

FLY RANCH PROJECT PROPOSAL – 2011



Fly Ranch Plan

Hualapai Flat, Nevada

Fly Hot Springs: Fly Geyser

Fly Ranch and Hot Springs

Proposed Development (plan attached, view at 400%)

This is a proposal for development of the Fly Ranch property. The development will conform to all local and regional regulations, as well as the Ten Principals of Burning Man. It is to have minimum visual and physical impact on the land, particularly as seen from Highway 34. All improvements to be inconspicuous, and noticeable elements must blend harmoniously with their environment. The great amount of Open Space within the property preserves an impression of pristine landscape, as do large setbacks, and native trees screening improvements from the highway.

Preservation

While it is quite true that the Fly Geyser, and it's periphery, is the showplace, source and symbol of this project, it remains a liability. The geyser is so lovely and unique in this world that it deserves to be open to the public's, and indeed the world's view. The area's vernal pools are also rare, and as a nature preserve, with migrating birds, indigenous animals and uniquely adapted fish, this becomes a showplace of wonder and study for children and adults.

Yet, it is fragile and hazardous. The geyser is scalding, and the stone soft and easily crumbled. An increase of residents and visitors will rapidly bring more exposure and greater fame, leading to ever increased pressure. Civil control of access may be extremely difficult, if not impossible.

Fly Geyser is core to a network of channels and ponds which serve as an oasis for local fauna and migrating birds. It also serves as an attractive nuisance in liability issues, and is easily damaged by vandalism or overuse. Because of this, and though difficult to enforce, it has been closed to public access for many years. Still, the area has developed a mystique, and is under increasing demand for access. As a natural wonder, this remarkable area deserves to be opened up to the World, while controlled and preserved as wildlife refuge and environmental study area.

Even with limited use, the grassy banks of the (likely ancient) vernal pools are being sloughed in by bathers, the pools gradually churned into shallow mud holes. Bathers also leave tanning lotions, insect repellants, and other contaminants behind to ill effect. The pond waters contain a species of pupfish which may be genetically unique and endangered, isolated by the underground source and terminal outflow.



Hunters have used the geysers for target practice, and visitors have damaged them out of curiosity or mistake. A nature preserve requires control and enforcement, accordingly this area must be properly fenced to admit access only to indigenous animals, but excluding horses or cattle which trample wetlands. Human access must be highly regulated, with trespass, hunting and public use of existing pools and hot springs banned.

Anticipating the utter destruction of too much love, together with the projected costs of controlling and insuring against increasing liability, it is suggested that Nevada Parks and Recreation is the sole entity with the experience and authority to carry this out properly, it being precisely their line of business.

Fly Hot Springs and Nature Reserve

(Note: the development of needed protections will require time and considerable operator investment, but work on the property may well precede this. With a large influx of people, this issue must be addressed, as a great deal of irreparable damage might be done in the interim)

The public will be admitted on a fee basis, excepting school field trips and university studies. Elevated boardwalks will be constructed, allowing close visual access around the geyser pools and wet areas. Walkways and descriptive signage to remain unobtrusive, but discourage trespass. Self-guided loop trail tours, field trips, and other group tours will be available. A full time caretaker's home must be built strategically. A small museum and library, meeting and study area to be constructed near the parking lot and entry. Parking will be located just south of the Fly Geyser, and will also serve the new mineral baths area, as well as the geothermal installations.

Baths and Geothermal Works

Fee based public hot mineral baths are to be developed next to the springs' drainage reservoir. These small pools will be sculpted of reinforced concrete and allowed to overflow and concretize with natural travertine deposits, replicating the look and feel of the geyser pools. The adjacent reservoir will also be available for swimming and cooling off. The temperature of the mineralized water is to be regulated by a temperature mixing valve and high limit cutoff valve in series – as a precaution against dangerous fluctuation. The mixing valve to be supplied by geothermal hot water, plus cooler mineralized water from the reservoir. Fresh water showers and changing rooms will also be available.

