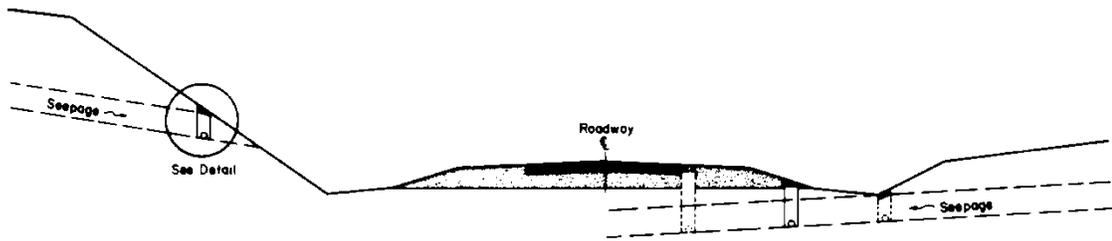
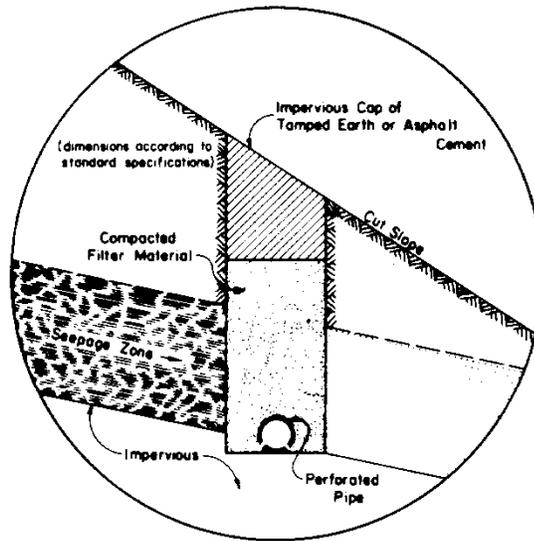


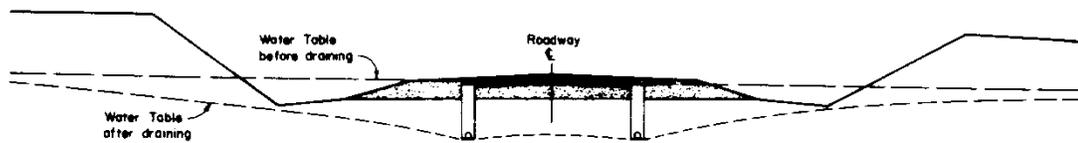
# SUBDRAINS



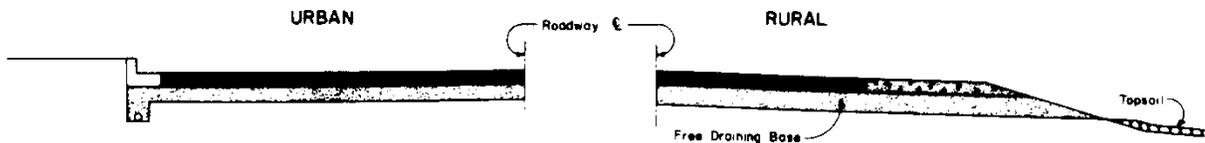
**Subdrain to intercept sidehill seepage**



**Typical details of subdrains**



**Subdrains to lower water table**



**Subdrains to drain pavement structure**

**SUGGESTED DEPTH AND SPACING OF UNDERDRAINS  
FOR VARIOUS SOIL TYPES**

Soil Classes	Soil Composition			Drain Spacing (feet)			
	Percent Sand	Percent Silt	Percent Clay	3 ft. Deep	4 ft. Deep	5 ft. Deep	6 ft. Deep
Clean Sand	80-100	0-20	0-20	110-150	150-200	--	--
	50-80	0-50	0-20	50-100	100-150	--	--
Loam	30-50	30-50	0-20	30-60	40-80	50-100	60-120
Clay Loam	20-50	20-50	20-30	20-40	25-50	30-60	40-80
Sandy Clay	50-70	0-20	30-50	15-30	20-40	25-50	30-60
Silty Clay	0-20	50-70	30-50	10-25	15-30	20-40	25-50
Clay	0-50	0-50	30-100	15 (Max.)	20 (Max.)	25 (Max.)	40 (Max.)

Note: Depth is measured to invert of pipe.

Source: California Highway Design Manual (Drainage)