Mountain Resort Design Guidelines
For
Jumbo Glacier Resort

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A SUPPLEMENT TO THE MASTER PLAN
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Definitions
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General

These Design Guidelines for a mountain resort have been prepared by Oberto Oberti Architecture and Urban Design Inc. to create an identifiable and cohesive design character for the resort by utilizing a fairly limited vocabulary of design features that reinforce the notion of a desirable mountain retreat; an escape from the more mundane solutions of urban centres.

The intent is to have each building and other man-made feature contribute to the character of the region so that there is an identifiable resort image instead of a disparate collection of individual components that compete for attention as monuments to a particular individual or corporate taste. The identity of mountain architecture is drawn from the better examples of lodges, hotels, and mountain refuges found in the mountains of Canada and the United States, satisfying a need for remote destinations, beginning from the end of the 19th century. Many successful examples of romantic and functional mountain architecture date from pre-1940, and this is why it is often referred to as National Parks heritage architecture. The essence of the style is found in the combination of grand forms, forested settings and rustic materials. Heavy timber detailing and natural stone are combined with grand roofscape derived from the romantic and picturesque periods of a style of architecture most popular at the beginning of the 20th century. It is a heritage of elegance derived from a tasteful use of rustic materials combined with a functional response to real needs.
Character

The design concept will take inspiration from the mountain architecture tradition of the National Parks, and the heritage design tradition and rustic architecture of the Western Canadian Mountain Ranges, but in this project a modern interpretation with clean lines, rather than a stylistic imitation of past pictures, will be encouraged. The design of buildings will emphasize sloping roofs, the use of wood and stone and generally abundant use of natural materials – primarily timber and local stone. Design for durability of construction, good snow management and inherent quality will also be mandatory components. The purpose of these guidelines is to identify some of the key features of that mountain architecture style, so that they can be worked into individual compositions that are both unique and conforming. The goal is the creation of a grand yet warm impression characteristic of the National Parks aesthetic. A successful design must respond favourably to both the spirit and intent of these guidelines.

Quality control will be a fundamental principle in achieving a product that will be positioned on the tourist map for a wide-ranging clientele. This is planned through encouraging design that will create a park-like setting. Design controls will ensure that all future development will follow the original architectural theme. The guidelines are provided so that the architectural concept and execution of each building is in keeping with the desired image as well as with the overall Master Plan for the resort.

A Design Review and Approval Authority (DRAA), described in Section 4.3.10.1 of the Master Plan, will be responsible for design review and requiring compliance with these guidelines and with the intent of the Master Plan documents so that the form and character of the resort project will be maintained until completion.

Drawings showing building plans, sections and elevations, roof plans, finishes, colours, landscape and streetscape design must be submitted to the Design Review and Approval Authority for the resort area prior to application for Development Permit.

Authentic style and character will be derived from the successful design tradition of mountain architecture (ranging from the Western Canadian mountain lodge tradition to the majesty of the Canadian Pacific hotels). Such authentic character will reflect a recognized heritage value and mountain tradition, even if reminiscent of a European romantic mountain style.

The guidelines described in the following pages will emphasize the use of heavy timbers, warm, natural finishing materials, and large interior spaces to combine a grand impression and a warm mountain atmosphere. Authenticity will be emphasized by rustic simplicity and by the avoidance of superfluous or added-on features.
Building Elements

The shape of the building will be determined by its functional mass. False appurtenances and decorative architectural elements with no function will not be permitted. Decorations should only apply to real functions. It is intended that the style be rustic, solid and true, with its elegance and grace provided by good proportions, good massing and good relationship to the other buildings. The building mass resulting from the shape of walls, floors and roofs must be broken into smaller scale components to avoid brutal and overpowering proportions. Ornament and decoration will be encouraged only in the direction of sculpting and finishing the functional building elements. The use and appearance of natural elements will be given preference.

Design Review and Approval Authority Requirements – Site Plan And Conceptual Drawings.

Each building component must be designed to fit within the building envelope designated in the Master Plan and finalized with the subdivision drawings, and must comply with other Master Plan requirements and guidelines.

The designers of buildings, signs and incidental development components must submit a site plan, conceptual building drawings, colour schemes and all necessary design information to a Design Review and Approval Authority (DRAA) prior to submitting drawings for a Development Permit. Upon approval, the DRAA will provide a written statement confirming to the local Authority Having Jurisdiction that the project is in compliance with the Master Plan Guidelines. Subject to evidence of compliance with the B.C. Building Code certified by the appropriate B.C. registered professional and any relevant covenant, building scheme and local bylaws, the Authority Having Jurisdiction will then issue a Development Permit and a Building Permit.
Summary of Principles:

• The resort image will be based on the alpine romantic revival and the North American National Parks and heritage mountain architecture in a contemporary mountain setting.

• The architecture will combine grand forms and rustic materials such as heavy timber and natural stone.

• Buildings will conform to the Master Plan for the resort.
Exterior Building Character

As indicated above, the resort design concept will take inspiration from the National Parks heritage and Canadian and American mountain architecture. It will emphasize sloping roofs, heavy timber or log construction where appropriate, stone bases and generally abundant use of natural materials comprising primarily timber and local stone. Design for durability of construction, respect for function and inherent quality will also be mandatory components.

Roofs

- One of the most characteristic elements of mountain architecture is a sloping roof. Roofs will be of utmost importance to the visual landscape of the resort, as they will be viewed from above further up the mountain. Steep roofs and overhangs are a simple way to shed snow and are a desirable building design. Snow retention on roofs, where preferred for snow management reasons, will also be encouraged but only low-pitched roofs will be permissible. Flat roofs will not be part of the resort unless they are approved as part of the design by the DRAA for functional reasons such as decks.

