PLANNING COMMISSION

CITY OF INDUSTRY

REGULAR MEETING AGENDA
DECEMBER 10, 2015 11:00 A.M.

CHAIRWOMAN ANDRIA WELCH
VICE CHAIRMAN FRANK CONTRERAS
COMMISSIONER JIM DIVERS
COMMISSIONER MICHAEL GREUBEL
COMMISSIONER BERT SPIVEY

Location: City Council Chamber, 15651 East Stafford Street, City of Industry, California

Addressing the Planning Commission:

- ***Agenda Items:*** *Members of the public may address the Planning Commission on any matter listed on the Agenda. In order to conduct a timely meeting, there will be a three-minute time limit per person for any item listed on the Agenda. Anyone wishing to speak to the Planning Commission is asked to complete a Speaker's Card which can be found at the back of the room and at the podium. The completed card should be submitted to the Secretary prior to the Agenda item being called by the Secretary prior to the individual being heard by the Planning Commission.*

- ***Public Comments (Non-Agenda Items):*** *Anyone wishing to address the Planning Commission on an item not on the Agenda may do so during the "Public Comments" period. In order to conduct a timely meeting, there will be a three-minute time limit per person for the Public Comments portion of the Agenda. State law prohibits the Planning Commission from taking action on a specific item unless it appears on the posted Agenda. Anyone wishing to speak to the Planning Commission is asked to complete a Speaker's Card which can be found at the back of the room and at the podium. The completed card should be submitted to the Secretary prior to the Agenda item being called by the Secretary and prior to the individual being heard by the Planning Commission.*

Americans with Disabilities Act:

- *In compliance with the ADA, if you need special assistance to participate in any City meeting (including assisted listening devices), please contact the City Clerk's Office (626) 333-2211. Notification of at least 48 hours prior to the meeting will assist staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting.*

Agendas and other writings:

- *In compliance with SB 343, staff reports and other public records permissible for disclosure related to open session agenda items are available at City Hall, 15625 East Stafford Street, Suite 100, City of Industry, California, at the office of the City Clerk during regular business hours, Monday through Friday 9:00 a.m. to 5:00 p.m. Any person with a question concerning any agenda item may call the City Clerk's Office at (626) 333-2211.*

1. Call to Order

2. Flag Salute

3. Roll Call

4. Public Comments

5. **PUBLIC HEARING**

5.1 Public Hearing of Exemption and recommendation to the City Council regarding Zone Amendment 15-3 to amend Chapters 13.18 and 17.36 of the Municipal Code and the Water Efficient Landscape Guidelines to be consistent with the State's new water efficient landscape requirements

Consideration of Resolution No. PC 2015-23 - A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF INDUSTRY, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL OF THE CITY OF INDUSTRY APPROVE ZONE AMENDMENT 15-3 REPEALING CHAPTER 13.18 (WATER EFFICIENT LANDSCAPES) OF TITLE 13 (WATER AND SEWERS) OF THE CITY OF INDUSTRY MUNICIPAL CODE AND ADDING A REVISED CHAPTER 13.18, AMENDING SECTION 17.36.080 A.3 (STANDRD CONDITIONS OF APPROVAL) OF CHAPTER 17.36 (DESIGN REVIEW) OF TITLE 17 (ZONING); AND RESCIND RESOLUTION NO. 2299 AND ADOPT UPDATED WATER EFFICIENT LANDDSCAPE GUIDELINES; AND NOTICES OF EXEMPTION REGARDING SAME

RECOMMENDED ACTION: Adopt Resolution No. PC 2015-23

6. Adjournment. Next regular meeting: Thursday, January 14, 2016 at 11:00 a.m.

PLANNING COMMISSION

ITEM NO. 5.1

CITY OF INDUSTRY

P.O. Box 3366 • 15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

MEMORANDUM

To: Planning Commission

December 3, 2015

From: Paul J. Philips, City Manager

Staff: Brian James, Planning Director

Subject: Zone Amendment 15-3 – Updated Water Efficient Landscape Ordinance

Introduction

For the Planning Commission's consideration and recommendation to the City Council, Zone Amendment 15-3 is a request to amend Chapters 13.18 and 17.36 of the Municipal Code and the Water Efficient Landscape Guidelines to ensure that the City's landscape and irrigation provisions are consistent with new State water efficient landscape requirements. The proposed amendments are contained in Exhibits A and B of the accompanying Resolution (Attachment 3).

Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed the Department of Water Resources (DWR) to update the State's Model Water Efficient Landscape Ordinance (MWELO) through expedited regulation. The California Water Commission approved the revised MWELO Ordinance on July 15, 2015. Local agencies have until December 1, 2015, to adopt the State's MWELO or an ordinance that is at least as effective in conserving water. A local agency may also choose to allow MWELO to become effective by default and then adopt an ordinance at a later time, which is the path that the City is taking.

In order to amend the Zoning Code, the City must comply with procedures set forth in California's Planning and Zoning Law, Government Code section 65800 – 65856. The minimum process authorized under the Government Code can be summarized as: (1) the Planning Commission must publish a notice of a public hearing; (2) the Planning Commission must hold a public hearing and render a written decision in the form of a recommendation to the City Council; (3) the City Council must publish a notice of a public hearing to consider the amendments; and (4) the City Council must hold at least one public hearing before approving the amendments. This amendment is being initiated by City Staff to comply with state requirements.

Existing Chapter 13.18 and Water Efficient Landscape Guidelines

In 2010, the City adopted Ordinance 758 and Resolution 2299 amending the Industry Municipal Code to add Chapter 13.18 (Water Efficient Landscape Requirements) and adopting the Water Efficient Landscape Guidelines in compliance with AB 1881, the Water Conservation in Landscaping Act. The Water Efficient Landscape Guidelines contain the detailed technical aspects related to designing and installing water efficient irrigation and landscaping while Chapter 13.18 contain the basic requirements and procedures.

Significant Changes to Chapter 13.18 and Water Efficient Landscape Guidelines

The majority of the provisions contained in Chapter 13.18 and the Water Efficient Landscape Guidelines remain unchanged. The major changes from the City's existing provisions include the following:

- The size of landscapes subject to the ordinance has been lowered from 2,500 to 500 square feet and applies to projects that require a permit, plan check, or design review. The size threshold for existing landscapes being rehabilitated has not changed, remaining at 2,500 square feet.
- To reduce the complexity and costs for landscapes between 500 and 2,500 square feet, the revised MWELO allows a prescriptive compliance option, which is contained in the Water Efficient Landscape Guidelines.
- The maximum applied water allowance (MAWA) has been lowered from 70% to 45% of the reference evapotranspiration (ETo) for non-residential projects. This water allowance reduces the landscape area that can be planted with high water use plants such as cool season turf.
- The irrigation efficiency requirement has been increased.
- The use of high water use plants in street median strips has been banned.
- Dedicated landscape water meters or submeters are required for non-residential landscapes over 1,000 square feet.
- Local agencies must report on the implementation and enforcement to the DWR each year.

The revised Chapter 13.18 and Water Efficient Landscape Guidelines are contained in Exhibits A and B of the accompanying Resolution (Attachment 3).

Changes to Chapter 17.36

The standard conditions of approval contained in the Municipal Code must also be revised to be consistent with the new State water efficient landscape requirements. Specifically, Section 17.36.080 A.3. of the City of Industry Municipal Code, would be amended to read:

17.36.080 Standard conditions of approval

A.3. The applicant must provide landscaping and automatic irrigation plans to be approved by the planning director prior to the issuance of a building permit. Where applicable, landscaping must be designed to comply with the city's Water Efficient Landscape regulations, Chapter 13.18, and with the city's Water Efficient Landscape Guidelines. A current California licensed landscape architect must prepare and sign all landscape and irrigation plans required as part of this condition. Such plans must be in substantial conformity with the development plans approved pursuant to this chapter.

Environmental Analysis

The proposed amendments are exempt from review under the California Environmental Quality Act ("CEQA") (California Public Resources Code Section 21000 et seq.), pursuant to Section 15307 of the State CEQA Guidelines (Actions by Regulatory Agencies for Protection of Natural Resources) which exempts actions taken to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the environment. The adoption of the Ordinance and Water Efficient Landscape Guidelines will result in the enhancement and protection of water resources in the City, and will not result in cumulative adverse environment impacts. A Notice of Exemption

(Attachment 1) will be prepared for the project and filed with the Los Angeles County Clerk.

Public Hearing

The required Public Hearing Notice (Attachment 2) was posted on the site, Fire Station 118, City Hall, Council Chambers, and published in the San Gabriel Tribune by November 27, 2015.

Recommendation

Staff recommends that the Planning Commission approve Resolution PC 2015-23 (Attachment 3), recommending that the City Council approve Zone Amendment 15-3.

Attachments

- Attachment 1: Notice of Exemption
- Attachment 2: Public Hearing Notice
- Attachment 3: Planning Commission Resolution PC 2015-23 recommending that the City Council approve Zone Amendment 15-3

Attachment 1

Notice of Exemption

NOTICE OF EXEMPTION

To: County Clerk
County of Los Angeles
Environmental Filings
12400 East Imperial Highway #2001
Norwalk, CA 90650

From: City of Industry
15625 E. Stafford Street, Suite 100
City of Industry, CA 91744

Project Title: Zone Amendment 15-3

Project Location - Specific: Citywide

Project Location-City: City of Industry **Project Location-County:** Los Angeles

Description of Project: A proposed amendment to Chapters 13.18 and 17.36 of the Municipal Code and the Water Efficient Landscape Guidelines to ensure that the City's landscape and irrigation provisions are consistent with new State water efficient landscape requirements pursuant to Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15).

