



## **NOTICE TO INDUSTRY**

### **Addendum #2**

#### **Irrigation System (Guidelines and Inspections)**

**EFFECTIVE Thursday, September 9, 2024**

Beginning June 1, 2024, Ordinance 46-23 took effect regarding irrigation systems, and amends the City of Cape Coral, Florida, Code of Ordinances, Chapter 19 "Water and Sewer Utilities," Article VII, "Water Management," by amending Section 19-90.6, "Completion of installation or substantial modification," Section 19-90.8, "Alternative Compliance," and Section 19-94, "Penalties," regarding irrigation systems and penalties for violations.

The growth of population has given rise to water conservation problems, wastage of sources of water supply, degradation of water quality and quantity in Cape Coral as well as the geographic region in which it is located. With this understanding, the South Florida Water Management District (SWFMD) has found concerns and issued an emergency water shortage order.

It is the intent and purpose to provide means to alleviate such condition by improving the long-term sustainability of the water resources, providing an ongoing water conservation program, increase water use efficiency, and prevent and curtail wasteful water use practices. The City has been a leader in water conservation efforts through the beneficial reuse of reclaimed water from its wastewater reclamation facilities augmented by the city's fresh water canal system for the purposes of outdoor water uses. In a continuing effort to conserve the City's water resources, in the best interests of its citizens, an Emergency Water Conservation Plan has been enacted to a line with SWFMD's order.

The location of the current restrictions starts within the North East section of Cape Coral between Gator Slough Canal to the North, N.E. Pine Island Rd to the South, Nelson Rd N to the West, and N.E 24<sup>th</sup> Ave to the East and will be in place until further notice. Please see attached Map.

All new and modified irrigation systems shall be designed to achieve a minimum of 70% efficiency by providing sprinkler head placement and nozzle selection that are within manufacturers specifications. Irrigation systems shall be designed to comply with F.S.



Title XXVIII, Ch. 373, § 228, and the standards adopted by the City and reference the Florida Building Code, Plumbing Volume, Appendix F.

Design drawings shall be provided for the installation of irrigation systems prior to start of construction of the irrigation system. Design drawings shall be prepared by a licensed professional engineer, licensed plumbing/irrigation contractor or licensed landscape architect. Design drawings for single-family homes may be neatly hand-drawn and to scale. A design drawing shall be required for irrigation systems installed on non-residential, multi-family residential, and residential developments or buildings, and shall contain the following information, in addition to the minimum design criteria per Appendix F, of the Florida Building Code, Plumbing.

- (a) Location, type and size of all components including sprinklers, micro-irrigation, main and lateral piping, master valves, valves, moisture sensors, rain sensors, controllers, pump start relays, backflow prevention devices, pumps, wells, etc.
- (b) The flow rate, application rate (inches per hour), and the manufacturer's specifications for operating pressure for the sprinklers and micro-irrigation within each zone.
- (c) The name, address, phone, email, and professional license or certification number of the installation contractor.
- (d) Design drawings for non-residential and multi-family residential buildings shall also include pump station size, pump station location, design operating pressure per manufacturer's specifications, and flow rate per zone, precipitation rate per zone, locations of pipe, controllers, valves, sprinklers, sleeves, gate valves, sensors, etc.

For purposes of determining the 70% efficiency standard, the City Building Department will require an **EPA WaterSense certified** smart controller/timer and soil moisture sensors. Alternative components and designs that meet the 70% efficiency standard may be approved by the Development Services Director, or designee.

Property owners who install a smart irrigation system verified by the City Building Department, which meets the >70% water conservation efficiency standard and has an EPA WaterSense certified smart controller/timer and soil moisture sensors installed, shall receive a \$500 cash rebate from the City.

