

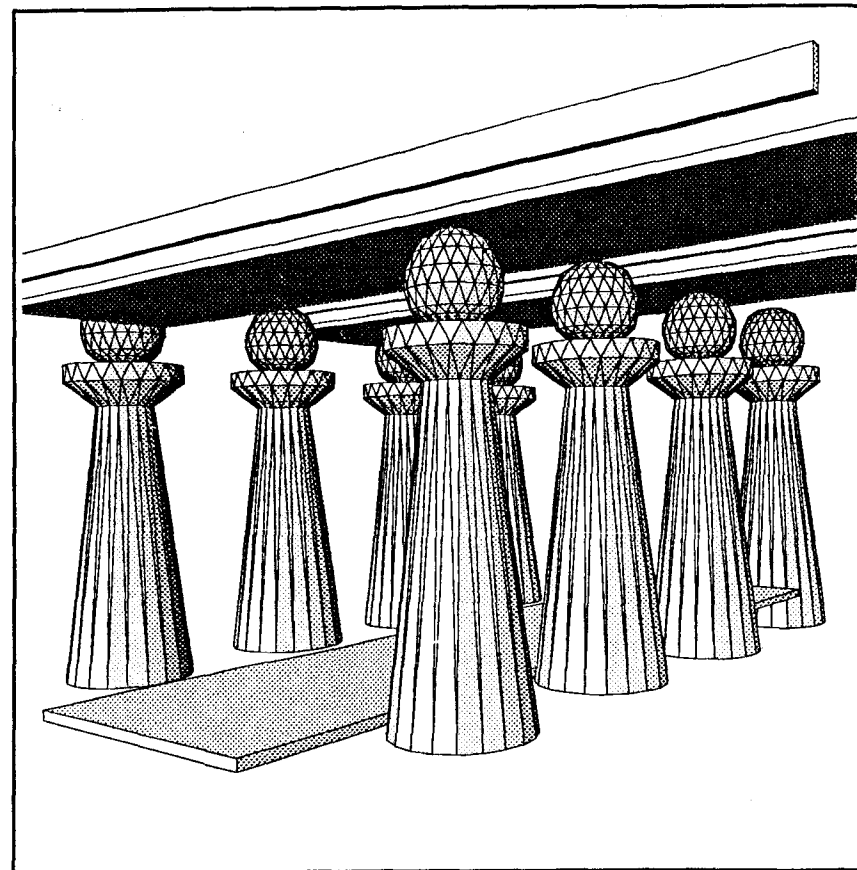
CONCLUSION AND RECOMMENDATIONS

This project has undertaken to examine the nature of the Interstate Highway System based on the principles of "expressive content." It has been shown that the history of the American roadway has been one that has emphasized the function and technical aspects over those of form and a concern for the landscape. Issues of economic expansion and technological development have tended to shape the highway system to the dictates of establishing an American "quality of life." This has permitted the nation to be almost totally dependent on the automobile and an efficient and safe roadway system.

