



AGENDA
SPECIAL JOINT MEETING OF
CITY COUNCIL/PLANNING COMMISSION
TUESDAY, APRIL 27, 2010, 5:30 P. M.
SENIOR CITIZEN/COMMUNITY CENTER
201 E. BONITA AVE.

COUNCIL:

Mayor Curtis W. Morris
Mayor Pro Tem John Ebner
Councilmember Emmett Badar
Councilmember Denis Bertone
Councilmember Jeff Templeman

1. CALL TO ORDER

2. ORAL COMMUNICATIONS

(For anyone wishing to address the City Council on an item on this agenda. Under the provisions of the Brown Act, the legislative body is prohibited from taking or engaging in discussion on any item not appearing on the posted agenda. Speakers are limited to three minutes or as may be determined by the Chair.)

a. Members of the Audience

3. STUDY SESSION PLANNING MATTERS

a. Water Efficient Landscape Ordinance Update

b. Downtown Specific Plan

c. Façade Program Update

4. ADJOURNMENT

The next City Council meeting is Tuesday, April 27, 2010, 7:00 p.m.

AGENDA STAFF REPORTS: COPIES OF STAFF REPORTS AND/OR OTHER WRITTEN DOCUMENTATION PERTAINING TO THE ITEMS ON THE AGENDA ARE ON FILE IN THE OFFICE OF THE CITY CLERK AND ARE AVAILABLE FOR PUBLIC INSPECTION DURING THE HOURS OF 8:00 A.M. TO 5:00 P.M. MONDAY THROUGH FRIDAY. INFORMATION MAY BE OBTAINED BY CALLING (909) 394-6216. CITY COUNCIL MINUTES AND AGENDAS ARE ALSO AVAILABLE ON THE CITY'S HOME PAGE ON THE INTERNET: <http://cityofsandimas.com>

POSTING STATEMENT: ON APRIL 23, 2010, A TRUE AND CORRECT COPY OF THIS AGENDA WAS POSTED ON THE BULLETIN BOARDS AT 245 EAST BONITA AVENUE (SAN DIMAS CITY HALL) 145 NORTH WALNUT AVENUE (LOS ANGELES COUNTY PUBLIC LIBRARY, SAN DIMAS BRANCH); AND 300 EAST BONITA AVENUE (UNITED STATES POST OFFICE) AND THE CITY'S WEBSITE AT WWW.CITYOFSANDIMAS.COM.



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CITY OF SAN DIMAS MEMORANDUM

DATE: April 27, 2010

TO: Mayor, City Council, and Planning Commission

FROM: Community Development Department

SUBJECT: Study Session for Municipal Code Text Amendment 10-01.

On Tuesday March 9, 2010, a public hearing was held to introduce MCTA 10-01 to the City Council. MCTA 10-01 is an amendment to revise, in its entirety, the Water Efficient Landscape Ordinance to comply with new state requirements. At the meeting on March 9, the Council and the public had many questions regarding the proposed ordinance. Staff has created a document addressing those questions. Staff has also taken the proposed ordinance and highlighted the portions of it that are mandated by the State. Staff would like to use the study session to answer additional questions the council may have, elaborate if necessary on questions already asked, and address any concerns.

- Attachment A: Draft Water Efficient Landscape Ordinance highlighting portions mandated by the State
- Attachment B: Draft Water Efficient Landscape Guidelines highlighting portions mandate by the State
- Attachment C: Questions posed by Council, Regarding the Water Efficient Landscape Ordinance, at the public at the public hearing on Tuesday March 9.
- Attachment D: Questions posed by Council, Regarding Artificial Turf, at the public hearing on Tuesday March 9.

Chapter 18.14

WATER-EFFICIENT LANDSCAPES

Sections:

18.14.010	Purpose and Intent
18.14.020	Definitions
18.14.030	Applicability
18.14.040	Implementation Procedures
18.14.050	Landscape Water Use Standards
18.14.060	Existing Landscapes
18.14.070	Artificial Turf
18.14.080	Minor Deviations
18.14.090	Implementation Guidelines
18.14.100	Enforcement and Penalties

18.14.010 Purpose and Intent

The intent of the water-efficient landscape chapter is:

- A. That this Chapter be at least as effective in conserving water as the State Model ordinance set forth in to Government Code §65595;
- B. To assure beneficial, efficient, and responsible use of water resources;
- C. To retain the land's natural hydrological role and promote the infiltration of surface water into the groundwater;
- D. To recognize that landscapes enhance the aesthetic appearance of developments and communities;
- E. To encourage the appropriate design, installation, maintenance, and management of landscapes so that water demand can be decreased, runoff can be retained, and flooding can be reduced without a decline in the quality or quantity of landscapes; and
- F. To reduce or eliminate water waste.

18.14.020 Definitions

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

"Artificial Turf" means a man-made material which simulates the appearance of live turf, organic turf, grass, sod, or lawn.

"Chapter" means Chapter 18.14 of the San Dimas Municipal Code.

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

"Estimated Applied Water Use" means the average annual total amount of water estimated to be necessary to keep plants in a healthy state, calculated as provided in the Guidelines. It is based

on the reference evapotranspiration rate, the size of the landscape area, plant water use factors, and the relative irrigation efficiency of the irrigation system.

“ET adjustment factor” or “ETAF” is equal to the plant factor divided by the irrigation efficiency factor for a landscape project, as described in the Guidelines. The ETAF is calculated in the context of local reference evapotranspiration, using site-specific plant factors and irrigation efficiency factors that influence the amount of water that needs to be applied to the specific landscaped area.

“Guidelines” refers to the “Guidelines for Implementation” as adopted by the City, which describes procedures, calculations, and requirements for landscape projects subject to this Chapter.

