the inclement weather in the area. Because of its elevation, helicopters would be fogged in at (or out of) the site many days when they could otherwise fly. With the adjacent terrain protecting the site from the every side, winds would be a relatively small factor at the upper Eaglecrest site.

Approaches and departures would be inside the existing Class D/E airspace at the Juneau Airport directly abeam Runway 8-26, requiring an ATCT clearance, unless the weather was such that the aircraft could climb over the ski slope area and travel along the southwest side of Douglas Island. Typical flight paths for the

flightseeing tours would either pass down Gastineau Channel or stay well south of the airport, depending on weather. Given that the weather would typically affect access to this site, significant airspace conflicts could be expected with Juneau airspace and IFR approach/departure procedures. The Eaglecrest Parking Lot site would be able to marginally meet the requirements set forth in FAA AC 150/5390-2A Heliport Design.

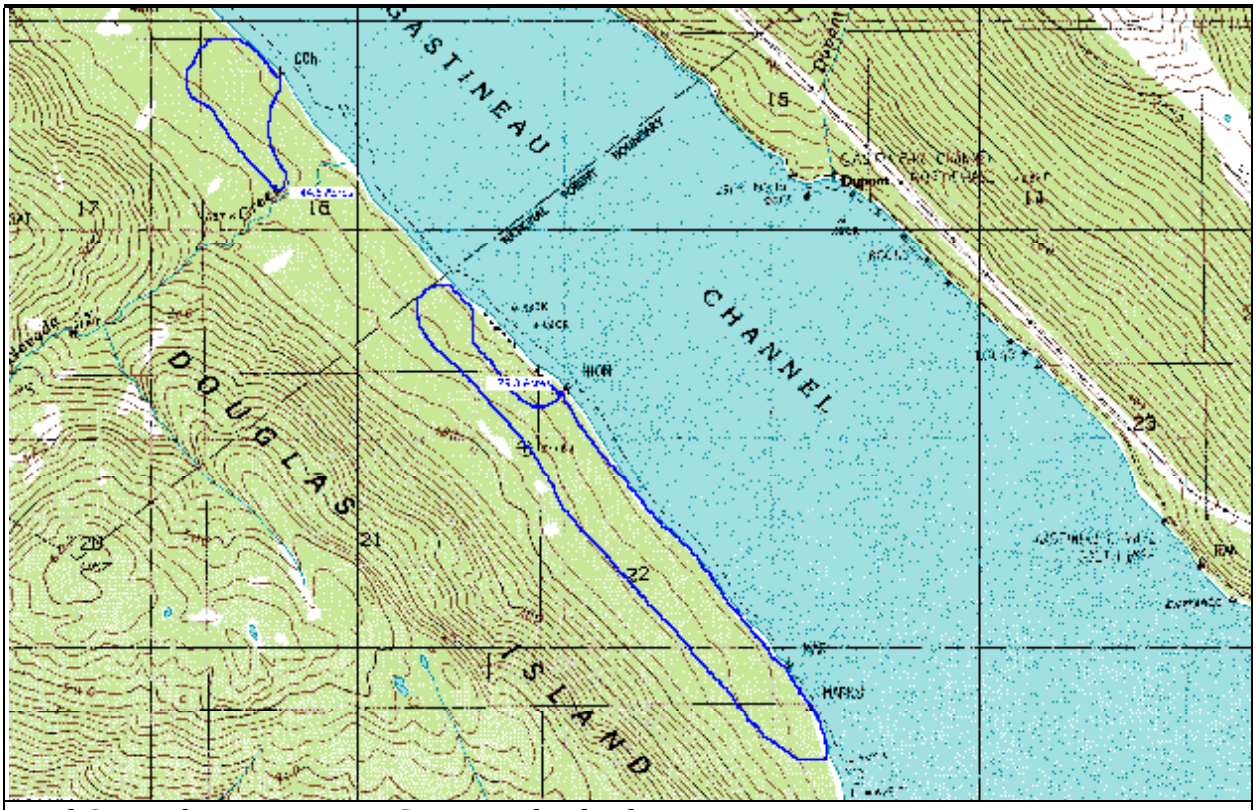
Figure **4.3.3.2** Eaglecrest Parking Lot

