# Construction Requirements and Recommendations

#### PRESENTED BY SLPOA

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#### **Overview**

ver the years members of the Serene Lakes Property Owners Association have experienced the gentle and not-so-gentle hand of Mother Nature as it caresses their cabins. In the event you haven't observed a winter at Serene Lakes, the advice in these pages will go a long way toward making the experience a happy one. If, after reading this document, you have additional questions please feel free to e-mail or write. We'll do our best to get you an answer.

At the end of the document we have included addresses and phone numbers for agencies and companies (including SLPOA) that may be useful during and after your construction activities. We've also included a SLPOA Membership form. Please join us; we'd love to have you as a member.

## Requirements

Let's start with what's required in a construction project in Serene Lakes. These requirements apply to any development on any lot, to both new construction as well as additions and alterations, and includes snow tunnels, covered walkways and garages for all Ice Lakes (our original name) and Serene Lakes subdivisions.

Refer to <u>Placer County Zoning Ordinances</u>, <u>Codes and Standards</u> and <u>Placer County code 17.54.140</u> for up-to-date details on Placer regulations and setbacks for property lines.

SLPOA will vigorously oppose any request to Placer County for a variance from setbacks and other County regulations that has not been first presented to the SLPOA Design Advisory Committee. Due to the heavy snow fall and limited snow storage in Serene Lakes SLPOA will oppose any request to Placer County for a variance from setbacks and other County regulations that has not been first presented to the SLPOA Design Advisory Committee.

#### **Submittals**

To assist us to assist you, you may provide the SLPOA Design Advisory Committee with a copy of your building plans including a plot plan. Digital copies are preferred, usually in a PDF file format. We will review your plans and respond with a review document with any suggestions or concerns we have. Design review will take a maximum of 30 days although most reviews are completed within a week of submission.

Your plans and specifications should include:

- All exterior elevations (4 views minimum) with ground lines shown. Where finish grades are different from the natural grade show existing grades as a dotted line.
- The type and color of roofing material.
- The type of exterior siding and color.
- We recommend exposed foundation walls should be painted earth tones or covered with siding if the exposed portion is more than an average of two feet in height on any one side. Exceptions are allowed where a decorative or textured concrete block, stone veneer or special concrete treatment is to be used.

#### • A plot plan showing:

Trees and rock outcroppings to be removed (if any).

Trees larger than 6 inches in diameter and large rock outcroppings to remain.

Lot property lines, lot number, subdivision unit, adjacent streets and local street address (if known), easements (including greenbelt) if any, building setbacks with distances from the property lines, North arrow and scale used.

Contours at two foot intervals. Sectional views for proposed cuts and fills (if any).

Location of utilities, water, sewer and underground electrical service.

Location of propane tank (if any).

Location of culverts and driveways. Encroachment permits must be obtained from Placer County prior to the construction of driveways or culverts.

Location of any natural wetlands or stream channels, including intermittent streams.

Location of the Placer County required bear box for garbage.

#### Send the above to:

SLPOA - Serene Lakes Property Owners Association PO Box 669 Soda Springs, CA 95728

OR e-mail the digital copies to: <a href="mailto:admin@slpoa.com">admin@slpoa.com</a>

#### What do we do with this information

Well, we are not acting as the arbiters of "cabin look correctness". We aren't the "style police".

First, we look for design features that might cause you or your neighbors problems - the same kinds of things that the Recommendations deal with - a roof that dumps its load of snow directly on your deck or driveway, a cabin that sits so low that there will be a serious problem with access, or a propane tank that may be inaccessible in the winter.

Second, we look at the positioning of the cabin with respect to natural features and greenbelt areas. If the plan calls for significant removal of trees, grading or disturbance or wetlands or streams, we may make suggestions to help minimize damage to the environment and the amount of work you have to do. Third, we look for potential problems with snow storage from the driveway and roads.

