THE LODGE AT EDGEWOOD TAHOE

# NVB18030
The Lodge at Edgewood Tahoe is the first modern destination lodge directly on the shore of Lake Tahoe. Developed by descendants of the Park family, who acquired the site and surrounding lands (including the historic Friday’s Station Pony Express stop) in the 1800’s, the Lodge is the culmination of an extensive redevelopment of the 240-acre Edgewood Tahoe Resort. Among the owners’ goals was to create luxurious accommodations within the authentic Tahoe forest setting, directly adjacent to the many amenities available in South Lake Tahoe itself. By doing so, they believe the Lodge will add fuel to an economic and public-image renaissance of the entire South Lake Tahoe community, in turn encouraging other area landowners to re-invest in their properties resulting in greater prosperity for all.

The Lodge was designed to embrace the feeling of Grand Lodges of the American West, blending traditional elements of Tahoe landmark architecture (tall, steep roofs, multiple gables and dormers, divided windows, massive vertical elements faced with local granite, abundant wood surfaces and accents), with contemporary transparency and sparseness of line, to both preserve and enhance the visual typology which is one ingredient in Tahoe region’s visual identity.

Nestled among towering Jeffery Pine trees, the Lodge also complements the existing and treasured Edgewood Clubhouse building in a manner that is fresh rather than imitative. Early in design, the project team identified a minimum number of the existing trees on the site which could be displaced, and mitigated by new plantings. The building’s footprint was then carefully tailored to preserve the remainder, including the most significant specimens. As a result, this 169,000 SF building fits the site so well that some grand opening guests assumed it had been in place for decades and was celebrating a remodel rather than a debut.

Opened in the summer of 2017 at a cost of approximately $76 million, and offering 154 guest rooms and suites, the Lodge overlooks nearly a half mile of shoreline, with the panoramic views of the Sierra Nevada Range beyond. Aimed to expand the resorts already successful events-site business, its program includes a signature restaurant, cocktail bar, café/snack shop, Adventure Center, kids camp, meeting rooms, treatment spa, and fitness center. Outdoor amenities include a patio grill and bar, pool and hot tub, multiple fire features and gathering spaces, and an expanded beach with public access, and a boat dock on Lake Tahoe. As befits a landmark, the carefully-choreographed entry sequence begins beneath a monumental cantilevered porte cochere roof, then extends along a stone-and-steel covered walkway, through a two-story glazed vestibule to culminate in the Living Room, a monumental space with 38’ tall floor-to-roof windows overlooking a generous paved terrace to the lawn, beach, Lake Tahoe, and to the mountains beyond.

Given the delicate beauty of the Tahoe Basin, it should come as no surprise that this project was required to demonstrate extensive environmental benefits to gain entitlement. Working over a period of seven years with TRPA - the agency charged with preserving the environment of the Basin - the owners reached agreement to construct extensive water-quality improvements that would effectively buffer and treat storm-water runoff from the nearby urban core before it enters the lake. Those Threshold Improvements were built by the owner, at a cost in the tens of millions, prior to starting construction of the Lodge. LEED Silver Certification was another program requirement, final review and processing of which is currently near completion.
The sustainability story of The Lodge at Edgewood starts not with design of the building, but with the project’s goals, site and scope.

Located within an existing golf course, the newly constructed Lodge did not displace any natural site or ‘greenfield’. As part of its entitlement, the owners proposed and reached agreement with the regional planning authority to improve buffering and treatment of storm water which flows from the nearby casino district onto and through the Edgewood Golf Course. Working with the landscape architect and various civil and environmental engineering firms, the team developed a menu of ‘Environmental Enhancements’, including changes in stream courses and shapes, improved holding ponds, landscaping, and grading. While the most significant environmental benefit of the project is water quality, others include enhanced vegetation, habitat, soil, and fisheries, with the result that one environmental official publicly described it as ‘an environmental project with a hotel attached to it’.

The Edgewood Lodge building is LEED Silver Certified, targeting 50+ credits including several for Innovation in Design and Regional Priorities.

A major contributor to energy efficiency and LEED certification is the use of a sustainable cooling source for the building. The surrounding community obtains its water supply from the lake via a system operated by a small local utility company. This system includes a large-diameter intake pipe resting on the lake bottom and running up to a pump-house on the shore. That pump-house pushes the water uphill to a storage tank, from which it flows down by gravity to serve commercial buildings and homes. During design, IEI (Interface Engineering Inc., the project MEP engineers) proposed we install a heat exchanger on this pipe, expelling heat from the building’s cooling water to the utility intake water. While this raises the city water temperature by only a small amount, it can cool the entire lodge building and eliminate the need for a cooling tower or condensers, thus avoiding nearly all the energy use of a normal AC system, as well a substantial equipment cost. Since a large portion of the utility’s water is eventually heated for domestic use, raising its starting temperature in this way is actually predicted to be a further net energy saver.

