

CHANGE or Start from Scratch?

by **Ron Jezerinac**

Owners, tenants and managers in the modern sports business with plans for new venues are more challenged than ever to secure financing from public or private sources. The banking crisis has made private financing very difficult to obtain. Governments across the country are financially strapped and skeptical taxpayers are unlikely to vote for new venues. Given this economic climate, renovating your facility may be a better alternative.

Whether renovation makes sense for your facility depends largely on the existing structural system. Nearly all re-brandings of venues require significant upgrades or replacement of existing mechanical, electrical, telecommunications, graphics and video systems as well as changes to building exterior. However, if the bones of the building are good, the possibility for saving millions of dollars by renovating exists. That's why, when deciding whether to build new or renovate, a structural feasibility study is often the best place to start.

For stadium structures, the two most important issues of structural feasibility are condition and code. There is a third important issue, inherently intertwined with the architecture, and that is sight-lines. Let's take a look at what is involved in each stage of evaluation.

BUILDING CONDITIONS

Your first step should be to have the condition of the structure assessed. This process generally includes visual inspec-

tion of all structural elements that can be reasonably accessed. Where significant deterioration is observed, further non-destructive or even destructive testing should be performed. Structural conditions assessments require between three and six weeks to complete depending on the size of the venue. Should it be found that widespread repairs are required, the likelihood of renovation being more economical is greatly diminished.

One exception to this rule, is in the case of historic buildings. Because of their profound affect on our culture, many sports venues are listed as historic or protected buildings. In this case, the scope of the conditions assessment must go well beyond that normally performed and may include individual surveys and measurements of each structural element outlining the extent of deterioration of each member.

In either instance, the findings of these assessments are compared to desired program and feasibility from a conditions standpoint is determined.

BUILDING CODES

Even if the structural system is found to be in good condition, local building codes could render certain additions and changes not feasible. Building codes vary widely as to how renovation is addressed. Often times the program will require alterations to or additional loads to be resisted by the existing lateral load resisting systems. Depending on the age of the facility and the governing codes this may require upgrades of the entire lateral load

resisting system. However, other codes are more “pro-renovation” and only require the upgrade of elements that are actually changed.

One way around significant upgrades is to not alter any existing lateral load resisting elements and completely separate existing structural systems from the new via expansion joints. However, in this scenario the architectural freedom, and thus the program, is vastly limited and the ability to re-brand severely challenged. Like the conditions assessment, the analysis of the code must be compared to the program to determine feasibility.

SIGHTLINES

The program element that can single handedly eliminate feasibility is sightlines. If the existing seating bowls do not provide the desired sightlines, then significant structural modifications will be necessary. This is particularly true when the seating bowls are structurally elevated and less so if they are on grade. If the sightlines are desirable, the owner is one step closer to structural feasibility.

Current political and cultural trends suggest that building renovation will become a greater point of emphasis. Studies have shown that almost one quarter of our waste is from building

construction and demolition. With material re-use being one of the cornerstones of sustainable design principals, it is likely that political leaders with the backing of their constituents will begin to favor renovation over new-build. Given this environment it makes sense for any owner looking to upgrade to start with a thorough structural feasibility study. Even if the ultimate decision is to build new, looking towards renovation first will go a long way in gaining public support.

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