Name of Public Agency Approving Project: City Council, City of Industry

Name of Person or Agency Carrying Out Project: City of Industry

Exempt Status: *(check one)*

☐ Ministerial (Sec. 21080(b)(1); 15268);
☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
☑ Categorical Exemption. *State type and section number:* 15307
☐ Statutory Exemptions. *State code number:*

Reasons why project is exempt: Section 15307 Class 1, which exempts actions taken to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the environment. The adoption of Zone Amendment 15-3 and amendments to the Water Efficient Landscape Guidelines will result in the enhancement and protection of water resources in the City, and will not result in cumulative adverse environment impacts.

Lead Agency
Contact Person: Brian James Telephone: (626)333-2211

Signature: _____ Date: _____

Title: Planning Director

Attachment 2

Public Hearing Notice

NOTICE OF PUBLIC HEARING

Zone Amendment No. 15-3

On November 27, 2015, notice has been given that the Planning Commission of the City of Industry will hold a public hearing to consider and make a recommendation to the City Council on Zone Amendment 15-3. Zone Amendment 15-3 is a request to amend Chapters 13.18 and 17.36 of the Municipal Code and the Water Efficient Landscape Guidelines to ensure that the City's landscape and irrigation provisions are consistent with new State water efficient landscape requirements.

A copy of all relevant material are on file in the City Administrative Offices, 15625 East Stafford Street, Suite 100, City of Industry, California 91744.

The time, date and place of such hearing shall be as follows:

Time:	11:00 a.m.
Date:	December 10, 2015
Place:	City Council Chamber 15651 East Stafford Street City of Industry, CA 91744

Any person wishing to be heard regarding this matter may appear at the above time, date and place. Written comments may be sent via U.S. Mail or by hand delivery to the City of Industry, at 15625 Stafford Street, Suite 100, City of Industry, CA 91744.

If you challenge the project in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Planning Commission of the City of Industry at, or prior to, the public hearing.

Diane Schlichting
Acting Deputy City Clerk of the City of Industry

Attachment 3

Planning Commission Resolution PC 2015-23 recommending that the City Council approve Zone Amendment 15-3

RESOLUTION NO. PC 2015-23

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF INDUSTRY, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL OF THE CITY OF INDUSTRY APPROVE ZONE AMENDMENT 15-3 REPEALING CHAPTER 13.18 (WATER EFFICIENT LANDSCAPES) OF TITLE 13 (WATER AND SEWERS) OF THE CITY OF INDUSTRY MUNICIPAL CODE AND ADDING A REVISED CHAPTER 13.18, AMENDING SECTION 17.36.080 A.3 (STANDARD CONDITIONS OF APPROVAL) OF CHAPTER 17.36 (DESIGN REVIEW) OF TITLE 17 (ZONING); AND RESCIND RESOLUTION NO. 2299 AND ADOPT UPDATED WATER EFFICIENT LANDSCAPE GUIDELINES; AND NOTICE OF EXEMPTION REGARDING SAME

RECITALS

WHEREAS, in 2010 the City Council adopted Chapter 13.18 of the City's Municipal Code ("Code"), concerning Water Efficient Landscape Requirements, and Resolution No. 2299, Water Efficient Landscape Guidelines, in compliance with AB 1881, the Water Conservation in Landscaping Act (Government Code Section 65591 *et seq.*), related to water use, waste, conservation and efficiency; and

WHEREAS, pursuant to Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15), the California Water Commission approved an update to the state's Model Water Efficient Landscape Ordinance; and

WHEREAS, the state requires the City to adopt the model ordinance or an ordinance that is at least as effective in conserving water; and

WHEREAS, the City desires to repeal Chapter 13.18, and Section 17.36.080 of the City's Code, and replace them with a revised Chapter 13.18 and Section 17.36.080 to ensure that existing City landscape provisions are consistent with the new State water efficient landscape requirements; and

WHEREAS, the City desires to amend the Water Efficient Landscape Guidelines to ensure that City landscape provisions are consistent with the new State water efficient landscape requirements; and

WHEREAS, the proposed Zone Amendment 15-3 and Water Efficient Landscape Guidelines are exempt from review under the California Environmental Quality Act ("CEQA") (California Public Resources Code Section 21000 et seq.), pursuant to Section 15307 of the State CEQA Guidelines (Actions by Regulatory Agencies for Protection of Natural Resources) which

exempts actions taken to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the environment. The adoption of Zone Amendment 15-3 and amendments to the Water Efficient Landscape Guidelines will result in the enhancement and protection of water resources in the City, and will not result in cumulative adverse environment impacts; and

WHEREAS, notice of the Planning Commission's December 10, 2015 public hearing on Zone Amendment 15-3 was published in *The San Gabriel Valley Tribune* on November 27, 2015, in compliance with the City's Municipal Code and Government Code Section 65091, and was posted at three public places on November 25, 2015; and

WHEREAS, on December 10, 2015, the Planning Commission of the City of Industry conducted a duly noticed public hearing to consider Zone Amendment 15-3, and considered all testimony written and oral; and

WHEREAS, all legal prerequisites to the adoption of Zone Amendment 15-3 have occurred.

NOW THEREFORE, it is hereby found, determined and resolved by the Planning Commission of the City of Industry as follows:

SECTION 1. The Planning Commission finds that all of the facts set forth in the Recitals are true and correct, and are incorporated herein by reference.

SECTION 2. All necessary public hearings and opportunities for public testimony and comment have been conducted in compliance with State law and the Municipal Code of the City of Industry.

SECTION 3. Based upon substantial evidence presented to the Planning Commission during the December 10, 2015 public hearing, including public testimony and written and oral staff reports, which includes without limitation, CEQA, the CEQA Guidelines, the Notice of Exemption, and the City's Code, the Planning Commission finds as follows:

A. The California Department of Water Resources has updated the Model Water Efficient Landscape Ordinance ("State Model Ordinance") pursuant to Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) and the City is required to adopt the State Model Ordinance or its own water efficient landscape ordinance that is "at least as effective in conserving water as" the State Model Ordinance; and

B. The proposed amendment to Chapter 13.18, is consistent with and at least as effective in conserving water as the State Model Ordinance, and the proposed amendment to Section 17.36 of the City's Code ensures that existing City landscape provisions are consistent with the new State water efficient landscape requirements. The proposed amendments are attached hereto as Exhibit A and incorporated herein by reference; and

C. The proposed amendments to Chapter 13.18 and Section 17.36.080 are consistent with the Resource Management and Land Use Elements of the City's General Plan. Specifically, policy RM1-3 states, "Encourage the conservation of water resources through the use of drought-tolerant plants and water-saving irrigation systems." Likewise, policy LU2-6 states, "Support the use of energy-saving designs and equipment in all new development and rehabilitation or reconstruction projects."

D. Pursuant to Section 13.18.045 of the City's Code, the City has elected to adopt by resolution Water Efficient Landscape Guidelines. The Planning Commission finds that the Guidelines ensure that City landscape provisions are consistent with the new State water efficient landscape requirements. A copy of the Guidelines is attached hereto as Exhibit B, and incorporated herein by reference; and

E. Upon independent review and consideration of the information contained in the Staff Report and the Notice of Exemption for Zone Amendment 15-3 and the proposed Water Efficient Landscape Guidelines, the Planning Commission hereby finds and determines that Zone Amendment 15-3 and the Water Efficient Landscape Guidelines will not result in or have a significant impact on the environment, because the proposed amendments and guidelines will result in the enhancement and protection of water resources in the City and will not result in cumulative adverse environment impacts. Therefore, the proposed Zone Amendment 15-3 and the Water Efficient Landscape Guidelines are categorically exempt from the California Environmental Quality Act ("CEQA") (Public Resources Code Section 21000 et seq.), pursuant to Section 15307 of the State CEQA Guidelines (Actions by Regulatory Agencies for Protection of Natural Resources) which exempts actions taken to assure the maintenance, restoration, enhancement, or protection of a natural resource where the regulatory process involves procedures for protection of the environment. Based on these findings, the Planning Commission recommends that the City Council adopt the Notice of Exemption and direct staff to file same as required by law.

SECTION 4. Based upon substantial evidence presented to the Planning Commission during the above referenced December 10, 2015 public hearing, including public testimony, the written and oral staff report and attachments, as well as the findings and conclusions set forth herein, the Planning Commission

does hereby recommend that the City Council adopt the proposed Zone Amendment 15-3, set forth in Exhibit A, to revise the City's water efficient landscape requirements, and the Water Efficient Landscape Guidelines, as set forth in Exhibit B.

SECTION 6. The Secretary of the Planning Commission is directed to certify the adoption of this resolution and cause it to be transmitted to the City Council for further proceedings in accordance with State law and the Industry Municipal Code.

