



STAFF REPORT CITY OF SOLANA BEACH

TO: Honorable Mayor and City Council members
FROM: David Ott, City Manager
MEETING DATE: March 23, 2011
ORIGINATING DEPT: Community Development Department
SUBJECT: **Adoption (2nd Reading) of Ordinance 430–Related to Water Efficient Landscape and establish related Fees**

BACKGROUND

On February 23, 2011 the Council Introduced Ordinance 430 amending Title 17 of the Solana Beach Municipal Code (SBMC) by repealing the existing Landscaping Regulations of section 17.56 and replacing them with the Water Efficient Landscape Regulations after conducting a public hearing on the matter.

The Ordinance is now before the Council for its proposed adoption.

DISCUSSION

The Council introduced Ordinance 430 as it was written at its meeting of February 23, 2011. Staff is recommending that the Council adopt Ordinance 430 as introduced, which is equivalent to the State's Model Water Efficient Landscape Ordinance (MWELO) with these proposed local modifications:

1. A requirement to obtain a permit for landscape and irrigation projects that are 2,500 square feet or larger that are not tied to a building or discretionary permit. (Existing landscaped single-family lots that are re-landscaped, for either homeowner-provided or homeowner-hired projects are an exception and do not require a permit.)

A new landscape permit is required to review these permits. In order to fully implement the intent of the State's requirements for landscape and irrigation projects a local revision to the City's fee schedule is necessary.

2. A fee of \$321.20 for this new permit is proposed to recover the City's costs to process, review and inspect the work.

CITY COUNCIL ACTION:

**AGENDA ITEM
C.3.**

Ordinance 430 also specifies the applicant's responsibility to submit a detailed documentation package that is prepared by a professional of record to certify compliance with the provisions of the ordinance.

3. The local threshold of 2,500 sq. ft. for the minimum project area is proposed to be lower than the States MWELO ordinance threshold of 5,000 sq. ft. to reflect the smaller size of lots in the coastal area of Solana Beach.

For example, Staff estimates that City will review approximately 5 projects per year if this lower threshold is adopted as proposed. Staff estimates that one project per year would require a landscape permit if the larger landscape project area of 5,000 sq. ft. was adopted instead.

4. Ordinance 430 incorporates the existing provisions of SBMC Chapters 1.16 and 1.18 for administrative citations and criminal penalties by reference.

Administrative penalties may include \$100, \$200 and up to \$500 fines for first, second, and third violations of the Ordinance. Also, misdemeanor penalties include a fine of not more than \$1,000, or six months in jail or both.

CEQA COMPLIANCE STATEMENT:

The project is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15308 of the State CEQA Guidelines.

FISCAL IMPACT:

Approval of the establishment of a new fee to the current FY 2010/2011 Fee Schedule will eliminate the subsidy for these services from General Fund revenues.

WORKPLAN: This action will support and further the City's goals under Environmental Sustainability to develop policies that support the US Mayor's Climate Protection Agreement.

OPTIONS:

- Approve Staff recommendation.
- Approve Staff recommendation with alternative amendments/modifications.
- Provide alternative direction.

DEPARTMENT RECOMMENDATION:

Staff recommends that the City Council:

1. Find the project exempt from CEQA under guidelines 15308.
2. Make a finding that the proposed amendments to SBMC 17.56 are consistent with the general plan and would not be detrimental to the public interest, health and safety, convenience, or welfare of the City as required under 17.76.070.
3. Make a finding that the proposed amendments to SBMC are equivalent to the State's requirements for the Model Water Efficient Landscape Ordinance.

4. Adopt Ordinance 430 amending SBMC section 17.56 by repealing the existing Landscaping Regulations and adopting the Landscaping Regulations in Ordinance 430.

CITY MANAGER'S RECOMMENDATION:

Approve Department Recommendation.



David Ott, City Manager

Attachments:

1. Ordinance 430

ORDINANCE 430

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SOLANA BEACH, CALIFORNIA, TO ADOPT THE WATER EFFICIENT LANDSCAPE REGULATIONS REPLACING THE EXISTING SECTION 17.56 OF THE SOLANA BEACH MUNICIPAL CODE

WHEREAS, The City reviews and periodically updates its regulations to insure that sustainable and best management practices in water conservation and landscape management are implemented; and

WHEREAS, In 2006 the State of California adopted the Water Conservation in Landscaping Act, Government Code Sections 65591 et seq. to provide for greater efforts at water conservation and more efficient use of water in landscaping; and

WHEREAS, Government Code Section 65595 requires that on or before January 1, 2010 a local agency shall adopt a water efficient landscape ordinance that is equivalent to, or at least as effective as the State Model Water Efficient Landscape Ordinance (MWLEO) developed by the Department of Water Resources in accordance with the Water Conservation in Landscaping Act (2006), or shall adopt the State MWLEO, or if no ordinance is adopted by the deadline, the State MWLEO applies with the same force and effect as if adopted by the local agency; and