“Hardscapes” means any durable materials or feature (pervious and non-pervious) installed in or around a landscaped area, such as pavements or walls. Swimming pools and other water features are considered part of the landscaped area and not considered hardscapes for purposes of this Chapter.

“Homeowner installed landscape” means any landscaping either installed by a private individual for a single family residence or installed by a licensed contractor hired by a homeowner. A homeowner, for purposes of this Chapter, is a person who occupies the dwelling he or she owns. This definition excludes speculative homes, which are not owner-occupied dwellings and which are subject to the requirements applicable to developer-installed residential landscape projects.

“Irrigation efficiency” 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 minimum average irrigation efficiency for purposes of this Chapter is 0.71.

“Landscaped area” means all the planting areas, turf areas, and water features in a landscaped design plan subject to the “Maximum Applied Water Allowance” and “Estimated Applied Water Use” calculations. The landscaped 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 Documentation Package” means the documents required to be provided to the City for review and approval of landscape design projects, as described in the Guidelines.

“Landscape project” means total area of landscape in a project, as provided in the definition of “landscaped area”.

“Maximum Applied Water Allowance” or “MAWA” means the upper limit of annual applied water for the established landscaped area. It is based upon the area’s reference evapotranspiration, the ET Adjustment Factor, and the size of the landscaped area. The “Estimated Applied Water” use shall not exceed the “Maximum Applied Water Allowance”.

“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.

“Permit” means an authorizing document issued by the City for new construction or rehabilitated landscape.

“Rehabilitated landscape” means any re-landscaping project that is greater than 2,500 square feet, is 50% of the total landscape area, and the modifications are planned to occur within one year.

“Special landscape area” means an area of the landscape dedicated solely to edible plants such as orchards and vegetable gardens, areas irrigated with recycled water, water features using recycled water, and areas dedicated to active play such as parks, sports field, golf courses, and where turf provides a playing surface.

“Turf” means a ground cover surface of mowed grass.

“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 landscaped area. Constructed wetlands used for on-site wastewater treatment, habitat protection, or storm water best management practices that are not irrigated and used solely for water treatment or storm water retention are not water features and, therefore, are not subject to the water budget calculation.

18.14.030 Applicability

- A. All landscaping projects subject to this Chapter shall obtain a permit from the Department of Development Services prior to installation of any landscaping. All planting, irrigation, and landscape related improvements required by this Chapter shall apply to the following landscape projects:
1. Installation of new and rehabilitated landscaping for industrial, commercial, office and institutional developments; parks and other public recreational areas; multi-family residential; with a landscape area equal to or greater than 2,500 square feet.
 2. Installation of new landscaping at single family dwellings which are developer installed with a landscape area equal to or greater than 2,500 square feet.
 3. Installation of new landscaping at single family dwellings, which are homeowner installed, with a landscape area equal to or greater than 5,000 square feet.
 4. Special Landscaped Areas, such as areas dedicated to edible plants, irrigated with recycled water, or dedicated to active play, shall prepare a water efficient landscape worksheet and landscape documentation package according to specifications for Special Landscaped Areas;
 5. New and rehabilitated cemeteries shall be required to comply with this Chapter;

6. Irrigation of landscaped areas of any size shall be conducted in a manner conforming to the rules and requirements, and shall be subject to penalties and incentives for water conservation and water waste prevention as determined and implemented by the local water purveyor or as mutually agreed by the local water purveyor and the City of San Dimas.
7. Existing landscapes that are one acre or more shall not exceed their Maximum Applied Water Allowance.

B. This Chapter 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. Plant collections, as part of botanical gardens and arboretums open to the public.

C. Except as provided in this Chapter a permit is required before the installation or rehabilitation of a landscape. Before a permit is issued the Director of Development Services or his designee must ensure the proposed landscape is in conformity with the conditions set forth in this Chapter.

18.14.040 Implementation Procedures

- A. Prior to installation, a "Landscape Documentation Package" shall be submitted to the Development Services Department for review and approval of all landscape projects subject to the provisions of this Chapter. Any "Landscape Documentation Package" submitted shall comply with the adopted Guidelines.
- B. Prior to assembling the landscape documentation Package, applicants are advised to consult the Development Services Department to ascertain if the subject property is located within an area subject to additional landscape requirements including, but not limited to various custom lot areas and scenic corridors. Information regarding additional landscape requirements shall be made available upon request.
- C. 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. State of California Section 65595;
 2. National Pollutant Discharge Elimination Permit for the Municipal Separate Sewer System;
 3. Water Conservation and Drought Response Regulations of the Local Water Purveyor;
 4. Zoning Code;
 5. Building Code;
 6. Specific Plans, Master Plans, General Plan, or similar land use and planning documents; and
 7. Conditions of approval for a specific project.

- D. Landscape and irrigation plans submitted to the Development Services Department for review and approval shall include appropriate water use calculations.
- E. The "Landscape Documentation Package" shall bear the signature of a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape. This ordinance shall not be deemed to prohibit any person from preparing any plans, drawings, or specifications for any property owned by that person.
- F. Verification of compliance of the landscape installation with the approved plans shall be obtained through a "Certificate of Completion" in conjunction with the final permit process, as provided in the Guidelines and are certified to be in compliance with the provisions of a Chapter and Guidelines and that the landscaping has been completed in accordance with the approved plans.

18.14.050 Landscape Water Use Standards

- A. For applicable landscape installation or rehabilitation projects subject to this Chapter, the "Estimated Applied Water" use allowed for the landscaped areas shall not exceed the "Maximum Applied Water Allowance" calculated using an "ET adjustment factor" of .07, except for special landscaped areas where the "Maximum Applied Water Allowance" is calculated using an "ET adjustment factor" of 1.0; or the design of the landscaped area shall otherwise be shown to be equivalently water-efficient in a manner acceptable to the City as provided in the Guidelines.