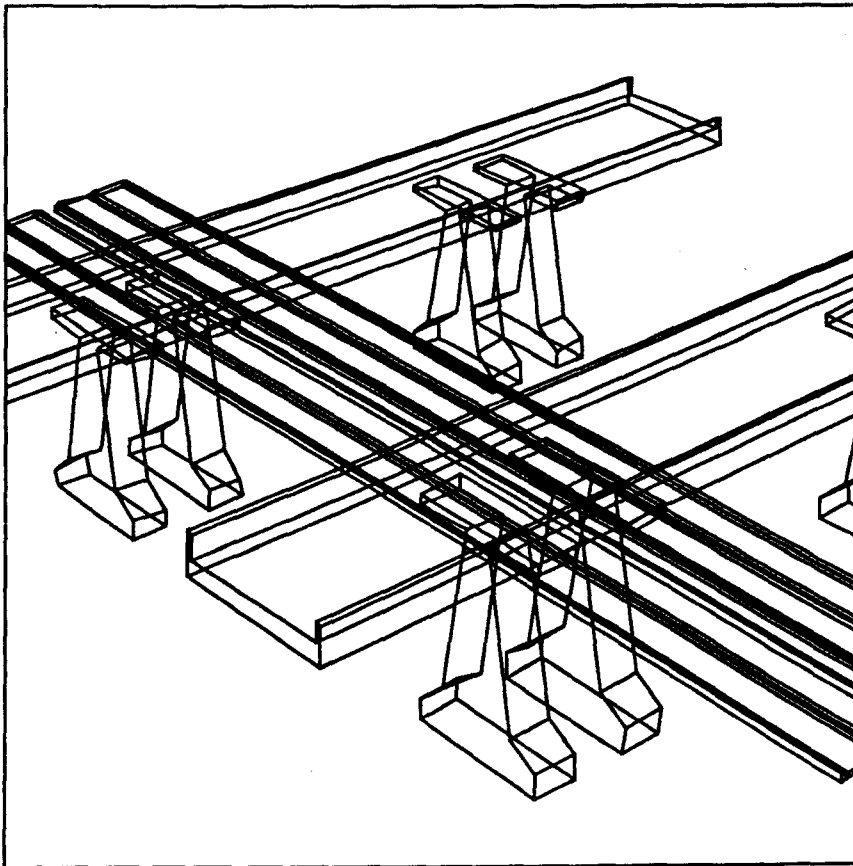
Through the careful examination of the existing "state of the art", it can be seen that the roadway designed along technical and structural guidelines has had little concern for the aesthetic aspects of highway planning and design. The sameness of the highway experience makes this observation apparent. To this end, this research project introduces a "design method" for evaluating the existing context between the landscape and the roadway and a "design handbook" for introducing several approaches to increasing the expressive content of the highway experience.

The abstract research points out one of the major problems

Gate Element across lanes
can act as a highway marker



Bridge elements can provide for a variety of sculptured forms for the highway corridor.



associated with highway planning and design - a singular lack of dedicated literature or projects that emphasize the aesthetic issues. This limited resource is indicative of a separation of the techno-functional attitudes from those of the aesthetic since there are a significant number of resources support the structural and safety aspects of roadway design. The major reason for the imbalance is socio-economic factors. The general attitude on the part the Department of Transportations, at the national and state levels, has been to place economic limits on design programs. With the cost-per-mile increasing at an alarming rate, the effect has been to strip the aesthetic issues to a "bare" minimum.

Recommendation One

To increase the aesthetic content of the national highway system, the allocation of 6 percent of the project design and development budget be instituted at the national and state level. These funds will be dedicated to the evaluation, design and implementation of projects that enhance the "expressive content" of the roadway.

The role of the artist, sculptor, painter, graphic or environmental designer, architect or landscape architect has yet to be understood in relation to the design of the roadway. The research has shown that a number of projects, sculpture and assemblage, have been placed along the roadway. However, little has been done at the national level. The artistic interpretation can repre-

