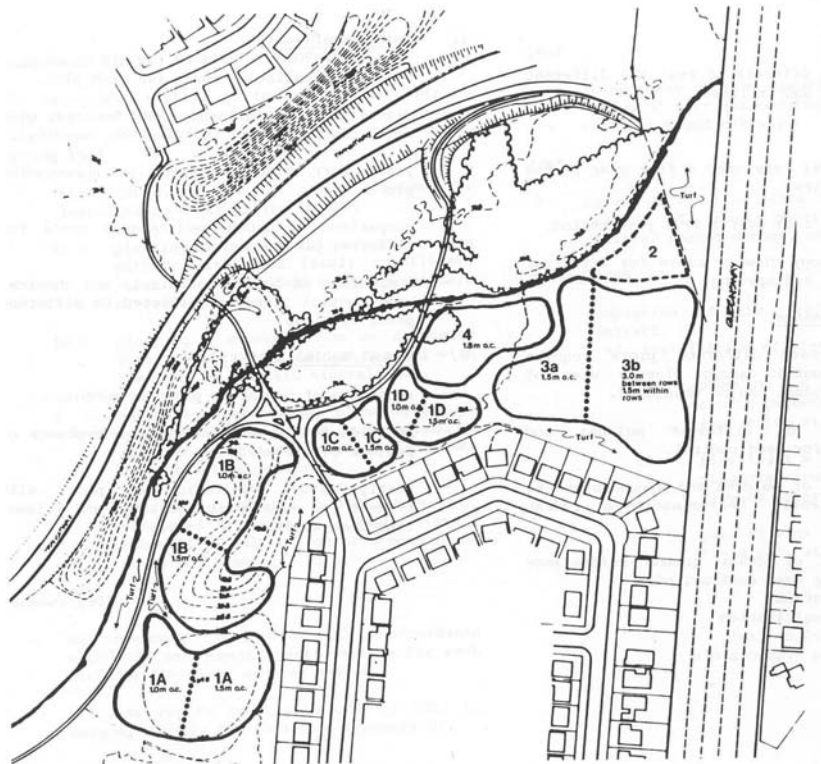


## PINECREST CREEK, NATURALIZATION PROJECT 20-YEAR EVALUATION (1983 - 2004)

### BACKGROUND:

In 1981 the National Capital Commission (NCC) initiated a bench mark study called the "Naturalization Project" to develop alternative approaches to management of its large inventory of urban open spaces lands.

The purpose of the Naturalization Project was to investigate various alternative approaches, and to put in place a series of experimental test plots on a site within the South-West Transit Corridor. The test area would investigate the implications of discontinued mowing and the creation of woodlands in areas formerly subjected to frequent mowing. The test area were designed to allow for comparisons between different planting techniques, plant species associations, and the evaluation of various weed control methods, and implementation costs. The ultimate goal of this naturalization study was to provide a body of information that could be used by the NCC, its consultants and other organizations with whom the NCC collaborates in the development of its lands.



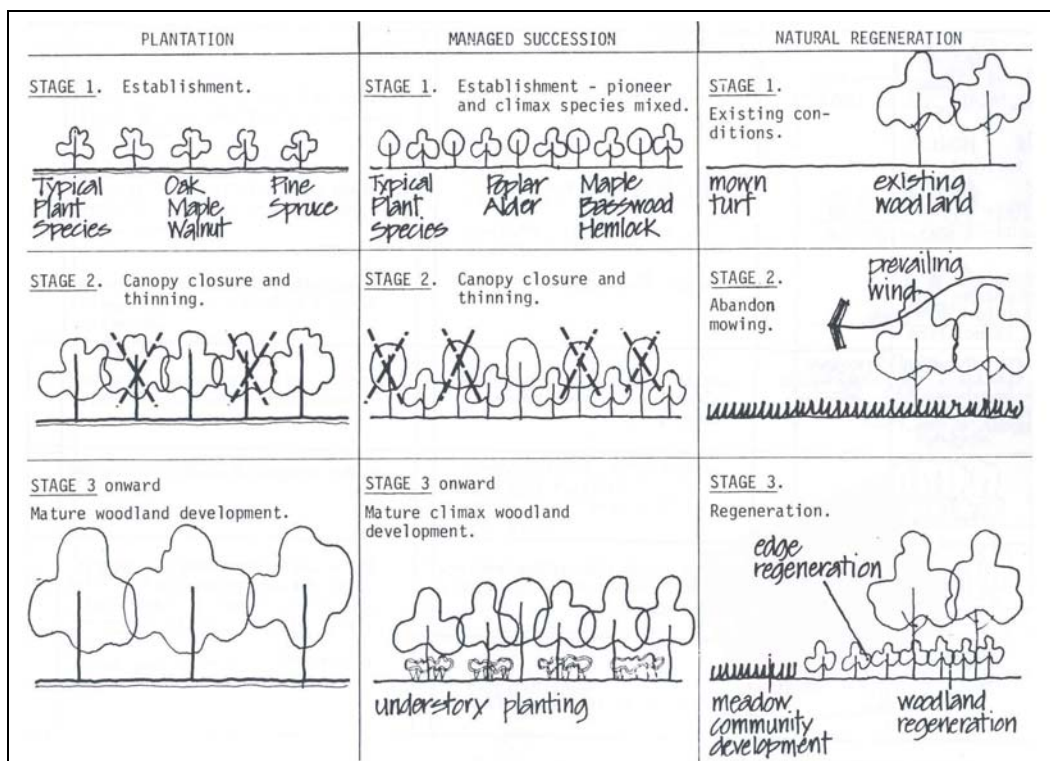
The proposed test plots were **implemented in 1983**. A five-year test plot evaluation was carried out in 1988 to provide some initial information on the survival and success of the various practices utilized.

## WOODLOT MANAGEMENT

Although one of the benefits of naturalized open space areas is that it ultimately becomes a self-sustaining low cost landscape, the accelerated development of a new woodland area does require some management. A key focus of such management is canopy closure, the point at which the ground becomes shaded and the growth of undesirable, and often messy looking, weed species transitions to more desirable woodland understory species.

The South-West Transit test plots utilized fast growing tree species, primarily hybrid poplar, as part of the woodland establishment to achieve rapid canopy closure. The **hybrid poplar (life expectancy of 30 to 40 years)** were planted in combination with **slow growing, longer lived tree species (life expectancy of 100 to 400 years)**, such as white pine, white spruce, white and red ash, and black walnut, which were intended to ultimately become the dominate woodland tree species.

The original strategy detailed in the 1982 Naturalization Project report (see below) indicated that the poplars were intended to be thinned out and removed over time as the longer lived species achieved significant canopy coverage of their own. With the density of the initial planting, without such thinning and removal, the growth potential of the longer lived tree species becomes suppressed as they are shaded by the faster growing poplars and all trees become increasingly crowded as they grow in size.



## SELECTIVE THINNING OF HYBRID POPLAR

Woodlot thinning consists of the removal of trees to increase the spacing between trees. **100% removal of existing poplars is not the goal.** The intention is to remove those poplars that are currently in competition with more desirable slow growing, long lived tree species. **Approximately 230 poplars have been identified for removal.**