WHEREAS, The City has implemented the State MWLEO for all applications received after January 1, 2010 as required by state law; and

WHEREAS, Staff has reviewed the State MWLEO for applicability to development within the coastal community of Solana Beach and proposes certain amendments to the MWLEO which are equivalent to, or more restrictive than the State regulations; and

WHEREAS, the current landscaping regulations of Chapter 17.56 of the Solana Beach Municipal Code are less restrictive than the State MWLEO; and

WHEREAS, This ordinance implements the water Conservation in Landscaping Act and that the provisions of this ordinance are equivalent to and at least as effective in conserving water as the provisions of the State MWLEO; and

WHEREAS, This ordinance will increase water use efficiently by establishing water budgets, promoting installation and maintenance of efficient irrigation systems, encouraging use of plants that use water efficiently based on climate, soil type and site features and reduce water waste that occurs from irrigation runoff and overspray; and

WHEREAS, adoption of the Water Efficient Landscape Ordinance is exempt under the California Environmental Quality Act, Section 15308; and

WHEREAS, adoption of the Water Efficient Landscape Ordinance is consistent with the General Plan. It will implement the Conservation Elements goal, objectives and policies to maintain an adequate domestic water supply for all residents and conserve and recycle important resources.

NOW THEREFORE, the City Council of the City of Solana Beach does ordain as follows:

Chapter 17.56 of the Solana Beach Municipal Code is hereby amended to read as follows:

Chapter 17.56
WATER EFFICIENT LANDSCAPE REGULATIONS

Sections:

- 17.56.010 Purpose
- 17.56.020 Findings
- 17.56.030 Definitions
- 17.56.040 Applicability
- 17.56.050 Landscape approval
- 17.56.060 Administration and landscape manual
- 17.56.070 Landscape documentation package
- 17.56.080 Soil management report
- 17.56.090 Planting and irrigation plans
- 17.56.110 Water efficient landscape worksheet
- 17.56.111 Grading design plan
- 17.56.112 Irrigation schedule
- 17.56.113 Maximum applied water use
- 17.56.114 Estimated total water use
- 17.56.115 Adjustment to landscaped area for non-vegetated area
- 17.56.116 New single family residential projects with limited landscaping
- 17.56.117 Cemeteries
- 17.56.118 Regulations applicable to use of turf on landscaped areas
- 17.56.119 Projects with model homes
- 17.56.120 Recycled water
- 17.56.121 Landscaping and irrigation installation
- 17.56.122 Landscaping and irrigation maintenance
- 17.56.123 Certificate of completion
- 17.56.124 Waste water prevention
- 17.56.125 Violations
- 17.56.126 Enforcement
- 17.56.127 Fees
- 17.56.010 Purpose**

The State Legislature determined in the Water Conservation in Landscaping Act (the "Act"), Government Code sections 65591 et seq., that the State's water resources are in limited supply. The Legislature also recognized that while landscaping is essential to the quality of life in California, landscape design, installation, maintenance and management must be water efficient. The general purpose of this chapter is to establish water use standards for landscaping in the City that implement the 2006 development landscape design requirements established by the Act. Consistent with the Legislature's findings, the purpose of this ordinance is to:

- A. Promote the values and benefits of landscapes while recognizing the need to utilize water and other resources as efficiently as possible.
- B. Establish a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction.
- C. Promote the use, when available, of tertiary treated recycled water, for irrigating landscaping.
- D. Use water efficiently without waste by setting a Maximum Applied Water Allowance (MAWA) as an upper limit for water use and reduce water use for landscaping to the lowest practical amount.
- E. Encourage water users of existing landscapes to use water efficiently and without waste.

17.56.020. Findings

This Chapter implements the Water Conservation in Landscaping Act. The requirements of this chapter reduce water use associated with irrigation of outdoor landscaping by setting a maximum amount of water to be applied to landscaping and by designing, installing and maintaining water efficient landscapes consistent with the water allowance. The provisions of this ordinance are equivalent to and at least as effective as the provisions of the state Model Water Efficient Landscape Ordinance because the calculation of MAWA and the resulting restrictions on irrigation and process are similar, though tailored to the City's existing regulatory procedures.

The requirements herein are intended to reduce water usage in Solana Beach to the same extent as the Model Landscape Ordinance prepared by the State of California. In implementing this law, the City shall endeavor to apply the law in a manner which will result in long-term water savings to the Citizens of the State as required by law. The water savings shall be achieved through permanent landscape rules using irrigation management, greater use of drought-tolerant plantings and improved design criteria.