18.14.060 Existing Landscapes

- A. Irrigation of landscaped areas of any size shall be conducted in a manner conforming to the rules and requirements and shall be subject to penalties and incentives for water conservation and waste prevention, as determined and implemented by the local water purveyor and as may be mutually agreed by the City.
- B. The City and/or local water purveyor may administer programs such as irrigation water use analyses, irrigation surveys and/or irrigation audits, tiered meter rate structures, water budgeting by parcel, or other approaches to achieve landscape water use efficiency community-wide to a level equivalent to or less than would be achieved by applying a MAWA calculated with an ETAF of 0.8 to all landscaped areas in the City over one acre in size.
- C. The architectural guidelines of a common interest development, including apartments, 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.

D. Water Waste Prevention

- C. The Director of Development Services Department decision may be appealed to Development Plan Review Board in writing. The Development Plan Review Board shall not be required in granting a minor deviation to this chapter or accompanying Guidelines.

18.14.090 Implementation Guidelines

This Water Efficient Landscape Ordinance Guidelines shall be adopted by resolution of the Planning Commission.

18.14.100 Enforcement and Penalties

- A. Except for the provisions of Section 5.110.030(D)(13)(h), any firm, corporation or person, whether as principal, agent, employee or otherwise, violating or causing the violation of any of the provisions of this chapter shall be guilty of a misdemeanor, and any conviction thereof shall be punishable as set forth in Chapter 1.12 of the San Dimas Municipal Code.
- B. Nothing herein shall prevent or restrict the city from taking such other lawful action in any court of competent jurisdiction as is necessary to prevent or remedy any violation or noncompliance. Such other lawful actions shall include, but shall not be limited to, an equitable action for injunctive relief or an action at law for damages.
- C. Further, nothing in this section shall be construed to prohibit the city from prosecuting any violation of this chapter by means of code enforcement established pursuant to the authority as provided by the laws of the state of California and the City of San Dimas.
- D. Any violation of the provisions of this chapter shall constitute a separate offense for each and every day during which such violation is committed or continued.

1. Water waste resulting from inefficient landscape irrigation leading to excessive runoff, low head drainage, overspray and other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways or structures is prohibited.
2. All landscape areas, whether installed pursuant to this chapter or not, shall be maintained in a healthful and sound condition. Irrigation systems and their components shall be maintained in a fully functional manner consistent with the originally approved design and the provisions of this chapter.
3. Landscapes shall be maintained to ensure water efficiency. A regular maintenance schedule should include but not be limited to checking, adjusting, and repairing irrigation equipment; resetting the automatic controller; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; and weeding in all landscaped areas.

18.14.070 Artificial Turf

- A. Artificial or synthetic turf is an appropriate substitute for natural turf for the purposes of water conservation. Guidelines for the use and maintenance of artificial turf shall include:
 1. Artificial turf shall consist of lifelike individual blades of grass that emulate real grass in look and color and have a minimum pile height of 1 ¾ inches.
 2. Artificial turf shall be prepared in a manner that allows water to permeate and pass through the turf, so as not to cause runoff onto adjacent properties, flooding, or pooling of water.
 3. Artificial turf shall be installed and maintained to effectively simulate the appearance of a well-maintained lawn.
 4. The use of indoor or outdoor plastic or nylon carpeting as a replacement for artificial turf or natural turf shall be prohibited.
 5. Artificial turf shall be installed in combination with only natural plant materials (i.e. trees, shrubs, and groundcover) to enhance the overall landscaping design.
 6. Artificial turf must be professionally installed by a licensed company.
 7. Artificial turf which looks worn or faded must be replaced or repaired.

18.14.080 Minor Deviations

- A. The Director of Development Services or his or her designee may grant minor deviations from the requirements of this chapter limited to the following:
 1. Minor modifications to approved landscaping irrigation or grading plans, which comply with the spirit and intent of this chapter and the accompanying Guidelines;
 2. Modifications of planting, installation, and/or preparation details;
 3. Final of permits prior to installation of landscaping due to exceptional and unforeseen circumstance, subject to the deposit of an appropriate performance guarantee with the Development Services Department.
- B. In granting a minor deviation, the Director of Development Services or his or her designee may impose conditions, as deemed necessary, to comply with the spirit and intent of this chapter and accompanying Guidelines;

Water Efficiency Ordinance Guidelines

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Purpose and Applicability

A. Purpose

1. The primary purpose of these Guidelines is to provide procedural and design guidance for project applicants proposing landscape installation or rehabilitation projects that are subject to the requirements of the Water Efficient Landscape Ordinance pursuant to Government Code Section 65595. This document is also intended for use and reference by staff in reviewing and improving designs and verifying compliance with the Water Efficient Landscape Ordinance. The general purpose of the Water Efficient Landscape Ordinance is to promote the design, installation, and maintenance of landscaping in a manner that conserves regional water resources by ensuring that landscaping projects are not unduly water-needy and that irrigation systems are appropriately designed to minimize water waste.
2. 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:
 - (a) State of California Government Code Section 65595;
 - (b) National Pollutant Discharge Elimination Permit for the Municipal Separate Sewer System;
 - (c) Water Conservation and Drought Response Regulations of the Local Water Purveyor;
 - (d) Zoning Code;
 - (e) Building Code;
 - (f) Specific Plans, Master Plans, General Plan, or similar land use and planning documents; and
 - (g) Conditions of approval for a specific project.