PASSED, APPROVED AND ADOPTED by the Planning Commission of the City of Industry at a regular meeting held on December 10, 2015 by the following vote:

AYES:	COMMISSIONERS:
NOES:	COMMISSIONERS:
ABSTAIN:	COMMISSIONERS:
ABSENT:	COMMISSIONERS:

_____
Andria Welch
Planning Commissioner

ATTEST:

_____
Cecelia Dunlap
Secretary

EXHIBIT A

AMENDMENT TO MUNICIPAL CODE
CHAPTER 13.18
WATER EFFICIENT LANDSCAPES

EXHIBIT A

CHAPTER 13.18

WATER EFFICIENT LANDSCAPES

13.18.010. Purpose.

The purpose of this chapter is to establish water efficient landscape regulations that are "at least as effective in conserving water as" the State Model Water Efficient Landscape Ordinance (Government Code Section 65591 et seq.) in the context of conditions in the city in order to ensure that landscapes are planned, designed, installed, maintained, and managed in a manner that uses water efficiently, encourages water conservation, and prevents water waste.

13.18.020. Definitions.

For the purposes of this chapter and the Water Efficient Landscape Guidelines that implement this chapter, the following terms are defined:

"Applicant" means the person submitting a landscape documentation package. Applicants can be the property owner or the owner's designee.

"Applied water" means the portion of water supplied by the irrigation system to the landscape.

"Automatic irrigation controller" means a timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers are able to self-adjust and schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.

"Backflow prevention device" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

"Certificate of Completion" means the document required under Section 2.2 of the Water Efficient Landscape Guidelines.

"Certified irrigation designer" means a person certified to design irrigation systems by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency's WaterSense irrigation designer certification program and Irrigation Association's Certified Irrigation Designer program.

"Certified landscape irrigation auditor" means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency's WaterSense irrigation auditor certification program and Irrigation Association's Certified Landscape Irrigation Auditor program.

"Check valve" or "anti-drain valve" means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in the system to prevent drainage from sprinkler heads when the sprinkler is off.

"Common interest developments" means community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351.

"Compost" means the safe and stable product of controlled biologic decomposition of organic materials that is beneficial to plant growth.

"Conversion factor (0.62)" means the number that converts acre-inches per acre per year to gallons per square foot per year.

"Distribution uniformity" means the measure of the uniformity of irrigation water over a defined area.

"Drip irrigation" means any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

"Ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

"Effective precipitation" or "usable rainfall" (Eppt) means the portion of total precipitation which becomes available for plant growth.

"Emitter" means a drip irrigation emission device that delivers water slowly from the system to the soil.

"Established landscape" means the point at which plants in the landscape have developed significant root growth into the soil. Typically, most plants are established after one or two years of growth.

"Establishment period of the plants" means the first year after installing the plant in the landscape or the first two years if irrigation will be terminated after establishment. Typically, most plants are established after one or two years of growth. Native habitat mitigation areas and trees may need three to five years for establishment.

"Estimated Total Water Use" (ETWU) means the total water used for the landscape as described in Section 2.1.B.2 of the Water Efficient Landscape Guidelines.

"ET adjustment factor" (ETAF) means a factor of 0.55 for residential areas and 0.45 for non-residential areas, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape. The ETAF for new and existing (non-rehabilitated) Special Landscape Areas shall not exceed 1.0. The ETAF for existing non-rehabilitated landscapes is 0.8.

"Evapotranspiration rate" means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.

"flow rate" means the rate at which water flows through pipes, valves and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.

"Flow sensor" means an inline device installed at the supply point of the irrigation system that produces a repeatable signal proportional to flow rate. Flow sensors must be connected to an automatic irrigation controller, or flow monitor capable of receiving flow signals and operating master valves. This combination flow sensor/controller may also function as a landscape water meter or submeter.

"Friable" means a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting material requirements, whereby the root structure of newly planted material will be allowed to spread unimpeded.

"Fuel Modification Plan Guideline" means guidelines from a local fire authority to assist residents and businesses that are developing land or building structures in a fire hazard severity zone.

"Graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. Health and Safety Code Section 17922.12.

"Hardscapes" means any durable material (pervious and non-pervious).

"Hydrozone" means a portion of the landscaped area having plants with similar water needs and rooting depth. A hydrozone may be irrigated or non-irrigated.

"Infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).

"Invasive plant species" means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies as noxious species. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.

"Irrigation audit" means an in-depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, 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. The audit must be conducted in a manner consistent with the Irrigation Association's Landscape Irrigation Auditor Certification program or other U.S. Environmental Protection Agency "WaterSense" labeled auditing program.

"Irrigation efficiency" (IE) means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from

measurements and estimates of irrigation system characteristics and management practices. The irrigation efficiency for purposes of this ordinance are 0.75 for overhead spray devices and 0.81 for drip systems.

"Irrigation survey" means an evaluation of an irrigation system that is less detailed than an irrigation audit. An irrigation survey includes, but is not limited to: inspection, system test, and written recommendations to improve performance of the irrigation system.

"Irrigation water use analysis" means an analysis of water use data based on meter readings and billing data.

"Landscape architect" means a person who holds a license to practice landscape architecture in the state of California Business and Professions Code, Section 5615.

"Landscape area" means all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

"Landscape contractor" means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems.

"Landscape Documentation Package" means the documents required under Section 13.18.060.

"Landscape project" means total area of landscape in a project as defined in "landscape area" for the purposes of this ordinance, meeting requirements under Section 13.18.030.

"Landscape water meter" means an inline device installed at the irrigation supply point that measures the flow of water into the irrigation system and is connected to a totalizer to record water use.

"Lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

"Local agency" means a city or county, including a charter city or charter county, that is responsible for adopting and implementing the ordinance. The local agency is also responsible for the enforcement of this ordinance, including but not limited to, approval of a permit and plan check or design review of a project.

"Local water purveyor" means any entity, including a public agency, city, county, or private water company that provides retail water service.

"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, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

"Main line" means the pressurized pipeline that delivers water from the water source to the valve or outlet.

"Master shut-off valve" is an automatic valve installed at the irrigation supply point which controls water flow into the irrigation system. When this valve is closed water will not be supplied to the irrigation system. A master valve will greatly reduce any water loss due to a leaky station valve.

"Maximum Applied Water Allowance" (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in Section 2.1.B.2 of the Water Efficient Landscape Guidelines. It is based upon the area's reference evapotranspiration, the ET Adjustment Factor, and the size of the landscape area. The Estimated Total Water Use shall not exceed the Maximum Applied Water Allowance. Special Landscape Areas, including recreation areas, areas permanently and solely dedicated to edible plants such as orchards and vegetable gardens, and areas irrigated with recycled water are subject to the MAWA with an ETAF not to exceed 1.0. MAWA = (ETo) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]

"Median" is an area between opposing lanes of traffic that may be unplanted or planted with trees, shrubs, perennials, and ornamental grasses.

"Microclimate" means the climate of a small, specific area that may contrast with the climate of the overall landscape area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.

"Mined-land reclamation projects" means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

"Mulch" means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, or decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.

"New construction" means, for the purposes of this ordinance, a new building with a landscape or other new landscape, such as a park, playground, or greenbelt without an associated building.

"Non-residential landscape" means landscapes in commercial, institutional, industrial and public settings that may have areas designated for recreation or public assembly. It also includes portions of common areas of common interest developments with designated recreational areas.

"Operating pressure" means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.

"Overhead sprinkler irrigation systems" or "overhead spray irrigation systems" means systems that deliver water through the air (e.g., spray heads and rotors).

"Overspray" means the irrigation water which is delivered beyond the target area.

"Parkway" means the area between a sidewalk and the curb or traffic lane. It may be planted or unplanted, and with or without pedestrian egress.

"Permit" means an authorizing document issued by the city for new construction or rehabilitated landscapes.

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

"Planning Approval Letter (Letter #1)" is issued by the City and is required in order for the Los Angeles County Building and Safety Department to issue building and grading permits.

"Planning Final Letter (Letter #2)" is issued by the City and is required in order for the Los Angeles County Building and Safety Department to issue a Certificate of Occupancy (final building permit approval).

"Plant factor" or "plant water use factor" is a factor, when multiplied by ETo, estimates the amount of water needed by plants. For purposes of this ordinance, the plant factor range for very low water use plants is 0 to 0.1, the plant factor range for low water use plants is 0.1 to 0.3, the plant factor range for moderate water use plants is 0.4 to 0.6, and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in this ordinance are derived from the publication "Water Use Classification of Landscape Species". Plant factors may also be obtained from horticultural researchers from academic institutions or professional associations as approved by the California Department of Water Resources (DWR).

"Project applicant" means the individual or entity submitting a Landscape Documentation Package required under Section 13.18.060, to request a permit, plan check, or design review from the city. A project applicant may be the property owner or his or her designee.

"Rain sensor" or "rain sensing shutoff device" means a component which automatically suspends an irrigation event when it rains.

"Record drawing" or "as-builts" means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.

"Recreational area" means areas, excluding private single family residential areas, designated for active play, recreation or public assembly such in parks, sports fields, picnic grounds, amphitheaters or golf course tees, fairways, roughs, surrounds and greens.

"Recycled water," "reclaimed water," or "treated sewage effluent water" means treated or recycled waste water of a quality suitable for nonpotable uses such as landscape irrigation and water features. This water is not intended for human consumption.

"Reference evapotranspiration" or "ETo" means a standard measurement of environmental parameters which affect the water use of plants. ETo is expressed in inches per day, month, or year as represented in Appendix B of the Water Efficient Landscape Guidelines, and is an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowances so that regional differences in climate can be accommodated.