In adopting this Chapter, the City Council finds and determines that this Chapter will be as effective as the state Model Landscape Ordinance and is based on the San Diego

County Regional Model Ordinance with changes for local and climatic conditions. The threshold regulations are based on those in the State Model Landscape Ordinance as modified by the San Diego Regional Model Ordinance. The uniformity with the County Model will assist developers and property owners in meeting the requirements of this Chapter.

17.56.030. Definitions

The following definitions shall apply to this chapter:

A. "Automatic irrigation controller" means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers shall schedule irrigation events using either evapotranspiration (ET_o) (weather-based) or moisture sensor data.

B. "Building permit" means a permit to engage in a certain type of construction on a specific location.

C. "Certified landscape irrigation auditor" means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other accredited certification program.

D. "Developer" means a person who seeks or receives permits for or who undertakes land development activities' who is not a single family homeowner. Developer includes a developer's partner, associate, employee, consultant, trustee or agent.

E. "Director" means the *[insert local definition]* or anyone to whom the Director has designated or hired to administer or enforce this chapter.

F. "Discretionary permit" means any permit requiring a decision making body to exercise judgment prior to its approval, conditional approval or denial.

G. "Estimated total water use" (ETWU) means the estimated total water use in gallons per year for a landscaped area.

H. "ET adjustment factor" (ETAF) means a factor that when applied to reference ET_o, adjusts for plant water requirements and irrigation efficiency, two major influences on the amount of water that is required for a healthy landscape.

I. "Evapotranspiration" (ET_o) means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time period. "Reference evapotranspiration" means a standard measurement of environmental parameters which affect the water use of plants. ET_o is given in inches per day, month, or year and is an estimate of the ET_o of a large field of four-inches to seven-inches tall,

cool season turf that is well watered. Reference ETo is used as the basis of determining the MAWA so that regional differences in climate can be accommodated.

J. "Grading" means any importation, excavation, movement, loosening or compaction of soil or rock.

K. "Hardscape" means any durable surface material, pervious or non pervious. Do we need to include pervious?

L. "Homeowner-provided landscaping" means landscaping installed either by a private individual for a single-family residence or installed by a licensed contractor hired by a homeowner.

M. "Hydrozone" means a portion of the landscape area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.

N. "Invasive species" means species of plants not historically found in California that spread outside cultivated areas and may damage environmental or economic resources.

O. "Irrigation audit" means an inspection which includes an in depth evaluation of the performance of an irrigation system conducted by a certified landscape irrigation auditor. An irrigation audit may include, but is not limited to, inspection, system tune up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow and preparation of an irrigation schedule.

P. "Irrigation efficiency" means the measurement of the amount of water beneficially used divided by the water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices.

Q. "Landscaped area" means an area with outdoor plants, turf and other vegetation. A landscaped area includes a water feature either in an area with vegetation or that stands alone. A landscaped area may also include design features adjacent to an area with vegetation when allowed under SBMC 17.56.115. A landscaped area does not include the footprint of a building, decks, patio, sidewalk, driveway, parking lot or other hardscape that does not meet the criteria in SBMC 17.56.115. A landscaped area also does not include an area without irrigation designated for non-development such as designated open space or area with existing native vegetation.

R. "Landscape design manual" means the manual, approved by City that establishes specific design criteria and guidance to implement the requirements of this chapter.

S. "Licensed" means licensed by the State of California

T. "Low head drainage" means a sprinkler head or other irrigation device that continues to emit water after the water to the zone in which the device is located has shut off.

U. "Low volume irrigation" means the application of irrigation water at low pressure through a system of tubing or lateral lines and low volume emitters such as drip lines or bubblers.

V. "Mass grading" means the movement of soil per the grading ordinance.

W. "Maximum Applied Water Allowance" (MAWA) means the maximum allowed annual water use for a specific landscaped area based on the square footage of the area, the ETAF and the reference ETo.

X. "Mulch" means an organic material such as leaves, bark, straw or inorganic mineral materials such as rocks, gravel or decomposed granite left loose and applied to the soil surface to reduce evaporation, suppress weeds, moderate soil temperature or prevent soil erosion.

Y. "Overspray" means the water from irrigation that is delivered outside an area targeted for the irrigation and makes contact with a surface not intended to be irrigated.

Z. "Pervious" means any surface or material that allows the passage of water through the material and into underlying soil.

AA. "Plant factor" means a factor when multiplied by the ETo, estimates the amount of water a plant needs.

BB. "Public water purveyor" means a public utility, municipal water district, municipal irrigation district or municipality that delivers water to customers. What about private water purveyor? Do we need to add this definition?

CC. "Recycled water" means waste water that has been treated at the highest level required by the California Department of Health Services for water not intended for human consumption. "Tertiary treated recycled water," means water that has been through three levels of treatment including filtration and disinfection.

DD. "Runoff" means water that is not absorbed by the soil or landscape to which it is applied and flows from the landscaped area.

