

July/August 2018 Irrigation News and Product Updates for Irrigation and Landscape Designers

Irrigation Design Tip: Preparing the Final Irrigation Design Plan

The last step in the irrigation system design procedure is preparing the final irrigation plan. The final irrigation plan is a diagram representing what the sprinkler system should look like after installation. Because the installing contractor will follow the plan as the system goes in, the plan should be as thorough as possible. After reviewing the drawings, the contractor should have very few questions about the designer's intent.

When the final irrigation plan is complete, and it is presented to the client, all the designer's decisions and intentions should be clearly discernible so that the system can go in as designed.

Example of Irrigation Legend

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EXISTING SLEEVE

MAINLINE PIPE: CLASS 200 PVC
(1-NCH (25 MM) SIZE, ROUTING SHOWN IS DIAGRAMMATIC)

LATERAL PIPE TO SPRINKLERS: POLYETHYLENE
(1/2-MCH (15 MM) SIZE UNLESS OTHERWISE SPECIFED)

LATERAL PIPE TO EMITTERS: UV RADIATION RESISTANT POLYETHYLENE
(1/2-MCH (15 MM) SIZE, ROUTING SHOWN IS DIAGRAMMATIC)

UNCONNECTED PIPE CROSSING

PONT-OF-CONNECTION (P.O.C.) ASSEMBLY

BACKFLOW PREVENTION ASSEMBLY

RAIN SENSOR ASSEMBLY: RAIN BIRD RAIN CHECK

REMOTE CONTROL WALVE ASSEMBLY FOR SPRINKLER AND BUBBLER LATERALS:
RAIN BIRD 100-DVF

POP-UP SPRAY SPRINKLER: RAIN BIRD 1804 W/ 10 SERIES NOZZLE
PRESSURE: 30 PSI (2,1 BARS) RADIUS: 10 FEET (3,1 METERS)
FLOW (CPM): Q = 0.39 H = 0.79
FLOW (CPM): Q = 0.39 H = 0.79
FLOW (L/S): Q = 0.03 H = 0.05

BBID POP-UP SPRAY SPRINKLER: RAIN BIRD 1804 W/ 12 SERIES NOZZLE
PRESSURE: 30 PSI (2,1 BARS) RADIUS: 12 FEET (3,7 METERS)
FLOW (CPM): Q = 0.05 H = 0.16

POP-UP SPRAY SPRINKLER: RAIN BIRD 1804 W/ 15 SERIES NOZZLE
PRESSURE: 30 PSI (2,1 BARS) RADIUS: 15 FEET (4,6 METERS)
FLOW (CPM): Q = 0.05 H = 0.12 F = 0.23
FLOW (CPM): Q = 0.93 H = 1.88 F = 5.70
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Detailed plans for commercial installations usually have installation drawings that show exactly how each type of product is to be installed. These drawings are often available as line drawings on transparent sheets so they can be shot with the blueprint of the project design

Other points to consider when preparing the final plan:

- The plan should be readable, usable and drawn at a convenient scale.
- The plan should have a detailed legend explaining all the symbols used in the drawing.
- The plan should show any major elevation changes.
- The plan should show all water and power utility locations, not just those to which the contractor will need to hook up. Buried telephone cables, power lines or water mains can be very expensive to repair, the contractor must know their location to avoid cutting into them.
- The plan should contain special notes for any specific requirements which must be met. Local codes and ordinances, system programming instructions, installation criteria, and rules affecting the landscape from a homeowners' association could all be part of the special instructions.

in PDF and AutoCAD versions.

Product Legends
AutoCAD

Product Legends
PDF