



ARCHITECTURE

EHLINGER & ASSOCIATES

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Oak Alley Plantation, Vacherie, Louisiana

Oak Alley Plantation is a historic plantation located on the Mississippi River in the vicinity of Vacherie, Louisiana just upriver from New Orleans. Its name derives from the double row alley of oaks between the house and the Mississippi River that were planted

by an unknown settler in the late 17th century to the early 18th century, probably ca. 1715, long before the house was built. One interesting aspect of the nearby town's

name, Vacherie, is its double meaning: in archaic French, it meant the place of cows, and it also means what we would call in English a "catty", snide or nasty remark or action. There is a French custom to display dinner plates on a stand or on the wall upon which are painted scenes that express and are titled with a witty "vacherie".

Originally named "Bon Séjour" ("Good

Stay"), the mansion was built for the sugar plantation by George Swaine in 1837 to 1839 for Jacques Telephore Roman, brother of Andre Roman, twice Governor of Louisiana. Joseph Pilie is widely considered to be the architect as he was the father-in-law of Jacques. The Roman family in the person of Jacques Joseph

Roman is thought to have come to Louisiana in ca. 1728 from the area around Grenoble, France to administer the affairs of his cousin, Joseph du Vernay, who had been given a large land grant upriver from New Orleans. The family prospered by

central hall on both floors with fan light doors on each end from which all rooms are entered, and by 12' high ceilings. The high ceilings, shade from the galleries, and operable doors and windows that opposed each other rendered a cool interior even on the hottest days during those times of no air conditioning. The flooring was originally of marble, and is now wood. The walls and columns are of painted plastered brick, the spanning members are of wood with painted plaster ceilings. The roof is of slate on a wood deck.

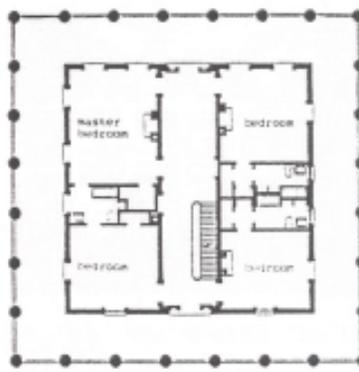
There was an Oak Alley slave named Antoine, who was 38 years old at the time of Jacques Roman's death, and was listed in the estate as a gardener / expert grafter of pecan trees. It is Antoine we have to thank for development of what was then a new variety of pecan trees in 1846-47: "paper shell" pecans, the nut of which one could crack open with one's bare hands. This pecan won a prize in the 1876 Centennial Exposition in Philadelphia. These trees are now found throughout southern Louisiana and other states.

After the Civil War, the fortunes of the Roman family reached a nadir, and the mansion was sold at auction in 1866. It went through a succession of owners and fell into disrepair. It was acquired by Andrew and Josephine Stewart in 1925, and they commissioned the

architect Richard Koch to design extensive restoration work. After Mrs. Stewart's death, the mansion was placed in the hands of a non-profit organization to own and manage and opened to the public, lately as a bed and breakfast. It has also been listed on the U.S. National Register of Historic Places and is a U.S. National Historic Landmark.



Ground Floor Plan



Upper Floor Plan

buying, selling and managing plantations through multiple generations. The initial owner of Oak Alley that caused it to be built was Jacques Joseph's grandson.

The floor plan of the mansion is square with 28 peripteral (perimeter free standing) colossal Doric columns on each facade on the outside of the 13' wide gallery. The plan is characterized by a

On Building Codes and Their Evolution of Purpose

The original purpose of building codes is to provide a minimal set of rules through which to achieve an acceptable level in construction for public safety, health and general welfare. For decades now, most local governments across the United States have adopted into law one form or another of a model building code, or written their own. While many an architect and owner might complain over a specific code and its applicability to their project, the code itself is generally accepted as achieving its purpose: protecting safety, health, and welfare.

Most changes to the building code that increase base construction cost are introduced incrementally, as general expectations for safety increase, and the costs for those safety features decrease. For example, the types of structures which require sprinklers has increased over the years. Just a decade ago, apartment complexes of three stories or less weren't required to have sprinkler systems; now, every structure containing three or more residential units is required to have sprinklers in most jurisdictions. At a cost increase of about \$3/square foot (about 5% increase of construction cost), most would consider this new requirement within reason, particularly since sprinklers reduce the death rate during fires by nearly 95%.

I expect most codes to soon begin requiring sprinklers in all new homes, not just in multi-unit residential; and if the cost reaches the \$1.50/square foot target cost that many sprinkler manufacturers are claiming, I wouldn't consider it an unreasonable requirement, given the magnitude of additional safety provided. But what if sprinklers cost \$15/square foot? Where's the line?

What happens when the definition of the code is suddenly expanded? Perhaps the first test of this was with the introduction of the ADA (Americans With Disabilities Act), which expanded the definition of public safety, health and general welfare to include people with disabilities. An admirable goal, and many of the requirements are not costly or difficult to implement, like adding Braille to building signs, or providing support bars for restrooms. However, many of the other requirements are incredibly expensive in cost, space, aesthetics, and may not even be possible in existing structures: ramps, chair lifts, and elevators, just to name a few.