EE. "Special landscaped area" means an area of the landscape dedicated to edible plants, an area irrigated with recycled water, or an area dedicated as turf area within a park, sports field or golf course where turf provides a passive or active recreational surface.

FF. "Subsurface irrigation" means an irrigation device with a delivery line and water emitters installed below the soil surface that slowly and frequently emit small amounts of water into the soil to irrigate plant roots.

GG. "Transitional area" means a portion of a landscaped area that is adjacent to a natural or undisturbed area and is designated to ensure that the natural area remains unaffected by plantings and irrigation installed on the property.

HH. "Turf" means a groundcover surface of mowed grass.

II. "Water feature" means a design element where open water performs an aesthetic or recreational function. A water feature includes a pond, lake, waterfall, fountain, artificial streams, spa and swimming pool. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices are not water features.

JJ. "WUCOLS III" means Water Use Classification of Landscape Species and refers to the Department of Water Resources 1999 publication or the most current version.

17.56.040. Applicability

A. This chapter shall apply to the following projects::

1. A project for an industrial, commercial, institutional, or multi-family residential use where the landscaped area is greater than or equal to 2,500 square feet.
2. Developer installed residential and common area landscapes where the total landscaped area for the development is greater than or equal to 2,500 square feet.
3. A new single-family residence with homeowner provided landscaping where the landscaped area is greater than or equal to 2,500 square feet.
4. A model home that includes a landscaped area.
5. A public agency project that contains a landscaped area greater than or equal to 2,500 square feet.
6. A rehabilitated landscape for an existing industrial, commercial, institutional, public agency, or multifamily use where a building permit, discretionary permit or landscaping permit is being issued and the

applicant is installing or modifying landscaping greater than or equal to 2,500 square feet.

7. A cemetery under limited requirements in SBMC 17.56.117.

8. A new single-family residence with homeowner provided landscaping, where the landscape area is less than 2,500 square feet, under limited requirements in SBMC 17.56.116.

B. This chapter shall not apply to the following:

1. A registered local, State or federal historical site.

2. An ecological restoration project that does not require a permanent irrigation system.

3. A mined land reclamation project that does not require a permanent irrigation system.

4. A botanical garden or arboretum, open to the public.

5. Any single-family residence that is being rebuilt after it was destroyed due to a natural disaster, such as a fire, earthquake, hurricane or tornado.

6. Existing landscaped single-family lots that are relandscaped, for either homeowner-provided or homeowner-hired projects.

17.56.050 Landscape approval

A. No person shall install landscaping for a project subject to this chapter without the review and approval required by this chapter.

B. A person constructing a project subject to the requirements of this chapter shall obtain approval for the landscaped area as follows:

1. A person applying for a building permit for a single-family residence shall obtain an approval of the landscaping from the City as part of the permitting process.

2. A person applying for a discretionary permit described in SBMC 17.56.040:

a. Shall submit a landscape concept plan as required by the discretionary permit application. The concept plan shall include

representation of the site features, proposed planting areas and the proposed method and type of irrigation.

b. Shall obtain approval for landscaping as part of the permitting process for each building permit for each project.

c. May use "typical" plans for Developer-installed landscaping for Single-family homes.

3. When neither a building permit nor discretionary permit is required for a project meets the thresholds in SBMC 17.56.040 a landscape permit is required. A person applying for approval of a landscape permit shall submit a landscape documentation package that complies with the provisions of this chapter.

17.56.060 Administration and landscape manual

A. The Director shall administer and enforce this chapter.

B. The County of San Diego Landscape Design Manual has been designated as the City's Landscape Design Manual to provide guidance to applicants in order to comply with the requirements of this chapter.

17.56.070 Landscape documentation package

A. Except as provided in subsection (B) building permit applications for projects subject to SBMC 17.56.040 shall include a landscape documentation package that complies with the provisions of this chapter and with the Landscape Design Manual.

B. An applicant for a building permit for a single family residence with a landscaped area less than 2,500 square feet is not required to submit a landscape documentation package with the permit application, but shall comply with SBMC 17.56.116. An applicant for a permit for a cemetery is not required to submit a landscape documentation package, but shall comply with SBMC 17.56.117.

C. The landscape documentation package required by subsection (A) shall contain the following:

1. A soil management report and plan that complies with SBMC 17.56.080 that analyzes the soil within each landscaped area of the project and makes recommendations regarding soil additives.

2. Planting and irrigation plans that comply with SBMC 17.56.090 that describe the landscaping and irrigation for the project.

3. A water efficient landscape worksheet that complies with SBMC 17.56.110 that calculates the MAWA and the ETWU for the project. See the Landscape Design Manual for required worksheet.
4. A grading design plan that complies with SBMC 17.56.111 that describes the grading of the project. If the project applicant has submitted a grading plan with the application for the project, the Director may accept that grading plan in lieu of the grading design plan required by this subsection if the grading plan complies with SBMC 17.56.111.

