


Irrigation Legend:

| $\begin{array}{\|l} \text { Plan } \\ \text { Symbol } \\ \hline \end{array}$ | Description |
| :---: | :---: |
| A | Smart Irrigation Controller Replace existing irrigation controller with new smart controller. Install per manufacturers instructions. |
| $\emptyset$ | Anti-syphon Valve Drip Zone Assembly Replace existing irrigation valves if existing valves are leaking, damaged or not properly working. Install a drip valve assembly for drip irrigation. See detail A. |
|  | Electric Remote Control Anti-syphon Valve Replace existing irrigation valves if existing valves are leaking, damaged or not properly working. See detail B. |
| - | Tree Deep Watering Bubbler Install 2 deep watering bubblers per tree. install per manufacturers instructions. See detail C . |
| - | Spray to Drip Retrofit Kit Install drip retrofit kit by replacing one of the existing spray bodies located within the new planting area. Install per manufacturers instructions. Cap all other spray bodies so they do not emit water. See detail D. |
|  | $17 \mathrm{~mm}(5 / 8$ ") Polyethylene Distribution Tubing This tubing does not have emitters installed inside the tubing. Install distribution tubing at either end of the inline drip tubing to connect the system where irrigation is not needed. |
|  | $17 \mathrm{~mm}\left(5 / 8^{\prime \prime}\right)$ In-Line Emitter Polyethylene Tubing Install 0.6 gallon per hour drip line at 18 " row spacing in all planted areas. See detail D. |
| $\triangleright$ | Drip Flush Valve <br> Install flush valve at the end of the drip line system to flush debris out of the drip lines. Be sure to flush the system after drip line is first installed. See detail E . |
|  | PVC Schedule 40 Piping \& Fittings Install PVC pipe if existing irrigation piping is damaged or not usable. | new planting area. Install per manufacturers instructions. Cap all other

17 mm (5/8") Polyethylene Distribution Tubing This tubing does not have emitters installed side the tubing. Inslal distrbution tabing at either end of the inline drip tubing to connect the system where irrigation is not needed.
$17 \mathrm{~mm}\left(5 / 8^{\prime \prime}\right)$ In-Line Emitter Polyethylene Tubing spacing in all planted areas. See detail $D$.

## Drip Flush Valve

$\qquad$ Be sure to flush the system after drip line is first installed. See detail $E$.
Install PVC pipe if existing irrigation piping is damaged or not usable.


This sample irrigation concept plan is intended for general guidance only Irrigation emission device layout, piping layout and piping sizes are based upon Landscape Concept Plan. It is intended that homeowners adapt the concept as needed for the specific conditions of their property, adapt the concept as needed for the specific conditions of their property,
including choice of materials, appropriate layout and installation of including choice of materials, appropriate layout and installation of
materials per local codes and manufacturer's recommendations. Pomona assumes no responsibility for final design or installation.


(1) CONNECT WIRES TO VALVE USING WATER
(1) TIGHT CONNECTORS (SEE NOTES)
(2) ELECTRIC DRIP ZONE CONTROL VALVE
(3) SCH 40 PVC BALL VALVE (LINE SIZE)
(4) PVC SCH. 80 NIPPLE
(4) (SIZE AS REQUIRED)
(5) FINISH GRADE
(6) LATERAL LINE
(7) FIPTX SLIP ELBOW (LINE SIZE)
(8) PRESSURE SUPPLY LINE

IRRIGATION DETAIL A
DRIP ZONE VALVE ASSEMBLY

Scale: $1^{\prime \prime}=1^{\prime}-0{ }^{\prime \prime}$

(1) CONNECT WIRES TO VALVE USING WATER
(2) ANTI SIPHON CONTROL VALVE
(3) SCH 40 PVC BALL VALVE (LINE SIZE)
(4) PVC SCH. 80 NIPPLE
(SIZE AS REQUIRED)
(5) FINISH GRADE

## IRRIGATION DETAIL B

Scale: $1^{\prime \prime}=1$ 1'-0"


(1) TREE ROOT WATERING SYSTEM. (2 PER TREE)
(2) FINISH GRADE
(3) PVC LATERAL PIPE
(4) ROOT BALL

## NOTES:

1. INSTALL SAND SOCK IN SANDY SOIL TO HELP PREVENT SOIL INTRUSION.

IRRIGATION DETAIL C TREE DEEP WATERING BUBBLER


(1) PVC LATERAL LINE FROM ELECTRIC CONTROL VALVE
(2) SPRAY TO DRIP RETROFIT KIT
(3) DISTRIBUTION TUBING MANIFOLD
(4) MANIFOLD TO ELBOW OR TEE CONNECTION
(5) DRIP LINE EMITTER TUBING
(6) DISTRIBUTION TUBING FLUSH MANIFOLD
(7) PERIMETER LATERALS 12" FROM EDGE
(8) HARDSCAPE EDGE
(9) MANUAL FLUSH VALVE PLUMBED TO FLUSH AT LOW POINT

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. THE TOTAL LENGTH OF ALL INTERCONNECTED DRIP LINE SHALL NOT EXCEED THE MAXIMUM RUN LENGTH PER MANUFACTURER'S SPECIFICATIONS.
3. ALL TUBING SHALL BE STAKED DOWN EVERY 36" USING DRIP TUBING STAPLES OR STAKES.

