

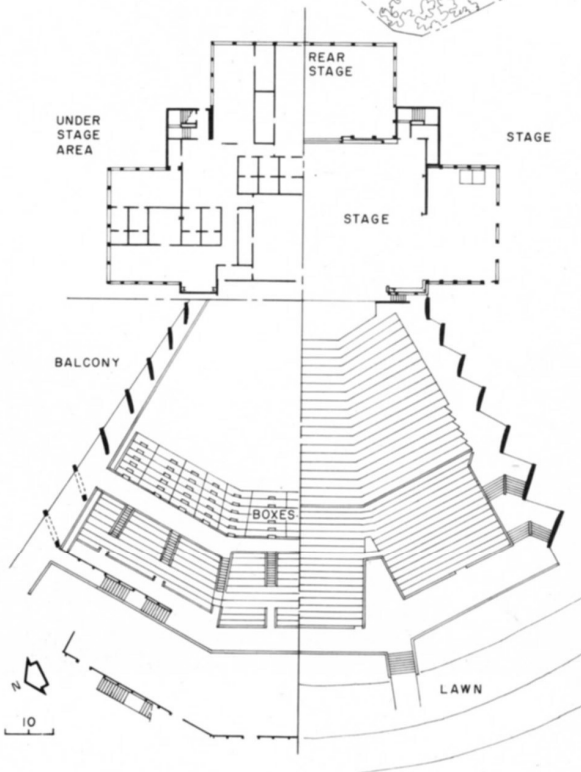
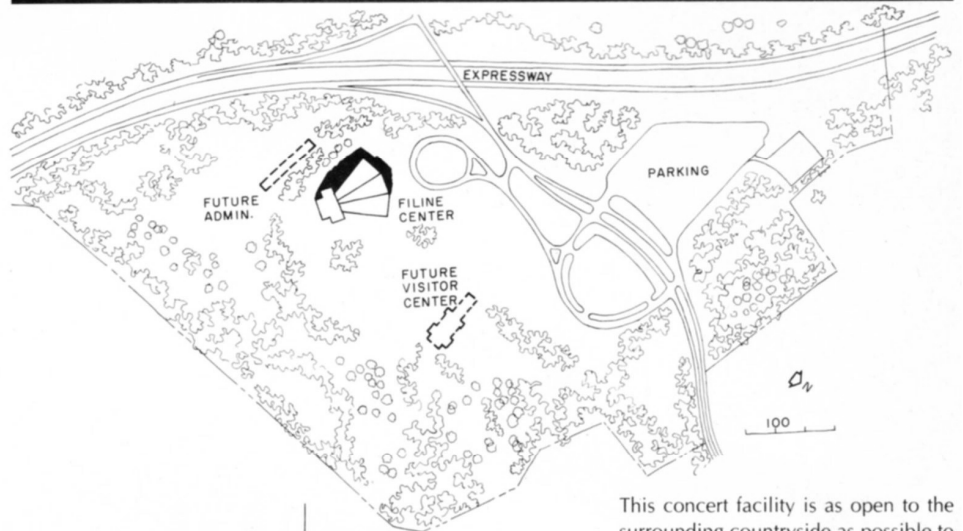
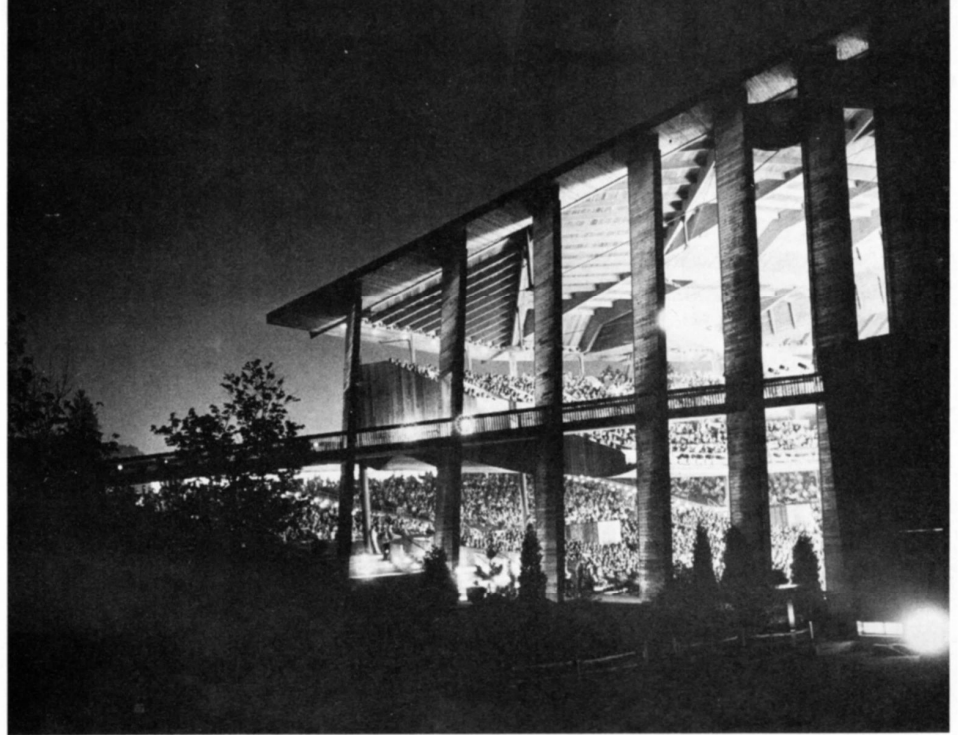
A "bare-bones" pavilion lets the natural landscape help in a musical success