Finally, we look at the materials you specify for the roof and exterior finish. Will they work well under the severe conditions on the Summit or will they be a maintenance nightmare? When we're done we provide you with our comments and suggestions. The process provides you and your neighbors with a *FREE* evaluation of the plan before the project is so far along that changes become real expensive.

You get the benefit of the experience of people who have lived in the area for years in a structured and rational way.

#### **Recommendations**

You'll enjoy Serene Lakes, especially in the winter, a lot more if you take these recommendations into consideration while you're planning and building your cabin. Remember, the less time you spend moving snow and repairing damage, the more time you have to ski, snowshoe, hike, swim, canoe, and sail or just relax.

If you are using an architect, especially one not familiar with our area, you may want to keep these recommendations in mind as you review the plans. We urge you to choose the designer of your cabin with care. The average snowfall at Serene Lakes is on the order of 450 inches - that's nearly 40 feet! That much snow poses some serious stresses for a building and some unique problems in the placement of doors, decks and the design of rooflines.

## General Design Considerations Aesthetics

Design the structure for mountain weather and in keeping with the environment.

#### **Home Hardening**

We hope that we never have to experience the devastation of a forest fire. That being said, it is important to design with being prepare for wildfire and harden your home.

There are three ways your home can be exposed to wildfire:

Direct flames from a wildfire or burning neighboring home;

Radiant heat from nearby burning plants or structures, and

Flying embers. Flying embers from a wildfire can destroy homes up to a mile away and are responsible for the destruction of most homes during a wildfire.

Check out <u>Placer Alert Home Hardening</u> site to learn more about how you can build in preventative measures to help increase your chances of surviving a fire threat.

#### **Living Area**

Consider placing your main living areas on the upper level for more light, better views and easier access during the winter months. During a normal winter we have 10 to 12 feet of snow on the ground, more where the snow from your driveway has been added to the natural depth. You can imagine what your view will be from a ground floor living room!

#### **Dormers**

Avoid gable type dormers (known locally as "glacier makers"). The snow will build up between those beautiful gables and not slough off. Eventually it turns to a mass of ice and exerts tremendous sideways pressure on the dormers. Then, in the spring, that not-so-little glacier comes crashing down on your driveway or deck (or, worse yet, you, your dog or your car). Keep your roof line as simple as possible.

Install the chimney and other vents as close to the peak or ridge of the roof as possible. Install a snow splitter to minimize sliding snow damage. As a preview, look at roofs as you drive around Serene Lakes. Those missing chimneys, stovepipes and smashed vents are proof of the power of 450 inches of "light, fluffy snow"!

Provide sheltered storage for firewood. It's hard to get enthusiastic about a romantic fire when you have to dig through 10 feet of snow to feed it.

Disturb existing soil and vegetation as little as possible. Both are very fragile and take a long time to recover. The Sierra Lakes Water District has a document which includes recommendations for limiting erosion during construction. Lakes such as Serena and Dulzura may be described as "meadows in the making". Over time, erosion of the surrounding soils fills the lakes, creating a beautiful mountain meadow. However, we'd like to delay that moment as long as possible! You can help by stabilizing your lot during and after construction.

#### **Second Story Access**

With 10 to 12 feet of snow on the ground you may want to provide access at the second story level. While your driveway may be cleared by a plow service that last six feet will be difficult since your shovel or snowblower is snug and warm inside the garage! That same access will serve you well as an emergency exit.

## **Deck and Stairway Locations**

Picture four feet of snow on your roof. Now picture that same amount of snow immediately after it moves from your roof to your deck, stairway or driveway. Remember, that's four feet of snow multiplied by the area of your roof that sheds onto those areas. At minimum it'll make using those areas impossible until you shovel it off. Most likely the snow will remove things that get in its way - like your deck rails (if not the deck itself!). We strongly recommend that your roof design take into consideration the location of your doors, decks and driveway. Decks and landings should be sheltered by a roof overhang. The roof should never shed onto the driveway for your and your guests' safety. During the other three seasons those roof overhangs are pretty nice at keeping the rain from drip, drip, dripping down your collar.