17.56.080 Soil management report

A. The soil management report required by SBMC 17.56.070 shall be prepared by a licensed landscape architect, licensed civil engineer, licensed architect, or other landscape professional licensed by the state to do this work and shall contain the following information:

1. An analysis of the soil for the proposed landscaped areas of the project that includes information about the soil texture, soil infiltration rate, pH, total soluble salts, sodium, and percent organic matter.
2. Recommendations about soil amendments that may be necessary to foster plant growth and plant survival in the landscaped area using efficient irrigation techniques.

B. When a project involves mass grading of a site the applicant shall submit the soil management report that complies with subsection (A) above with the certificate of completion required by SBMC 17.56.123.

C. The soil management report shall include information regarding proposed soil amendments and mulch:

1. The report shall identify the type and amount of mulch for each area where mulch is applied. Mulch shall be used as follows:
 - a. A minimum two-inch layer of mulch shall be applied on all exposed soil surfaces in each landscaped area except in turf areas, creeping or rooting ground covers or direct seeding applications where mulch is contraindicated.
 - b. Stabilizing mulch shall be applied on slopes.
 - c. The mulching portion of seed/mulch slurry in hydro-seeded applications shall comply with subsection (A) above.
 - d. Highly flammable mulch material shall not be used.

2. The report shall identify any soil amendments and their type and quantity.

1756.090 Planting and irrigation plans

A. The planting and irrigation plans required by SBMC 17.56.070 shall be prepared by a licensed landscape architect, licensed civil engineer, licensed architect, or other landscape professional licensed by the state to do this work. The plans shall:

1. Include the MAWA for the plans, including the calculations used to determine the MAWA. The calculations shall be based on the formula in SBMC 17.56.113.
2. Include the ETWU for the plans, including the calculations used to determine the ETWU. The calculations shall be based on the formula in SBMC 17.56.114.
3. Include a statement signed under penalty of perjury by the person who prepared the plan that provides, "I am familiar with the requirements for landscape and irrigation plans contained in the City's Water Efficient Landscape Regulations. I have prepared this plan in compliance with those regulations and the Landscape Design Manual. I certify that the plan implements those regulations to provide efficient use of water."
4. Demonstrate compliance with best management practices required by SBMC 13.10.
5. Address fire safety issues and demonstrate compliance with applicable requirements for defensible space around buildings and structures and shall avoid the use of fire prone vegetation.

B. The planting plan shall meet the following requirements:

1. The plan shall include a list of all vegetation by common and botanical plant name, which exists in the proposed landscaped area. The plan shall state what vegetation will be retained and what will be removed.
2. The plan shall include a list of all vegetation by common and botanical plant name, which will be added to each landscaped area. Invasive plant species shall be highly discouraged. The plan shall include the total quantities by container size and species. If the applicant intends to plant seeds, the plan shall describe the seed mixes and applicable purity and germination specifications.

3. The plan shall include a detailed description of each water feature that will be included in the landscaped area.
4. The plan shall be accompanied by a drawing showing on a page or pages, the specific location of all vegetation, retained or planted, the plant spacing and plant size, natural features, water features, and hardscape areas. The drawing shall include a legend listing the common and botanical plant name of each plant shown on the drawing.
5. All plants shall be grouped in hydrozones and the irrigation shall be designed to deliver water to hydrozones based on the moisture requirements of the plant grouping. A hydrozone may mix plants of moderate and low water use or mix plants of high water use with plants of moderate water use. No high water use plants shall be allowed in a low water use hydrozone. The plan shall also demonstrate how the plant groupings accomplish the most efficient use of water.
6. The plan shall identify areas permanently and solely dedicated to edible plants.
7. The plan shall avoid the use of landscaping with known surface root problems adjacent to a paved area, unless the plan provides for installation of root control barriers or other appropriate devices to control surface roots.
8. Plants in a transitional area shall consist of a combination of site adaptive and compatible native and/or non-native species. Invasive species are highly discouraged from being introduced or tolerated in a transitional area. The irrigation in a transitional area shall be designed so that no overspray or runoff shall enter an adjacent area that is not irrigated.
9. On a project other than a single-family residence, the plan shall identify passive and active recreational areas.

C. The Irrigation Plan shall meet the following requirements:

1. The plan shall show the location, type and size of all components of the irrigation system that will provide water to the landscaped area, including the controller, water lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices.
2. The plan shall show the static water pressure at the point of connection to the public water supply and the flow rate in gallons, the

application rate in inches per hour and the design operating pressure in pressure per square inch for each station.

3. The irrigation system shall be designed to prevent runoff, overspray, low-head drainage and other similar conditions where irrigation water flows or sprays onto areas not intended for irrigation. The plan shall also demonstrate how grading and drainage techniques promote healthy plant growth and prevent erosion and runoff.