Scale: Not to Scale

(1) 17 mm EMITTER DRIP LINE TUBING
(2) ROUND VALVE BOX

CUT HOLE FOR TUBING
(3) 18 " LENGTH OF 17 mm DRIP
(3) DISTRIBUTION TUBING
(4) DRIP TUBING ISOLATION BALL VALVE
(5) FINISH GRADE
(6) $3 / 4 "$ GRAVEL SUMP IN, UNDER AND AROUND

## IRRIGATION DETAIL E MANUAL FLUSH VALVE

Scale: $3^{\prime \prime}=1$ 1'-0"



Scale: $1 / 4^{\prime \prime}=1^{\prime}-0^{\prime \prime}$

(1) SET TOP OF ROOTBALL
1" ABOVE FINISH GRADE
(2) 3" LAYER MULCH MATERIAL
(3) $3^{\prime \prime}$ HIGH WATERING BERM
(4) FINISH GRADE
(5) PLANTING BACKFILL
(6) SLOPE PLANTING HOLE

Scale: $1^{\prime \prime}=1^{\prime}-0^{\prime \prime}$

| Opinion of Probable Costs |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PROJECT TITLE <br> Mediterranean Low Maintenance Front Landscape Design | Labor Rate: Tax Rate: | $\begin{aligned} & \$ 30.00 \\ & 0.0775 \\ & \hline \end{aligned}$ |  |  |  | As of 1/18/2021 |
| ITEM DESCRIPTION | QUANTITY | UNIT | MAT | ERIALCOSTS TOTAL MATERIALS COST | $\begin{gathered} \text { TOTAL LABOR } \\ \text { COST } \end{gathered}$ | TOTAL LABOR AND MATERIALS |
| Irrigation |  |  |  |  |  |  |
| Valves |  |  |  |  |  |  |
| Electric control valve - 1" w/ fittings | 1 | EA | \$47.63 | \$51.32 | \$60.00 | \$111.32 |
| Drip Valve Assembly- 1" | 2 | EA | \$66.61 | \$143.54 | \$180.00 | \$323.54 |
| Standard Controllers with Sensor |  |  |  |  |  |  |
| Hydrawise Smart Irrigation Controller (12 station) | 1 | EA | \$190.90 | \$205.69 | \$120.00 | \$325.69 |
| Supplemental Trees Irrigation |  |  |  |  |  |  |
| Deep Watering Tube Bubbler Assembly | 4 | EA | \$39.95 | \$51.80 | \$180.00 | \$352.18 |
| Supplemental Drip on Grade |  |  |  |  |  |  |
| Spray to Drip Conversion Kit | 2 | EA | \$21.05 | \$45.36 | $\$ 90.00$ | \$135.36 |
| Drip Tubing Header | 161 | LF | \$0.20 | \$34.70 | \$144.90 | \$179.60 |
| In Line Drip Emitter Tubing | 860 | LF | \$0.50 | \$463.33 | \$774.00 | \$1,237.33 |
| Flush Valve Assembly w/ Valve Box | 2 | EA | \$8.82 | \$19.01 | \$90.00 | \$109.01 |
| Pipe at 12" Depth |  |  |  |  |  |  |
| Non- Pressure Lateral Line- Class 200 3/4" with fittings. | 231 | LF | \$0.07 | \$17.42 | \$693.00 | \$710.42 |
| TOTAL IRRIGATION COSTS |  |  |  | 1,032.17 | 2,331.90 | 3,484.46 |
| Planting |  |  |  |  |  |  |
| Tree Support |  |  |  |  |  |  |
| Staking (8' long) | 4 | EA | \$3.25 | \$14.01 | \$33.00 | \$47.01 |
| 4" Perf. PVC Tree Drain Tubes w/Drain Cap | 2 | EA | \$26.88 | \$57.93 | \$30.00 | \$87.93 |
| Ground Preparation |  |  |  |  |  |  |
| Clear of Existing Landscape Area and Fine Grading | 1,500 | SF | \$0.00 | \$0.00 | \$900.00 | \$900.00 |
| Mulching (Recycled Organic) | 1,500 | SF | \$0.20 | \$323.25 | \$450.00 | \$773.25 |
| Miscellaneous Items |  |  |  |  |  |  |
| Rainwater Storage (50 Gal) | 1 | EA | \$150.00 | \$161.63 | \$45.00 | \$206.63 |
| Shrubs |  |  |  |  |  |  |
| 1 gallon shrubs | 69 | EA | \$5.75 | \$427.50 | \$207.00 | \$634.50 |
| 5 gallon shrubs | 33 | EA | \$10.00 | \$355.58 | \$247.50 | \$603.08 |
|  |  |  |  |  |  |  |
| 24 " box trees- multi trunk | 2 | EA | \$175.00 | \$377.13 | \$150.00 | \$527.13 |
| TOTAL PLANTING COSTS |  |  |  | 1,717.01 | 2,062.50 | 3,779.51 |
| TOTAL COSTS |  |  |  | 2,749.18 | 4,394.40 | 7,263.97 |
|  |  |  |  |  |  | \$4.84 |
| TYPICAL IRRIGATIO COSTS | $\mathbf{N} \mathrm{N}$ |  | $\left[A \mathbf{N}^{7}\right.$ | $\Gamma M N$ |  | Sheet 13 of 13 |