A property owner or licensed irrigation contractor who installs an irrigation system shall



conduct final testing and adjustments to achieve design specifications prior to completion of the system. A property owner or licensed irrigation contractor who installs or performs work on an automatic irrigation system shall test for the correct operation of each technology that inhibits or interrupts operation of the system during periods of sufficient moisture. If such devices or switches are not installed in the system or are not in proper operating condition, the property owner or licensed irrigation contractor shall install new ones or repair the existing ones and confirm that each device or switch is in proper operating condition before completing other work on the system.

Please refer to Appendix F, Florida Building Code, Plumbing for the proper installation of the proposed irrigation system along with the Testing & Inspections.

The Testing & Inspections shall occur in 2 phases at a minimum.

- Plumbing Underground / Rough
- Plumbing Final

Violation of any provision of Code of Ordinances, Chapter 19 within a consecutive 12-month period shall result in the following penalties:

- (a) First violation: no fine.
- (b) Second violation: \$200 fine.
- (c) Third violation: \$350 fine.
- (d) Fourth and subsequent violations: \$500 fine. An irrigation dual water customer may also be disconnected and subject to a reconnection fee of \$80. Reconnection of service shall be at the sole discretion of the City Manager or his or her designee.



### **7/29/24 Addendum**

1. Updates to the Irrigation Permit are now live on CSS. Do NOT use any previously saved drafts, templates, or bookmarks.
2. For additional information on Irrigation Permit requirements, please refer to the applicable guidelines, forms, and examples on the Permit Document Center.

Examples are also included on the following pages.

3. Only the follow types of contractors may apply for an irrigation permit:
  - a. Certified Plumbing Contractor
  - b. Certified Specialty Contractor – Irrigation
  - c. Registered Plumbing Contractor (until FL State expiration)
  - d. Registered Specialty Contractor – Irrigation (until FL State expiration)
  - e. Owner/Builder per [FL State Statute Section 489.103\(7\)\(c\)](#)

### **09/05/2024 Addendum**

#### **Inspections:**

1. Rough Plumbing Inspections:
  - Complete the “Lawn Irrigation Rough Plumbing Inspection Affidavit” and provide pictures of the following:
    - a) PVC purple sch 40 pipe and purple primer applied to PVC solvent-cemented joints.
    - b) Pipe installation depth:
      - 12” burial depth for static pressure lines
      - 6” burial depth for lateral lines
    - c) Diameter of sleeve
- All photos submitted must include a date/time stamp.
- The photographic evidence shall be comprehensive in the display of the installation and/or construction and job location identifiers.
- If the photographs are found to be insufficient by the building official to demonstrate compliance with this code, statute, Land Development Code and/or the permitted documents, or clearly display location identifiers, or are missing information, the inspector shall require the contractor to obtain the services of a Registered Florida Professional Engineer to inspect and certify the installation and/or construction.
- The signed affidavit and pictures must be uploaded to the portal before scheduling the Rough Plumbing Inspection.



- The rough plumbing and plumbing final shall be scheduled for the same date.
- A copy of the affidavit and accompanying photographs shall be provided to the inspector onsite.

