



PET FRIENDLY WATER SMART GARDEN

JOB: 2164
DATE: 6-9-2010
REVISIONS:

LANDSCAPE TECHNOLOGIES
architectural irrigation design
970 Woodlark Drive
Carroll Canyon, CA
California 92007
760.942.9320

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	FSI	GPM	RADIUS
⊙	Hunter INST-06-CV 6" radius	1	180	25	0.38 @	
⊙	Hunter INST-06-CV 6" radius	2	90	25	0.19 @	
⊙	Hunter INST-06-CV 8" radius	4	120	25	0.29 @	
▲	Rain Bird 180C-SAM-FRS-1400 Flood	16	360	30	0.25 1'	
■	Rain Bird 180C-SAM-FRS-1400 Flood	4	360	30	2.00 1'	

SYMBOL	MANUFACTURER/DESCRIPTION
⊠	Rain Bird XACZ-075-PRF 3/4" Control Kit, 3/4" Low Flow Anti-Siphon Valve, 3/4" Pressure Regulating RBY Filter and 3/4" pressure regulator, for above grade installation.
⊕	Flush Valve
⊞	Area to Receive Dripline Netalim TLQV4-1B-1B Landscape Dripemine with 0.4gph emitters at 1.0' spacing, with check valve, pressure compensation, 1/2" x 1/2" x 1/2" x 1/2" x 1/2" x 1/2" x 1/2" x 1/2" spaced at 18" apart, with emitters offset for triangular pattern.
⊟	Area to Receive Dripemine Netalim TLQV6-12-12 Landscape Dripemine with 0.6gph emitters at 1.2' spacing, with check valve, pressure compensation, 1/2" x 1/2" x 1/2" x 1/2" x 1/2" x 1/2" x 1/2" spaced at 18" apart, with emitters offset for triangular pattern.

SYMBOL	MANUFACTURER/DESCRIPTION
⊕	Rain Bird ASVF Electric Remote Control Valve, with Atmospheric Backflow Preventer
⊙	Champion B-402 Garden Valve Install on meter stalked to 4x4 redwood post.
⊠	KB1 LT-5 PVC Schedule 80 Ball Valve, Slip X Slip
⊞	Rain Bird ESP-SMT4 with (1) ESP-SM13 station, wall mount, outdoor controller with prepping socket, rain sensor
⊟	Wilms 500 HLR Series Pressure Reducing Valve

Point of Connection 1"
Tie in at water service line.

--- Irrigation Lateral Line: PVC Schedule 40
--- Irrigation Mainline: PVC Class 31.5 SPR 13.5

==== Pipe Sleeve: PVC Schedule 40
Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their reduced couplings to easily slide through sleeve material. Exposed sleeves 18 inches beyond edges of paving or construction.

Value Callout:
N Value Number
F Value Flow
V Value Size

SYMBOL

⊕ Rain Bird ASVF
⊙ Electric Remote Control Valve, with Atmospheric Backflow Preventer
⊙ Champion B-402 Garden Valve
⊠ KB1 LT-5
⊞ PVC Schedule 80 Ball Valve, Slip X Slip
⊞ Rain Bird ESP-SMT4 with (1) ESP-SM13 station, wall mount, outdoor controller with prepping socket, rain sensor
⊟ Wilms 500 HLR Series Pressure Reducing Valve

Pet Friendly Water Wise Garden

Water Budget Calculations

Maximum Applied Water Allowance (MAWA)
MAWA = (E)(A)(C)(T)(L)(A)
46.6 x 0.82 x 0.7 x 2839 = 59440 Gallons per Year

Estimated Total Water Use (ETWU)
ETWU = (E)(A)(C)(T)(P)(F)(H)(A)(I)(E)
29 x 2839 = 79 Units (1000s) per Year

Water Zone Plan Legend

LOW WATER HYDROZONE (L-3" to L-6")
MEDIUM WATER HYDROZONE (M-4" - 6")
HIGH WATER HYDROZONE (H-7" - 8")

Estimated Total Water Use (ETWU)