4. The plan shall identify each area irrigated with recycled water.

5. The plan shall provide that any slope greater than 25 percent will be irrigated with an irrigation system with a precipitation rate of .75 inches per hour or less to prevent runoff and erosion. As used in this chapter, 25 percent grade means one foot of vertical elevation change for every four feet of horizontal length. An applicant may employ an alternative design if the plan demonstrates that no runoff or erosion will occur.

6. The plan shall provide that all wiring and piping under a paved area that a vehicle may use, such as a parking area, driveway or roadway, will be installed inside a PVC conduit.

7. The plan shall provide that irrigation piping and irrigation devices that deliver water, such as sprinkler heads, shall be installed below grade if they are within 24 inches of a vehicle or pedestrian use area. The Director may allow on-grade piping where landform constraints make below grade piping infeasible.

8. The plan shall provide that only low volume or subsurface irrigation shall be used to irrigate any vegetation within 24 inches of an impermeable surface unless the adjacent impermeable surfaces are designed and constructed to cause water to drain entirely into a landscaped area.

9. The irrigation system shall provide for the installation of a manual shutoff valve as close as possible to the water supply. Additional manual shutoff valves shall be installed between each zone of the irrigation system and the water supply.

10. The irrigation system shall provide that irrigation for any landscaped area will be regulated by an automatic irrigation controller.

11. The irrigation system shall be designed with a landscape irrigation efficiency necessary to meet the MAWA.

12. The plan shall describe each automatic irrigation controller the system uses to regulate the irrigation schedule and whether it is a weather based system or moisture detection system. The plan shall depict the location of electrical service for the automatic irrigation controller or describe the use of batteries or solar power that will power valves or a smart controller.

17.56.110 Water efficient landscape worksheet

The water efficient landscape worksheet required by SBMC 17.56.070 shall be prepared by a licensed landscape architect, licensed civil engineer, licensed architect, or other landscape professional licensed by the state to do this work and shall contain the following:

A. A hydrozone information table that contains a list of each hydrozone in the landscaped area of the project and complies with the following requirements:

1. For each hydrozone listed, the table shall identify the plant types and water features in the hydrozone, the irrigation methods used, the square footage and the percentage of the total landscaped area of the project that the hydrozone represents.

2. The plant types shall be categorized as turf, high water use, moderate water use or low water use.

B. Water budget calculations, which shall meet the following requirements:

1. The plant factor used shall be from WUCOLS III. The plant factor shall be 0.1 for very low water use plants 0.3 for low water use plants, 0.5 for moderate water use plants and 0.8 for high water use plants. A plan that mixes plants in a hydrozone that require a different amount of water shall use the plant factor for the highest water using plant in the hydrozone.

2. Temporarily irrigated areas shall be included in the low water use hydrozone. Temporarily irrigated as used in this chapter means the period of time when plantings only receive water until they become established.

3. The surface area of a water feature, including swimming pools, shall be included in a high water use hydrozone.

4. The calculations shall use the formula for the MAWA in SBMC 17.56.113 and for the ETWU in 17.56.114.

5. Each special landscaped area shall be identified on the worksheet and the area's water use calculated using an ETAF of 1.0.

17.56.111 Grading design plan

The grading design plan required by SBMC 17.56.070 shall be prepared by a California licensed civil engineer, licensed landscape architect, licensed architect, or other landscape professional licensed by the state to do this work and shall comply with following requirements:

A. The grading on the project site shall be designed for the efficient use of water by minimizing soil erosion, runoff and water waste, resulting from precipitation and irrigation.

B. The plan shall show the finished configurations and elevations of each landscaped area including the height of graded slopes, the drainage pattern, pad elevations, finish grade and any stormwater retention improvements.

17.56.112 Irrigation schedule

The irrigation schedule required by SBMC 17.56.070, shall be prepared by a licensed landscape architect, licensed civil engineer, licensed architect, or other landscape professional licensed by the state to do this work and provide the following information:

A. A description of the automatic irrigation system that will be used for the project.

B. The ETo data relied on to develop the irrigation schedule, including the source of the data.

C. The time period when overhead irrigation will be scheduled shall conform with the applicable Drought Response Policies and Procedures of the Santa Fe Irrigation District which may vary according to the current Drought Response Level being enforced.

D. The parameters used for setting the irrigation system controller for watering times for:

1. The plant establishment period.
2. Established landscaping.
3. Temporarily irrigated areas.
4. Different seasons during the year.

E. The consideration used for each station for the following factors:

1. The days between irrigation.
2. Station run time in minutes for each irrigation event, designed to avoid runoff.
3. Number of cycle starts required for each irrigation event, designed to avoid runoff.
4. Amount of water to be applied on a monthly basis.
5. The root depth setting.
6. The plant type setting.
7. The soil type.
8. The slope factor.
9. The shade factor.