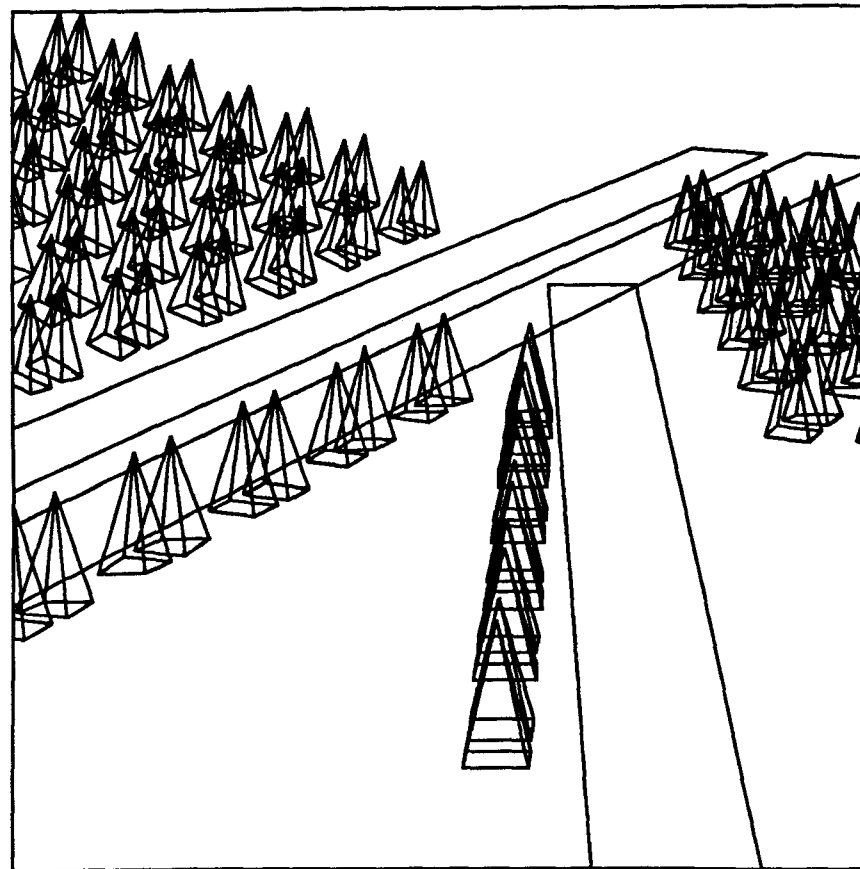
sent a more powerful force in the design development of the roadway. The untapped resource of our national pool of artists is a means to introduce: historical perspective, cultural values, landscape conservation and natural factors. The artistic volition is a means of increasing driver awareness through the aesthetic image.

Recommendation Two

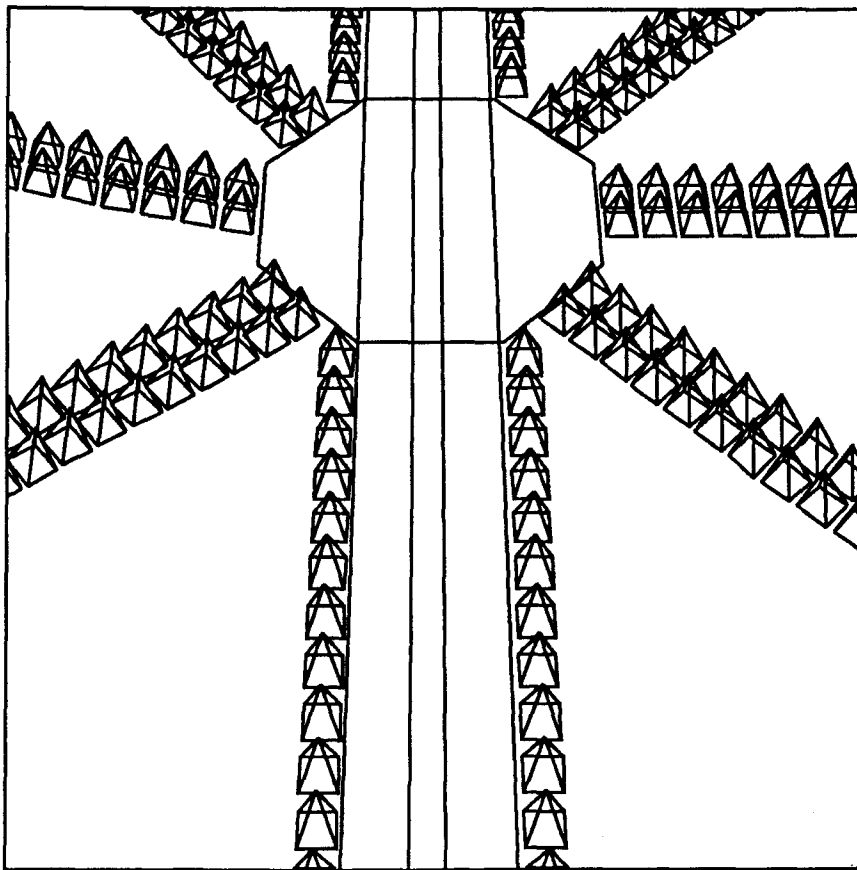
To increase the aesthetic content of the national highway system, a multi-disciplinary advisory board be established, at the state level, to select, contract and to assist in the implementation of artistically oriented projects into the national highway system. A fund of one and one-half percent of the allocated budget would be established for commission, design and administrative fees. The remaining funds would be allocated to the construction, installation and maintenance of the art works.