Roof Shapes

- Roofs will be an essential component of the visual landscape of the resort base area and of the single-family dwellings. Steep roofs will be encouraged. All roofs must be sloped at a minimum angle of 8 in 12 and designed for proper snow management and engineering, except that angles as low as 3 in 12 will be permissible where snow retention is desirable. Decks and flat areas of snow collection must be designed to provide a visual balance of design as well as fulfilling practical needs. Locations of snow dumping must be indicated. Chimneys, mechanical and venting requirements of buildings must be shown in the preliminary design with appropriate design treatment where possible. Roof protrusions must be protected against the action of snow accumulation and movement.
• The main roof form should be articulated with a combination of full-scale gables and dormers, providing windows to habitable spaces (rather than being mere ornaments), and generally be designed for functional purposes.

• The roof forms should tie into the main roof volume and wrap comfortingly around corners giving a sense of function to the composition, rather than appearing to be stuck onto the façade or main roof as whimsical appurtenances.

• The composition of roof elements may be symmetrical or strongly asymmetrical, but not purely random.

• Roof finishes are important, as they are highly visible from the ski slopes and should preferably be of natural slate, or ribbed (standing seam) metal. Asphalt shingles and quality recycled material of special design and colour may be permitted.

• Roof forms should provide valleys below which there are safe locations for snow dumping.

• The roofs above entranceways must either form a gable end or provide adequate snow fences or similar protection to guard against falling accumulations of ice or snow.

• Eaves should project at least 600mm on all sides of a roof (except where adjacent roofs of two buildings terminate at a common wall or where the chateau style is being used for a hotel).

• Eaves may be supported by stylized brackets such as in the tradition of the arts and crafts movement.

• Eaves, fascias, bargeboards, and soffits should be, or appear to be, of natural wood.

• Decorative roof elements such as cupolas, towers, finials, gingerbread tracery and the like are generally discouraged and should be used only in strict moderation.

• Flagpoles incorporated into building or roof designs are encouraged in public base areas to create a sense of place and of visual activity.

• Vented cold roof designs are encouraged in order to minimize maintenance problems.
Summary of Principles:

- Roofs must be steeply pitched or sloped and articulated without unnecessary decoration.
- Roofs must be designed to be viewed from above.
- Protection from snow hazards and ice accumulations must be provided for in design.
- Roofs in the vicinity of the main resort base area should be standing seam metal with complementary colours to provide a coherent design.
**Principles of Snow Management from Roofs**

Snow accumulation on roofs must be taken into account not only in terms of structural loads but also in terms of the other effects of snow accumulation. Protection must be provided from snow and ice for protruding components such as chimneys and vents. Areas of snow accumulation and of snow removal must be considered and the design accordingly dictated. Snow management may require that there be little or no areas of flat roof – some areas will have roof pitches as low as 3 in 12 while most roofs will have pitches of 12 in 12 or greater. The general roofline must be steep.

Snow management planning is an important aspect of building design for a mountain resort – especially with respect to roof design. Pedestrians must be protected from falling snow either by snow retention on roofs or terraces or by providing for the collection and directional shedding of snow from roofs by the prudent use of gables and dormers.

Building entrances for both pedestrians and vehicles must be given special design attention to avoid snow and ice accumulation or injury or damage in those areas.

The weight of snow and ice on a roof requires that eaves and other appendages be sturdy. Eaves troughs or gutters should be avoided where they are likely to suffer damage from snow and ice, yet icicle formation must be avoided or adequately controlled through design. Metal roof materials should be of a substantial gauge to avoid deformity under pressure of ice and snow.

Snow management should be enhanced by provision of “cold roof” design, achieved through adequate insulation and roof ventilation.

Locations for snow dumping must be indicated on building plans submitted to the DRAA. Snow dumping areas should be within the property lines of the private property – which may require accumulation on perimeter arcade roofs in some instances. Decks and flat areas of snow collection must be designed to provide a visual balance of design as well as fulfilling practical needs.
Chimneys and Mechanical Equipment

- All chimneys must appear on design and construction drawings submitted to the Design Review and Approval Authority.

- Chimneys should have a stone finish where visible from the exterior of a building. Where desired, chimney pots may be of black painted metal. Unpainted metal such as stainless steel or galvanized chimneys, chimney pots or chimney caps will not be permitted. Other mechanical shafts and vents must also appear on design drawings and be treated appropriately so as to be as unobtrusive as possible.

- Elevator penthouses, exhaust vents and fans, air handling units and other equipment must be incorporated into the overall building envelope and design such as within the roof forms.

- All such equipment must be screened from view of public areas, whether on a roof or at grade. Mechanical equipment, ventilation grates or motors should not be adjacent to any main pedestrian, commercial or other public area.

Summary of Principles:

- Chimneys must be of stone finish and no metal chimneys or unpainted metal equipment is to appear on a roof.

- Mechanical Equipment is to be screened as part of the building design.
Windows

• At ground level, commercial area windows should be of modest size, broken by solid wall elements to reflect the structural rhythm of the building.

• Windows in wall areas above ground level should form part of a pattern of punched windows in the building façade.

• Quality wood framed windows are encouraged, but high quality alternative materials may be approved when fitting in appropriate designs.

• For windows above ground level, casement or double hung windows are preferred to sliding windows. Jalousie windows and glass block windows will not be permitted.

• Mullioned windows are encouraged in dormer and gable windows, whether the mullion panes are square, rectilinear or even diamond shaped.

Summary of Principles:

• Large expanses of undivided glass wall are inappropriate.

• Fenestration should include some mullioned windows.
Wall Finishes and Forms

Many good examples of mountain architecture combine different wall finishes, which change from the bottom to the top of the building.

The main floor must create a strong connection to the ground with a solid base rising at least to windowsill height. Although each building will have a different geometry, massing and treatment of elevations, this base will be a continuous cohesive element that provides a visual connection of the buildings to the ground and to each other. It is intended that the base will be constructed with materials that will provide a sense of solidity and mass.

The base of all buildings should be finished in natural stone, randomly rather than geometrically set, at least to the window sill height of the main floor. Stone is encouraged as a finish over the entire height of the main floor. Stone supports are also encouraged to sustain arcade, pergola and porte cochère elements at the ground floor of buildings.