## **Railings**

During heavy snow years the weight of the snow pack will break 2X6 boards and bend 1½ inch steel pipe. We previously recommended making the railings removable. However, county ordinances prohibit the use of removable railings as a safety hazard. You should shovel (or contract with someone to do the shoveling for you) your deck and railings throughout the winter.

## **Roofing**

Metal roofing provides a surface that will allow snow to slough off rather than building up. It also provides good protection from fire. The roofing you choose should have a matte finish (not shiny). Steel roofing panels seem to hold their finish much longer than aluminum. If your roof design incorporates a prow or bow shape at the rake edges metal top-set edge flashing should not be used. It will be torn off in the first winter as the snow pack slides off the roof. If you ever take a close look at a metal roof you'll notice that the snow pack can catch on an area as small as the screw heads that fasten the roofing to the roof deck. You can tell because some of them are sheared off or pulled out of the roof deck.

Alternatives to metal roofing include a snow-holding, "cold" roof and a partial composition (asphalt shingles) roof. Of late some have tried a partial composition roof with varying levels of success. Difficulties include ice buildup along the eaves leading to roof leaks, shingle failure, especially where snow loads get high, and decreased roof covering life. Drive around and look for cabins with a composition roof. Introduce yourself to the owners and ask about their experiences.

#### **Setbacks**

Placer County lists the minimum setbacks. Folks, those are truly minimums! We've tried to describe the damage snow can do as it falls off your roof. Those same forces are at play when your house is so close to your neighbors that the snow has no place to go. Two houses too close together have the same effect as two dormers side-by-side. The snow builds up between them and, if the snow fills the area between the houses, the roof can no longer slough the accumulated snow. If the weight becomes too much doors won't close and windows jam. The answer is to have your roof shoveled - at a price. Further, if you or your neighbor happens to have a deck or walkway in the line of the falling snow it'll probably be crushed. So don't push that building envelope to the absolute maximum, leave a little safety margin.

Of late, Serene Lakes has been experiencing another side effect of cabins completely filling the lot, leaving only minimum setbacks- a lack of snow storage. The snow from the road and your driveway has to go somewhere. As Serene Lakes approaches build out we're just plain running out of places to put the snow. The county plow folks have been doing a great job of trying to handle it but they need our help. If your lot is 70 feet wide and you have a 2-car driveway there is effectively only about 46 feet by 30 feet (the county setback) in which to store the snow from your driveway and the road in front of your house. That's 1,380 square feet to store 4,220 square feet of snow-covered surface or 3 times the depth of snow that falls. Remember that beautiful view out your front window? Wonder where it went in the winter?

Some people apply for variances from the 30-foot minimum set back and wonder why SLPOA opposes them. It's simple physics- we MUST have room to store the snow from the roads or the county will

- A) raise our taxes to pay to have the snow hauled away in trucks or
- B) quit plowing the streets.

Option A is very, very, very unlikely and would be REAL expensive. Option B is much more likely. For all of those reasons, when you're laying out your cabin give some thought to snow storage. Don't build to the maximum footprint — be respectful of your neighbor, be smart about the loads you put on your house and be sure to leave room for snow storage. If you don't you may have the pleasure of owning a very large cabin that you have to ski to in the winter. Of course, that would free up the garage for guest accommodations during the winter...

#### Orientation

If possible orient your cabin so the roof is in a predominately North/South direction. This will help avoid uneven loading of your roof when the sun melts the snow off one side. When the lot requires that the roof ridge run East/West the design should incorporate a number of cross walls built as shear walls. A shear wall has plywood or other shear resistant material under the sheetrock to form a rigid element that can resist sideways forces.