B. Applicability

1. These requirements shall be applicable to:
 - (a) Installation of new and rehabilitated landscaping for industrial, commercial, office and institutional developments; parks and other public recreational areas; multi-family residential; with a landscape area equal to or greater than 2,500 square feet.
 - (b) Installation of new landscaping at single family dwellings which are developer installed with a landscape area equal to or greater than 2,500 square feet.
 - (c) Installation of new landscaping at single family dwellings, which are homeowner installed, with a landscape area equal to or greater than 5,000 square feet.
 - (d) Special Landscaped Areas, such as areas dedicated to edible plants, irrigated with recycled water, or dedicated to active play, shall prepare a water efficient landscape worksheet and landscape documentation package according to specifications for Special Landscaped Areas;
 - (e) New and rehabilitated cemeteries shall be required to comply with this Chapter;
 - (f) Irrigation of landscaped areas of any size shall be conducted in a manner conforming to the rules and requirements, and shall be subject to penalties and incentives for water conservation and water waste prevention as determined and implemented by the local

water purveyor or as mutually agreed by the local water purveyor and the City of San Dimas.

(g) Existing landscapes that are one acre or more shall not exceed their Maximum Applied Water Allowance.

2. Unless otherwise determined by the City, Chapter 18.14 of the Municipal Code and these Guidelines do not apply to:

- (a) Registered local, state, or federal historical sites;
- (b) Ecological restoration projects that do not require a permanent irrigation system;
- (c) Mined-land reclamation projects that do not require a permanent irrigation system;
- or
- (d) Plant collections, as part of botanical gardens and arboretums open to the public.

Submittal Requirements for New Landscape Installations or Landscape Rehabilitation

A. **Discretionary approval** is required for landscape projects that are subject to site plan reviews or other procedural processes apply such that standard or special conditions of approval may be required by the City. Discretionary projects with conditions of approval may be approved administratively by city staff, or acted on formally by the Planning Commission or City Council.

Landscape or water features that typically require a permit (i.e. a building, plumbing, electrical, other similar permits), hereby triggering compliance with the Water Efficient Landscape Ordinance requirements independently of the need for discretionary approval include, but are not limited to, swimming pools, fountains or ponds, retaining walls, and overhead trellises.

B. **A Landscape Documentation Package** is required to be submitted by the project applicant for review and approval prior to the issuance of permits for landscape or water features by the City, and prior to start of construction. Unless otherwise directed by the City, the *Landscape Documentation Package* shall include the following elements:

- 1. Checklist or index of all documents in the *Landscape Documentation Package*;
- 2. Project contacts, including contact information for the project applicant and property owner;
- 3. Certification of Landscape Design;
- 4. Landscape Installation Certificate of Completion;
- 5. Any other information the City deems relevant for determining whether the landscape project complies with the Water Efficient Landscape Ordinance and these Guidelines;
- 6. Maximum Applied Water Allowance (MAWA) calculation worksheet;
- 7. Estimated Applied Water Allowance (EAWU) calculation worksheet;
- 8. Hydrozone information table for the landscaped project;
- 9. A soil management report;
- 10. A landscape design plan for the landscaped project;
- 11. An irrigation design plan for the landscaped project;

12. A grading design plan, unless grading information is included in the landscape design plan for the landscape project or unless the landscape project is limited to replacement planting and/or irrigation to rehabilitate an existing landscaped area. If a project proposes less than 50 cubic yards of earth movement, a drainage plan may be submitted instead of a grading plan; and
13. Irrigation water schedules or procedures for programming of irrigation controllers.

Water Efficient Landscape Calculations and Alternatives

- A. The project applicant shall provide the calculated *Maximum Applied Water Allowance (MAWA)* and *Estimated Applied Water Use (EAWU)* for the landscaped area as part of the *Landscaped Documentation Package* submittal to the City. The *MAWA* and *EAWU* shall be calculated based on completing the *Water Efficient Landscape Worksheets*.
- B. The *EAWU* allowable for the landscaped areas shall not exceed the *MAWA*. The *MAWA* shall be calculated using an *Evapotranspiration Adjustment Factor (ETAF)* of 0.7 except for the portion of the *MAWA* applicable to any special landscaped areas with the landscape project, which shall be calculated using an *ETAF* of 1.0.
- C. Water budget calculations shall adhere to the following requirements:
 1. The *MAWA* shall be calculated using the *Water Efficient Landscape Worksheets*;
 2. The *EAWU* shall be calculated using the *Water Efficient Landscape Worksheets*;
 3. For the calculation of the *MAWA* and *EAWU*, a project applicant shall use the *ETo* value of 47.5. This value was established by a weather station operated by the California Irrigation Management Information System, located in the City of Glendora.
 4. For calculation of the *EAWU*, the plant water use factor shall be determined as appropriate to the project location from the *Water Use Classification of Landscape Species (WUCOLS)* species evaluation list. The plant factor is 0.1 for very low water use plants, 0.2 to 0.3 for low water use plants, 0.4 to 0.6 for moderate water use plants, and 0.7 to 1.0 for high water use plants;
 5. For calculating the *EAWU*, the plant water use factor shall be determined for each valve hydrozone based on plant species within the zone. The *plant factor* for each hydrozone may be required to be further refined as a "landscape coefficient," according to protocols defined in detail in the *WUCOLS* document, to reflect planting density and microclimate effects on water need at the option of the City;
 6. For calculation of the *EAWU*, the area of a water feature shall be defined as a high water use hydrozone with a plant factor of 1.0.
 7. For calculation of the *EAWU*, a temporarily irrigated hydrozone area, such as an area of highly drought-tolerant native plants that are not intended to be irrigated after they are fully established, shall be defined as a very low water use hydrozone with a *plant factor* of 0.1.
 8. For calculation of the *MAWA*, the *ETAF* for special landscaped areas shall be set at 1.0. For calculation of the *EAWU*, the *ETAF* for special landscaped areas shall be calculated as the *Special Landscaped Area (SLA) plant factor* divided by the *SLA irrigation efficiency factor*.