Initial calculations by IEI determined that heat exchange with this intake pipe would provide substantial cooling, depending on how many hours a day the water was actually flowing and the temperature of the water, which might fluctuate with the seasons or weather. Further analysis of intake temperature and pumping schedules, along with the utility’s concern that a continuing drop in the lake’s surface elevation due to the ongoing drought would result in an unacceptable risk of contamination of the intake pipe, led the team to study extending the intake farther into the lake. After extensive negotiations, the utility and state water board agreed to allow our project to extend the intake pipe, thus addressing both our function and their concern about low lake level.

In order to accomplish this, sections of new 24” diameter HDPE (High Density Polyethylene) pipe were sequentially joined on the beach then pushed out onto the water’s surface to be temporarily supported with buoys and rafts. Once all 3257 ft of pipe had been fused into a single, watertight tube and floated into place, the entire length was carefully lowered into position on the lake bed, leaving the intake nearly 600 ft below the surface, ensuring a pure and temperature-stable water source for both the Lodge and the water utility’s customers. This system will cool the entire 170,000 sf building with no fossil fuel consumption and virtually no outside power for the life of the building. It is expected to pay back inside of 10-years.
In order to meet the requirements for LEED Silver Certification, the Lodge’s design and construction identified Indoor Environmental Quality credits IEQx3.1, 4.1, 4.2 and 6.1. Specifications called for low- or no- VOC materials, adhesives and coatings, all of which were verified through the construction submittal process (and through the LEED application). Paints and stains all comply with the applicable standard for each type of finish (paint, stain, lacquer; flat, semi-gloss, glossy sheen; floor finish, etc) and include Sherwin Williams’ PVA and ProMar Zero VOC series products.

Carpet installation incorporates Mohawk’s NuBroadlok adhesive and edge sealer, Enpress PSA Adhesive, XL Brand Bold Stix Adhesive and Mat’s Inc’s. Perma Bond Adhesive.

Resilient flooring and base includes Dickson woven flooring which meets California Specification 1350 for school use, adhered with Mapei Ultrabond Eco Fix.

In addition to material specifications as noted above, each guest-room has its own heating/cooling fan coil unit with electronic thermostat (suites have multiples), affording full occupant control. Lighting and draperies are also independently controllable, facilitating environmental quality (IEQc6). Programmable and dimmable pre-set lighting and motorized window coverings in main public spaces, as well as individual task lighting at work stations in administrative office areas add to the building’s programmable spaces. The building’s shape and the location of guest rooms were carefully developed to maximize the number of rooms with lake views. Window areas were maximized - to the extent allowable while also meeting TRPA requirements for building form and height - to further enhance indoor environmental quality.

Regarding diversion of materials from the waste stream, the Lodge’s design and construction identified Materials and Resources credits MRC2 and MRC5.

**Responsible treatment of construction waste was facilitated by the local waste utility, South Tahoe Refuse, which accepts fully-co-mingled waste and separates recyclables downstream at its own transfer facility.** This helpful facilitation also applies to waste from ongoing Lodge operations, continuing the responsible waste treatment plan for years to come. To further help reduce waste, the Lodge’s restaurants, bar, cafe and room service all use washable dish-ware and utensils, avoiding waste associated with disposables.

In order to avoid obstructing the natural flow of below-ground water, the Lodge has no basement and its ground floor is situated above previous existing grade. The substantial quantity of fill necessary to achieve this was obtained through a simultaneous re-grading of several holes of the surrounding golf course. Thus the project required neither export of excavation spoils, nor import of structural fill, either of which would have resulted in significantly greater energy use and pollution.

Project stonework uses rough granite, quarried approximately 20-miles from the project site. Boulders for landscaping were gleaned from the owner’s property across Highway 50 (within one mile of site). The amount of form work and ties were reduced by the use of shotcrete, rather than cast-in-place concrete, for shear walls, and by forming footings directly against earth. These methods result in less material waste and less surplus concrete mix to be disposed of.

While not commonly recognized as ‘diverting materials from the waste stream’, the storm water quality improvements implemented prior to construction of the Lodge remove sediments and pollution from urban runoff and sequester them on site. Thus waste materials are diverted from the literal ‘streams’ which would otherwise convey construction runoff into Lake Tahoe, providing an environmental benefit just as real and direct as reducing more visible types of waste.
1. porte cochere
2. lobby
3. great room
4. banquet
5. bar
6. restaurant
7. pool terrace
8. service wing

LEVEL 01

170,000 SF
ENTRANCE - PORTE COCHERRE
2018 AIA NEVADA DESIGN AWARDS - BUILT
GREAT ROOM WITH THE VIEW LOOKING OUT AT LAKE TAHOE
2018 AIA NEVADA DESIGN AWARDS - BUILT
TERRACE OUTSIDE OF THE GREAT ROOM
2018 AIA NEVADA DESIGN AWARDS - BUILT