The design of the roadway path, and subsequently the effect of that path on the landscape, has been relegated to the urban or regional planning facilities. The technical domain has been relegated to civil engineering interests. While the design professionals have emphasized the functional aspects of alignments, curves, materials, clearances and safety, the "design team" has lacked the "formal design" input. There are a limited number of cases where the landscape and the highway were designed a a singular idea, this has been the exception rather

Highway gardens can add visual interest and protection.



Geometric designs of plants, trees and shrubs can ornament the highway strip.



than the rule. A broader representation of all interests must be accommodated to reduce the number of poorly designed roadways. The potential to eliminate all "bad" design from the roadway is impossible. However, the complexities and contradictions of one part of the highway will be justified by the resultant rationality of the whole, or certain negative characteristics of a highway section will be compromised for the whole image. To this end, the design professional must be willing to accept greater responsibility for the part as well as the whole.

Recommendation Three

To increase the aesthetic content of the national highway system, a multi-disciplinary design team, dedicated to representing all factors, within the area influenced by the highway, be developed. The design team would institute as part of its "design mandate" a mechanism for self and public evaluation. The environmental impact statement would be expanded to reflect areas of cultural, historical, and regional concerns.

The landscape is a resource that has been continuously exploited by the designers of the national highway system. The destruction of surficial geology is simply one of a number of insults that the landform has undergone. The apparent variation in soil structure, formation, elevation and natural features have tended to be overlooked for the expediency of a homogeneity of the technical aesthetic. Where once the highway

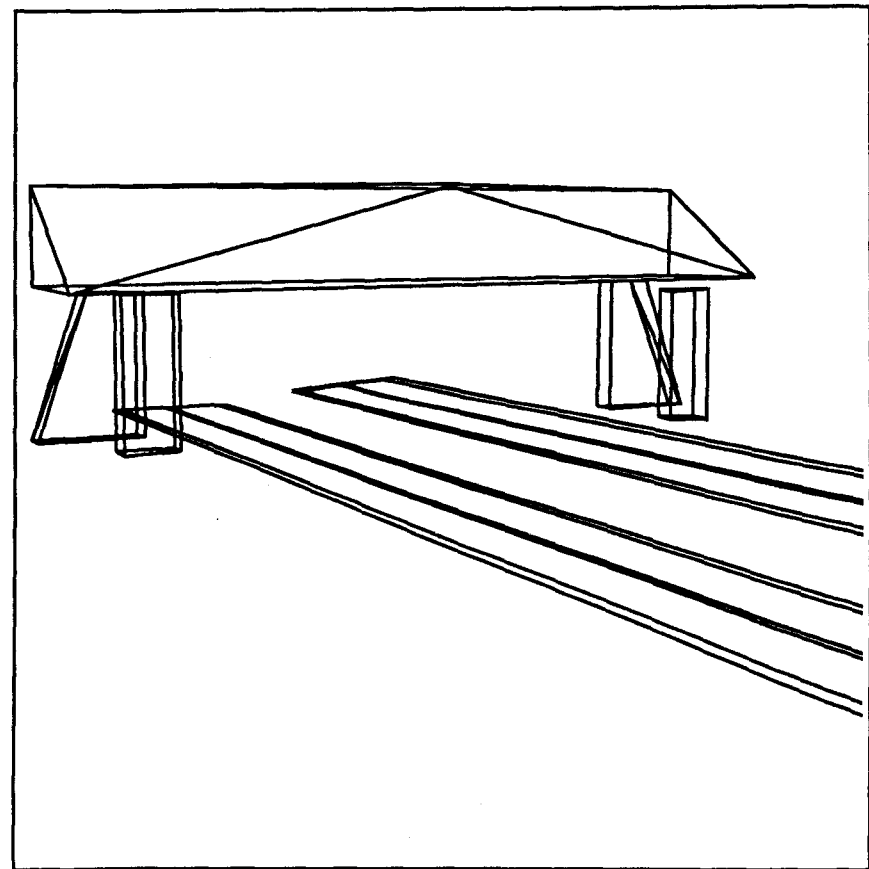
followed the ridge-lines, the highway now rests within the valleys, following alignments that can only be perceived from the air. Where the highways once followed the ancient paths and trails of the Native American Indians and settlers, the highway now cuts across natural, cultural and historic boundaries with impunity. The landscape is a natural resource that cannot be replenished and therefore must be carefully conserved as well as preserved.

