DRIP IRRIGATION provides an exciting new plant watering concept for speeding plant establishment in installation ranging from highway right of ways to the rehabilitation of downtown shopping areas.

In fact, the more difficult the project, the greater the advantages of drip irrigation seem. But even in such relatively simple landscape projects as park developments, golf courses and commercial buildings, drip irrigation also offers many distinct advantages.

Perhaps foremost among these is the amount of labor-saving automation that can be achieved through the installation of drip irrigation systems.

Importantly, this automation also allows for the mechanical metering of nutrients directly to plants through the drip irrigation line.

Water with a relatively high salt content can be readily used for drip irrigation.

Since water is applied directly at the base of each plant — instead of over a wide area, drip irrigation provides a substantial savings on water bills.

This water savings concurrently reduces weed growth between plants, since the distribution of the water is limited solely to a one to two foot ground area immediately surrounding each plant. And fewer weeds mean less weeding labor and chemical applications.

While still basically a new concept to landscape architects — even though the number and variety of installations is growing steadily, drip irrigation is an established concept in agriculture, with nearly 100,000 acres of high density crops currently being irrigated by drip irrigation systems.

Basically, whether used for agriculture or landscape applications, drip irrigation involves the placement of small, steady amounts of irrigation water to specific areas of concentration immediately surrounding individual plants. This basic concept has been utilized for many years in ornamental nurseries.

Drip irrigation can best be defined as the frequent or daily application of water drops to a specific area of the plant where the water enters the soil surface readily.

This water is discharged onto the soil from plastic devices called emitters that are installed into plastic hose lines running for lengths of up to 500 feet. The most commonly used hose is .580 in diameter. Where aesthetics dictate, these hoses can be installed underground — yet with above ground water discharge.

Anywhere from one up to four or more water emitters are placed into this hose line where it passes a plant. Each system is set up to provide specific amounts of water to individual plants, the most common amount being one gallon an hour during running periods. The purpose of increasing the number of emitters is to spread the distribution of water around the base of larger plants, rather than to increase the total amount of water applied to the plant. New plantings can be started with one emitter, and additional emitters added as plant growth dictates.

The water drips out of these emitters — literally drop by drop, onto the soil surface without disturbing the soil structure, so that the water can seep between soil particles. Once in the soil, the water moves by capillary to the surrounding areas.