



MOROZNAYA-SEDLO
S K I C O M P L E X



AVACHINSKIY
S K I C O M P L E X



TOPOLOVIY RIDGE
S K I C O M P L E X



SOPKA PETROVSKAYA
S K I C O M P L E X



SKI MOUNTAIN
RESORTS
OF KAMCHATKA

What is Kamchatskiy krai



Kamchatskiy krai occupies an area of 464.3 thousand square kilometers, including the part of Eurasia, Kamchatka Peninsula, Karaginsky and Commander Islands. Kamchatka exceeds territorially each taken separately countries such as Britain, Italy, Norway, Sweden and Finland.

The climate of the peninsula is oceanic, relatively soft, with lots of rainfall - up to 2000 mm a year (snow cover reaches 2,5 - 3,0 m). Average long-term air temperature in January is $-16,4^{\circ}\text{C}$, in July $+13^{\circ}\text{C}$.

Permanent population is 343.5 thousand people.

Pure mountain air, the unique flora and fauna, the unique natural and recreational resources, a rich national culture allow creating and offering a various tourism product. Kamchatka attracts tourists from all over the world.

This is the place where you will find one of the Seven Wonders of Russia - the wonderful Valley of the Geysers, located on the territory of Kronotsky State Biosphere Nature Reserve, where 40 large and medium-sized geysers, a lot of soaring, pulsing and boiling springs, mud pots are concentrated.

Kamchatka is called «the land of volcanoes». More than 1000 volcanoes and cones are located here. From the 600 active volcanoes in the world,



30 of them are in Kamchatka. However among volcanic regions of the world, there are few, what are equal Kamchatka on diversity and beauty.

Without exaggeration, Kamchatka is the Tierra del Fuego, the only Russian region of active volcanism. The highest volcano in Eurasia - Klyuchevskaya Sopka is located in Kamchatka, its height is 4750 meters above sea level.

All-year-round on the Kamchatka Peninsula fine fishing is available: in summer - for all species of Pacific salmon (chinook, coho, sockeye red, masu salmon, humpback salmon, chum); Atlantic salmon (Kamchatka salmon and rainbow trout) during the most part of the year - for sea and river fish species.

Distinctive culture of low-numbered peoples of the North has preserved in Kamchatka: Itelmen, Koryak, Even and Aleuts, which is an excellent resource for ethnographic tourism.

In the forests of Kamchatka lynx, glutton, beavers and otters, many fur-bearing animals and game live. In spring and autumn hunting firms and society organize the biggest animals hunting - bear and elk, bighorn sheep.

The flora of Kamchatka is unusual. Kamchatka is one of the few places in the world where the plants reside in gigantism. Here grass grows up to 2,5 - 4 meters. On the peninsula there are more than 100 plant species that occur only in Kamchatka.

Mild, snowy and long winter and, varied mountain terrain make it possible to develop winter sports and tourism - the biathlon, snowboarding, skiing and heli-skiing, traveling by snowmobiles and dog sledding. Kamchatka - the ideal place for all-year-round sports training on natural snow.

Tourism is one of the priorities of socio-economic development of Kamchatskiy krai. The Government of Kamchatskiy krai supports projects on tourism infrastructure development in the construction of ski resorts and spa hotels on the base of thermal springs, hotels and other facilities.



The ski resort Avachinskiy may become the most exotic resort in Russia, located on the slopes of an active volcano, an excellent platform for fans of extreme sports and tourism!!!



Ski complex «Avachinskiy»

The natural beauty of the Avacha volcano zone, one of the most unique areas of integrated resort, is already arousing interest among tourists from all over the world.

The view to the ocean, the regional center, Nalychevo river valley and other volcanoes of the group opens up from the Avachinskiy volcano.

Steep slopes of the volcano create the excellent opportunities for skiers and snowboarders with a high level of preparation for the development of heli-skiing.

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In accordance with the Master Plan, building of a small mountain resort is planned, providing the opportunity to ski on the best slopes of the volcano Avachinskiy as for guests, living in the resort (sportsmen and tourists), so for one-day visitors.

This site has the perfect opportunities to create a unique successful commercial all-season ski/tourist center, and good sports training center for summer months.