"Regional Water Efficient Landscape Ordinance" means a local Ordinance adopted by two or more local agencies, water suppliers and other stakeholders for implementing a

consistent set of landscape provisions throughout a geographical region. Regional ordinances are strongly encouraged to provide a consistent framework for the landscape industry and applicants to adhere to.

"Rehabilitated landscape" means any re-landscaping project that requires a permit, plan check, or design review, meets the requirements of Section 13.18.030, and the modified landscape area is equal to or greater than 2,500 square feet.

"Residential landscape" means landscapes surrounding single or multifamily homes.

"Run off" means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area. For example, run off may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope.

"Soil moisture sensing device" or "soil moisture sensor" means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

"Soil texture" means the classification of soil based on its percentage of sand, silt, and clay.

"Special Landscape Area" (SLA) means an area of the landscape dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, or water features using recycled water.

"Sprinkler head" or "spray head" means a device which delivers water through a nozzle.

"Static water pressure" means the pipeline or municipal water supply pressure when water is not flowing.

"Station" means an area served by one valve or by a set of valves that operate simultaneously.

"Swing joint" means an irrigation component that provides a flexible, leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

"Submeter" means a metering device to measure water applied to the landscape that is installed after the primary utility water meter.

"Turf" means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses.

"Valve" means a device used to control the flow of water in the irrigation system.

"Water conserving plant species" means a plant species identified as having a very low or low plant factor.

"Water Efficient Landscape Guidelines" or "Guidelines" refers to the Water Efficient Landscape Guidelines, as approved by and available at the City, which describes procedures, calculations, and requirements for landscape projects subject to the Guidelines.

"Water Efficient Landscape Ordinance" means Chapter 13.18 of the Industry Municipal Code.

"Water feature" means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices that are not irrigated and used solely for water treatment or stormwater retention are not water features and, therefore, are not subject to the water budget calculation.

"Watering window" means the time of day irrigation is allowed.

"WUCOLS" means the Water Use Classification of Landscape Species published by the University of California Cooperative Extension and the Department of Water Resources 2014.

13.18.030. Applicability.

A. This ordinance shall apply to all of the following landscape projects:

   1. New construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review;
   2. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review;
   3. Existing landscapes limited to Section 3.1 of the Water Efficient Landscape Guidelines; and
   4. Cemeteries. Recognizing the special landscape management needs of cemeteries, new and rehabilitated cemeteries are limited to Sections 2.1.B.2, 2.2.A.4, and 2.2.A.5 of the Water Efficient Landscape Guidelines; and existing cemeteries are limited to Section 3.1 of the Water Efficient Landscape Guidelines.

B. Any project with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of this ordinance or conform to the prescriptive measures contained in Appendix E of the Water Efficient Landscape Guidelines.

C. For projects using treated or untreated graywater or rainwater captured on site, any lot or parcel within the project that has less than 2500 sq. ft. of landscape and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with treated or untreated graywater or through stored rainwater captured on site is subject only to Section B.5 of Appendix E of the Water Efficient Landscape Guidelines.

13.18.040. Exemptions.

A. This ordinance does not apply to:

1. Registered local, state or federal historical sites;
2. Ecological restoration projects that do not require a permanent irrigation system;
3. Mined-land reclamation projects that do not require a permanent irrigation system; or
4. Existing plant collections, as part of botanical gardens and arboretums open to the public.

13.18.050. Water Efficient Landscape Guidelines.

A. Water Efficient Landscape Guidelines. The Water Efficient Landscape Guidelines as adopted by resolution of the city council, as they may be amended from time to time, is hereby incorporated into this chapter by reference.

13.18.060. Procedures.

A. Landscape Design and Review. Prior to installation and construction, the Applicant shall submit a complete Landscape Documentation Package that complies with the provisions of this chapter and the Water Efficient Landscape Guidelines to the Planning Department for approval. The Landscape Documentation Package shall include the following elements, as detailed in the Water Efficient Landscape Guidelines:

1. Project information including all of the following;
    a. Date
    b. Applicant
    c. Project address (if available, parcel and/or lot number(s))
    d. Total landscape area (square feet)
    e. Project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed)
    f. Water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well
    g. Checklist of all documents in Landscape Documentation Package
    h. Project contacts to include contact information for the Applicant and property owner.
    i. Applicant signature and date with statement, "I agree to comply with the requirements of the Water Efficient Landscape Guidelines and submit a complete Landscape Documentation Package".
2. Water Efficient Landscape Worksheet including calculations for the Maximum Applied Water Allowance (WAWA) and Estimated Total Water Use (ETWU) in

compliance with this chapter and as contained in Appendix C of the Water Efficient Landscape Guidelines;

3. Soil management report;
4. Landscape design plan;
5. Irrigation design plan;
6. Grading design plan; and
7. A Certificate of Landscape Design (Appendix A of the Water Efficient Landscape Guidelines) on the landscape plans verifying that the Landscape Documentation Package, including landscape, irrigation, and grading designs have been prepared in accordance with the provisions of this chapter and the Water Efficient Landscape Guidelines and containing the following:
    a. The statement: "I have complied with Chapter 13.18 of the City of Industry Municipal Code and the Water Efficient Landscape Guidelines and applied them for the efficient use of water in this landscape design plan"; and
    b. The professional stamp, contact information, and signature of the California-licensed landscape architect who prepared the landscape plan.

B. Final Approval after Installation. Upon installation and prior to final inspection and approval, the Applicant shall submit a Certificate of Completion (Appendix D of the Water Efficient Landscape Guidelines) to the Planning Department that includes:
    1. Project information sheet containing:
        a. Date;
        b. Project name;
        c. Applicant name, telephone, and mailing address;
        d. Project address and location; and
        e. Property owner name, telephone, and mailing address.
    2. Certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;
    3. Irrigation scheduling parameters used to set the controller.
    4. Landscape and irrigation maintenance schedule.
    5. Irrigation audit report conducted by a third party certified landscape irrigation auditor.
    6. Soil analysis report, if not submitted with Landscape Documentation Package, and documentation verifying implementation of soil report recommendations.
    7. Documentation showing that copies of the approved Certificate of Completion have been submitted to the local water purveyor and property owner or his or her designee.

EXHIBIT B

WATER EFFICIENT LANDSCAPE GUIDELINES

CITY OF INDUSTRY
15625 E. Stafford St. • City of Industry, CA 91744-0366 • (626) 333-2211 • FAX (626) 961-6795

Water Efficient Landscape Guidelines

Implementing Municipal Code Chapter 13.18 Water Efficient Landscape Ordinance

Table of Contents

1. PURPOSE AND APPLICABILITY

1.1 Purpose

A. The primary purpose of these Guidelines is to provide procedural and design guidance for applicants proposing new landscape or landscape rehabilitation projects that are subject to Chapter 13.18 of the City of Industry Municipal Code. This document is also intended for use and reference by City staff in reviewing and approving designs and verifying compliance with Chapter 13.18.

B. Other regulations affecting landscape design and maintenance practices are potentially applicable and should be consulted for additional requirements. These regulations include but may not be limited to:

1. Governor's Executive Order No. B-29-15;
2. National Pollutant Discharge Elimination Permit(s) for the Municipal Separate Storm Sewer System;
3. Los Angeles County Fire Code Regulations for fuel modification in landscapes;
4. Water Conservation, Water Supply Shortage and Drought Response Regulations of any other Local Water Purveyor that provides water to the City;
5. State and local regulations governing the use of Recycled Water;
6. Industry Municipal Code (including Building and Zoning Code);
7. Specific Plans, Master Plans, General Plan, or similar land use and planning documents; and
8. Conditions of approval for a specific project.

1.2 Applicability

A. This ordinance shall apply to all of the following landscape projects:

1. New construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review;
2. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review;
3. Existing landscapes limited to Section 3.1; and
4. Cemeteries. Recognizing the special landscape management needs of cemeteries, new and rehabilitated cemeteries are limited to Sections

2.1.B.2, 2.2.A.4, and 2.2.A.5; and existing cemeteries are limited to Section 3.1.

B. Any project with an aggregate landscape area of 2,500 square feet or less may comply with the performance requirements of this ordinance or conform to the prescriptive measures contained in Appendix E of the Water Efficient Landscape Guidelines.

C. For projects using treated or untreated graywater or rainwater captured on site, any lot or parcel within the project that has less than 2500 sq. ft. of landscape and meets the lot or parcel's landscape water requirement (Estimated Total Water Use) entirely with treated or untreated graywater or through stored rainwater captured on site is subject only to the prescriptive measures contained in Section B.5 of Appendix E of the Water Efficient Landscape Guidelines.

D. Exemptions. This ordinance does not apply to:

1. Registered local, state or federal historical sites;
2. Ecological restoration projects that do not require a permanent irrigation system;
3. Mined-land reclamation projects that do not require a permanent irrigation system; or
4. Existing plant collections, as part of botanical gardens and arboretums open to the public.

2. SUBMITTAL REQUIREMENTS

2.1 Landscape Documentation Package

A. A Certification of Landscape Design in accordance with Exhibit A of these Guidelines that includes a landscape professional's professional stamp, licensed in California, signature, contact information (including email and telephone number), license number, and date, certifying the statement, "I have complied with Chapter 13.18 of the City of Industry Municipal Code and the Water Efficient Landscape Guidelines and applied them for the efficient use of water in this landscape design plan" and must bear the signature of the landscape professional as required by law.