Hydrozone	Rotating Sprinklers	Med. Req. Drip	Low Req. Drip	Bubblers	ETWU
Hydrozone 1	55.1 x 0.82 x 0.3 x 175 = 2242	0.8	55.1 x 0.82 x 0.6 x 336 = 7682	0.9	18917
Hydrozone 2	55.1 x 0.82 x 0.3 x 1389 = 18917	0.9	55.1 x 0.82 x 0.6 x 384 = 10095	0.8	2294
Hydrozone 3					3896
Hydrozone 4					48

Units (1000s) per Year

Assumes Eto of 55.1 inches (CMIIS Zone 9 South Coast Marine to Desert Transition)

Where: Eto = Evapotranspiration in inches per year
0.82 = Conversion factor to gallons per square foot
0.7 = ET adjustment factor (plant factor x irrigation efficiency)
LA = Landscaped Area
PF = Average plant factor for each hydrozone (WUCOLS)
HA = Hydrozone area in square feet
IE = Irrigation efficiency of irrigation method used in hydrozone

Maximum Allowable Water Use 59440
Total Estimated Water Use 38905
Difference 23833
60% Of Allowance

NOTES:

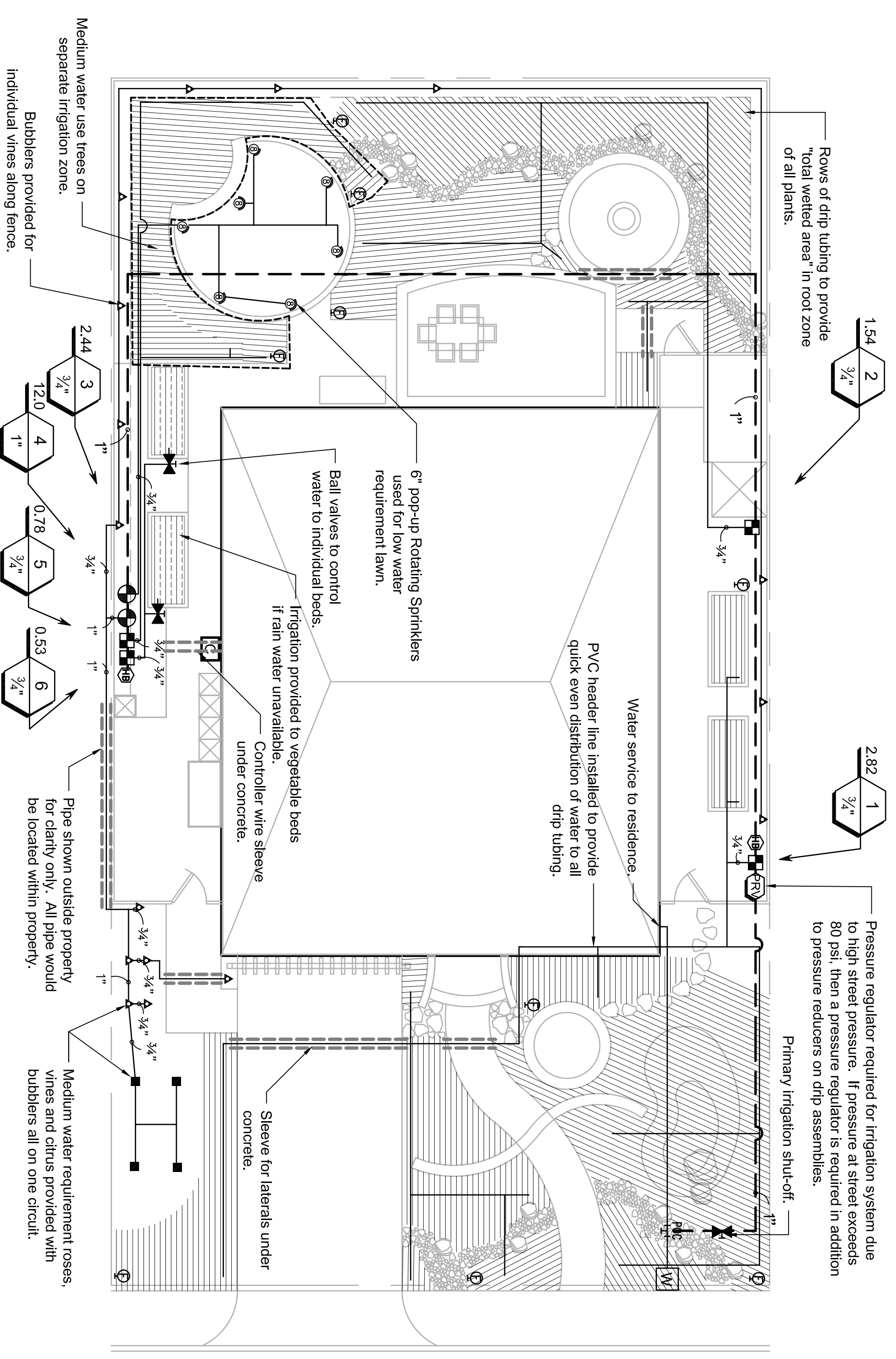
- All irrigation shown is diagrammatic only. All pipe and drip tubing would be laid in planter areas.
- Vegetable garden was not zoned or scheduled as planting requirements would vary depending on planting.
- Irrigation schedules are for reference purposes only. Actual schedule would be based on performance observations of run-off, local weather conditions and plant health/status and would be regulated by Controller Weather Sensor system.
- All PVC pipe to be sch. 40 with manhole buried 18" and laterals buried 12".