#### **Window Guards**

Windows below the eaves may be susceptible to breakage from falling snow and ice. You may wish to use window guards or shutters over those windows. The guards also act as protection from ice and rocks thrown by county or private snow blowers. You can use spaced horizontal boards set in frames, shutters, individual boards in tracks or Plexiglas sheets. Individual boards or removable panels can be stored during the summer months.

Vertical wooden tracks at the sides of the windows or shutters can remain in place throughout the year and should match the cabin trim color.

#### **Plumbing**

To prevent the freezing of water pipes during the winter months slope all water lines to a low point and provide a valve there for draining the lines from within the cabin. Avoid installing pipes in exterior walls. Install a pressure relief valve to minimize extremes in water pressure. You should determine whether back-flow prevention devices are necessary for your cabin.

## **Propane Tank**

If you will be using propane for heating or cooking you're going to have a propane tank. Pick the location for the tank carefully. While appearance may be your first concern you should consider safety and winter access also. The tank should be placed so that should a leak occur the propane (which is heavier than air) won't flow into your cabin. Be a good neighbor and try to place it so that a leak won't flow into their cabin, either. Because of the number of fires and explosions involving propane tanks in mountain areas, the Fire Department has increased their scrutiny of propane tank placement and marking, the protection necessary for the regulator and signs indicating the location of the outside shut off valve. Check with the Fire Department, Placer County and your propane supplier for the latest regulations. Also, see the Fire Safety pages on the SLPOA web site for the latest ordinances and propane safety rules.

In the middle of winter, when your 500 gallon propane tank runs dry, what do you do? Well, first, you dig it out from under 12 feet of the heaviest snow known to man - or at least to you. You see, the propane suppliers don't fill tanks they can't get to and their prices don't include snow removal. So, when you're picking that perfect tank location, give some consideration to your back.

Finally, make sure the pad the tank sits on will not sink into the ground under the load of the tank, propane and snow. If it does you'll have, at minimum, a broken propane line and at worst a large fire. Most problems have occurred when two small pads at the ends of the tank are used. A single pad slightly larger than the horizontal dimensions of the tank works well in most soils.

As a result of the emergency resulting from propane leaks during the winter of 2010-2011 people are increasingly switching to buried propane tanks. Consult your propane supplier to determine whether your lot is suitable for a buried tank.

A device known as a "regulator" is installed between the propane tank and your house to control the pressure in the lines leading to your appliances. Regulators are subject to freezing if left buried under snow for long periods. It should be placed so that it is protected from being covered or broken by accumulating snow and its location prominently marked for the Fire Department.

## **Site Drainage**

A number of lots in Serene Lakes have less than perfect drainage. Some of them fit the technical definition of wetlands. Have an engineer evaluate the foundation design for protection from drainage and frost heave damage. You may wish to have the first floor raised to avoid drainage and flooding. Flooding sometimes occurs even on level and high ground when the snow pack freezes and forms ice dams.

#### **Off Street Parking**

From November 1 to May 1 there is absolutely no on-street parking in Serene Lakes. If you intend to use your cabin during the winter you must provide off-street parking adequate for you and your guests' cars. Be sure to park well off the road to avoid damage from snow removal equipment and from thrown or pushed snow.

What's the first sound you hear after your plow service clears your driveway? The gentle roar of the county plow as it neatly places a 3 foot berm across your nice clean drive. That berm is

your responsibility to clear. You might want to park one car behind the other - that way you only have to clear one lane to get out of the drive.

## **Night Lighting**

Since Serene Lakes, thankfully, does not have street lights lighting your drive, it becomes a homeowner responsibility. Install light(s) to illuminate your driveway using a photo cell control that turn the lights on at night and off during the day. In fact, the best combination is a floodlight with a photo cell device and motion detector. That way you don't pay for lighting the driveway all night and we preserve the wonderful views of the night sky. The motion detector should be set so it "sees" movement in and just outside of your driveway. That lets the snow removal crews know where your cabin is when they're blowing snow off the streets. It tends to extend the life of your front windows when the blower operator can see what's in the way of all that snow they're blowing.