9. Irrigation efficiency shall be calculated using the Water Efficient Landscape Worksheets.

D. The Maximum Applied Water Allowance shall be calculated using the equation presented in the worksheets in the *Landscape Documentation Package*. For scheduling, automatic irrigation controllers are required and shall use current *ETo* data, such as from the California Irrigation Management Information System (CIMIS), other equivalent data, or soil moisture sensor data.

Soil Management Report

A. In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by the project applicant, or his/her designee, as follows:

1. Submit soil samples to a certified agronomic soils laboratory for analysis and recommendations;
2. Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants;
3. The soil analysis may include, but is not limited to:
 - (a) Soil texture;
 - (b) Infiltration rate determined by laboratory test or soil texture infiltration rate table;
 - (c) pH;
 - (d) Total soluble salts;
 - (e) Sodium;
 - (f) Percent organic matter; and
 - (g) Recommendations.

B. The project applicant, or his/her designee, shall comply with one of the following:

1. If a grading permit is not required, the soil analysis report shall be submitted to the City as part of the *Landscape Documentation Package*; or
2. If a grading permit is required, the soil analysis report shall be submitted to the City as part of the *Certification of Completion*.

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

D. The project applicant, or his/her designee, shall submit documentation verifying implementation of the soil analysis report recommendation to the City with the *Certification of Completion*.

Landscape Design Plan

A. For the efficient use of water, a landscape should be carefully designed and planned for the intended function of the project. To encourage the efficient use of water, the following is highly recommended:

1. Protection and preservation on non-invasive water-conserving plant species and water-conserving turf;

2. Selection of water-conserving plant species and water-conserving turf;
3. Selection of plants based on disease and pest resistance;
4. Selection of trees based on applicable zoning ordinances and tree guidelines and/or conditions of approval; and
5. Selection of plants from local and regional landscape program plant lists.

B. **Hydrozones:** The landscape area shall be divided into hydrozones. Each hydrozone shall be selected and planted appropriately based upon their adaptability to the climate, soil conditions, and site topography. Each hydrozone shall have plant materials with similar water use, with the following exception: hydrozones may mix plants with different water needs provided that individual hydrozones mix plants of moderate and low water use, or moderate and high water use. Hydrozones that mix low and high water use plants shall not be permitted. The water use calculation for mixed hydrozones must be based on one of the following:

1. Plant factor calculation is based on the proportions of the respective plant water uses and their plant factor; or
2. Plant factor of the highest water using plant is used for the calculation.

C. **Plants** shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. To encourage the efficient use of water, the following is highly recommended for inclusion in the landscape design plan:

1. 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.
2. Recognize the horticultural attributes of plants (e.g., mature plant size, invasive surface roots) to minimize damage to property or infrastructure (e.g., buildings, sidewalks, and power lines); and
3. Consider the solar orientation for plant placement to minimize summer shade and winter solar gain.

D. **Turf** is discouraged on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape.

E. **Fire Prone Areas:** 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 recommended pursuant to Title 32 of the County of Los Angeles entitled "Fire Code of the County of Los Angeles", where applicable.

F. **Invasive and/or noxious plant species** is strongly discouraged.

G. **Common Interested Developments:** 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 water efficient plant species as a group.

H. Water Features

1. Recirculation water systems shall be used for water features.
2. Where available and consistent with public health guidelines, recycled water shall be used as a source for decorative water features.
3. The surface area of a water features shall be included in the high water use hydrozone area of the water budget calculation.
4. Pool and spa covers are highly recommended.

I. Mulch and Amendments

1. 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.
2. Stabilizing mulching products shall be used on slopes.
3. The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.
4. Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for plants selected.

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

1. Be drawn to scale in a clear and legible fashion.
2. Delineate and label each hydrozone by number, letter, or other method.
3. Identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of the landscaped area shall be included in the low water use hydrozone for the water budget calculation;
4. Identify recreational areas;
5. Identify areas permanently and solely dedicated to edible plants;
6. Identify areas irrigated with recycled water;
7. Identify type of mulch and application depth;
8. Identify soil amendments, type, and quantity;
9. Identify type and surface area of water features;
10. Identify hardscapes (pervious and non-pervious);
11. Identify location and installation details of any applicable storm water best management practices that encourage on-site retention and infiltration of storm water. Storm water best management practices are encouraged in the landscape design plan and examples include, but are not limited to:
 - (a) Infiltration beds, swales, and basins that allow water to collect and soak into the ground;
 - (b) Constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants; and
 - (c) Pervious or porous surfaces (e.g. permeable pavers or blocks, pervious or porous concrete, etc.).
12. Identify any applicable rain harvesting or catchment technologies (e.g., rain gardens, cisterns, etc);

Irrigation Design Plan

For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and in the manufacturer's 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. **Water meters** dedicated to the landscape are recommended, when feasible, to facilitate water management.
- B. **Automatic irrigation** controllers utilizing either evapotranspiration or soil moisture sensor data shall be required for irrigation scheduling in all irrigation systems.
- C. **Water Pressure.** The irrigation system shall be designed to ensure that the dynamic pressure at each emission device is within the manufacturer's recommended pressure range for optimal performance.
 1. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulator, booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system.
 2. 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. The measurements shall be conducted at installation.
- D. **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.
- E. **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.
- F. **Backflow Prevention Devices** shall be required to protect the water supply from contamination by the irrigation system. A project applicant shall refer to the applicable City code for additional backflow prevention requirements.
- G. **High flow Sensors** that detect and report high flow conditions created by system damage or malfunction are recommended.
- H. **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.

