



# EAGLE POINT



## In-Depth Look

## Irrigation Design

Lay out, design and perform calculations on any size irrigation project.

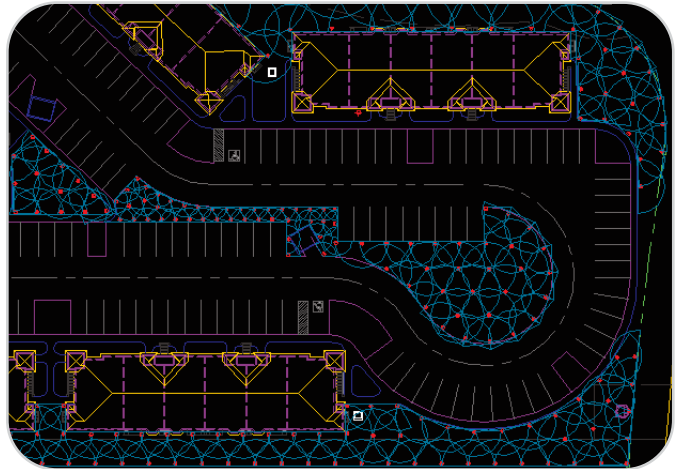
*Irrigation Design* provides powerful tools for designers to lay out, design and perform calculations on any size irrigation project using popular manufacturer's equipment.

### AUTOMATIC LAYOUT AND SIZING

Select a boundary and *Irrigation Design* automatically inserts sprinkler heads at all the appropriate places. Once lateral and mainline pipes are laid out, they are automatically sized for each zone.

### ENSURE WATER AVAILABILITY TO ZONES

Easily define your zones so they include all heads in a particular zone. *Irrigation Design* then determines how much water is needed so you can ensure that there is enough water flow to irrigate the zone properly.



*"D.R. Price Engineering & Land Surveying, Inc., PC has been using Eagle Point software since 1995. We have found it to be very useful in our line of work. The software is very user friendly and quite powerful."*

**- Danny R. Price, PE & LS  
President  
D.R. Price Engineering &  
Land Surveying, Inc., PC**

Irrigation Pipe Table		
Length	Symbol	Pipe
133.02	---	1/2" 180 PSI 800 20 PVC Pipe English Units
133.84	---	1/2" 180 PSI 800 20 PVC Pipe English Units
366.84	---	3/4" 125 PSI 500 20.5 PVC Pipe English Units
366.84	---	1/2" 125 PSI 500 20.5 PVC Pipe English Units
136.16	---	1/2" 200 PSI 800 21 PVC Pipe English Units
136.16	---	3/4" 200 PSI 800 21 PVC Pipe English Units

Irrigation Equipment Table		
Quantity	Symbol	Equipment
1	□	Control Box
1	□	Valve
1	⊖	Backflow Valve
7	⊖	Service Valve
4	⊖	1/2" x 1/2" 45 Elbow
13	⊖	1/2" x 1/2" Tee
2	⊖	1/2" x 1/2" 90 Elbow

Irrigation Heads Table		
Quantity	Symbol	Sprinkler Heads
2	⊖	3000 570 Wettable Pre Irrigation Heads (1" Gasket 1/2" dia) Teardrop Pressure Compensating (Green) 300
2	⊖	3000 570 Wettable Pre Irrigation Heads (1" Gasket 1/2" dia) Teardrop Pressure Compensating (Green) 300
1	⊖	3000 570 Wettable Pre Irrigation Heads (1" Gasket 1/2" dia) Teardrop Pressure Compensating (Black) 300
2	⊖	3000 570 Wettable Pre Irrigation Heads (1" Gasket 1/2" dia) Teardrop Pressure Compensating (Black) 300
2	⊖	3000 570 Wettable Pre Irrigation Heads (1" Gasket 1/2" dia) Teardrop Pressure Compensating (Black) 300
14	⊖	3000 570 Wettable Pre Irrigation Heads (1" Gasket 1/2" dia) Teardrop Pressure Compensating (Black) 300
2	⊖	3000 570 Wettable Pre Irrigation Heads (1" Gasket 1/2" dia) Teardrop Pressure Compensating (Black) 300
1	⊖	3000 570 Wettable Pre Irrigation Heads (1" Gasket 1/2" dia) Teardrop Pressure Compensating (Black) 300
2	⊖	3000 570 Wettable Pre Irrigation Heads (1" Gasket 1/2" dia) Teardrop Pressure Compensating (Black) 300

## HEADS

- Place a hatch pattern inside an area to be irrigated and use it as a template or guideline to help locate sprinkler heads.
- Place sprinkler heads inside a given area in a single step or place them individually for greater control.
- Automatically array a sprinkler to get multiple copies of that sprinkler over a large area. This saves you from having to manually locate a large number of sprinklers.
- Place user-defined sprinklers along the edge of a turf area.
- Show coverage arcs during the design process to ensure adequate coverage and turn the arcs off when you are ready to use the design drawing as your final plan.
- Modify the head data without having to remove and insert a new head. The ability to copy and move heads is also provided to increase the speed of plan revisions.
- Erase the head and the associated arc is removed.
- View how much water is used to cover a given area.
- View the precipitation rate at any given spot dynamically by moving the cursor over an area.
- Move a sprinkler up or down in three-dimensional space to bring it to the correct elevation on the terrain surface.
- Heads can be linked with *Quantity Takeoff* for more advanced cost estimating.