Sodium and mercury vapor lamps, while inexpensive to operate, are overkill for the amount of lighting required. Unless they are installed with a lot of shielding they spill into the night sky and shine into you and your neighbor's windows. For those reasons we recommend you not use those fixtures.

For additional information, visit the California Chapter of the <u>International Dark-Sky Association</u>.

#### **Greenbelt Easements**

If your lot has a greenbelt easement, the easement area must be preserved in its natural state. No portion of your cabin may project into this easement and no trees removed from it. If you feel a tree in a greenbelt area may be a hazard, please consult the Architectural Review Committee for the procedure to have the hazard removed. Special permission must be obtained prior to removing any tree within greenbelt areas.

#### Bears and Other Things that go Growl in the Night'

Yes, we have bears and mountain lions and coyotes and a bunch of other wildlife in Serene Lakes. They sometimes develop a palate for garbage. Domestic dogs have also been known to relish a snack from your ultimate leftovers. All of those create a mess as well as a danger. So, when we require rubbish and trash to be removed regularly, Placer County now requires the installation of a "bear box" for storage of garbage until it can be picked up. For your own safety and health you should contract for garbage service or pack your trash home with you. Garbage pickup is (currently) on Monday morning. If you don't have a bear box be sure you use a secure container—not just trash bags. You should place your garbage cans well out of the range of county and private snow blowers during the winter. If it gets covered by snow and the blower ingests it—well, it gets blown back onto your lot.

Placer County has (and enforces) a leash law. So please keep your pets under control. SLPOA maintains dispensers with disposable plastic bags for cleaning up after your pet at several locations around the lake. If you forget to bring your own on your walk with Rover feel free to take as many as you need. Please pick up your pet's poop - the lakes are your drinking water

## **Contact Appendix**

Here are addresses and phone numbers for other agencies you may need to contact.

#### **Serene Lakes Property Owners Association, Inc.**

(SLPOA, pronounced 'slowpa')

Address: PO Box 669 Soda Springs, CA 95728

Website: slpoa.com

Email Only: <u>admin@slpoa.com</u>

#### **Placer County Planning Division**

Location: Auburn CA 95603 Phone: (530) 745-3000

Website: https://www.placer.ca.gov/2845/Planning-Service

#### **Placer County Building Services**

Auburn Phone: (530) 745-3010 Tahoe City Phone: (530) 581-6200

Website https://www.placer.ca.gov/2845/Planning-Services

## **Placer County Tax Assessor Information**

Query this site with a parcel APN to get county information about a lot and the assessors base map

Website: https://www.placer.ca.gov/5866/Property-Details

## **Placer County Building Inspector**

Address: 565 W Lake Blvd. Tahoe City, CA (536) 581-6200

#### **PG & E**

Phone: (800) 743-5000

Website: https://www.pge.com

#### **Sierra Lakes County Water District**

Address: PO Box 1039 Soda Springs, CA 95728-1039

Phone: (530) 426-7800 Website: https://slcwd.org

#### **Optimum (Cable TV)**

Location: Truckee California, CA

Phone: (530) 550-3900

Website: https://www.optimum.com/?welcome-to-optimum

#### **Truckee Fire Protection District**

Location: Truckee, CA, Phone: (530) 582-7850

Website: https://www.truckeefire.org

#### **Propane Suppliers:**

Amerigas (530) 587-3578 Truckee Tahoe Propane-Truckee (530) 587-4730 JS West-Colfax (530) 346-6608 Suburban Propane (775) 359-8383

#### **Garbage/Trash Removal:**

#### Tahoe Truckee Sierra Disposal Company

Address: 645 W Lake Blvd. Tahoe City, CA

Phone: (530) 583-0148

Website: https://www.waste101.com

For other services please see the "Local Services" under the Community Tab of the <u>SLPOA website</u>. You will need to be a SLPOA Member in order to access this information.