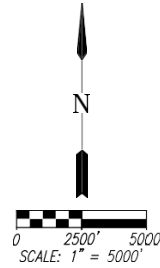
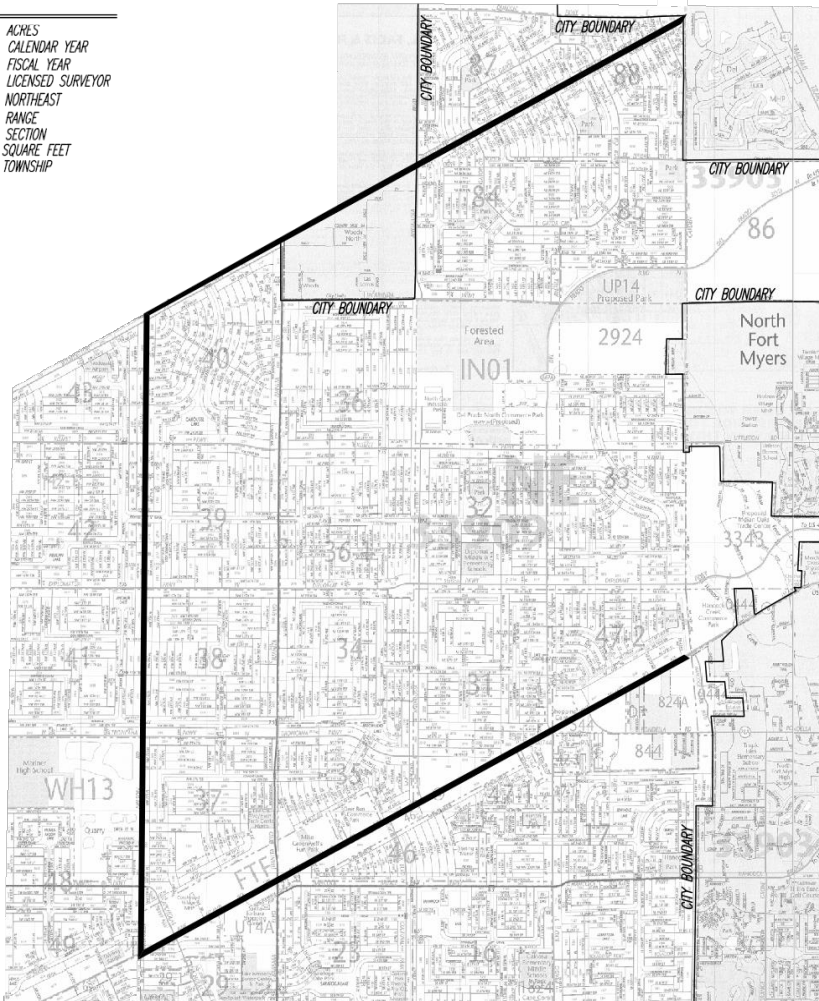
**Permit Documents:**

1. Do NOT use any previously saved drafts, templates, or bookmarks.
2. For additional information on Irrigation Permit requirements, please refer to the applicable guidelines, forms, and examples on the Permit Document Center.

[https://www.capecoral.gov/department/community\\_development/customer\\_service-permitting/department/community\\_development/building\\_division/permitdocumentcenter.php](https://www.capecoral.gov/department/community_development/customer_service-permitting/department/community_development/building_division/permitdocumentcenter.php)



AC. ACRES  
CY CALENDAR YEAR  
FY FISCAL YEAR  
LS LICENSED SURVEYOR  
N.E. NORTHEAST  
RNG. RANGE  
SEC. SECTION  
S.F. SQUARE FEET  
TWP. TOWNSHIP



## EXHIBIT 1

LANDS WITHIN THE CITY OF CAPE CORAL, BOUNDED ON THE WEST BY NELSON ROAD NORTH; ON THE NORTH BY GATOR SLOUGH CANAL; ON THE EAST BY GARDEN BOULEVARD AND N.E. 24th AVENUE; AND ON THE SOUTH BY PINE ISLAND ROAD. SAID LANDS INCLUDE ALL OF THE PLATTED CAPE CORAL UNITS 31, 32, 33, 34, 35, 36, 36 PART 1, 37, 38, 39, 40, 47 PART 2, 84, 85, AND 88; DEL PRADO NORTH COMMERCE PARK, AND UN-PLATTED LANDS.