## ZONES

- Group sprinklers controlled by the same valve to ensure you have enough water.
- Insert a label tag to identify a zone and indicate the total discharge required for that zone.
- Calculate the precipitation rate and operating times in minutes per day, then generate a user-defined water usage report based on these calculations.

## PIPE

- Set parameters for pipe insertion that include pipe data file selection, *Quantity Takeoff* link option, object property overrides and label style.
- Graphically show the flow of water from the sources to each of the individual zones and their respective valves.

- When you edit a pipe, the corresponding label is automatically updated.
- Graphically shows lines that might cross but are not related to each other.
- Change from one label style to another to make your plan appear more graphically pleasing. If you have labels that conflict with the pipe locations, you can mirror or rotate them, or select a different style so that the plan becomes more readable.
- Take an initial pipe layout, convert it to appropriately-sized pipe objects and label the objects for graphic purposes at the same time. This makes it easy for you to convey to the contractor what pipe sizes should be used in the various parts of the pipe layout.
- View and modify data associated with various pipe types.
- View which sprinkler has the greatest pressure loss from the valve to the head.

## DRIP

- Lay out Netafim-type subsurface drip irrigation systems.
- Locate individual emitters for each selected plant and draw the drip tubing if necessary. You can also specify the flow rate of each emitter.
- Locate areas on the plan that are to be specified as drip without showing all of the actual emitters.

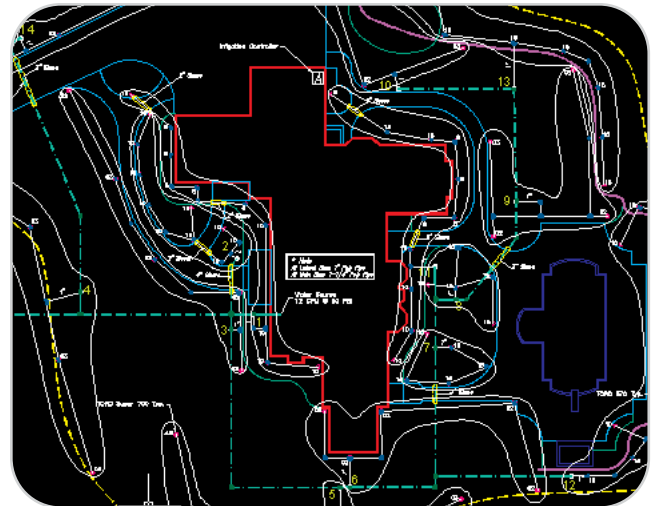
## SYMBOLS

- Create your own irrigation details.
- Insert any irrigation equipment symbols, such as water meters, back flow preventors, filters and other peripheral equipment that are not accounted for in your design.
- Create a legend on the drawing of all components used in the irrigation design. This gives you a quick visual tool of the quantities of each item used in the plan.

## TOOLS

- Insert various symbols representing bar scales into the drawing and specify the drawing scale.
- Insert various symbols representing tags into the drawing and specify text associated with the tags.

- Change the X, Y, Z scale of selected blocks to change the height or width of objects in the drawing.
- Select an object and copy/move it to a different location and then rotate it, all in one command.
- Make multiple copies of an object(s).
- Change the crown diameter of multiple plant symbols without losing the insertion location.
- Reverse the direction of a polyline, line or arc segment.
- Hatch areas with patterns to represent different elements.
- Select multiple points/line segments in the drawing and ***Irrigation Design*** totals the distance for all points/line segments selected and each individual selection.
- Select an object on a layer/level and ***Irrigation Design*** automatically totals the area of all closed polylines on the object's layer/level.
- Select two line segments to get the angle between.
- Create a catalog of selected items in the drawing and use a graphic, as well as text notes, to describe the items.
- Set the default CAD settings for constructed objects.
- Represent a breakline by a zigzag or swoop to show an area on a drawing that may continue onto another sheet, or a distance that is longer than the distance displayed.
- Break an existing line or polyline and place an arc entity over the line that it crosses.
- Change the width of single or multiple polyline segments.
- Place a border in your CAD graphic and select the symbol, orientation and rotation angle for the border.
- Insert a block of ASCII text into the drawing to represent planting specifications.
- Enter a text string and have it follow the path of a polyline.
- Break a single text string into two separate text strings or join two separate text strings into a single text string. This is useful when editing large blocks of imported text.
- Modify several aspects of a text string without having to erase and retype the text string.
- Change all the characters in a text string to upper or lower case in one step.
- Make changes to multiple pieces of the same text.
- Import an ASCII file in several different formats and convert it to CAD points.
- Lay out an easy-to-use reference grid on a site to locate items in the drawing.
- Display a drawing with 3-D entities in a perspective view to show a client how the site will look once it is built.
- Quickly view a drawing with 3-D entities in elevation view.



#### **ABOUT EAGLE POINT**

*For over 20 years, Eagle Point has provided the Land Development industry with business and technology solutions. We use a defined process to explore your business and provide you with the right balance of solutions to help your organization thrive. We've helped over 30,000 clients worldwide.*