Recommendation Four

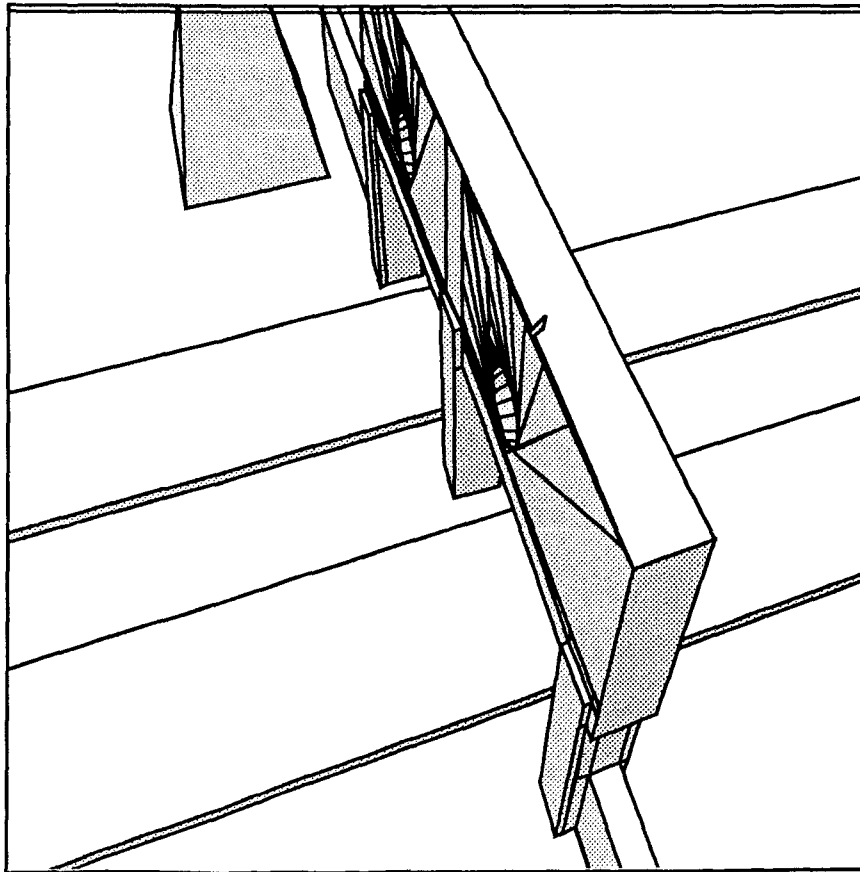
To increase the aesthetic content of the national highway system, the landscape and its conservation, preservation and cultivation must be given the highest priority in the planning and design process. It is critical that whatever the highway modifies or destroys, of the natural landform, the design must replace that with equal "natural" value.

The research, design ideas and projects contained within this document are applicable to all aspects of the highway planning and design process. While urban areas may have more extensive and complex design program requirements, it is important to understand that the investment at all scales is a beneficial aspect of a design aesthetic dedicated to enhancing the expressive content of the highway experience. The roadway "experience" can be an endless journey with little reward. With the introduction of environmental sculpture, highway furniture in the form of garden, median, enclosure, roadway or gate ele-

Portal elements can represent the cardinal points along the roadway.



Portal elements can be employed to divide states or announce coming events.



ments, at the rural, ruburban, suburban and urban scales, the expressive content of the highway system will be enhanced but driver safety as well.

Recommendation Five

To increase the aesthetic content of the national highway system, the adjacencies and superadjacencies of contrasting scales, directions, contradictions in the design elements is critical to the survival of the highway system, its user group and the landscape. To preserve the quality of life one must invest in the art form itself. Art not only replenishes the soul but ART SAVES LIVES.