- 1) THIS IS AN EXHIBIT, THE PURPOSE OF THIS EXHIBIT IS TO DEPICT THE VISUAL REPRESENTATION OF THE PROPERTIES SHOWN HEREON.
- 2) THIS IS NOT A SURVEY.
- 3) APPROXIMATE TOTAL AREA = 11,643 ACRES +/-

	PUBLIC WORKS DEPARTMENT 815 NICHOLAS PARKWAY EAST, CAPE CORAL, FL 33906 PHONE: (239) 574-0701		DRAWING NUMBER: CP-24-001040	
	PROJECT NUMBER: 2024-0018	DATE: 2024-0018	SURVEY JOB: 2024-0018	
PROJECT NUMBER: 24-008	DATE: 24-008	APPROVED: 24-008	SCALE: 1"=500'	





## **LAWN IRRIGATION GUIDELINES**

**Description:** Use this permit type for residential (1 & 2 family homes) lawn irrigation installation.

### **License Requirements:**

- Certified Plumbing Contractor
- Certified Specialty Contractor – Irrigation
- Registered Plumbing Contractor (until FL State expiration)
- Registered Specialty Contractor – Irrigation (until FL State expiration)
- Owner/Builder per [FL State Statute Section 489.103\(7\)\(c\)](#)

### **Documents Required at Time of Application:**

#### **Owner/Builder:**

- **Picture ID**
  - Must present in person
- **Paper miscellaneous application (for in person only)**
  - If applying online via CSS, select "Irrigation – Residential"
- **Site Plan**
  - Site plan to include site address, scale, north arrow, all structures located on property, setbacks, equipment pads, walkways, driveway, and complete irrigation layout
  - \*\*\*SITE PLAN MUST BE OF SUFFICIENT CLARITY
- **Irrigation Worksheet**
  - Available on the City of Cape Coral website under Permit Document Center
- **Irrigation Manufacturer's Specifications**
  - To include but not limited to controller, rain sensor, sprinkler heads, valves, etc. along with GPM rating for proper verification of calculations
- **Burrowing Owl/Gopher Tortoise Affidavit**
  - Must be Notarized
- **Owner/Builder Affidavit**
  - Must be Notarized
- **NOC if valuation is \$5000 or greater:**
  - May be submitted after application, but before the 1<sup>st</sup> inspection
  - Must be Notarized
  - Must be recorded and certified by Lee County. If only recorded, then a NOC Affidavit is also required



### **Registered Contractors Online:**

- **Apply on CSS:**
  - Select "Irrigation - Residential"
- **Site Plan**
  - Site plan to include site address, scale, north arrow, all structures located on property, setbacks, equipment pads, walkways, driveway, and complete irrigation layout

\*\*\*SITE PLAN MUST BE OF SUFFICIENT CLARITY
- **Irrigation Worksheet**
  - Available on the City of Cape Coral website under Permit Document Center
- **Irrigation Manufacturer's Specifications**
  - To include but not limited to controller, rain sensor, sprinkler heads, valves, etc. along with GPM rating for proper verification of calculations
- **Burrowing Owl/Gopher Tortoise Affidavit**
  - Must be Notarized
- **NOC if Valuation is \$5000 or greater:**
  - May be submitted after application, but before the 1<sup>st</sup> inspection
  - Must be Notarized
  - Must be recorded and certified by Lee County. If only recorded, then a NOC Affidavit is also required

### **Reviews:**

- Plumbing Review
- Environmental Review (if Owl or Gopher Tortoise are present)

### **Inspections:**

- |  |      |
|--|------|
| • BLD – Notice of Commencement (NOC)                     | 1    |
| • UTL - Kit A / Meter Install                            | 1    |
| ○ If using reclaimed (Dual) or potable (City) water      |      |
| • BLD – Plumbing Rough (Affidavit and Pictures Required) | 1000 |
| • BLD – Plumbing Final                                   | 1000 |
| • UTL – Dual Water                                       | 999  |
| ○ Only if using reclaimed (Dual) water                   |      |
| • UTL - Potable Irrigation Hook Up                       | 999  |
| ○ Only if using potable (City) water                     |      |

### **Expiration:**

- Six (6) months
- Two (2) years if using a Private Provider





## **LAWN IRRIGATION ROUGH PLUMBING INSPECTION AFFIDAVIT**

Permit #: \_\_\_\_\_

Site Address: \_\_\_\_\_

Contractor / Applicant Name: \_\_\_\_\_

License #: \_\_\_\_\_

The undersigned authority being duly sworn, deposes and says of his or her personal knowledge, attest to the following:

- Schedule 40 PVC is required for all static pressurized water lines. PVC purple pipe is mandatory for all non-potable water sources including irrigation systems.
- Burial depth shall be 12" for all static pressure lines and 6" for all lateral lines.
- PVC must have purple primer that conforms to ASTM F656 and shall be applied to PVC solvent-cement joints. Solvent cement for Purple PVC plastic pipe conforming to ASTM D2564 shall be applied to all joint surfaces.
- All water piping is sized to assure that the maximum water velocity does not exceed 5 fps.
- All low voltage wire which is directly buried, is labeled for Direct Burial.
- All photos submitted must include a date/time stamp.
- The photographic evidence shall be comprehensive in the display of the installation and/or construction and job location identifiers.

This affidavit and the necessary photos must be uploaded to the portal prior to scheduling the Rough Plumbing and Plumbing Final inspection (The rough plumbing and plumbing final shall be scheduled for the same date). In addition, a copy of the affidavit and accompanying photographs shall be provided to the inspector onsite.

If the photographs are found to be insufficient by the building official to demonstrate compliance with this code, statute, Land Development Code and/or the permitted documents, or clearly display location identifiers, or are missing information, the inspector shall require the contractor to obtain the services of a Registered Florida Professional Engineer to inspect and certify the installation and/or construction.

Under penalties of perjury, I declare that I have read the foregoing LAWN IRRIGATION ROUGH PLUMBING INSPECTION AFFIDAVIT and that the facts stated in it are true. I hereby affirm, that all the foregoing information is true and accurate and that the irrigation system at the above referenced permit/address was designed and installed to comply with F.S. Title. XXVIII, Ch. 373, § 228, the City of Cape Coral Code of Ordinance 46-23 and reference the Florida Building Code, Plumbing Volume, Appendix F. 8th Edition (2023).

\_\_\_\_\_  
Contractor / Owner/Builder Signature

\_\_\_\_\_  
Date

A person who knowingly makes a false declaration under subsection (2) is guilty of the crime of perjury by false written declaration, a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

## IRRIGATION WORKSHEET - Residential 1 & 2 Family

## SPRINKLERS

[illegible]

## CONTROL VALVES

	<u>Qty</u>	<u>Symbol</u>	<u>Description</u>
1			
2			

## MAINLINE PIPE

	<u>Qty</u>	<u>Symbol</u>	<u>Description</u>
1			
2			

## SLEEVING

	<u>Qty</u>	<u>Symbol</u>	<u>Description</u>
1			
2			

## IRRIGATION ACCESSORIES

	<u>Qty</u>	<u>Symbol</u>	<u>Description</u>
1			
2			
3			
4			
5			
6			

## SENSORS

	<u>Qty</u>	<u>Symbol</u>	<u>Description</u>
1			
2			

**Submittal Package Shall Include:**

1. Site plan (Site plan to include site address, scale, north arrow, all structures located on property, setbacks, equipment pads, walkways, driveway, and complete irrigation layout.)  
\*\*\*SITE PLAN MUST BE OF SUFFICIENT CLARITY
2. Irrigation Worksheet
3. Manufacturer specifications, controller, rain sensor, sprinkler heads, etc. along with GPM rating for proper verification of calculations.
4. Owl/Gopher Tortoise Affidavit
5. NOC if valuation is \$5,000.00 or greater