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

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

K. Average irrigation efficiency for the project shall be determined in accordance with the EAWU calculation sheet. Unless otherwise indicated by the irrigation equipment manufacturer's specifications or demonstrated by the project applicant, the irrigation efficiency of the irrigation heads used within each hydrozone shall be assumed to be:

Pop-up stream rotator heads = 75%

Stream rotor heads = 75%

Microspray = 75%

Bubbler = 80%

Drip emitter = 85%

Subsurface irrigation = 90%

L. It is highly recommended that the project applicant 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.

M. In **Mulched Planting Areas**, the use of low volume irrigation is required to maximize water infiltration into the root zone.

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

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

P. **Swing Joints** or other riser-protection components are required on all risers subject to damage that are adjacent to high traffic areas.

Q. **Check Valves** or anti-drain valves are required for all irrigation systems.

R. **Narrow or irregularly shaped areas**, including turf, less than eight feet (8') in width in any direction shall be irrigated in a manner that precludes overspray.

S. **Overhead Irrigation** shall not be permitted within 24-inches of any non-permeable surface unless:

1. The landscape area is adjacent to permeable surfacing and no runoff occurs; or
2. The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or

3. The irrigation designer specifies an alternative design or technology, as part of the Landscape Documentation Package, that clearly demonstrates how the irrigation system will 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. Prevention of overspray and runoff must be confirmed during the irrigation audit.

T. Hydrozones

1. Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.
2. Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.
3. Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf.
4. Individual hydrozones that mix plants of moderate and low water use or moderate and high water use may be allowed if:
 - (a) The plant factor calculation is based on the proportions of the respective plant water uses and their respective plant factors; or
 - (b) The plant factor of the higher water using plant is used for the calculations.
5. Individual hydrozones that mix high and low water use plants shall not be permitted.
6. On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. The irrigation design plan shall designate the areas irrigated by each valve and assign a number to each valve.

U. The Irrigation Design Plan, at a minimum, shall contain:

1. The location and size of separate water meters for the landscape;
2. The location, type, and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler head, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices;
3. Static water pressure at the point of connection to the public water supply;
4. Flow rate (gallons per minute), application rate (inches per hour), and design operation pressure (pressure per square inch) for each station;
5. Irrigation schedule parameters necessary to program smart timers specified in the landscape design;
6. On the irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation;
7. The signature of a professional authorized to design an irrigation system.

Recycled Water

- A. If and when a recycled water program becomes available irrigation systems and decorative water features shall use recycled water unless a written exemption has been granted by the local water purveyor stating that recycled water meeting all public health codes and standards is not available and will not be available for the foreseeable future.

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 Landscaped Areas. The ET Adjustment Factor for Special Landscaped Areas shall not exceed 1.0.

Grading Design Plan

A. For the efficient use of water, grading of the landscape project site shall be designed to minimize soil erosion, runoff, and water waste. Finished grading configuration of the landscaped area, including pads, slopes, drainage, post-construction erosion control, storm water control Best Management Practices, as applicable, shall be shown on the Landscape Plan unless this information is fully included in separate grading plans for the project, or unless the project is limited to replacement planting and/or irrigation to rehabilitate an existing landscaped area.

B. A grading design plan is not needed if the information is included in the landscape design plan for the landscape project or unless the landscape project is limited to replacement planting and/or irrigation to rehabilitate an existing landscaped area.

C. If a project proposes less than 50 cubic yards of earth movement, a drainage plan may be submitted instead of a grading plan.

D. The project applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscaped area including:

1. Height of graded slopes;
2. Drainage patterns;
3. Pad elevations;
4. Finish grade; and
5. Storm water retention improvements, if applicable.

E. To prevent excessive erosion and runoff, it is highly recommended that the project applicant:

1. Grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;
2. Avoid disruption of natural drainage patterns and undisturbed soil; and
3. Avoid soil compaction in landscaped areas.

Certification of Completion

Upon completion of the installation of the landscape, the designer shall certify that the landscape complies with all the requirements of the City of San Dimas Water Efficient Landscape Ordinance and the requirements as stated in the *Landscape Documentation Package*.

A. Landscape project installation shall not proceed until the *Landscape Documentation Package* has been approved by the City and any required permits are issued.

- B. The project applicant shall notify the City at the beginning of the installation work and at intervals, as necessary, for the duration of the landscape project work to schedule all required inspections.
- C. *Certification of Completion* of the landscape project shall be obtained through a final permit. The requirements for the final inspection and permit include submittal of:
1. **Landscape Installation Certificate of Completion** found in the *Landscape Documentation Package*.
 2. **Irrigation Schedule**. Submit irrigation scheduling parameters used to set the controller (may be included with the Irrigation Plan and Details).
 3. **Landscape and Irrigation Maintenance Schedule**. A regular maintenance schedule shall include, but not be limited to, routine inspection; adjustment and repair of the irrigation system and its components; aeration and dethatching of turf areas; replenishing mulch; fertilizing; pruning; weeding in all landscape areas, and removing obstructions to sprinklers and emitters.
 4. **Soil Management Report**. Submit soil samples to a certified agronomic soils laboratory for analysis and recommendations.

Post-Installation Irrigation Scheduling

- A. For the efficient use of water, all irrigation schedules shall be developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules shall meet the following criteria:
1. Irrigation scheduling shall be regulated by automatic irrigation controllers.
 2. Overhead irrigation shall be scheduled in accordance with the *Water Efficient Landscape Ordinance*.