	3000' Noise Corridors	6000' Noise Corridors
Affected Land Parcels	1241	2975
Affected Housing Units	1819	3934

On days when the weather allowed helicopters to fly, but the ceiling was not high enough for them to go through the cut to the west side of Douglas, the flight route would be down the valley and down Gastineau Channel to link with current established routes continuing down the channel. The number of affected housing units would be greater than flight paths currently being operated out of the ERA

Base (3,777). Approximately 1819 housing units would be within the 3,000 foot noise footprint (roughly 65 dBA) and 3934 housing units would be within the 6,000 foot noise footprint (roughly 55 dBA). There are 3,777 residences within the 6,000 foot noise footprint of the existing ERA routes.

4.3.4 West Gastineau Channel



Land Ownership:	City owned uplands
Physical:	12 to 20+ acre site 20’ to 70’ elevation
Terrain Features:	Gradually sloping upland timbered area along southeast shore of Douglas Island.
Adjacent Terrain Features:	1900’ mountain / ridgeline to the west. Gastineau Channel running northwest, southeast. Lucky Me residential development is located between proposed north and south City owned properties.
Access:	10 miles from Marine Park
Marine Route	Connection made by ferry transport from Marine Park Area.
Type of Traffic:	Commercial and recreational marine vessels.
Nearest Fire Station:	Douglas Fire Department, 8 miles.

The West Gastineau Channel site is located approximately 7.5 miles southeast of downtown Juneau on the southwest side of the Gastineau Channel across from the mouth of Dupont Creek. The site is gradually sloping and linear along the edge of the channel at an elevation of 20-70 feet MSL, with slopes to the southwest toward a ridgeline at 2,000 feet MSL at the south end of Douglas Island. The site has two areas of about 32 total acres available and is open to water toward the northeast.

Timber would need to be cleared and an access road and base facilities would need to be constructed. On-site electricity, water system and facility septic system would be needed.

Since it is located along the Gastineau Channel, the airspace is relatively clear along the channel side (northwest and southeast), as well as for approximately one mile across the channel to the northeast, except for maritime traffic. The normal large ship route down the middle of the channel is approximately 2,500 feet from the east bank at that location; the 8:1 approach surface would clear about 300+ feet over the ship route, which would clear the channel for cruise and cargo ships. The FAR 77 heliport approach surfaces would be placed in east-southeasterly and north-northwesterly directions, angling into the channel to avoid ship traffic.

Being at a relatively low elevation, the site would remain below most of the low scattered or broken ceilings that tend to make up the inclement weather in the area. It is approximately 14 miles from the Juneau Airport along the final approach course to Runway 26 (or departure course from Runway 8). At 2.0 miles from the entrance to Gastineau Channel, approaching jet aircraft would be at approximately 5,000 feet MSL; departing flights would be higher. There would be no airspace conflicts with Juneau airspace or IFR approach/departure procedures. No matter how the traffic pattern was rearranged, however, either the inbound or outbound flightseeing helicopter routes would cross the floatplane routes. The West Gastineau Channel site would be able to meet the requirements in FAA AC 150/5390-2A Heliport Design.

Access to this area is limited. To gain land access, approximately five miles of new road would need to be constructed through timbered lands and access through or past Douglas would be difficult. Marine access is an alternative transportation method that could be used. The west shore of Gastineau Channel is more exposed to waves than the east side and slopes more gently than the east shore. A docking facility would either need to employ dredge and fill, or necessitate a dock and possibly a wave barrier that extend into the channel.

Helicopter noise would be inaudible or negligible for all populated areas of the borough except for Lucky Me and the cabins near Marmion (See Figure 4.3.4.2). Noise impacts for these areas, however, would be considerably higher than from the Dupont site.

Figure 4.3.4.2

	3000' Noise Corridors	6000' Noise Corridors
Affected Land Parcels	12	13
Affected Housing Units	7	7