Likewise, heavy timber members should be evident through the general and generous use as support beams for overhangs, pergolas or aspects of arcades, and portes cochères, to reinforce the wood theme of other timber details.

Finishes above the main floor should emphasize the use of wood, including vertical board and batten siding, various gauges of horizontal wood siding, or highlights of wood shingles. Stucco and concrete finishes should be restricted to no more than 50 % of wall areas of each façade not occupied by fenestration or entries (except where required for fire separation or other Code requirements). Fenestration itself
should be limited to a maximum of about 50% of a wall area, except on the ground floor. Curtain wall forms of glass, metal, or concrete panels will not be permitted.

Where possible, wall forms should be continuous in commercial areas, the central resort area and along pedestrian oriented routes to help enclose the public spaces they define. Walls of adjacent buildings should meet at common property lines and actually touch, and public access around buildings should be provided by covered archways of appropriate width, usually at one end of a building.

Roof gables and dormers, support brackets, fascias and eave features should reinforce the image of timber construction through form, texture, colour and detail.

Components of building facades such as wood frame doors and windows will contribute to the timber theme and are strongly encouraged.

On the interior, especially in lobby spaces of hotels and other multiple unit buildings, elements of heavy timber construction should be evident in wood post columns, sawn beams and natural wood detailing in features such as doorways, stair rails, etc.
Summary of Principles:

- Buildings should have a solid and continuous base preferably of stone.
- Upper walls should emphasize wood.
- Curtain wall systems are not acceptable.
- Wall forms must be continuous wherever possible to define pedestrian oriented areas.
Colours

Wood finishes on walls should be stained in quiet natural finishes or subdued earth tones with highlights of other subtle colours. Doors should be of natural wood colours or colours that match window frame colours.

Window frames and mullions in traditional colours of natural wood, brown, black, white, forest green or pompeii red (i.e. a low chroma red rather than a bright orange red) are preferred over other colours. Brass coloured mullions, and anodized or aluminum window and doorframe finishes are strongly discouraged.

All colour schemes must be submitted for approval to the Design Review and Approval Authority prior to installation. Earth tones that are compatible with other buildings will be encouraged. Colours in glaring contrast with other buildings will be discouraged.

Summary of Principles:

- Colours for walls are to be based on subtle earth tones.
- Natural finished wood is encouraged.
Entry Areas

Entry areas should have a high quality of finish and detail as these areas leave some of the most lasting impressions and are subject to the greatest scrutiny.

Buildings should have main entrances that are easily identifiable and which evoke a sense of entry - again combining the grand and the rustic.

Entries should be set high above ground level. In the streets of the resort core entrances should open to raised sidewalks, and the sidewalks should be weather protected. Sidewalks should be designed to allow for snow management with high accumulation of compacted snow in the streets below in winter.

Entries should be weather protected either by overhanging gable eaves, portes cochères, arcades, or veranda elements. Materials about the entry way should again include stone and wood elements.

Summary of Principles:

- Entry areas should be grand, rustic, well detailed and weather protected.
Building Massing and Components

The shape of a building will be determined by its functional mass. False appurtenances and decorative architectural elements with no function will not be permitted. Decorations should only apply to real functions. It is intended that the style be rustic and solid, with elegance and grace provided by good proportions, good massing and a good relationship to the other buildings. The building mass resulting from the shape of walls, floors and roofs must be broken into smaller scale components to avoid brutal and overpowering proportions. Ornaments and decoration should be used only in the direction of sculpting and finishing the functional building elements.

Summary of Principles:

• Building massing should be broken down and display good proportions without false architectural features.
• Decoration should highlight structure and function.
Landscape and Streetscape

Landscape elements should reinforce the rustic themes of a park area.

Road barriers should not be steel or concrete, but made of simple stone posts supporting horizontal timbers. Where fences are necessary they should also be of stone and wood but continuous outdoor spaces are encouraged, rather than fenced areas.

Road surfaces and driveway surfaces should minimize expanses of muddy earth, asphalt or plain concrete. In private driveway and entrance areas, consideration should be given to crushed gravel and stone pavers.

Landscape design concept drawings will have to be submitted for approval. The main criteria to be followed will be the retention or regeneration of the natural landscape, enhanced to create an air of quality to the resort. Sun consideration must be given to decks and patios.

The resort may require compliance with more detailed landscape guidelines, which will be prepared before the start of development.

New trees and shrubs should reinforce the natural species. Existing trees should be preserved, especially mature evergreen species, care being taken not to harm the roots or stability of the trees. Seasonal highlights may include some deciduous trees. In single-family chalet areas the buildings should be partly hidden by evergreen trees. Natural groundcovers and natural wild alpine flowers should reinforce the natural theme of the resort.

In the more urban areas of the resort base area, seasonal colour may be added through summer window boxes of geraniums or other typical alpine themes that are conducive to a National Parks environment.

Pedestrian interest is an important factor at the ground level of buildings. That interest is retained through a variety of uses, well detailed finishes, transparency and frequent access to building interiors.

Street Furniture items should be of rustic materials such as wood - in benches, kiosks and barriers.

Some weather protection should be provided at all building entries. In commercial areas, weather protection for pedestrians may be provided by arcades, roofed pergolas, verandas, overhangs, or similar elements.

View of the shops, lighting and transparency, however, are also emphasized. Weather protection should not be oppressive or obscure the commercial areas. Simple overhangs may be preferred in a variety of locations.
Textured surface treatments for pedestrian walkway and plaza areas should be small in scale, durable and attractive.

Asphalt will not be permitted as a walkway finish. Plain concrete is discouraged. Concrete pavers, paving stones and textured and patterned concrete are encouraged.

Summary of Principles:

- Outdoor areas should allow for sun penetration.
- Some mature trees should be preserved where possible.
- New planting should reflect native species.
- Unnatural ground surfaces should be small in scale.
- Street furniture, barriers and fences should all be of rustic natural materials.
- Weather protection should be provided at entries and in commercial areas, but this is not intended to decrease transparency.
Signage

All sign designs must be approved prior to installation. Signs may only be of solid materials and may only utilize front lighting. Back-lighting of exterior signs will not be permitted. Signs extending out from buildings will be solid, in the shape of a banner of no more than 1000mm x 1000mm. The use of natural wood is encouraged in signs.