Post-Installation Landscape and Irrigation Maintenance

- A. Landscapes shall be maintained to ensure water use efficiency in accordance with the City's current property maintenance code found in Chapter 8.14 of the Municipal Code.
- B. A regular maintenance schedule shall be submitted with the Certificate of Completion.
1. A regular maintenance schedule shall include, but not be limited to, routine inspection; adjustment and repair of the irrigation system and its components; aerating and dethatching turf area; 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.
- C. Repair of all irrigation equipment shall be done with the originally installed components or their equivalents.
- D. A project applicant is encouraged to implement sustainable or environmentally-friendly practices for overall landscape maintenance.

Provisions for Existing Landscapes

- A. Irrigation of landscaped areas of any size shall be conducted in a manner conforming to the rules and requirements and shall be subject to penalties and incentives for water conservation and waste prevention, as determined and implemented by the local water purveyor and as may be mutually agreed by the City.
- B. The City and/or local water purveyor may administer programs such as irrigation water use analyses, irrigation surveys and/or irrigation audits, tiered meter rate structures, water budgeting by parcel, or other approaches to achieve landscape water use efficiency community-wide to a level equivalent to or less than would be achieved by applying a MAWA calculated with an ETAF of 0.8 to all landscaped areas in the City over one acre in size.
- C. The architectural guidelines of a common interest development, including apartments, 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.
- D. Water Waste Prevention**
1. Water waste resulting from inefficient landscape irrigation leading to excessive runoff, low head drainage, overspray and other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways or structures is prohibited.
 2. All landscape areas, whether installed pursuant to this chapter or not, shall be maintained in a healthful and sound condition. Irrigation systems and their components shall be maintained in a fully functional manner consistent with the originally approved design and the provisions of this chapter.
 3. Landscapes shall be maintained to ensure water efficiency. A regular maintenance schedule should include but not be limited to checking, adjusting, and repairing irrigation equipment; resetting the automatic controller; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; and weeding in all landscaped areas.

Artificial Turf

- A. Artificial or synthetic turf is an appropriate substitute for natural turf for the purposes of water conservation. Guidelines for the use and maintenance of artificial turf shall include:
1. Artificial turf shall consist of lifelike individual blades of grass that emulate real grass in look and color and have a minimum pile height of 1 ¾ inches.
 2. Artificial turf shall be prepared in a manner that allows water to permeate and pass through the turf so as not to cause runoff onto adjacent properties, flooding, or pooling of water.
 3. Artificial turf shall be installed and maintained to effectively simulate the appearance of a well-maintained lawn.
 4. The use of indoor or outdoor plastic or nylon carpeting as a replacement for artificial turf or natural turf shall be prohibited.
 5. Artificial turf shall be installed in combination with only natural plant materials (i.e. trees, shrubs, and groundcover) to enhance the overall landscaping design.

6. Artificial turf must be professionally installed by a licensed company.
7. Artificial turf which looks worn or faded must be replaced or repaired.

Minor Deviations

- A. The Director of Development Services or his or her designee may grant minor deviations from the requirements of this chapter limited to the following:
 1. Minor modifications to approved landscaping irrigation or grading plans which comply with the spirit and intent of this chapter and the accompanying Guidelines;
 2. Modifications of planting, installation, and/or preparation details;
 3. Final of permits prior to installation of landscaping due to exceptional and unforeseen circumstance, subject to the deposit of an appropriate performance guarantee with the Development Services Department.
- B. In granting a minor deviation, the Director of Development Services or his or her designee may impose conditions as deemed necessary to comply with the spirit and intent of this chapter and accompanying Guidelines;
- C. The Director of Development Services Department decision may be appealed to the Development Plan Review Board in writing. The Development Plan Review Board shall not be required in granting a minor deviation to this chapter or accompanying Guidelines.

Definitions

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

“Artificial Turf” means a man-made material which simulates the appearance of live turf, organic turf, grass, sod, or lawn.

“Automatic irrigation controller” means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers 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.

“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.

“Certified irrigation designer” means a person certified to design irrigation systems by an accredited academic institution or a professional trade organization.

“Certified Landscape Irrigation Auditor” means a person certified to perform landscape irrigation audits by an accredited academic institution or a professional trade organization.

“Homeowner-provided landscaping” means any landscaping either installed by a private individual for a single family residence or installed by a licensed contractor hired by a homeowner. This excludes speculative homes, which are not owner-occupied dwellings.

“Hydrozone” means a portion of the landscaped area having plants with similar water needs and typically irrigated by one valve/controller station. 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” or “noxious” means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive plant species may be regulated by county agricultural agencies as noxious species.

“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.

“Irrigation Management Efficiency” or “IME” means the measurement used to calculate the irrigation efficiency of the irrigation system of a landscaped project. A 90% IME can be achieved by using evapotranspiration controllers, soil moisture sensors, and other methods that will adjust irrigation run times to meet plant water needs.

“Irrigation efficiency” or “IE” means the measurement of the amount of water beneficially used divided by the amount of water applied to a landscaped area. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The following irrigation efficiency may be obtained for the listed irrigation heads with an IME of 90%:

- (a) Pop-up stream rotator heads = 75%
- (b) Stream rotor heads = 75%
- (c) Microspray = 75%
- (d) Bubbler = 80%
- (e) Drip emitter = 85%
- (f) Subsurface irrigation = 90%

“Irrigation survey” means an evaluation of an irrigation system. An irrigation survey includes, but is not limited to an 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.

“Mulch” means any organic material such as leaves, bark, straw or 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-pervious” means any surface or natural material that does not allow for the passage of water through the material and into the underlying soil.

“Operation pressure” means the pressure at which the parts of an irrigation system of sprinklers are designed to operate by the manufacturer.

“Overhead sprinkler 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.

“Permit” means an authorizing document issued by the City for new construction or rehabilitated landscapes.

“Person” means any natural person, firm, joint venture, joint company, partnership, public or private association, club, company, corporation, business trust, organization, public or private agency, government agency or institution, school district, college, university, any other user of water provided by the local water purveyor, or the manager, lessee, agent, servant, officer, or employee of any of them or any other entity which is recognized by law as the subject of rights or duties.