Not only skiers and snowboarders can use the objects of tourist infrastructure on the Avachinskiy site but also tourists, scientists, groups of students, who are interested in the examination and study of the unique natural landscapes, unique flora and fauna.



AVACHINSKIY
S K I C O M P L E X

THE MAIN RESORT OBJECTS:

- service center;
- processing buildings;
- parking for cars, bus stop;
- hotel complex for 120 beds;
- heliport;
- 5 lifts;
- lighting and snowmaking system for pistes;
- objects of engineering infrastructure.

Обозначения подъемников / Lift Designation Legend

MC - конвейерный подъемник / Magic Carpet
 P - одноступенчатый буксировочный (тарельчатый) подъемник / Platter
 TB - двухступенчатый буксировочный подъемник / T-Bar
 4C - подъемник с четырехместными неотделимыми креслами / Fixed Grip 4 Passenger Chairlift
 D4C - подъемник с четырехместными отделяемыми креслами / Detachable 4 Passenger Chairlift



AVACHINSKIY
 SKI COMPLEX

КАМЧАТКА



Горизонталы проведены через 5 метров / Contour Interval: 5 Meters
 Февраль 2011 г. / Date: 03/2011

0m 100 200 300 400 500

УСЛОВНЫЕ ОБОЗНАЧЕНИЯ / LEGEND

Уровень трудности трасс / Ski Trail Ability Level

- Простые / Easier ●
- Более трудные / More Difficult ■
- Самые трудные / Most Difficult ◆