Night Lighting

Night lighting should be adequate for safe movement, and designed for an intimate, aesthetic effect. It should not be bright and obtrusive and it should only illuminate what needs to be lit. Where possible, light sources should be shielded and directional. All light fixtures must be in keeping with the architectural character. All exterior lighting design and fixtures must be submitted for approval.

Harsh vapour bulbs in orange, pink, blue, etc., will not be permitted and the preference is for incandescent tones. Street lighting should be attached to buildings where possible to avoid the necessity for large and often unattractive lamp standards.

Acoustical Design

Except for single family chalets, a review of the design by an acoustical engineer may be required prior to approval of preliminary design drawings. Following acoustical recommendations will be mandatory.

Energy Efficiency – Geothermal Energy

Geothermal energy and energy efficient design are encouraged in all buildings. Single-family chalets and townhomes should adhere to the B.C. Hydro PowerSmart program when feasible.
Screening and Enclosure of Service Areas

Entry to garages and other enclosed areas must be part of the overall building design. Garage doors and service areas must be unobtrusive and in keeping with the pedestrian, small-scale character of the mountain resort. Storage, mail-box areas, compactors, garbage collection, snow removal equipment, mechanical or electrical equipment, transformers, utility tanks, propane gas meters, solar collectors, antennae, satellite dishes, etc. must be designed appropriately to be contained inside building areas, placed underground, or suitably screened, and must be part of the initial approved design.
Supplementary Guidelines for Hotels

Hotel Image

The hotels within a resort area, as buildings most frequented by the public, will often create a lasting impression, and help define the “brand” of the resort. For that reason, the design guidelines will be monitored very carefully for hotels, as their impact is greater than that of the single family chalets, town-houses, or other more private resort buildings.

Hotels within the resort area will fall within one of two broad categories of National Parks architecture. The most prevalent, and generally preferred for hotels up to about 150 rooms, is the grand rustic lodge. The other category is the less common but magnificent style of a Canadian Pacific chateau hotel.

To complement the outdoor setting, both categories should incorporate elements of rough or rusticated natural
stone. The rustic lodge category will use more heavy timber elements and exterior timber treatment, while the chateau will use more stone. Both will have steeply pitched roofs, with the rustic lodge utilizing roof pitches of about 12 in 12 for the main roof components and no less than 4 in 12 for most other minor roof components. The roofscape of the lodge style may be either symmetrical or asymmetrical, with one main gable dominating the other roof elements. The chateau style is often asymmetric with greater height and a main hipped and dormered roof element dominating the composition.

The chateau style usually employs some roof elements that are steeper than 12 in 12. The roofscape of the rustic lodge generally incorporates both gable and dormer elements in a variety of compositions and with the overall form of the massing being more horizontal than the chateau style. The rustic lodge utilizes horizontal bands of different (mostly wood and shingles) finishes and often employs a horizontal arcade, terrace, or veranda at the base to reinforce the horizontal elements and to protect from snowfall. The chateau style employs more dormers and hipped roof forms. It may have combinations of different exterior finishes but the chateau exterior is generally solid with a base, a middle and cantilevered band below the roof. Its overall proportions usually emphasize the vertical rather than the horizontal.

To be convincing, the lodge style should not normally exceed 5 or 6 storey plus underground levels. However, the chateau style hotel will need to be higher, with a main centre block rising above resort height, and in this case the height will be an exception subject to design approval by the DRAA. Care
should be taken not to seriously block views from other hotels or buildings behind. Stand alone high-rise tower forms are not appropriate and will not be permitted. Higher building design will require an analysis of view angles for surrounding areas and buildings.

Brutal highrise blocks with token sloped roofs are not permitted. Both the Canadian chateau and the rustic lodge are spread horizontally with wings of rooms stretching from a main focal point, and are not point tower forms.

The Canadian chateau is not really a copy of French or Scottish castles, despite allusions to those forms. The chateau style, as used so prolifically by the Canadian Pacific Railway, is simpler in form, devoid of too many unnecessary turrets, cone topped towers, crenellated parapets, or stepped gables, elements that may not generally be appropriate. Similarly, a propensity to use Queen Anne style towers with cone roofs is not generally conducive to the more restrained National Parks style image, and such forms will not be encouraged.

Generally, caution must be used in designing chateau style hotels, which could, with poor proportions, details or inappropriate materials, appear to be simply grotesque rather than grand and dramatic. The design of the resort, as a sum total of buildings, but especially in the expression of the major buildings, will create a “brand” of quality and elegance, with a tasteful expression of architectural components.

Summary of Principles:

- Hotels should be based on the image of a large rustic lodge or possibly a mountain chateau.
- Finishes should include natural stone and rough timber.
Hotel Lobbies

Interior design and the standard of hotel accommodation will vary depending on the target market and on changes in standards and fashion over time. However, the lobby design and character should reinforce the National Parks theme. This may be achieved through elements such as a stone fireplace, natural wood features in the form of beamed ceilings, feature stairs, doorways, wood trim around doorways, and some paneling or cabinet work in the reception area. The lobby areas should evoke a grand impression, utilizing two storey volumes where possible and tall windows capturing the rugged outdoor scenery. View-through lobbies are encouraged.

Summary of Principles:

- Hotel lobbies should be grand in scale with wood detailing and a fireplace.
Ground Floor Shopping Areas

Hotels, Condotels and other buildings which incorporate commercial / retail shops or food and beverage services on the ground floor should provide for some access from the exterior to vitalize the streetscape.

Retail shop frontages should be limited in width on the pedestrian oriented exterior façade to provide pedestrian scale interest and rhythm to the streetscape. Restaurants and pubs would perhaps be larger, but may expand behind other street front uses.