17.56.113 Maximum applied water use

A. A landscape project subject to this chapter shall not exceed the MAWA. The MAWA for a landscape project shall be determined by the following calculation:

$$\text{MAWA} = (\text{ETo})(0.62)[0.7 \times \text{LA} + 0.3 \times \text{SLA}]$$

- B. The abbreviations used in the equation have the following meanings:
1. MAWA = Maximum Applied Water Allowance in gallons per year.
 2. ETo = Evapotranspiration in inches per year.
 3. 0.62 = Conversion factor to gallons per square foot.
 4. 0.7 = ET adjustment factor for plant factors and irrigation efficiency.
 5. LA = Landscaped area includes special landscaped area in square feet.
 6. 0.3 = the additional ET adjustment factor for a special landscaped area (1.0 - 0.7 = 0.3)
 7. SLA = Portion of the landscaped area identified as a special landscaped area in square feet.

17.56.114 Estimated total water use

A. An applicant for a project subject to this chapter shall calculate the ETWU for each landscaped area and the entire project using the following equation:

1. $ETWU = (ET_o)(0.62)(PF \times HA / IE + SLA)$

B. The abbreviations used in the equation have the following meanings:

1. ETWU = Estimated total water use in gallons per year.
2. ET_o = Evapotranspiration in inches per year.
3. 0.62 = Conversion factor to gallons per square foot.
4. PF = Plant factor from WUCOLS
5. HA = Hydrozone Area in square feet. Each HA shall be classified based upon the data included in the landscape and irrigation plan as high, medium or low water use.
6. IE = Irrigation Efficiency of the irrigation method used in the hydrozone.
7. SLA = Special landscaped area in square feet.

C. The ETWU for a proposed project shall not exceed the MAWA.

17.56.115 Adjustment to landscaped area for non-vegetated area

Rock and stone or pervious design features, such as decomposed granite ground cover that are adjacent to a vegetated area may be included in the calculation of the MAWA and ETWU provided the features are integrated into the design of the landscape area and the primary purpose of the feature is decorative.

17.56.116 New single family residential projects with limited landscaping

The City shall provide an applicant for a new single-family residence not subject to this chapter where the landscaped area of the project is less than 2,500 square feet with information regarding irrigation best management practices and access to the landscape design manual in order to increase public awareness of water efficient landscaping practices.

17.56.117 Cemeteries

A. A person submitting an application for a cemetery shall include the following:

1. A concept plan, as described in SBMC 17.56.050.
2. A water efficient irrigation worksheet that calculated the MAWA for the project with the application that complies with SBMC 17.56.110.
3. A landscape irrigation and maintenance schedule that complies with SBMC 17.56.122.

17.56.118 Regulations applicable to use of turf on landscaped areas

The following regulations shall apply to the use of turf on a project subject to this chapter:

A. Only low volume or subsurface irrigation shall be used for turf in a landscaped area:

1. On a slope greater than 25 percent grade where the toe of the slope is adjacent to an impermeable hardscape.
2. Where any dimension of the landscaped area is less than six feet wide.

B. On a commercial, industrial, institutional or multi-family project, no turf shall be allowed on a center island median strip or on a parking lot island.

C. A ball field, park, golf course, cemetery and other similar use shall be designed to limit turf in any portion of a landscaped area not essential for the operation of the facility.

D. No turf shall be allowed in a landscaped area that cannot be efficiently irrigated, such as avoiding runoff or overspray.

17.56.119 Projects with model homes

A person who obtains a permit to construct a single-family residential development that contains a model home or homes shall provide a summary of this chapter to each adult visitor that visits a model home. If an adult visitor is accompanied by one or more adults during the visit only one set of written materials is required to be provided. Each model home shall provide an educational sign in the front yard of the model home visible and readable from the roadway that the home faces that states in capital black lettering at least two inches high on a white sign, "THIS MODEL HOME USES WATER EFFICIENT LANDSCAPING AND IRRIGATION."

17.56.120 Recycled water

A. A person who obtains a permit for a project that is subject to this chapter shall use recycled water for irrigation when tertiary treated recycled water is available from the water purveyor who supplies water to the property for which the City issues a permit.

B. A person using recycled water shall install a dual distribution system for water received from a public water purveyor. Pipes carrying recycled water shall be purple.

C. A person who uses recycled water under this section shall be entitled to an ETAF of 1.0.

D. This section does not excuse a person using recycled water from complying with all State and local laws and regulations related to recycled water use.

17.56.121. Landscaping and irrigation installation

A person issued a landscape approval for a project, other than a single-family residence where the landscaped area of the project is less than 2,500 square feet, shall install the approved landscaping and irrigation system before final inspection of the project.