In a new construction project, the ADA costs can generally be absorbed. What is entirely different about the ADA from other building codes, however, is that it can be applied retroactively by selective enforcement. In other words, if someone believes your building is in violation of the ADA, even if it was built prior to the enactment of the ADA, they can attempt to force you to retrofit your building through the court system. There were any number of lawsuits during the late 90's illustrating this, but a more recent one sums up the conflict, where a restaurant was forced to close down,

being financially unable to make the required upgrades to comply (<http://www.cjac.org/blog/2011/03/the-ada-struggle/>).

What if all codes were selectively retroactive like the ADA? What if, every time the code were upgraded, all buildings were required to have inspections and perform required upgrades? Imagine if every apartment building built prior to the sprinkler requirement were forced to install them now. The cost wouldn't be \$3/square foot; it would be closer to \$30, requiring removal of ceilings, relocating of piping and wiring, extensive clean up, and lots of unforeseen complications. Rural California is experimenting with such brutal tactics right now, but it doesn't seem to be for the purposes of public safety: <http://www.laweekly.com/2011-06-23/news/1-a-county-s-private-property-war>.

After Katrina, FEMA had an excuse to dig their hands deeper into the building code business, as well, pressuring municipalities across the U.S. to adopt FEMA construction code requirements at the threat of losing funding for local flood control projects. While their requirements are not being enforced retroactively, a general practice being adopted is to require full flood upgrades on all property in any flood zone, once the cost of work cumulatively exceeds 50% of the value of the structure. If any work is done on such a structure, it counts towards the 50% value, and the value is set at the first permitting and isn't adjusted over time. In other words, without making very expensive modifications to the property (flood gates, raising the entire structure, etc.), any work will eventually be prevented, like a reroofing, or an electrical upgrade. The unstated goal is to prevent new construction in flood zones, and force those in flood zones to eventually abandon their developments. While these measures have been adopted on a limited basis in Louisiana, readers in our other areas should check with their local government's engineering department before planning any work in property within a flood zone.

The latest redefinition of public safety, health and general welfare is coming with the ICC's (International Code Council) forming of the International Green Construction Code (IGCC). Public safety, health and general welfare will apparently include protections for the environment and provisions for sustainability. This entails a great many requirements that have little to nothing to do with public safety, health, or general welfare.

For example, this code (IGCC) has a requirement for a 50% construction waste diversion - that means 1/2 of all construction waste can not go to a landfill and must be recycled. This also means all of the construction waste must first be accounted for by weight (before dumping), other uses for the waste must be determined and located, and the waste must be diverted to multiple locations, regardless of the additional time and cost required. Zero relevance to public safety, health, or welfare.

Construction material choices are also limited to a mix of material with recycled content, biological content, and other specifications. All

without regard for intended use, quality, performance, life cycle, or cost of said materials vs. their "unrecycled" counterparts - it's simply percentage requirements to tick off on a form.

Besides enforcing a specific brand of social consciousness, most of the IGCC is geared towards the reduction of energy use and water use, which, while a laudible goal, is questionable as something a government should be mandating as a construction requirement when these issues generally have no concern with public safety, health, or welfare.

Now, in specific regions, the reduction of water use may truly be an issue of general welfare, because the water supply is limited; but what about any community along the Mississippi River? Or the Tennessee River? Do they really need to concern themselves with installing expensive greywater piping systems? Should they be required to harvest rainwater? Such systems and tactics can be inherently expensive and costly to maintain compared to utility services. While many may take the community water and sewer services for granted, there's a reason that people in areas without regular water shortages don't invest in septic, cisterns and other water technologies for small scale use - it's expensive and unnecessary. Purportedly, the IGCC is "customizable" upon adoption, but in areas where ideology often trumps reason, will such requirements truly be lessened where they are not of general concern?

With energy use the argument becomes one of the law of diminishing returns. How much does it cost to improve a building's energy efficiency before you're spending more time and money trying to save energy than the energy costs? With the multitude of requirements for automated equipment, separate metering, and commissioning of systems for monitoring, it's arguable that bureaucratizing a facade of energy conservation with government monitoring will be much more expensive and wasteful than leaving energy decisions and upgrades to the owner.

From the IGCC synopsis: "Section 604, Energy Metering, Monitoring and Reporting, requires all buildings that consume energy, regardless of compliance path, have capabilities for energy measuring, monitoring and **reporting.**" (emphasis mine).

Reporting to who? Will inspection departments where the IGCC is adopted be responsible for monitoring and enforcing energy conservation requirements on an ongoing basis? Is this acceptable and reasonable? Certainly, having the tools to monitor and adjust energy use is a helpful tool for any owner looking to save money, but to what standards will the "reporting" be held to, and how will energy conservation be enforced?

These are questions all building owners and managers, architects and contractors should be asking themselves in areas considering adopting the IGCC. Is it worth the financial cost, and the cost in freedoms of property use and ownership with no commensurate gain of benefit to public safety, health, or general welfare?

More information on the IGCC can be found at: <http://www.iccsafe.org/cs/IGCC>