In pedestrian oriented areas, broad expanses of solid wall should be avoided to provide for both natural light as well as pedestrian scale, interest and rhythm to the streetscape. Frequent access, transparency and a variety of uses are encouraged within all shopping areas.

Signage for shops, as elsewhere, should be front lit and in the form of or similar to banners. Signage for shops should be secondary to the main hotel signage; that is, small and tasteful. Otherwise the general signage guidelines apply.

Summary of Principles:

• Hotels should have ground floor shopping or food service facilities accessible from the outside pedestrian area.

Hotel Terraces

Exterior terraces, arcades, and verandas, whether for drinking, dining or appreciating the view, should be incorporated in hotels. They should be planned to capture sun or views of activity nodes or characteristic scenery. Requirements will vary according to the hotel size, location and orientation.

Hotel Balconies

Individual cantilevered balconies are not part of the National Parks heritage design vocabulary and are discouraged. Recessed balconies, galleries, French doors behind flat railings, covered verandas, small terraces, building protrusions and other solidly supported types of balconies and open spaces are encouraged.
Supplementary Guidelines for Townhouses

Exterior Building Character

Beyond the general guidelines for the resort area, the townhouses should be grouped together preferably in multiples of 4 to 6 units in an overall composition that appears to be a single structure with a unified form. Each unit should be identifiable through the use of individual entries and some secondary or subordinate roof form such as a gable or dormer that the owners will recognize as part of their own unit. For the majority of the townhouse units, the overall impression should be of a single large home in the characteristic architecture described in these guidelines.

Wall Finishes and Forms

Exterior finishes should include generous amounts of natural finishes, such as natural wood trim and stone finish, which will tie the neighbourhood composition of the townhouse enclave together, even if the other finishes are changed in colour or finish treatment over time by different strata councils or individuals. Windows should likewise be uniform within each grouping of townhouses.

External Spaces

Each individual unit should have a semi-private exterior space such as a patio or deck that is screened from direct overlook by the neighbouring units within the same grouping, whether that screening is achieved through building form, overhanging roof, lattice or pergola elements.

Parking

Parking should be at grade or as close to road level as possible to accommodate winter driving conditions. Garages may be either under the main body of the townhouse grouping or to the side of the grouping. Individual carports or garages as separate elements in front of the townhouse units will not be permitted.
Supplementary Guidelines for Single Family Chalets, Duplexes and Bed and Breakfasts.

In addition to the general guidelines for the resort, individual chalets should respond to the National Parks architectural theme by drawing finishes from a broader selection, which may include timbers, shingles and board siding, in addition to stone, which is always a recommended finish at least for lower levels. Metal or vinyl wall finishes are not permitted in the resort area. Stucco is permitted in limited areas, and will not be permitted as the prevalent wall finish. Roofs must be sloped and may include slate roofs, asphalt shingle roofs of approved colour, style and appearance, or painted metal roofs. Roofs must be designed for viewing from further up the mountain in terms of form and freedom from a clutter of mechanical or technological appendages. Consideration should be given to verandas and enclosed garages.

House interiors should provide for secure vermin and animal proof garbage storage, possibly in a freezer unit.

The design guidelines will apply also to permitted accessory buildings, such as garages, etc., as well as to the main buildings.
Supplementary Guidelines for Condominiums and Apartments

Apartment and condominium buildings in the resort area should be of the same form and character as hotel buildings. Condominium units in the voluntary rental pool may function as hotel units, and for this reason they are referred to as condotel units in the Master Plan. Exterior finishes for condominium and apartment buildings should be the same as for hotels. The supplementary guidelines for hotels should apply generally except with respect to lobby and balcony finishes.

Lobbies

Where most of the units in the building contain individual kitchen facilities and more than one main living space, the buildings are more likely to function as private spaces than semi-public spaces, and the need for large two storey lobby areas with fireplaces will be optional.

Balconies

Similarly, there will be a stronger case for individual balconies from the units, in which case the balcony spaces should be semi-enclosed and covered in a form similar to a verandah.
Commercial Bases

The base of the condominium buildings in the core of the resort area should contain continuous commercial spaces at grade where adjacent to a street, plaza or right of way that is intended to provide pedestrian oriented commercial outlets to respond to the Master Plan.

Garbage

In mountain resort areas, special care must be taken with kitchen waste in multi-unit residential buildings such as condominiums and apartments. Each multi-unit residential building must provide an animal and vermin proof interior space for garbage collection and transfer, located for easy access by garbage hauling contractors. Use of strong airtight metal doors and freezer storage units is encouraged, yet exterior finishes should employ a minimum appearance of metallic finishes. No external areas are to be used for the storage of garbage. Ventilation for garbage rooms should be through high level vents (such as roof vents) rather than through low level wall vents to further discourage scavenging animals.
Siting Guidelines

Siting setbacks are regulated by these Design Guidelines, but are supposed to be further defined by building envelopes to be designed at time of subdivision for each parcel that will include any building type other than single family chalets. The following guidelines exemplify the desired image of each area and create the minimum standards to be followed for approval by the DRAA.

For Hotels, Condominiums, and Apartment Buildings

The hotel form should reinforce build-to-lines where it fronts on pedestrian oriented streets or where it forms the defining wall of a public open space. Likewise, the form should stretch across all or almost all of its lot width where it is intended to help define either a street or plaza wall. Archways and subtle linkage elements should be used over most access routes to pedestrian plazas to complete the sense of enclosure. Adjacent buildings may be linked by roofed archways, portes cochéres, arcades, pergolas and the like.

The building envelope for hotels should comply with the general indications in the Master Plan, which may be amended from time to time.

The siting should be based on the main principle of reinforcing the street wall of the adjacent public space, especially at ground level. Where possible, siting should also provide for some private space by way of a terrace or park-like garden that captures the essence of the wilderness surroundings. Where a hotel or other building fronts on two or more pedestrian oriented streets, plazas or rights of way, it must build up to the approximate edge of all those pedestrian areas and provide the appropriate interface such as weather protection and pedestrian access. Where such buildings are shown in the Master Plan as helping to define only some of the bordering public space, the other building faces should overlook areas of integrated terrace and treed landscape area that includes native tree species, natural alpine ground covers, and a park-like setting.