A secure display of the alternative energy facilities will round out the attractions here. Tours will be offered of the hydrothermal installation, which will have additional displays of solar and wind power generation. Electricity derived from this hybrid installation will supply the entire complex (perhaps other valley residents as well), and it's hot water will warm nearby greenhouses for year-round production of organic vegetables. These facilities require an operator investment, and fees collected will give return.

Village and Residential sites

The two communities are based on Burning Man's Ten Principles, and this will be it's first year-round expression. Employees and affiliates may build on a 'Homestead' basis, or rent or buy into the Village community at the project's north end. For others, one acre lots may be bought from Bright Holland for home construction in the project's central development (and separate H.O.A). These areas will be allowed to grow incrementally, with roads and utilities phased as required. Geothermal electricity will serve all the lighting and cooling needs of residents (and possibly the valley's ranchers as well), and hot water will provide all heating.

Organic vegetable farming will be developed as an economic base for the village community. Geo-thermally heated greenhouse organic farming will be operated for local needs, and for transport and sale. This can supply Reno with organic vegetables throughout the year, while creating a wholly independent economy for the community.

Farming, together with small event, camping, and bathing fees, plus various onsite employment opportunities, give the project a local, but diverse economic base. These factors will enable the unique and fully sustainable infrastructure to create a dynamic community in a remote and otherwise somewhat hostile environment.

Architecture and Construction

It is a long haul from Reno, and as this is to be a sustainable community, alternative construction techniques and materials will be employed to take advantage of onsite resources, and to lessen the carbon footprint. Here, rammed earth construction becomes both economical and ecologically sound. It employs unskilled labor to compact a mixture of soil and cement into reusable forms. It's thick, steel reinforced walls provide thermal mass, and digging in uses the subsurface as a natural temperature buffer. This also has advantage in creating sunken living rooms, storage and wine cellars, etc. These lower levels might enable soaring spaces within the proposed 12' above grade height limitation.



Further, to minimize disruption, all the earth component will be taken from within the foundation line of the structure. At minimum, all exterior walls will be rammed earth. They may be treated with a clear or semitransparent sealer or repellent to maintain the color and character of the soil.

In design, strong horizontal lines should be employed, though verticals might be imposed, rooms might cascade, etc. Overall, a modified southwest style, blending with the environment, and without color other than the native soil's. In elevation, strongly horizontal stepped terraces and towers (referencing Fly Geysers). In plan, thick, possibly curved exterior walls with deep-set windows and doors. Floors may be of concrete or rammed earth (with proper membrane, natural or topped with cement or tile), and contain tubes for radiant heat.

The ideal roof might be of the "sod" variety, perhaps using saltgrass or other native vegetation. This would give a level of living, breathing insulation, and blend in well – as seen from Highway 34. They should not be of the white, reflective variety unless visually blocked from the highway in having a deep parapet, this creating a roof terrace as well. Both roof types can provide excellent insulation and fire resistance, and might be combined.

Cars, boats, satellite dishes, etc., must be secluded and screened from view, but no fences will be otherwise erected. There is little need to employ such boundaries in these communities, plus they would greatly interrupt the perception of open space. The remaining land and vegetation should remain primarily as is, without addition of nonnative species – animal or vegetable. Further, all construction, open storage, clearing and planting are to be subject to community planning review to preserve the visual and ecological status quo. To the end of eliminating "exotics" and reestablishing indigenous species, nonnative "landscaping" and gardens to be disallowed, as well as the keeping of domestic animals.

LEED certification to be required for project credibility. Considering the type of construction employed, this should not require a great deal to qualify. Additionally, even the household heat and power will be 100% renewable energy.

Fly Lodge and Conference Center

This will epitomize the style of Fly Ranch, and become a beacon for the greater community. A restaurant, rooms and services will be available. Fly Lodge will be available for public and corporate use, while also serving as World Headquarters for Burning Man's Regional organizations around the globe.