B. A Landscape Documentation Package is required to be submitted by the Applicant for review and approval prior to the issuance of ministerial permits and prior to the start of construction. Unless otherwise directed by the City, the Landscape Documentation Package must include the following elements on fully

dimensioned and labeled plan sheets and supplemental pages as directed by the City:

1. Project information including all of the following;
    a. Date
    b. Applicant
    c. Project address (if available, parcel and/or lot number(s))
    d. Total landscape area (square feet)
    e. Project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed)
    f. Water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well
    g. Checklist of all documents in Landscape Documentation Package
    h. Project contacts to include contact information for the Applicant and property owner.
    i. Applicant signature and date with statement, "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package".
2. Water Efficient Landscape Worksheet (Appendix C) including the following:
    a. A completed Water Efficient Landscape Worksheet found in Appendix C containing information on the plant factor, irrigation method, irrigation efficiency, and area associated with each hydrozone. Calculations are then made to show that the evapotranspiration adjustment factor (ETAF) for the landscape project does not exceed a factor of 0.55 for residential areas and 0.45 for non-residential areas, exclusive of Special Landscape Areas. The ETAF for a landscape project is based on the plant factors and irrigation methods selected. The Maximum Applied Water Allowance (WAWA) is calculated based on the maximum ETAF allowed (0.55 for residential areas and 0.45 for non-residential areas) and expressed as annual gallons required. The Estimated Total Water Use (ETWU) is calculated based on the plants used and irrigation method selected for the landscape design. ETWU must be below the MAWA.
    b. In calculating the MAWA and ETWU, an Applicant shall use the ETo values from the Reference Evapotranspiration Table in Appendix B.
    c. Water budget calculations shall adhere to the following requirements:
        i. The plant factor used shall be from WUCOLS or from horticultural researchers with academic institutions or professional associations

as approved by the California Department of Water Resources (DWR). The plant factor ranges from 0 to 0.1 for very low water using plants, 0.1 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants, and from 0.7 to 1.0 for high water use plants.

ii. (All water features shall be included in the high water use hydrozone and temporarily irrigated areas shall be included in the low water use hydrozone.

iii. All Special Landscape Areas shall be identified and their water use calculated as shown in Appendix C.

iv. ETAF for new and existing (non-rehabilitated) Special Landscape Areas shall not exceed 1.0.

3. Soil management report completed by the Applicant, or his/her designee, as follows:

a. Submit soil samples to a laboratory for analysis and recommendations.

b. Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.

c. The soil analysis shall include:

i. Soil texture;

ii. Infiltration rate determined by laboratory test or soil texture infiltration rate table;

iii. pH;

iv. Total soluble salts;

v. Sodium;

vi. Percent organic matter; and

vii. Recommendations.

d. In projects with multiple landscape installations (i.e. production home developments) a soil sampling rate of 1 in 7 lots or approximately 15% will satisfy this requirement. Large landscape projects shall sample at a rate equivalent to 1 in 7 lots.

e. The Applicant, or his/her designee, shall comply with one of the following:

i. If significant mass grading is not planned, the soil analysis report shall be submitted to the city as part of the Landscape Documentation Package; or

ii. If significant mass grading is planned, the soil analysis report shall be submitted to the city as part of the Certificate of Completion.

f. The soil analysis report shall be made available, in a timely manner, to the professionals preparing the landscape design plans and irrigation design plans to make any necessary adjustments to the design plans.

g. The Applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the city with Certificate of Completion.

4. Landscape Design Plan that contains the following:

a. The Landscape Design Plan, at a minimum, shall:

i. Delineate and label each hydrozone by number, letter, or other method;

ii. Identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of the landscape shall be included in the low water use hydrozone for the water budget calculation;

iii. Identify recreational areas;

iv. Identify areas permanently and solely dedicated to edible plants;

v. Identify areas irrigated with recycled water;

vi. Identify type of mulch and application depth;

vii. Identify soil amendments, type, and quantity;

viii. Identify type and surface area of water features;

ix. Identify hardscapes (pervious and non-pervious);

x. Identify location, installation details, and 24-hour retention or infiltration capacity of any applicable stormwater best management practices that encourage on-site retention and infiltration of stormwater. Applicants shall refer to the city or regional Water Quality Control Board for information on any applicable stormwater technical requirements. Stormwater best management practices are encouraged in the landscape design plan and examples are provided in Section 2.6.

xi. Identify any applicable rain harvesting or catchment technologies as discussed in Section 2.6 and their 24-hour retention or infiltration capacity;

xii. Identify any applicable graywater discharge piping, system components and area(s) of distribution;

xiii. Contain the following statement: "I have complied with Chapter 13.18 of the City of Industry Municipal Code and the Water Efficient Landscape Guidelines and applied them for the efficient use of water in this landscape design plan"; and

xiv. Bear the professional stamp, contact information, and signature of the California-licensed landscape architect who prepared the landscape plan. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agriculture Code.)

b. Plant Material. Any plant may be selected for the landscape, providing the ETWU in the landscape area does not exceed the MAWA. Methods to achieve water efficiency shall include one or more of the following:

   i. Protection and preservation of native species and natural vegetation;

   ii. Selection of water-conserving plant, tree and turf species, especially local native plants;

   iii. Selection of plants based on local climate suitability, disease and pest resistance;

   iv. Selection of trees based on applicable local tree ordinances or tree shading guidelines, and size at maturity as appropriate for the planting area; and

   v. Selection of plants from local and regional landscape program plant lists.

   vi. Selection of plants from local Fuel Modification Plan Guidelines.

c. Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in Section 2.1.B.5.b.iv.

d. Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. Methods to achieve water efficiency shall include one or more of the following:

   i. Use the Sunset Western Climate Zone System which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;

ii. Recognize the horticultural attributes of plants (i.e., mature plant size, invasive surface roots) to minimize damage to property or infrastructure [e.g., buildings, sidewalks, power lines]; allow for adequate soil volume for healthy root growth; and

iii. Consider the solar orientation for plant placement to maximize summer shade and winter solar gain.

e. Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape and where 25% means 1 foot of vertical elevation change for every 4 feet of horizontal length (rise divided by run x 100 = slope percent).

f. High water use plants, characterized by a plant factor of 0.7 to 1.0, are prohibited in street medians.

g. A landscape design plan for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per Public Resources Code Section 4291(a) and (b). Avoid fire-prone plant materials and highly flammable mulches. Refer to the local Fuel Modification Plan guidelines.

h. The use of invasive plant species, such as those listed by the California Invasive Plant Council, is strongly discouraged.

i. The architectural guidelines of a common interest development, which include community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.

j. Water Features

i. Recirculating water systems shall be used for water features.

ii. Where available, recycled water shall be used as a source for decorative water features.

iii. Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.

iv. Pool and spa covers are highly recommended.

k. Soil Preparation, Mulch and Amendments

i. Prior to the planting of any materials, compacted soils shall be transformed to a friable condition. On engineered slopes, only amended planting holes need meet this requirement.

ii. Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 2.1.B.3).

iii. For landscape installations, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil. Soils with greater than 6% organic matter in the top 6 inches of soil are exempt from adding compost and tilling.

iv. A minimum three inch (3") layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated. To provide habitat for beneficial insects and other wildlife, up to 5 % of the landscape area may be left without mulch. Designated insect habitat must be included in the landscape design plan as such.

v. Stabilizing mulching products shall be used on slopes that meet current engineering standards.

vi. The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.

vii. Organic mulch materials made from recycled or post-consumer shall take precedence over inorganic materials or virgin forest products unless the recycled post-consumer organic products are not locally available. Organic mulches are not required where prohibited by local Fuel Modification Plan Guidelines or other applicable local ordinances.

5. Irrigation design plan, which only applies to landscaped areas requiring permanent irrigation, not areas that require temporary irrigation solely for the plant establishment period. For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and the manufacturers' recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

   a. System

      i. Landscape water meters, defined as either a dedicated water service meter or private submeter, shall be installed for all non-residential irrigated landscapes of 1,000 sq. ft. but not more than 5,000 sq.ft. (the level at which Water Code 535 applies) and residential irrigated landscapes of 5,000 sq. ft. or greater. A landscape water meter may be either: 1) A customer service meter dedicated to landscape use provided by the local water purveyor; or 2) A privately owned meter or submeter.

ii. Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data utilizing non-volatile memory shall be required for irrigation scheduling in all irrigation systems.

iii. If the water pressure is below or exceeds the recommended pressure of the specified irrigation devices, the installation of a pressure regulating device is required to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance.

   a) If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators, booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system.

   b) Static water pressure, dynamic or operating pressure, and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation.

iv. Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions. Irrigation should be avoided during windy or freezing weather or during rain.

v. Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency (such as a main line break) or routine repair.

vi. Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system. An Applicant shall refer to the applicable local agency code (i.e., public health) for additional backflow prevention requirements.

vii. Flow sensors that detect high flow conditions created by system damage or malfunction are required for all on non-residential landscapes and residential landscapes of 5000 sq. ft. or larger.

viii. Master shut-off valves are required on all projects except landscapes that make use of technologies that allow for the individual control of sprinklers that are individually pressurized in a system equipped with low pressure shut down features.