For Townhouses

The concept is to create enclaves of townhomes that convey the ambiance of a mountain village. They should reinforce the public street edge while also providing for private space for individual units in areas away from the street-front.

For Single Family Chalets, Duplexes, and Bed and Breakfast Operations

Siting for both chalets and bed and breakfast operations should be designed so as to surround individual buildings with abundant stands of trees and to screen them from each other, and partially from the road. The individual buildings are intended to nestle into the landscape rather than to dominate the landscape. Ample setbacks should be provided on all sides of these buildings. Surface parking areas for bed and breakfast operations should be out of view of the road and parking areas additional to enclosed garages of single-family chalets should provide landscaping screening for vehicles so they are not clearly visible from the road. Driveways should curve into the site to emphasize the image of the romantic forested mountain setting that the resort is intended to convey, as
well as to partially screen the building area of the site. No more than fifty
percent (50%) of the site should be cleared for the building site, parking,
access, driveway, open space and movement during construction. In order
to facilitate this, only large building lots will be made available.

A detached garage or carport of an acceptable design may be permissible
based on the fact that almost all lots will be quite large and well treed. No other
structures, buildings or attachments of any kind will be permitted, except that
in planned portions of the development, elements designed for residential living
in condominium ownership, special parking arrangements and structures for
common use of appropriate design may be permitted.

Dwelling designs will need to be in compliance with siting guidelines and
submission for design approval must include a report on the design
contribution to the restoration of the landform and the resettlement of the
forest, as well as the relationship to the ski runs, where applicable.

Whenever possible, existing features that may exist prior to development
should be restored and reinforced after construction. The intent is to fit the
buildings to their sites in a way that recreates the natural setting, treating
the buildings as an integral component of the site, with fitting landscaping that
will create the impression of homes naturally nestled in the forest.

Homes should be located to generate the best possible views from the living
areas and to capture as much sunlight as possible. The plan is mostly for large
lots, therefore there is every opportunity to preserve privacy and to avoid
blocking views from other dwellings. Energy efficient design, including the
use of geothermal energy and water conservation measures, will be
encouraged.

For Commercial Retail and Related Areas

The siting of buildings in commercial retail areas should have no setback
from the pedestrian areas or rights of way except for small external display
areas. In retail areas the buildings may include a base arcade or other similar
building element such as a canopy, verandah, covered pergola or
overhangs to provide some pedestrian weather protection. View of the shops,
lighting and transparency, however, are also emphasized. Weather protection
should not be oppressive or obscure the commercial areas. Simple overhangs
may be preferred in a variety of locations. Whenever possible buildings
should touch each other at grade to form a continuous street wall and street
edge. Side setbacks are eliminated where feasible except where required
for thoroughfare or emergency vehicle access, in which case the building forms
may also step over that access with an arch. Buildings may also complete the
street wall image by proximity. On the fringes of the central resort area, and on
the mountainside, some buildings may be appropriate as separate pavilion
forms (for example a restaurant or refuge on the mountain, interfaith
chapel, information kiosk, ticket booth, etc.), in which case they should be
integrated into both the pedestrian environment and natural environment
as closely as possible.
Central Parking Areas

When parking areas are laid out in detail they should incorporate areas of retained natural growth and trees and be separated from roads by narrow leaf strips of well-maintained native trees and shrubs.

Guidelines for underground parking access are covered under “Screening and Enclosure of Service Area.”

Public Outdoor Activities and Spaces

The provision of outdoor space planned for different times of the year on a commercial building site or on a public area adjacent to that site, creating activities to enliven the resort, is encouraged.

In sunny areas on public plazas or squares, provision should be made for public outdoor restaurant dining during good weather, by agreement with the ownership or authority having control of that area. Likewise the building owners should cooperate with the mountain operator or mountain resort association to ensure that all public plaza areas have a program of activities including entertainment, displays, and spaces assigned for educational activities, meeting places and starting points for walking and hiking tours. Some provisions should be made at the time of individual building design to accommodate these activities and the DRAA will look at proposed designs with these considerations in mind. The building design adjacent to such public pedestrian areas should provide also for sun penetration to the public areas wherever reasonably possible.

Summary of Principles:

• Resort buildings should be linked in the central resort area and commercial pedestrian areas.

• Townhouses should be close to the road.

• Chalets and Bed and Breakfast areas should be surrounded by trees.

• Commercial areas should abut the street.

• Parking areas should be landscaped.
Fire Prevention Guidelines

Defensible Space

A surrounding perimeter that resists the spread of fire must be incorporated into building design. Combustible materials, including natural ground and ladder fuels must be removed from the area surrounding each building to create a buffer between potential fire paths and the building structure.

Building Location

Structures on a slope must be placed away from any ridge or cliff according to the geotechnical engineer’s instructions.

Roofing

Because retardant treatments are only effective for a period of time, approvable roofing materials will be limited to standing seam metal roofs, slate tiles or in some cases asphalt shingles. The pitch of the roof will be important as well, the steeper the roof pitch the harder for embers to remain there.

Vents

Vents around attics, under-eave soffit vents, and chimneys are areas where embers may enter a building. Vents and chimneys will be required to be covered with non-combustible wire mesh no larger than 3 mm (1/8 inch).

Siding and Exterior Materials

Although stucco is less fashionable for resort architecture, wood siding is susceptible to ignition by radiant heat and materials such as stucco, heavy timber, masonry and stone stand up much better under heat and exposure. For this reason stucco in limited quantities is permissible in these guidelines. Stucco may be used in combination with heavy timber and stone to achieve a traditional mountain architecture style as well as a timeless contemporary structural appearance. Stucco as the single finishing material in any elevation shall be limited to a maximum of 50% of each elevation. It is intended that other materials, such as stone, heavy timber or logs will comprise the rest of each elevation. A limited amount of fire retardant treated wood siding or equivalent material may also be permissible, but it is intended that exterior wood be generally comprising solid heavy timber or logs tightly fitted together. In an emergency, buildings will be sprayed with fire retardant. Retardant should be stored on site for emergency use.