Establishment Schedule

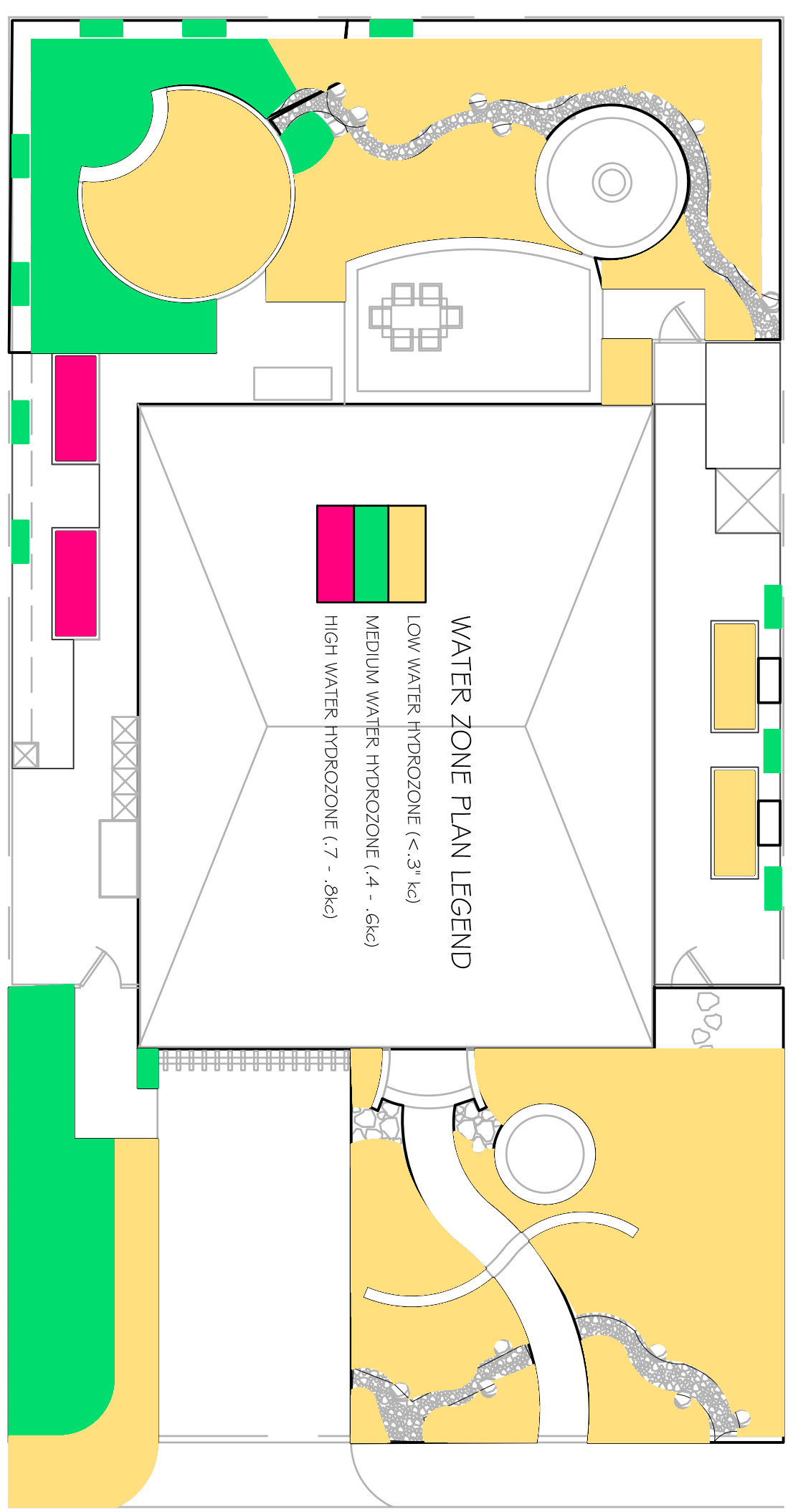
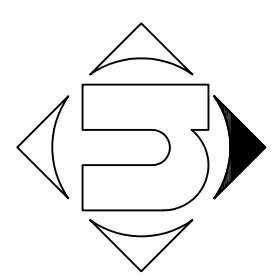
Hydrozone 1 (Station 3)	Hydrozone 2 (Station 5)	Hydrozone 3 (Station 1, 2)	Hydrozone 4 (Station 4)
Weekly Eto: 0.48 Daily Eto: 0.16	Weekly Eto: 0.37 Daily Eto: 0.12	Weekly Eto: 0.14 Daily Eto: 0.04	Weekly Eto: 0.29 Daily Eto: 0.12
Jan: 0.48, Feb: 0.48, Mar: 0.48, Apr: 0.48, May: 0.48, Jun: 0.48, Jul: 0.48, Aug: 0.48, Sep: 0.48, Oct: 0.48, Nov: 0.48, Dec: 0.48	Jan: 0.37, Feb: 0.37, Mar: 0.37, Apr: 0.37, May: 0.37, Jun: 0.37, Jul: 0.37, Aug: 0.37, Sep: 0.37, Oct: 0.37, Nov: 0.37, Dec: 0.37	Jan: 0.14, Feb: 0.14, Mar: 0.14, Apr: 0.14, May: 0.14, Jun: 0.14, Jul: 0.14, Aug: 0.14, Sep: 0.14, Oct: 0.14, Nov: 0.14, Dec: 0.14	Jan: 0.29, Feb: 0.29, Mar: 0.29, Apr: 0.29, May: 0.29, Jun: 0.29, Jul: 0.29, Aug: 0.29, Sep: 0.29, Oct: 0.29, Nov: 0.29, Dec: 0.29

