Verge Sprinklers

Existing front fence sprinkler system has been in for many years now , no one seems to know but definitely 10 years. The existing system only waters the 1.5-meter strip between the footpath and fence.

With the establishment of grass and trees on the verge between the footpath and the road courtesy of the City of Palmerston Council the body corporate has an obligation to irrigate and maintain this verge lawn and its trees.

Quotes were obtained to upgrade the sprinkler system to water both fence strip plus the verge stip. All 5 quotes came in over $3,000

Body corporate committee decided that we would have a go at upgrading the system ourselves with Peter from unit 9 project managing it. Peter estimated that we could probably do it for less than $1200 depending on the water pressure.

Advice from Water Dynamics and other contractors was that attempting to set sprinklers on the roadside and watering in towards the property to avoid water waste from over spray would be problematic for a number of reasons.

[1] That even with cement protection collars at $200 each around each sprinkler they would still ultimately be damaged by vehicle weight. It was suggested there a number of ways to attempt avoiding damage but that in their experience in the trade NONE were that successful. Especially when you take into consideration the extra costs

[2] Back in year 1996-1999 when roads were done no service access pipes were laid across the driveways apart from fire hydrant, which we can not use. Thus access to roadside of verge would need to tunnelled on both sides of driveway. Tunnelling under the footpath requires permits. The path can not just be cut and cemented over. It requires 100mm concrete of sufficient width so as not to lift creating a trip hazard and would also require expansion gap either side. Tunnelling under the footpath may damage or interfere with NBN cabling.

One one side of the footpath is the NBN cabling and on the other side is the street fire-hydrant piping.

In the end it was decided it was better to spray sprinklers from the property side towards the road. It was acknowledged that overspray of the arc required

to adequately water the verge would means some water would be sprayed on to the road , however, to keep the grass green does not require a lot of water and whilst the down hill slope of the road makes the runoff look like a lot of water , in fact its not a lot of wastage at all. It is estimated that we would only need to run the sprinklers for 10 minutes.

The Rain K1 gear drive sprinklers cove the 4.5 – 5 metre width from fence to road with a small section of the irrigation spray going on to the road.

What may look worse is that on the upper west side of driveway the footpath unavoidably gets a thorough watering and since the footpath is lower than the grass on either side of it the runoff runs down the footpath till finding the driveway then enters the common area. We may have to run the system on the west side of driveway for a shorter period of time but run it twice a day instead of once to reduce the noticeable run off.

Its intended that the watering will be set to happen in the very early hours of the morning whilst still dark and less likely to be used by pedestrians.

To avoid tunnelling under the driveway or going under the pavers we are using a water source from near the water meter for the West side of driveway and using the bin compound tap for the East side of the driveway.

This means we require two controller units ,one for each side.

To avoid having to go through unit 10 yard when ever we need to access the controller, we have installed another tap from the meter to the fence. A lockable box will house the controller on the fence which itself is hidden by the NBN telecommunications node unit between the fence and the footpath.

Costs. & Purchase… Peter was given permission at the committee meeting of the 19th Jan 2022 to purchase materials to begin upgrading the sprinkler system. Peter would use his own money on the understanding that he would be reimbursed on providing the receipts.

Stage 1.	
West Side of driveway	
[1] Extend water source to a tap near fence • Metal pressure fittings, high pressure pvc pipe primer fluid, cable ties • brass ½ turn tap • stop cock to regulate pressure	$ 69.04
[2]Controller unit , Metal box to house fence tap and controller reducer fittings a junction and joiner	$ 60.86 $. 16.52
[3] 25mm pipe, 7T fittings, 7 riser & 25 clips, 1 end cap 4 -25mm elbows .	$ 62.10
[4] 4 K1 sprinklers 2 pro-s series sprinkler flush cap, + 2 K1 sprinklers's	$ 50.96 $ 32.68
[6] Miscellaneous , 9v battery. Black paint for box, extra fittings and padlock for box	$ 25.50

Total West side **$ 317.66**

Receipts totalling $317.66attached

Wish to be reimbursed for the West Side first so I can use same funds for purchase of East Side material.

Used unit 10’s garden tap already installed next to the water meter. With very good pressure . Joined on to the existing tap and went back down underground the front fence were it comes up and into a service box mounted on the fence. (New works all in black- The black stop cock controls pressure .Strapped off in set position)
The service box is mounted behind the the street telecommunications node so as not to be noticeable from street or footpath.

The box houses the on off tap and the 9 volt battery controller unit. Inside the box is also the tool for adjusting sprinkler flow and radius.
The key to open the box is attached underneath the bottom of the box with a magnet

We dug up and replaced the 25mm supply pipe and installed 7 Rain K1 gear driven sprinklers. 4 meters apart. The sprinklers overlap and reach the roadside.
There will be some tinkering around until we get flow and radius correct so as not to waste to much water in run off. However thats somewhat unavoidable due to footpath being in middle.

At this stage set to 10 minutes in early hours of morning.

East side already have controller unit and source tap in place

Below is estimate until done.

Stage 2. East Side of driveway	
[1] 25mm pipe, 7T fittings, 7 riser & 25 clips, 1 end cap 4 -25mm elbows .	$ 62.10
[2] 7 K1 sprinklers @ 12.74	$ 89.18

Total West side **$ 151.28**