Isolated Structures

Chalets containing decks and porches should also receive strong fire prevention attention. Firewood shall not be stored under decks or porches. The underside of decks and porches will be enclosed with non-combustible screening or siding. Elevated decks on a hillside are in the direct line of a fire moving up-slope. Terraced patios will be recommended instead.

Sprinklers

All buildings shall be sprinklered until when a local volunteer fire department is fully established and will provide the level of service expected under the B.C. Building Code.
Design Regulations

Single Family Chalet Lots

1. Setbacks

1. Setbacks for one storey houses
   a. Front yard: 5 meters
   b. Rear yard: 5 meters
   c. Sideyard: 3 meters

2. Setbacks for two storey houses
   a. Front yard: 5 meters
   b. Rear yard: 5 meters
   c. Sideyard: 3 meters
   d. Sideyards are a minimum of 3 meters each but the combined total of the sideyards is to be 8 meters.

2. Height
   a. The height of the building shall not exceed 2 storeys plus a basement.
   b. The maximum height permitted for the principal building is 8 meters.
   c. The maximum height of accessory buildings, where permitted, is 4.5 meters.

3. Highest Building Face Envelope
   a. The highest building face envelope is to be established by drawing a line up to a height of 6.7 meters from the lowest of the natural or finished grade at any point along the exterior face of the building and then in towards the building at 45 degrees.
   b. Any portion of the building that falls outside of the line described in 3.a. is considered to be outside of the highest building face envelope.
   c. The top plates of the exterior walls must be within the highest building face envelope but any portion of the roof structure on top of this plate is exempt from the calculation.
   d. A maximum total of 1/3 the width of the building can be exempted from falling inside the envelope.

4. Site Coverage
   a. Site coverage for all buildings on the property is not to exceed a maximum of 35%.

5. Detached Garages
   a. Detached garages, including those joined to the main building by way of a covered walkway or other exterior construction, are permitted as per the Design Guidelines.

6. Carports
   a. Carports open on all sides and not joined to the main building at the roof are permitted, provided they do not encroach into the setbacks given for the main building.
Townhouse Lots

1. Setbacks
   a. Front yard: 5 meters
   b. Rear yard: 5 meters
   c. Sideyard: 3 meters

2. Height
   a. The height of the building shall not exceed 3 storeys.
   b. The maximum height permitted for the principle building is 11 meters.

Condominium and Apartment Lots

Building envelope and siting is to be in accordance with individual building envelope drawings developed for each lot and approved by the DRAA prior to subdivision.

Commercial Lots

Building envelope and siting is to be in accordance with individual building envelope drawings developed for each lot and approved by the DRAA prior to subdivision.

Bed Unit Limitations for all Buildings

Size of buildings must comply with the maximum number of room and bed unit allocations for each site as per the approved Master Plan.
Definitions

**AVERAGE FINISHED GRADE** - shall be the average of the individual finished grades around the outline of the proposed building located on the site. It can be established as follows:

For each face of the proposed building, the average face grade (AGF) can be established by adding the grade at each corner of the proposed building face and dividing by two (assuming a constant change in grade). The length of the proposed face, measured horizontally, is the length of face (LF).

Example: Assuming a building with four faces (L1 to L4)

\[
\text{Average Finished Grade} = \frac{(AGF_1 \times LF_1) + (AGF_2 \times LF_2) + (AGF_3 \times LF_3) + (AGF_4 \times LF_4)}{LF_1 + LF_2 + LF_3 + LF_4}
\]

**AVERAGE NATURAL GRADE** - shall be the average of the individual natural grades around the outline of the proposed building located on the site. It can be established as follows:

For each face of the proposed building, the average face grade (AGF) can be established by adding the grade at each corner of the proposed building face and dividing by two (assuming a constant change in grade). The length of the proposed face, measured horizontally, is the length of face (LF).

Example: Assuming a building with four faces (L1 to L4)

\[
\text{Average Natural Grade} = \frac{(AGF_1 \times LF_1) + (AGF_2 \times LF_2) + (AGF_3 \times LF_3) + (AGF_4 \times LF_4)}{LF_1 + LF_2 + LF_3 + LF_4}
\]

**BASEMENT** – shall mean a storey, the floor of which is more than 300mm but less than one half (1/2) its height from floor to ceiling below the lesser of either the average natural grade elevation, or the average finished grade elevation, calculated around the perimeter of a building or structure at or directly below its outermost exterior walls, but excluding uncovered exterior decks, patios and stairs.

**BED UNIT** – shall mean one of the permitted number of beds in each building, according to the Master Plan and to the provisions of the Master Development Agreement, as defined in the Commercial Alpine Ski Policy (CASP), recently renamed the All Seasons Resorts Policy (ASRP), of the Province of B.C.

**BUILDING** – shall mean any structure used or intended to be used for the shelter, accommodation, assembly or storage of persons, goods or chattels.

**DWELLING, MULTIPLE FAMILY** – shall mean a building comprised of three (3) or more
dwelling units. This definition will include townhouses, apartments, condominiums and condotels.

**DWELLING, SINGLE FAMILY CHALET** – shall mean a detached building designed for use exclusively as a dwelling unit and as a second home for the purpose of an extended stay for vacations by the owner(s) or by rental guests, or for residing at the resort.

**DWELLING, DUPLEX** – shall mean a building designed as two separate dwelling units structurally adjoined side by side or one above the other.

**DWELLING UNIT** – shall mean two or more rooms used or intended to be used together for the purposes of one or more persons staying overnight at the resort and shall include at least one living room, one kitchen or kitchenette and one bathroom.

**FINISHED GRADE** - shall mean the final ground level at the outermost exterior walls of the building or structure after the site is fully graded and landscaped.

**GARAGE** – shall mean a building or part thereof used or intended to be used for the shelter, storage or repair of motor vehicles but shall not mean a Gasoline Service Station.