Существующие трассы / Existing Pistes



Существующие подъемники - подлежат сносу / Existing Lifts to be Removed



Подъемники этапа 1 / Phase 1 Lifts



Трассы этапа 1 / Phase 1 Pistes



Подъемники этапа 2 / Phase 2 Lifts



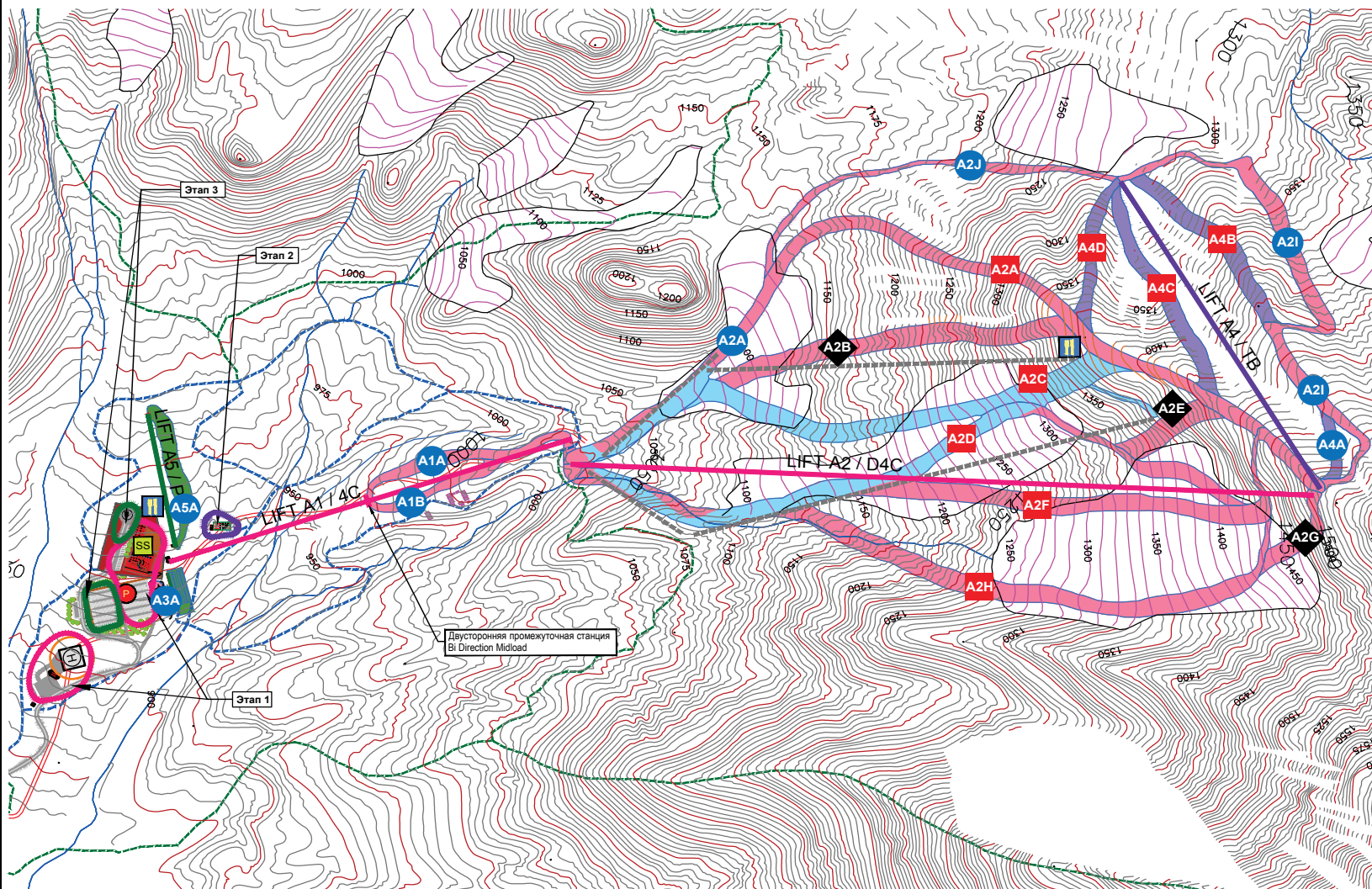
Трассы этапа 2 / Phase 2 Pistes



Подъемники этапа 3 / Phase 3 Lifts



Трассы этапа 3 / Phase 3 Pistes



Вместимость системы подъемников / Lift System SCC 2 400 лыжников / Skiers

LIFTS SPECIFICATION

PHASE	1			2	3	TOTAL
LIFT DESIGNATION LEGEND	A1	A2	A3	A4	A5	
Lift type	4C	D4C	MC	TB	P	
Top elevation, m	1 030	1 510	954	1 510	986	
Middle elevation, m	975					
Bottom elevation, m	954	1 020	947	1 275	954	
Total elevation, m	76	490	7	235	32	840
Horizontal Distance, m	975	1 715	70	870	287	
Slope Distance, m	978	1 784	70	901	289	4 022
Average Slope, %	8%	29%	10%	27%	11%	17%
Rated capacity, people/hour	1 800	2 400	1 200	1 440	600	7 440
(V.T.M.) thousand m/hour	99	1 176	8	338	19	1 641
Speed, m/s	2,2	5,0	0,6	3,0	5,0	
Time trip, min	7,41	5,95	1,95	5,01	0,96	
Operating, hour/day	7,0	7,0	7,0	7,0	7,0	7,0
(V.T.M.) demand/day	2 120	3 771	940	3 202	940	
Loading eff., %	85%	80%	95%	85%	85%	
Access Reduction, %	20%	0%	0%	0%	25%	
Lift system SCC, people	220	1 450	40	600	90	2 400

PISTES TYPES



GIANT-SLALOM

Piste A2C (red) is planned for giant-slalom. Start and finish are located at elevation points 1385 and 1080 meters respectively, forming a vertical elevation of 305 meters, that corresponds to the FIS requirement for competitions of the Olympic Games, the World Championship and the Cup. The piste has an average slope of 33% and steeper section of 47%. At the confluence of pistes A2C and A2B (black) there is a wide flat area, well suited to the finish area. This piste may be homologated FIS for competitions in giant-slalom.

SLALOM

Slope, suitable for training and competitions in slalom is located between elevations 1285 and 1080 meters (piste A2B - black). Elevation of 205 meters is located within the range 180 - 220 meters, set in the FIS regulations for slalom. However, steeper area (57%) is somewhat higher



FIS maximum of 52%. This steep section may be acceptable for FIS homologation of piste or require a certain amount of earthworks for modification. There is easy finish area at the base of the piste, combined with giant-slalom.



MOGUL

Slope, suitable for training and competition in mogul has been identified on the piste A2E



(black). This slope will require subgrading and inconspicuous earthworks. With a start at elevation 1430 meters and finish at around 1330 meters (elevation is 100 m), this slope meets the basic requirements of FIS. The average gradient of the slope 44.1 is slightly smaller than the 44.5% minimum, set by FIS. It is possible to bring the slope into full compliance with FIS regulations with the help of a small amount of earthworks. There is a flat area for finish zone at the base of the slope.