ix. The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation

water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.

x. Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.

xi. The design of the irrigation system shall conform to the hydrozones of the landscape design plan.

xii. The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section 2.1.B.2 regarding the MAWA.

xiii. All irrigation emission devices must meet the requirements set in the American National Standards Institute (ANSI) standard, American Society of Agricultural and Biological Engineers'/International Code Council's (ASABE/ICC) 802-2014 "Landscape Irrigation Sprinkler and Emitter Standard, All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802-2014.

xiv. It is highly recommended that the Applicant or city inquire with the local water purveyor about peak water operating demands (on the water supply system) or water restrictions that may impact the effectiveness of the irrigation system.

xv. In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.

xvi. Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.

xvii. Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.

xviii. Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to hardscapes or in high traffic areas of turfgrass.

xix. Check valves or anti-drain valves are required on all sprinkler heads where low point drainage could occur.

xx. Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

xxi. Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:

a) The landscape area is adjacent to permeable surfacing and no runoff occurs; or

b) The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or

c) The irrigation designer specifies an alternative design or technology, as part of the Landscape Documentation Package and clearly demonstrates strict adherence to irrigation system design criteria in Section 2.1.B.5.a.ix. Prevention of overspray and runoff must be confirmed during the irrigation audit.

xxii. Slopes greater than 25% shall not be irrigated with an irrigation system with an application rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit.

b. Hydrozone

i. Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.

ii. Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.

iii. Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf to facilitate the appropriate irrigation of trees. The mature size and extent of the root zone shall be considered when designing irrigation for the tree.

iv. Individual hydrozones that mix plants of moderate and low water use, or moderate and high water use, may be allowed if:

a) Plant factor calculation is based on the proportions of the respective plant water uses and their plant factor; or

b) The plant factor of the higher water using plant is used for calculations.

v. Individual hydrozones that mix high and low water use plants shall not be permitted.

vi. On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve, and assign a number to each valve. Use this valve number in the Hydrozone Information Table (see Appendix C Section A). This table can also assist with the irrigation audit and programming the controller.

c. The irrigation design plan, at a minimum, shall contain:

i. Location and size of separate water meters for landscape;

ii. Location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices;

iii. Static water pressure at the point of connection to the public water supply;

iv. Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;

v. Recycled water irrigation systems as specified in Section 2.4;

vi. The following statement: "I have complied with Chapter 13.18 of the City of Industry Municipal Code and the Water Efficient Landscape Guidelines and applied them accordingly for the efficient use of water in the irrigation design plan"; and

vii. The signature of a California-licensed landscape architect, certified irrigation designer, licensed landscape contractor, or any other person authorized to design an irrigation system. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code.)

6. Grading design plan. A comprehensive grading plan prepared by a civil engineer for other city permits satisfies this requirement.

a. The Applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscape area including:

i. Height of graded slopes;

ii. Drainage patterns;

iii. Pad elevations;

iv. Finish grade; and

v. Stormwater retention improvements, if applicable.

b. To prevent excessive erosion and runoff, it is highly recommended that Applicants:

i. Grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;

ii. Avoid disruption of natural drainage patterns and undisturbed soil; and

iii. Avoid soil compaction in landscape areas.

c. The grading design plan shall contain the following statement: "I have complied with Chapter 13.18 of the City of Industry Municipal Code and the Water Efficient Landscape Guidelines and applied them accordingly for the efficient use of water in the grading design plan" and shall bear the signature of a California-licensed professional as authorized by law.

2.2 Certificate of Completion

A. Upon installation and prior to final inspection and approval (issuance of a Letter #2), the Applicant shall submit a Certificate of Completion (Appendix D) to the Planning Department that includes:

1. Project information sheet containing:

a. Date;

b. Project name;

c. Applicant name, telephone, and mailing address;

d. Project address and location; and

e. Property owner name, telephone, and mailing address.

2. Certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;

a. Where there have been significant changes made in the field during construction, these "as-built" or record drawings shall be included with the certification;

b. A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation controller for subsequent management purposes.

3. Irrigation scheduling parameters used to set the controller meeting the following criteria:

   a. Irrigation scheduling shall be regulated by automatic irrigation controllers.

   b. Overhead irrigation shall be scheduled between 8:00 p.m. and 10:00 a.m. unless weather conditions prevent it. If allowable hours of irrigation differ from the local water purveyor, the stricter of the two shall apply. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

   c. For implementation of the irrigation schedule, particular attention must be paid to irrigation run times, emission device, flow rate, and current reference evapotranspiration, so that applied water meets the ETWU. Total annual applied water shall be less than or equal to MAWA. Actual irrigation schedules shall be regulated by automatic irrigation controllers using current reference evapotranspiration data (e.g., CIMIS) or soil moisture sensor data.

   d. Parameters used to set the automatic controller shall be developed and submitted for each of the following:

      i. the plant establishment period;

      ii. The established landscape; and

      iii. Temporarily irrigated areas.

   e. Each irrigation schedule shall consider for each station all of the following that apply:

      i. Irrigation interval (days between irrigation);

      ii. Irrigation run times (hours or minutes per irrigation event to avoid runoff);

      iii. Number of cycle starts required for each irrigation event to avoid runoff;

      iv. Amount of applied water scheduled to be applied on a monthly basis;

      v. Application rate setting;

      vi. Root depth setting;

      vii. Plant type setting;

      viii. Soil type;

      ix. Slope factor setting;

x. Shade factor setting; and

xi. Irrigation uniformity or efficiency setting.

4. Landscape and irrigation maintenance schedule that includes, but is not be limited to, routine inspection; auditing, adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; topdressing with compost, replenishing mulch; fertilizing; pruning; weeding in all landscape areas, and removing obstructions to emission devices. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

   a. Repair of all irrigation equipment shall be done with the originally installed components or their equivalents or with components with greater efficiency.

   b. An Applicant is encouraged to implement established landscape industry sustainable Best Practices for overall all landscape maintenance activities.

5. Irrigation audit report conducted by a third party certified landscape irrigation auditor. Landscape audits shall not be conducted by the person who designed the landscape or installed the landscape.

   a. In large projects or projects with multiple landscape installations (i.e. production home developments) an auditing rate of 1 in 7 lots or approximately 15% will satisfy this requirement.

   b. The irrigation audit report that may include, but is not limited to: inspection, system tune-up, system test with distribution uniformity, reporting overspray or run off that causes overland flow, and preparation of an irrigation schedule, including configuring irrigation controllers with application rate, soil types, plant factors, slope, exposure and any other factors necessary for accurate programming;

6. Soil analysis report, if not submitted with Landscape Documentation Package, and documentation verifying implementation of soil report recommendations (see Section 2.1.B.3).

7. Documentation showing that copies of the Certificate of Completion have been submitted to the local water purveyor and property owner or his or her designee.

2.3 Irrigation Efficiency

A. For the purpose of determining ETWU, average irrigation efficiency is assumed to be 0.75 for overhead spray devices and 0.81 for drip system devices.

2.4 Recycled Water

A. The installation of recycled water irrigation systems shall allow for the current and future use of recycled water.

B. All recycled water irrigation systems shall be designed and operated in accordance with all applicable local and State laws.

C. Landscapes using recycled water are considered Special Landscape Areas. The ET Adjustment Factor for new and existing (non-rehabilitated) Special Landscape Areas shall not exceed 1.0.

2.5 Graywater Systems

A. Graywater systems promote the efficient use of water and are encouraged to assist in on-site landscape irrigation. All graywater systems shall conform to the California Plumbing Code (Title 24, Part 5, Chapter 16) and any applicable local ordinance standards. Refer to Section 1.2.C for the applicability of this ordinance to landscape areas less than 2,500 square feet with the ETWU met entirely by graywater.

2.6 Stormwater Management and Rainwater Retention

A. Stormwater management practices minimize runoff and increase infiltration which recharges groundwater and improves water quality. Implementing stormwater best management practices into the landscape and grading design plans to minimize runoff and to increase on-site rainwater retention and infiltration are encouraged.

B. Applicants shall refer to the city or Regional Water Quality Control Board for information on any applicable stormwater technical requirements.

C. All planted landscape areas are required to have friable soil to maximize water retention and infiltration. Refer to Section 2.1.B.4.k.

D. It is strongly recommended that landscape areas be designed for capture and infiltration capacity that is sufficient to prevent runoff from impervious surfaces (i.e. roof and paved areas) from either: the one inch, 24-hour rain event or (2) the 85th percentile, 24-hour rain event, and/or additional capacity as required by any applicable local, regional, state or federal regulation.

E. It is recommended that storm water projects incorporate any of the following elements to improve on-site storm water and dry weather runoff capture and use:

1. Grade impervious surfaces, such as driveways, during construction to drain to vegetated areas.
2. Minimize the area of impervious surfaces such as paved areas, roof and concrete driveways.
3. Incorporate pervious or porous surfaces (e.g., gravel, permeable pavers or blocks, pervious or porous concrete) that minimize runoff.
4. Direct runoff from paved surfaces and roof areas into planting beds or landscaped areas to maximize site water capture and reuse.
5. Incorporate rain gardens, cisterns, and other rain harvesting or catchment systems.
6. Incorporate infiltration beds, swales, basins and drywells to capture storm water and dry weather runoff and increase percolation into the soil.
7. Consider constructed wetlands and ponds that retain water, equalize excess flow, and filter pollutants.