**HEIGHT** – shall mean the vertical distance measured from a point representing the lesser of either the average natural grade elevation, or the average finished grade elevation calculated around the perimeter of a building or structure at or directly below its outermost exterior walls, but excluding uncovered exterior decks and outdoor swimming pools, patios, stairs, to:

i) the highest point of a building with a flat roof,
ii) the mean height line between the highest point of the building and the ceiling immediately below on buildings with pitched roofs,
iii) the mean height line between the highest point of the building and a point 2.5 meters above the immediate floor below on buildings with pitched roofs without ceilings, and
iv) the highest point of all other structures.

In calculating height in accordance with (i) through (iv) above, mechanical equipment, including the enclosures thereof, and skylights over 600mm in height shall be included.

**HIGHEST BUILDING FACE** – shall mean the building plan elevation, of the four building plan elevations, (front, rear, both sides) which has the greatest vertical distance between the highest average facing eave or parapet on the elevation and the lower of the average finished or natural grade along the base of that building elevation.

**HIGHEST BUILDING FACE ENVELOPE** – shall mean the envelope described by a series of lines drawn up the exterior building face from ground level at all points along the face showing on the elevation plan drawing for the vertical height specified for the
applicable type of structure, thence inward over the building at right angles to the plane of the building face at an angle of 45°. The envelope shall apply to two thirds (2/3) of the length of the building face.

For purposes of this definition, ground level, except for ground in front of a garage door, means the lower of the finished or natural grade, exterior building face means the outermost face of the building projected to the ground below but excludes decks, eaves and projecting decorative features not enclosing the interior of the building. The ground level in front of a garage door shall be interpreted as a line joining the ground level at each side of the garage door.

**LINE OF BUILDING, FRONT** – shall mean the line of building which faces the front property line.

**LINE OF BUILDING, REAR** – shall mean the line of building which faces the rear property line.

**LINE OF BUILDING, SIDE** – shall mean the line of building which faces the side property line.

**NATURAL GRADE** – shall mean the undisturbed ground level formed without human intervention or, where the undisturbed ground level cannot be ascertained because of an existing building or structure, the undisturbed existing grade.

**SETBACK** – shall mean the distance between the property line and the building line.

**SITE COVERAGE** – shall mean the percentage of the site covered by buildings and structures, including accessory buildings and structures, but excludes decks built above ground level or portions of decks built above ground level not exceeding a height of 600mm above the higher of natural or finished grade below such deck, and eaves and roof projections.

For calculation, where decks, including pool decks, meet the above requirements in terms of grades abutting the perimeter of such decks and would only require backfilling of the grade below such decks to comply, they shall be excluded from the calculation notwithstanding the absence of such backfilling. However, the grade abutting such surfaces must comply with the Bylaw so that the height does not exceed an apparent height of 600mm. The amount of excluded deck area located above areas where backfilling is deemed unnecessary shall be calculated by drawing a line or lines connecting the points on the perimeter of such decks where the abutting grade complies with this section and computing the area within that line where backfilling would have produced compliance. In no instance shall this exclusion for areas not backfilled include those portions of decks constructed above a height of 1830mm over the natural grade previously existing below the deck.

**STOREY** – shall mean the space between two floors or between the floor and roof next
STRUCTURE – shall mean anything that is built, constructed or erected, the use of which or presence thereof requires location on the ground or attachment to something having a location on the ground and shall without limiting the generality of the foregoing include all retaining and non-retaining walls, and swimming pools.

TOWNHOUSES – shall mean attached, three (3) storey or less, self-contained dwelling units with an internal stairway in each unit connecting between the main floor and upper floor.

YARD – shall mean that part of a site or lot which is unoccupied and unobstructed by buildings or parts thereof provided, however, the following may occupy, obstruct or enter into the yard area:

- ordinary projections, not exceeding 600mm, of sills, belt courses, cornices and eaves or not exceeding 1200mm where the distance to the property line from the projection remains at least 1200mm.
- ordinary projections, not exceeding 600mm, of chimneys in front yards and, for an overall or where more than one chimney encroaches a combined length not exceeding 3 meters, in sideyards.
- ordinary projections of chimneys in rear yards.
- underground parking structures.
- motor vehicle ramps within rear yards providing access to parking structures.
- accessory buildings.
- ordinary projections, not exceeding 1200mm, of uncovered and unenclosed steps attached to a building in front yards.

YARD, COMBINED SIDE – shall mean the sum of the two side yards. These two side yard measurements are established by the minimum distance from the building line to the side property line.

YARD, FRONT – shall mean a yard extending across the full width of a site or lot from the front property line to the front line of building.

YARD, REAR – shall mean a yard extending across the full width of a site or lot from the rear property line to the rear line of the building.

YARD, SIDE – shall mean the yard between the side property line and a line extending along the side of the property from its front property line to its rear property line at a distance from the side property line equal to the closest point that the line of the building comes to that side property line.
Interpretation

These Guidelines have been prepared for the proposed development of the mountain resort and should be considered as a permanent design direction of its Master Plan. They include mandatory rules and recommendations offered to the design professionals so that they know what is required to achieve design approvals from the DRAA.

The Master Plan referred to in these guidelines is the Ski Area Master Plan under the Commercial Alpine Skiing Policy (recently renamed All Seasons Resorts Policy – ASRP) as approved or adapted from time to time by the Province of B.C. through the appointed ministry or agency, as the case may be. These Guidelines have been prepared reflecting the intent of the Master Plan, but in the event of conflict between these Guidelines and other constraints of the Master Plan, the Design Guidelines must prevail as a more detailed document.

A Master Development Agreement between the Province and the developer is based on the Master Plan, and like the Master Plan may change from time to time. Interpretation of these Guidelines is up to the Design Review and Approval Authority, the DRAA established in accordance with section 4.3.10.1 of the approved Master Plan. These guidelines should be read in conjunction with the terms of related restrictive covenants, and as part of the Master Plan and of the Master Development Agreement for the creation of the project known as Jumbo Glacier Resort.