The Filene Center shown here is a concert pavilion designed by architects MacFadyen & Knowles in the Wolf Trap Farm Park in Fairfax County, Virginia. The 130 acres of rolling countryside in the park were donated to the National Park System in 1966, and are the subject of the master plan (shown below) by architect Edward Knowles to include other performing-arts facilities, a visitors' center, offices placed to block noises from the adjacent expressway and extensive parking. The long-term plan calls for largely undisturbed natural conditions on most of the site.

In designing the concert facility for a massive audience of up to 6,500 persons, the architects reduced the structure to a functional minimum to lessen its visual impact on the countryside (as well as to keep within the budget of \$3 million). Little more than basic elements have been built to project sound from the stage in an ideal manner to such a large audience. And with the exception of those in a thousand seats in the balcony, the audience sits on the natural slope of the ground. This allows half of the patrons to sit on the lawn outside of the shelter—while maintaining good visual contact with the performance. Even those within the enclosure look directly into the woods on both sides of the stage.

To achieve their goals, the architects, together with acoustical consultant Paul Veneklasen, examined the minimum physical requirements of each building element that would produce the desired characteristics of sound. In keeping with the philosophy of providing only that which is needed, the architectural result is described by Knowles as a profusion of disparate parts. These are united by the single material of red cedar, which is used structurally in the roof (a system utilizing 154-foot-long composite "queen post" trusses) and as sheathing for the steel and concrete construction of the rest of the building. Wood was chosen for both its ability to complement the natural site and its acoustical qualities.

FILENE CENTER, Wolf Trap Farm Park, Virginia. Owner: *National Parks Service*. Architects: *John MacFadyen and Edward Knowles*—associate: *Alfredo DeVido*. Engineers: *Lev Zetlin & Associates* (structural); *Peter Flack* (mechanical). Consultants: *Paul Veneklasen* (acoustics); *Clarke and Rapuano, Inc.* (landscape); *Robert Brannigan Associates* (stage).



This concert facility is as open to the surrounding countryside as possible to still create an acoustical success. The natural slope of a hill on the site provides an ideal situation for viewing the stage from the surrounding lawns.

