

Change-Out of Pop-up Riser Stems to In-Stem Flow Regulators and High-Efficiency Nozzles

West Valley Christian School & Church, 22450 Sherman Way, West Hills, CA

23 (non-rotor) valves changed-out of which these time studies were made on 8 of them

Valve #	Location	No. of Sprinklers	IFRs used	Nozzles Used	Water Savings
8)	Lawn on east side of old church	20	20 POP610	13 PRNs & 7 PSNs	54.8%
9)	Lawn in front of school office	15	15 POP410	15 PRNs	17.8%
11)	Shrubs in east side of driveway ingress	42	29 POP610 & 13 CP050	41 PRNs & 1 PSN	52.2%
13)	Shrubs at north end of westerly parking area and at west end of front planters	39	17 POP610, 21 CP050 & 1 TUF6	39 PRNs	58.2%
23)	Shrubs -east perimeter – street to trash area	103	57 POP610 & 46 CP050	16 PRNs & 87 PSN	39.3%
25)	Shrubs at east side of church + 5 tree squares	37	28 POP610 & 9 CP050	25 PRNs & 12 PSNs	51.2%
29)	Shrub planter – east sides of auditorium	36	36 POP610	12 PRNs & 24 PSNs	62.7%
30)	Shrubs – center front + long planter dividing westerly front parking lot	28	25 POP610 & 3 CP050	28 PRNs	33.0%

AVERAGE WATER SAVINGS FOR THE 8 VALVE SYSTEMS: 46.15%

AVERAGE WATER SAVINGS FOR THE 2 LAWN SYSTEMS: 36.30%

AVERAGE WATER SAVINGS FOR THE 6 SHRUB SYSTEMS: 49.48%

NOTE #1: We did not move or add any sprinklers; we simply changed out the stems and the nozzles in every existing sprinkler in each valve system. Change-out Project was completed on or about June 22, 2015.

NOTE#2: Wherever sprinklers are watering just dirt, mulch, or gravel OR are not needed, we most often take advantage of the easy on/off adjustment control In-Stem Flow Regulators (**IFRs**) provide by substantially reducing the watering distances in order to save even more water. In this report, some sprinklers were closed off in Valve No. 11 – [6], No. 13 – [7], No. 25 – [10], and No. 30 – [3] due to more than adequate coverage from the remaining sprinklers.

Legend:

- POP610 = LittleValve 6" Rain Bird Replacement stem
- CP050 = 1/2" LittleValve Coupling
- TUF6 = 6" Little Tuffy pop-up sprinkler
- PRN = Precision Rotating Nozzle by The Toro Company
- PSN = Precision Spray Nozzle – Side Strip model by The Toro Company