17.56.122. Landscaping and irrigation maintenance

A. A property owner using water on property subject to a landscape approval other than a single-family residence with a total landscaped area less than 2,500 square feet, shall prepare a maintenance schedule for the landscaping and irrigation system on the project. The schedule shall provide for (1) routine inspection to guard against runoff and erosion and to detect plant or irrigation system failure, (2) replacement of dead, dying and diseased vegetation, (3) discourage the use of invasive species, (4) repairing the irrigation system and its components, (5) replenishing mulch, (6) soil amendment when necessary to support and maintain healthy plant growth, (7) fertilizing, pruning and weeding and maintaining turf areas, and (8) maintenance to avoid obstruction of motorists' view. The schedule shall also identify who will be responsible for maintenance.

B. After approval of a landscape plan, the owner is required to:

1. Maintain and operate the landscaping and irrigation system on the property consistent with the MAWA.
2. Maintain the irrigation system to meet or exceed an irrigation efficiency necessary to meet MAWA.

3. Replace broken or malfunctioning irrigation system components with components of the same materials and specifications, their equivalent or better.
4. Ensure that when vegetation is replaced, replacement plantings are representative of the hydrozone in which the plants were removed and are typical of the water use requirements of the plants removed, provided that the replaced vegetation does not result in mixing high water use plants with low water use plants in the same hydrozone.

17.56.123. Certificate of completion

Prior to receiving final approval for completion of the project, each applicant, other than for a single family residence with a total landscaped area less than 2,500 square feet, shall submit a signed certificate of completion and final documentation for the project under penalty of perjury within 10 days after installation

A. The certificate of completion shall:

1. Be submitted on a form provided by the City.
2. Include a statement verifying that the landscaping and irrigation were installed as allowed in the approved landscape and irrigation plan, all approved soil amendments were implemented, the installed irrigation system is functioning as designed and approved, the irrigation control system was properly programmed in accordance with the irrigation schedule, and the person operating the system has received all required maintenance and irrigation plans, and.
3. Be signed by the professional of record for the landscape design.

B. The final submittal shall include:

1. Irrigation schedule that complies with SBMC 17.56.112, that describes the irrigation times and water usage for the project
2. A landscaping and irrigation system maintenance schedule that complies with SBMC 17.56.122, and
3. A soil management report that complies with SBMC 17.56.080, if the applicant did not submit the report with the landscape documentation package.
4. Final "as built" plans, submitted by the professional of record, where there have been significant changes to the landscape plan during

the installation of landscaping or irrigation devices or irrigation system components.

17.56.124. Water waste prevention

A. No person shall use water for irrigation that due to runoff, low head drainage, overspray or other similar condition, water flows onto adjacent property, non-irrigated areas, structures, walkways, roadways or other paved areas.

B. No person whose landscape is subject to a landscape approval pursuant to this chapter shall apply water to the landscape in excess of the MAWA.

C. No person shall fail to maintain the irrigation system installed as part of an City approved Landscape Documentation package as required by this section

D. The City may administer programs that may include water use analysis, irrigation surveys, and irrigation audits to evaluate water use. The City may use such information to provide recommendations to reduce the landscape water use for Landscapes installed prior to the adoption of this ordinance that are over an acre in size and have been identified as high water users.

17.56.125 Violations

Any person violating any provision of this chapter or conditions of a permit issued pursuant to this chapter shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not more than \$1,000 or by imprisonment in the county jail for a period not to exceed six months, or by both such fine and imprisonment. In the alternative, the city may issue an administrative citation pursuant to Chapter 1.18 SBMC or violators may be subject to any other penalty authorized by law.

17.56.126 Enforcement

A. The City Manager shall administer and enforce the provisions of this chapter. Any city authorized personnel or enforcement officer may exercise any enforcement powers as set forth in the Code.

B. The City may delegate to or enter into a contract with a local agency or other person to implement and administer any of the provisions of this Chapter on behalf of the City.

17.56.127 Fees

An applicant for a project subject to this chapter shall include with the application, all fees established by the current fee schedule to cover the cost to review a landscape documentation package, perform an onsite inspection and review any other documents the City requires pursuant to the requirements of this chapter.

EFFECTIVE DATE: This Ordinance shall be effective thirty (30) days after its adoption. Within fifteen (15) days after its adoption, the City Clerk of the City of Solana Beach shall cause this Ordinance to be published pursuant to the provisions of Government Code §36933.

INTRODUCED AND FIRST READ at a regular meeting of the City Council of the City of Solana Beach, California, on the 23rd day of February, 2011; and

THEREAFTER ADOPTED at a regular meeting of the City Council of the City of Solana Beach, California, on the 23rd day of March, 2011, by the following vote:

AYES: Councilmembers –
NOES: Councilmembers –
ABSTAIN: Councilmembers –
ABSENT: Councilmembers –

LESA HEEBNER, Mayor

APPROVED AS TO FORM:

ATTEST:

JOHANNA N. CANLAS, City Attorney

ANGELA IVEY, City Clerk