Post-Establishment Schedule

Hydrozone 1 (Station 3)	Hydrozone 2 (Station 5)	Hydrozone 3 (Station 1, 2)	Hydrozone 4 (Station 4)
Weekly Eto: 0.48 Daily Eto: 0.16	Weekly Eto: 0.37 Daily Eto: 0.12	Weekly Eto: 0.14 Daily Eto: 0.04	Weekly Eto: 0.29 Daily Eto: 0.12
Jan: 0.48, Feb: 0.48, Mar: 0.48, Apr: 0.48, May: 0.48, Jun: 0.48, Jul: 0.48, Aug: 0.48, Sep: 0.48, Oct: 0.48, Nov: 0.48, Dec: 0.48	Jan: 0.37, Feb: 0.37, Mar: 0.37, Apr: 0.37, May: 0.37, Jun: 0.37, Jul: 0.37, Aug: 0.37, Sep: 0.37, Oct: 0.37, Nov: 0.37, Dec: 0.37	Jan: 0.14, Feb: 0.14, Mar: 0.14, Apr: 0.14, May: 0.14, Jun: 0.14, Jul: 0.14, Aug: 0.14, Sep: 0.14, Oct: 0.14, Nov: 0.14, Dec: 0.14	Jan: 0.29, Feb: 0.29, Mar: 0.29, Apr: 0.29, May: 0.29, Jun: 0.29, Jul: 0.29, Aug: 0.29, Sep: 0.29, Oct: 0.29, Nov: 0.29, Dec: 0.29



IRRIGATION PLAN



WATER ZONE PLAN