2.7 Effective Precipitation

A. The city may consider Effective Precipitation (25% of annual precipitation) in tracking water use and may use the following equation to calculate MAWA:

1. MAWA= (ETo - Eppt) (0.62) [(0.70.55 x LA) + (0.30.45 x SLA)] for residential areas.
2. MAWA= (ETo-EPPT) (0.62) [(0.45 x LA) + (0.55 x SLA)] for non-residential areas.

3. EXISTING LANDSCAPES

3.1 Provisions for Existing Landscapes

A. Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis. This section shall apply to all existing landscapes that were installed before December 1, 2015 and are over one acre in size.

1. For existing landscapes that have a water meter, the city shall administer programs that may include, but not be limited to, irrigation water use analyses, irrigation surveys, and irrigation audits to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the MAWA for existing landscapes. The MAWA for existing landscapes shall be calculated as: MAWA = (0.8) (ETo)(LA)(0.62).

2. For existing landscapes that do not have a meter, the city shall administer programs that may include, but not be limited to, irrigation surveys and irrigation audits to evaluate water use and provide recommendations as necessary in order to prevent water waste.

3. All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

B. Water Waste Prevention. The property owner, business owner, and City and shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff from leaving the target landscape due to low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, parking lots, or structures.

1. Restrictions regarding overspray and runoff may be modified if:

   a. The landscape area is adjacent to permeable surfacing and no runoff occurs; or

   b. The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping.

Appendix A

Certificate of Landscape Design

CERTIFICATE OF LANDSCAPE DESIGN

I hereby certify that:

(1) I am a professional licensed in the State of California to provide professional landscape design services.

(2) I prepared the landscape design and water use calculations for the property located at

_____

(provide street address or parcel number(s)) were prepared by me or under my supervision.)

(3) In regards to the landscape design and water use calculations I prepared for the identified property, I have complied with Chapter 13.18 of the City of Industry Municipal Code and the Water Efficient Landscape Guidelines and applied them for the efficient use of water in this landscape design plan, irrigation plan, and grading design plan (if applicable).

(4) The information I have provided in this Certificate of Landscape Design is true and correct and is hereby submitted in compliance with the City of Industry Water Efficient Landscape Guidelines.

_____ _____

Print Name Date

_____ _____

Signature License Number

_____

Address

_____ _____

Telephone E-mail Address

Landscape Design Professional's Stamp

Appendix B

Reference Evapotranspiration (ETo) Table

County and City	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual ETo
Pomona	1.7	2.0	3.4	4.5	5.0	5.8	6.5	6.4	4.7	3.5	2.3	1.7	47.5

Source: Model Water Efficient Landscape Ordinance: 2015 Revision

Appendix C

Sample Water Efficient Landscape Worksheet

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (ETo) _____

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq, ft,)	ETAF x Area	Estimated Total Water Use (ETWU)[e]
Regular Landscape Areas							
				Totals	(A)	(B)	
Special Landscape Areas							
				1			
				1			
				1			
				Totals	(C)	(D)	
						ETWU Total	
						Maximum Allowed Water Allowance (MAWA)[e]	

[a] ***Hydrozone #/Planting Description***
E.g
1.) front lawn
2.) low water use plantings
3.) medium water use planting

[b] ***Irrigation Method***
overhead spray
or drip

[c] ***Irrigation Efficiency***
0.75 for spray head
0.81 for drip

[d] ***ETWU*** **(Annual Gallons Required) =**
Eto x 0.62 x ETAF x Area
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

[e] ***MAWA (Annual Gallons Allowed) =*** *(Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	(B)
Total Area	(A)
Average ETAF	**B ÷ A**

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas

Total ETAF x Area	(B+D)
Total Area	(A+C)
Sitewide ETAF	**(B+D) ÷ (A+C)**

Appendix D

Sample Certificate of Completion

CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project.

PART 1. PROJECT INFORMATION SHEET

Date		
Project Name		
Name of Project Applicant	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Project Address and Location:

Street Address		Parcel, tract or lot number, if available.
City		Latitude/Longitude (optional)
State	Zip Code	

Property Owner or his/her designee:

Name	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

Property Owner

"I/we certify that I/we have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

_____

Property Owner Signature Date

Please answer the questions below:

1. Date the Landscape Documentation Package was submitted to the local agency_____
2. Date the Landscape Documentation Package was approved by the local agency_____
3. Date that a copy of the Water Efficient Landscape Worksheet (including the Water Budget Calculation) was submitted to the local water purveyor_____

PART 2. CERTIFICATION OF INSTALLATION ACCORDING TO THE LANDSCAPE DOCUMENTATION PACKAGE

"I/we certify that based upon periodic site observations, the work has been completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package."

Signature*	Date	
Name (print)	Telephone No.	
	Fax No.	
Title	Email Address	
License No. or Certification No.		
Company	Street Address	
City	State	Zip Code

*Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

PART 3. IRRIGATION SCHEDULING

Attach parameters for setting the irrigation schedule on controller

PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE

Attach schedule of Landscape and Irrigation Maintenance

PART 5. LANDSCAPE IRRIGATION AUDIT REPORT

Attach Landscape Irrigation Audit Report

PART 6. SOIL MANAGEMENT REPORT

Attach soil analysis report, if not previously submitted with the Landscape Documentation Package

Attach documentation verifying implementation of recommendations from soil analysis report

Appendix E

Prescriptive Compliance Option

A. This Appendix contains prescriptive requirements which may be used as a compliance option to the Model Water Efficient Landscape Ordinance.

B. Compliance with the following items is mandatory and must be documented on a landscape plan in order to use the prescriptive compliance option:

1. Submit a Landscape Documentation Package which includes the following elements:
    a. Date
    b. Applicant
    c. Project address (if available, parcel and/or lot number(s))
    d. Total landscape area (square feet), including a breakdown of turf and plant material
    e. Project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed)
    f. Water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well
    g. Contact information for the Applicant and property owner
    h. Applicant signature and date with statement, "I agree to comply with the requirements of the prescriptive compliance option to the MWELO".
2. Incorporate compost at a rate of at least four cubic yards per 1,000 square feet to a depth of six inches into landscape area (unless contra-indicated by a soil test);
3. Plant material shall comply with all of the following;
    a. For residential areas, install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 75% of the plant area excluding edibles and areas using recycled water; For non-residential areas, install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 100% of the plant area excluding edibles and areas using recycled water;
    b. A minimum three inch (3") layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated.
4. Turf shall comply with all of the following:

a. Turf shall not exceed 25% of the landscape area in residential areas, and there shall be no turf in non-residential areas;

b. Turf shall not be planted on sloped areas which exceed a slope of 1 foot vertical elevation change for every 4 feet of horizontal length;

c. Turf is prohibited in parkways less than 10 feet wide, unless the parkway is adjacent to a parking strip and used to enter and exit vehicles. Any turf in parkways must be irrigated by sub-surface irrigation or by other technology that creates no overspray or runoff.

5. Irrigation systems shall comply with the following:

a. Automatic irrigation controllers are required and must use evapotranspiration or soil moisture sensor data and utilize a rain sensor.

b. Irrigation controllers shall be of a type which does not lose programming data in the event the primary power source is interrupted.

c. Pressure regulators shall be installed on the irrigation system to ensure the dynamic pressure of the system is within the manufacturers recommended pressure range.

d. Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be installed as close as possible to the point of connection of the water supply.

e. All irrigation emission devices must meet the requirements set in the ANSI standard, ASABE/ICC 802-2014. "Landscape Irrigation Sprinkler and Emitter Standard," All sprinkler heads installed in the landscape must document a distribution uniformity low quarter of 0.65 or higher using the protocol defined in ASABE/ICC 802-2014.

f. Areas less than ten (10) feet in width in any direction shall be irrigated with subsurface irrigation or other means that produces no runoff or overspray.

6. For non-residential projects with landscape areas of 1,000 sq. ft. or more, a private submeter(s) to measure landscape water use shall be installed.

C. At the time of final inspection, the permit applicant must provide the owner of the property with a certificate of completion, certificate of installation, irrigation schedule and a schedule of landscape and irrigation maintenance.

Appendix F

Definitions

The terms used in these Water Efficient Landscape Guidelines have the meanings set forth below:

"Applicant" means the person submitting a landscape documentation package. Applicants can be the property owner or the owner's designee.

"Applied water" means the portion of water supplied by the irrigation system to the landscape.

"Automatic irrigation controller" means a timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers are able to self-adjust and schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.

"Backflow prevention device" means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.

"Certificate of Completion" means the document required under Section 2.2.

"Certified irrigation designer" means a person certified to design irrigation systems by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency's WaterSense irrigation designer certification program and Irrigation Association's Certified Irrigation Designer program.

"Certified landscape irrigation auditor" means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency's WaterSense irrigation auditor certification program and Irrigation Association's Certified Landscape Irrigation Auditor program.

"Check valve" or "anti-drain valve" means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in the system to prevent drainage from sprinkler heads when the sprinkler is off.

"Common interest developments" means community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351.

"Compost" means the safe and stable product of controlled biologic decomposition of organic materials that is beneficial to plant growth.

"Conversion factor (0.62)" means the number that converts acre-inches per acre per year to gallons per square foot per year.