HALF-PIPE

Half-pipe is located in the upper part of the piste A2F (red) between elevations 1380 and 1340 meters. At 26% slope, this half-pipe has a length of 120 m, which fully meets the standards of FIS.



SNOWBOARD CROSS

The lower part of the piste A2A (red) has characteristics that suit for snowboard cross. Vertical elevation is 140 m with the start on height 1280 m and finish on height 1140 m, that falls within the specified FIS range of 100-240 m. This slope has a length of 519 m in a straight line and average slope of 28%, that meets the FIS requirements for the snowboard cross. During the construction of the direct piste, its length will be about 620 meters, that exceeds the length of the slope of the line by 20%. There is a natural flat area for the finish zone at the base of the slope.



SNOWPARKS

Building of three snowparks with different categories of difficulties is planned at the site of the mountain resort Avachinskiy.

Snowpark for beginners will be located on the piste A1A (blue), medium difficulty snowpark will be located on the road A2I (blue) and piste A2F (red) suits well for high difficulty snowpark.

ADDITIONAL TYPES OF WINTER SPORTS AND RECREATION

In addition to commercial and sport skiing and snowboarding at the site of the Avachinskiy volcano there are opportunities to organize other winter recreational activities, such as flat land skiing, snowshoeing, tubing, kiting, snowmobile and quad bikes safari, mini-golf on ice, zorbing. Construction of facilities for these sports and recreation should be accord with the standards and rules established for the natural park and run with minimal disruption to the natural terrain.

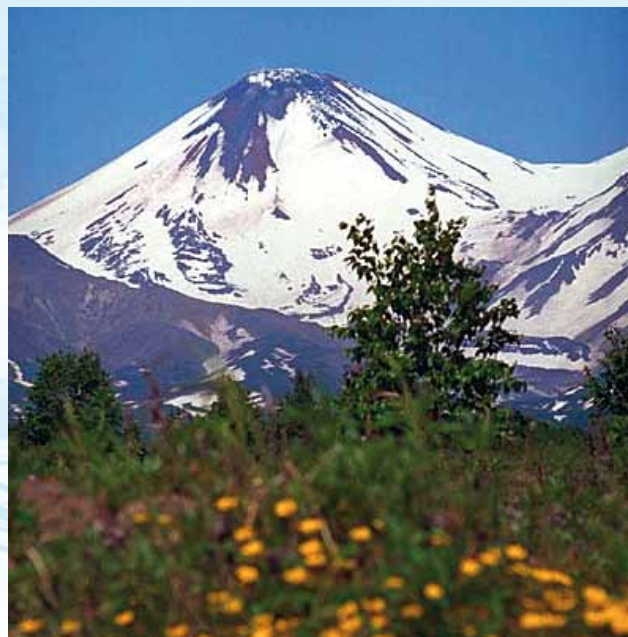


PLAN OF RESORT SUMMER USING

For this site we consider only those types of summer recreation that do not create a high load on the unique landscape of natural park. Multi-purpose trails with cover for bicycles, pedestrians and roller skaters around the base area and along the main access road are offered.

More difficult unsurfaced tourist mountain trails are planned on the ski arena and to the tops of Avachinskiy and Koryakskiy volcanoes. Hiking will be one of the attractions for tourists in the summer. Lifts A1 and A2 will be used in summer for delivery tourists and sightseers to mountain restaurants, sightseeing platforms and the top tourist mountain trails.

Tourists and sightseers will be able to go down on foot or on ski lifts. From the top lift station A2 tourists will be able to walk 600 meters down the mountain ridge to a second restaurant. Views of volcanoes and the surrounding landscape will be a key factor in attracting tourists.



FINANCIAL-ECONOMIC ACTIVITY OF THE PROJECT SKI RESORT AVACHINSKIY

Total cost of the project, billion rubles	4,2
Net present value (NPV), million rubles	- 949
Internal rate of return (IRR)	10,74%
Discounted payback period, year	doesn't pay out
Borrowed current assets share in initial investments	0%
Borrowed current assets share in total investments (including the replacement of basic means)	0%
WACC	17,24%
Number of employees	100