

and for the redevelopment and conservation of central residential areas. Adequately landscaped and planted, the expressway will serve as attractive and logical boundaries for communities and good location for certain recreational facilities. They are viewed as an essential measure in the checking of wasteful decentralization and the restoration of older areas to economic health.

Several theories have been advanced relative to the best location for an expressway. Each has its advantages and disadvantages. The authorities who prefer between-block locations claim a cheaper right-of-way cost on the basis that this method, in the majority of cases: (1) will preserve the buildings facing the street by using the back yards of the property required; (2) through preservation of the houses and small retail neighborhood establishments cause the least disturbance and dislocation to the immediate area; (3) remove from the tax books taxable property of lesser value; and, (4) cause less disturbance to existing underground utilities thus reflecting a tremendous saving in construction costs.

The proponents of the center of street location claim; (1), a wider right-of-way can be obtained by the acquisition of entire lot depths; (2), the economy in acquiring the rear portions of city lots is not as great as appears; (It has been the experience of right-of-way negotiators that the ultimate cost of a portion of a parcel of land represents nearly the total value of the entire parcel in most cases) (3), with a wider right-of-way, a better opportunity is afforded to design flatter slopes and attractively landscape the area; (These two erosion control devices will reflect a lower maintenance cost for years in addition to their beautification abilities) and, (4), the existing local streets flanking the improvement will serve as feeders and collecting arteries.

WIDTH CONSIDERATIONS

It is generally agreed by highway engineers that generous right-of-way widths should be provided for expressways. Some advocate right-of-way

widths of three hundred feet or greater, if possible. A wide right-of-way properly landscaped is a guarantee against damages to the abutting property values. Fumes, noise, and dirt, the objectionable by-products of arterial highways, are effectively eliminated where ample space is provided between the pavement and dwelling units. On wide rights-of-way, medians between pavements can be of generous widths to provide proper planting which provides more safety to the driving public.

An improvement of generous width will allow for future expansion, should it be needed, without entailing acquisition of additional land for widening purposes. Subsequent widening is a costly procedure and should be precluded in the original purchase.

DESIGN CONSIDERATIONS

In order to function as intended, an expressway cannot usually intersect other traffic arteries at grade, although conditions may be such that the highway economically may be at grade between intersections. This is generally possible in the open country, but it is more difficult in cities or towns, where railroads, waterways, and particularly city streets, may be so close together as to make impracticable the construction of an expressway at grade. In certain cases however, it may be possible to construct it essentially as a surface road, for example where it can be located parallel and adjacent to an existing railroad or waterway, or to a hillside, swamp, park or other natural man-made barrier.

The vertical location of an expressway in relation to the ground or street surface will depend on the specific characteristics of the terrain and the street system, and possibly to some degree on the likes and dislikes of the communities through which it will pass. It may depend also on the relative cost of right-of-way and construction. Generally speaking, the following types of structures can be used:

(a) Above ground (embankments with earth slopes or between retaining walls; viaducts of steel or concrete).