"Distribution uniformity" means the measure of the uniformity of irrigation water over a defined area.

"Drip irrigation" means any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

"Ecological restoration project" means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.

"Effective precipitation" or "usable rainfall" (Eppt) means the portion of total precipitation which becomes available for plant growth.

"Emitter" means a drip irrigation emission device that delivers water slowly from the system to the soil.

"Established landscape" means the point at which plants in the landscape have developed significant root growth into the soil. Typically, most plants are established after one or two years of growth.

"Establishment period of the plants" means the first year after installing the plant in the landscape or the first two years if irrigation will be terminated after establishment. Typically, most plants are established after one or two years of growth. Native habitat mitigation areas and trees may need three to five years for establishment.

"Estimated Total Water Use" (ETWU) means the total water used for the landscape as described in Section 2.1.B.2.

"ET adjustment factor" (ETAF) means a factor of 0.55 for residential areas and 0.45 for non-residential areas, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape. The ETAF for new and existing (non-rehabilitated) Special Landscape Areas shall not exceed 1.0. The ETAF for existing non-rehabilitated landscapes is 0.8.

"Evapotranspiration rate" means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.

"flow rate" means the rate at which water flows through pipes, valves and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.

"Flow sensor" means an inline device installed at the supply point of the irrigation system that produces a repeatable signal proportional to flow rate. Flow sensors must be connected to an automatic irrigation controller, or flow monitor capable of receiving flow signals and operating master valves. This combination flow sensor/controller may also function as a landscape water meter or submeter.

"Friable" means a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting material requirements, whereby the root structure of newly planted material will be allowed to spread unimpeded.

"Fuel Modification Plan Guideline" means guidelines from a local fire authority to assist residents and businesses that are developing land or building structures in a fire hazard severity zone.

"Graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. Health and Safety Code Section 17922.12.

"Hardscapes" means any durable material (pervious and non-pervious).

"Hydrozone" means a portion of the landscaped area having plants with similar water needs and rooting depth. A hydrozone may be irrigated or non-irrigated.

"Infiltration rate" means the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).

"Invasive plant species" means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies as noxious species. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.

"Irrigation audit" means an in-depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, 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. The audit must be conducted in a manner consistent with the Irrigation Association's Landscape Irrigation Auditor Certification program or other U.S. Environmental Protection Agency "WaterSense" labeled auditing program.

"Irrigation efficiency" (IE) means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The irrigation efficiency for purposes of this ordinance are 0.75 for overhead spray devices and 0.81 for drip systems.

"Irrigation survey" means an evaluation of an irrigation system that is less detailed than an irrigation audit. An irrigation survey includes, but is not limited to: inspection, system test, and written recommendations to improve performance of the irrigation system.

"Irrigation water use analysis" means an analysis of water use data based on meter readings and billing data.

"Landscape architect" means a person who holds a license to practice landscape architecture in the state of California Business and Professions Code, Section 5615.

"Landscape area" means all the planting areas, turf areas, and water features in a landscape design plan subject to the MAWA calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other

non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

"Landscape contractor" means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems.

"Landscape Documentation Package" means the documents required under Section 2.1.B.1.

"Landscape project" means total area of landscape in a project as defined in "landscape area" for the purposes of this ordinance, meeting requirements under Section 1.2.

"Landscape water meter" means an inline device installed at the irrigation supply point that measures the flow of water into the irrigation system and is connected to a totalizer to record water use.

"Lateral line" means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

"Local agency" means a city or county, including a charter city or charter county, that is responsible for adopting and implementing the ordinance. The local agency is also responsible for the enforcement of this ordinance, including but not limited to, approval of a permit and plan check or design review of a project.

"Local water purveyor" means any entity, including a public agency, city, county, or private water company that provides retail water service.

"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, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

"Main line" means the pressurized pipeline that delivers water from the water source to the valve or outlet.

"Master shut-off valve" is an automatic valve installed at the irrigation supply point which controls water flow into the irrigation system. When this valve is closed water will not be supplied to the irrigation system. A master valve will greatly reduce any water loss due to a leaky station valve.

"Maximum Applied Water Allowance" (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in Section 2.1.B.2. It is based upon the area's reference evapotranspiration, the ET Adjustment Factor, and the size of the landscape area. The ETWU shall not exceed the MAWA. Special Landscape Areas, including recreation areas, areas permanently and solely dedicated to edible plants such as orchards and vegetable gardens, and areas irrigated with recycled water are subject to the MAWA with an ETAF not to exceed 1.0. MAWA = (ETo) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]

"Median" is an area between opposing lanes of traffic that may be unplanted or planted with trees, shrubs, perennials, and ornamental grasses.

"Microclimate" means the climate of a small, specific area that may contrast with the climate of the overall landscape area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.

"Mined-land reclamation projects" means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

"Mulch" means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, or decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.

"New construction" means, for the purposes of this ordinance, a new building with a landscape or other new landscape, such as a park, playground, or greenbelt without an associated building.

"Non-residential landscape" means landscapes in commercial, institutional, industrial and public settings that may have areas designated for recreation or public assembly. It also includes portions of common areas of common interest developments with designated recreational areas.

"Operating pressure" means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.

"Overhead sprinkler irrigation systems" or "overhead spray irrigation systems" means systems that deliver water through the air (e.g., spray heads and rotors).

"Overspray" means the irrigation water which is delivered beyond the target area.

"Parkway" means the area between a sidewalk and the curb or traffic lane. It may be planted or unplanted, and with or without pedestrian egress.

"Permit" means an authorizing document issued by the city for new construction or rehabilitated landscapes.

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

"Planning Approval Letter (Letter #1)" is issued by the City and is required in order for the Los Angeles County Building and Safety Department to issue building and grading permits.

"Planning Final Letter (Letter #2)" is issued by the City and is required in order for the Los Angeles County Building and Safety Department to issue a Certificate of Occupancy (final building permit approval).

"Plant factor" or "plant water use factor" is a factor, when multiplied by ETo, estimates the amount of water needed by plants. For purposes of this ordinance, the plant factor range for very low water use plants is 0 to 0.1, the plant factor range for low water use plants is 0.1 to 0.3, the plant factor range for moderate water use plants is 0.4 to 0.6, and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in this ordinance are derived from the publication "Water Use Classification of Landscape

Species". Plant factors may also be obtained from horticultural researchers from academic institutions or professional associations as approved by the California Department of Water Resources (DWR).

"Project applicant" means the individual or entity submitting a Landscape Documentation Package required under Section 2.1.B, to request a permit, plan check, or design review from the city. A project applicant may be the property owner or his or her designee.

"Rain sensor" or "rain sensing shutoff device" means a component which automatically suspends an irrigation event when it rains.

"Record drawing" or "as-builts" means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.

"Recreational area" means areas, excluding private single family residential areas, designated for active play, recreation or public assembly such in parks, sports fields, picnic grounds, amphitheaters or golf course tees, fairways, roughs, surrounds and greens.

"Recycled water," "reclaimed water," or "treated sewage effluent water" means treated or recycled waste water of a quality suitable for nonpotable uses such as landscape irrigation and water features. This water is not intended for human consumption.

"Reference evapotranspiration" or "ETo" means a standard measurement of environmental parameters which affect the water use of plants. ETo is expressed in inches per day, month, or year as represented in Appendix B, and is an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowances so that regional differences in climate can be accommodated.

"Regional Water Efficient Landscape Ordinance" means a local Ordinance adopted by two or more local agencies, water suppliers and other stakeholders for implementing a consistent set of landscape provisions throughout a geographical region. Regional ordinances are strongly encouraged to provide a consistent framework for the landscape industry and applicants to adhere to.

"Rehabilitated landscape" means any re-landscaping project that requires a permit, plan check, or design review, meets the requirements of Section 1.2, and the modified landscape area is equal to or greater than 2,500 square feet.

"Residential landscape" means landscapes surrounding single or multifamily homes.

"Run off" means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area. For example, run off may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope.

"Soil moisture sensing device" or "soil moisture sensor" means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

"Soil texture" means the classification of soil based on its percentage of sand, silt, and clay.

"Special Landscape Area" (SLA) means an area of the landscape dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, or water features using recycled water.

"Sprinkler head" or "spray head" means a device which delivers water through a nozzle.

"Static water pressure" means the pipeline or municipal water supply pressure when water is not flowing.

"Station" means an area served by one valve or by a set of valves that operate simultaneously.

"Swing joint" means an irrigation component that provides a flexible, leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

"Submeter" means a metering device to measure water applied to the landscape that is installed after the primary utility water meter.

"Turf" means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses.

"Valve" means a device used to control the flow of water in the irrigation system.

"Water conserving plant species" means a plant species identified as having a very low or low plant factor.

"Water Efficient Landscape Guidelines" or "Guidelines" refers to the Water Efficient Landscape Guidelines, as approved by and available at the City, which describes procedures, calculations, and requirements for landscape projects subject to the Guidelines.

"Water Efficient Landscape Ordinance" means Chapter 13.18 of the Industry Municipal Code.

"Water feature" means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices that are not irrigated and used solely for water treatment or stormwater retention are not water features and, therefore, are not subject to the water budget calculation.

"Watering window" means the time of day irrigation is allowed.

"WUCOLS" means the Water Use Classification of Landscape Species published by the University of California Cooperative Extension and the Department of Water Resources 2014.