**Notes:**

1. All water piping is sized to assure that the maximum water velocity does not exceed 5 fps.
2. Recommended systems should be designed to a 80% zone capacity.
  - a) 1" mainline pipe -15 gpm x 0.8 = 12 gpm
  - b) 1 1/4" mainline pipe - 24 gpm x 0.8 = 20 gpm
3. City approved plans and instruction manuals shall be kept on-site. The "As-Built" and controller manual shall be left on-site after installation. The manual shall include information regarding routine maintenance.
4. A sticker shall be applied to the inside front cover of the controller providing the installer's contact information & warranty.
5. Control valve wiring is U/L listed for burial. Splices are water resisted per manufacturer specifications and in compliance with NFPA 70 - NEC 2020.
6. PVC must have a purple primer that conforms to ASTM F656 and shall be applied to PVC solvent-cemented joints. Solvent cement for PVC purple plastic pipe conforming to ASTM D2564 shall be applied to all joint surfaces.
7. Schedule 40 PVC is required for all static pressurized water lines. PVC purple pipe is mandatory for all non-potable water sources including irrigation systems. Burial depth shall be 12" for all static pressure lines and 6" for all lateral lines.
8. The irrigation system shall be designed to achieve a minimum of 70% distribution uniformity by providing sprinkler head placement and nozzle selection that are within the manufacturer's specifications.
9. Irrigation/sprinkler system risers for all heads shall discharge at least 1 foot (305 mm) away from the structure sidewall.
10. Low Voltage Wire
  - a) All low voltage wire which is directly buried must be labeled for direct burial wire. All wire traveling under any hardscape or roadway must be installed within a separate sleeve from the irrigation lines.
  - b) The size of the electrical control wire shall be in accordance with the valve manufacturer's specifications, based on the solenoid in-rush amperage and the circuit length, considering the number of solenoids operating, on the circuit. Minimum of #14 AWG control wire shall be used on all systems, except single lot individual residential systems. Minimum of #18 AWG control wire shall be used on all single lot individual residential systems.
11. All pop-up spray head bodies in turf areas shall be no less than 6 inches in height for St. Augustine, Zoysia and Bahia and no less than 4 inches in height for Bermuda, Centapede and Seashore Paspalum.
12. Flexible pipe connection required on heads in vehicle traffic area.
13. Manual shut off required on pressurized side of all filters and zone valves.
14. Pipes running parallel to road must be 24" off the edge of pavement.

**\*\*\*By applying for an irrigation permit the applicant attests the system is designed to comply with F.S. Title XXVIII, Ch. 373, § 228, the City of Cape Coral Code of Ordinance 46-23 and reference the Florida Building Code, Plumbing Volume, Appendix F. 8th Edition (2023) and that the irrigation systems is designed to achieve a minimum of 70% efficiency by providing sprinkler head placement and nozzle selection that are within the manufacturers specifications.**

**Site Address:** \_\_\_\_\_

**Contractor Name:** \_\_\_\_\_

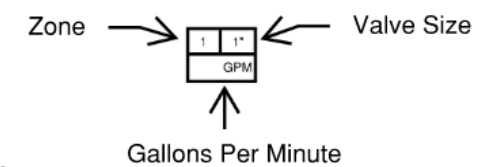
**Address:** \_\_\_\_\_

Professional License / Certification Number of the Installation Contractor: \_\_\_\_\_

**Phone #:** \_\_\_\_\_ **Email:** \_\_\_\_\_

**Typical Legend Symbol**

-  Sleeve  
 Lateral Lines  
 Mainline  
 Rain Sensor  
 Well Location  
 Water Supply Connection  
 Controller  
 Master Valve Assembly  
 Solenoid Assembly  
 Backflow Device  
 1/4 Rotor Spray/Fixed  
 1/2 Rotor Spray/Fixed  
 3/4 Rotor Spray/Fixed  
 Full Rotor Spray/Fixed  
 Drip System  
 Bubbler  
 Microjet  
 Ball Valve Emergency shut off



### Water Source #1

Meter Size/Reclaim System - Size of Connection (55 psi)*	
Well (65 psi)*	

\*Pressures may fluctuate

**\*\*To qualify for the EPA WaterSense rebate program the property owner shall install a smart irrigation system, which meets the >70% water conservation efficiency standard and install a EPA WaterSense certified smart controller/timer and soil moisture sensor.**