Water Conservation and the Lake

The 1500 feet long freshwater lake will be stocked with native trout, and used for swimming, fishing, and non-motorized boating. A dock and launching ramp will be constructed.

The Lake takes advantage of an existing holding pond. However, to minimize water loss, it will need to be drained and lined with compacted Bentonite – a natural clay product of Northern Nevada. The existing reservoirs might also benefit by 'seeding' the water with Bentonite. The channel supplying the Lake from the reservoirs would be best replaced by pipe laid in it.

Campground/Small Events

Graded into an amphitheater for visual and auidial isolation from the highway, the excavated soils will be used for road building. Trailer parking in the fee-based Campground/Small Event area will be temporary (except for the overseers). Trailer and camp space rentals for up to two months maximum will serve both individual and large group camps. Standard amenities for trailer and tent camps (roads, pads, utilities, showers and toilets, etc.) will be provided. The facility will also be available for rent by Burning Man to others as a venue for other small events. Title to Hualapai Flat will be pursued by Burning Man as a possible future location for their annual main event.

Airport

A landing strip and tie-down facility is to be constructed on the southern end of the property. Small hangers and other facilities may be permitted using design and construction methods similar to that for residential construction.

Waste Treatment and Utilities

Alternatives to standard anaerobic-chlorine based tertiary treatment plants are to be evaluated. A twenty-first century solution to that antiquated technology should exist, and this would be the ideal place for it. As the winds can be variable, the best site for a settling pond, if required, is in the area at the Southeast corner of the site. Where gravity may not be sufficient, septic pumps may be employed. The existing North-South irrigation trench might be used for laying utilities as needed. These may include potable water, irrigation water, hot mineral water, steam, electric, sewage, ethernet and/or other communications.

Wildlife Corridor

For birds and animals in this dry country, water sources become destination points along the way. Looking ahead, the Hualapai Valley is bound to develop along with this project. Over time, there may be sufficient urban and agricultural infill that safe open passageways disappear. Now would be the time to establish a such a pass in a public trust. We need not consider large migrations, but primarily the movement of individual animals, this being vital for their territorial boundaries, seasonal range, genetic balance, etc. Even in a narrow corridor, particularly if low lying and with good cover, animals can travel through human development to the safe "islands" of parks and preserves. This idea is incorporated into the plan, but needs to be proposed to local, state and national (BLM) agencies, establishing a permanent wildlife corridor from the Granites to the Black Rock – while it is still possible.



In conclusion

While doubtless incomplete, this report attempts to fill some of the blanks in the accompanying drawing. It remains for others to formulate the necessary application documents, negotiate the utility operations, etc. I fondly hope that this concept can develop rapidly, and become not only a destination for learning and wonder, but a model to the world of a community, although remote, that is ideal and sustainable. It is for the Burning Man Project to create this wilderness paradise, together with the generosity and support of Bright Holland.

r.g.

Notes:

Property = 3978 Acres (1610 Hectares), 6.2 Sq. Miles (16 Sq. KM)

Service roads for nine 5 Acre Parcels set back 300 ft. from Highway.

Village and Green-housing set back 500 ft. from Highway.

73 - 1 Acre Parcels and 9 - 5 acre parcels = 118 Acres for 82 parcels.

82 parcels require 3280 acres, less 118 = 3162 acres. Counting the Reserve as open space, but subtracting the remaining Use Areas (770 Acres) from the total Area leaves 3212 acres of onsite Open Space (it is assumed that the Lodge may fall under "Lodging", and the Village under "Company Town" designation in the HDRCMA).

Camp/Event site and One Acre Parcels are removed far from Highway, and no more than 12 ft. above grade. Camping Area, One Acre Development, Green-housing, Reserve Entry and Baths area, and Village to receive potable water supply, hot water and electricity (from geothermal), and other utilities as required.

One acre parcels and Village to require HOA and CC&R's. Central meeting spaces are a priority.

Pavement of Hwy. 36 should be extended by one half mile.