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

“Plant factor” or “plant water use factor” is a factor, when multiplied by ETo, that estimates the amount of water needed by plants. For purpose of this Water Efficient Landscape Ordinance, the plant factor range for low water use plants is 0 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 these Guidelines are derived from the Department of Water Resources 2000 publication “Water Use Classification of Landscape Species.”

“Precipitation rate” means the rate of application of water measured in inches per hour.

“Project applicant” means the individual or entity submitting a *Landscape Documentation Package* to request a permit, plan check, or design review from the City. A project applicant may be the property owner or his/her designee.

“Property owner” or “owner” means the record owner of real property as shown on the most recently issued equalized assessment roll.

“Landscape coefficient” (K_L) is the product of a plant factor multiplied by a density factor and a microclimate factor. The landscape coefficient is derived to estimate water loss from irrigated landscaped areas and special landscaped areas.

“Landscape Documentation Package” means the package of documents that a project applicant is required to submit to the City pursuant to these Guidelines.

“Landscape Installation Certificate of Completion” means the certificate included in these guidelines that must be submitted to the City.

“Landscape professional” means a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape pursuant to Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the California Business and Professions Code, Section 832.27 of the Title 16 of the California Code of Regulations, and Section 6721 of the California Food and Agriculture Code.

“Landscaped area” means all the planting areas, turf areas, and water features in a landscape design plan subject to the *Maximum Applied Water Allowance* and *Estimated Applied Water Use* calculations. The landscaped 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 from non-development (e.g. open spaces and existing native vegetation).

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

“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.

“Maximum Applied Water Allowance” or “MAWA” means the upper limit of annual applied water for the established landscaped area as specified in these Guidelines. It is based upon the area’s reference evapotranspiration, the ETAF, and the size of the landscaped area. The *Estimated Applied Water Use* shall not exceed the *Maximum Applied Water Allowance*.

“Microclimate” means the climate of a small, specific area that may contrast with the climate of the overall landscaped 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.

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

“Recreational area” means areas dedicated to active play such as parks, sports fields, and golf courses where turf provides a playing surface.

“Reference evapotranspiration” or “ET_o” means a standard measurement of environmental parameters which affect the water use of plants. ET_o is given expressed in inches per day, month, or year 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 Allowance*.

“Recycled water” or “reclaimed water” means treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation and water features. This water is not intended for human consumption.

“Rehabilitated landscape” means any re-landscaping project that requires a permit, plan check, or design review, and the modified landscape area is equal to or greater than 2,500 square feet, is 50% of the total landscape area, and the modifications are completed within one year.

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

“SMART irrigation controller” means a weather-based or soil moisture-based irrigation controller that monitors and uses information about the environmental conditions at a specific location and landscape to automatically adjust watering schedules.

“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 Landscaped Areas” or “SLA” means an area of the landscape dedicated solely to edible plants such as orchards and vegetable gardens, areas irrigated with recycled water, water features using recycled water, and areas dedicated to active play such as parks, sports field, golf courses, and where turf provides a playing surface.

“Sprinkler 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.

“Turf” means a ground cover surface of mowed grass.

“Valve” means a device used to control the flow of water in an irrigation system.

“Water Efficient Landscape Ordinance” means Chapter 18.14 of the San Dimas Municipal Zoning Code.

“Water Efficient Landscape Worksheet” means the worksheet which calculates a site’s water budget.

“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 landscaped area. Constructed wetlands used for on-site wastewater treatment, habitat protection, or storm water best management practices that are not irrigated and used solely for water treatment or storm water retention are not water features and, therefore, are not subject to the water budget calculation.

“WUCOLS” means the Water Use Classification of Landscape published by the University of California Cooperative Extension, the Department of Water Resources, and the Bureau of Reclamation.

Questions Regarding AB 1881

1. Why was AB 811 adopted?

Landscaping irrigation accounts for half of urban water use in California. With the state's increasing population and the difficulties in developing new water supplies and storage, increased efficiency in the use of landscaping irrigation water is needed.

2. Why is the City adopting this ordinance?

Because it is a state mandate.

3. What are the differences between the State Model Ordinance and the City's proposed ordinance?

On the City's proposed ordinance, I have highlighted the content, which is mandated by the State Model Ordinance, AB 811, accompanying legislation, and the Water Use Classification of Species (which is referenced several times in the model ordinance).

4. What type and size of projects does it apply to?

Every new commercial, multi-family, industrial, or tract home project containing 2,500 square feet or more of landscaping installed by the developer will be subject to the ordinance. Also new landscapes installed by an individual homeowner containing 5,000 square feet or more will be subject to the ordinance.

5. If a homeowner designs their own landscaping do they need to hire a professional to certify that it is in compliance with the requirements in the ordinance?

No if a homeowner did the landscaping and they feel they are capable of completing the documentation package they may do so. The State Model ordinance says; ". . . bear the signature of a licensed landscape architect, licensed landscape contractor, or any other person authorized to design a landscape. (See Sections . . . 5641.1 . . . of the Business and Professions Code . . .) And Section 5641.1 of the California Government Code says; "This chapter shall not be deemed to prohibit any person from preparing any plans, drawings, or specifications for any property owned by that person." So if a homeowner designs their own landscaping they are not prohibited from completing the documentation package.

6. What does the ordinance mean for new projects?

Landscaping plans will need to be prepared by a landscape architect, licensed landscape contractor, or other landscape professional. As stated above if a homeowner designs a landscape for their own property they may complete the documentation package themselves. Each project will need to have an established water budget, planning schedule, and irrigation details. There are a number of worksheets, which will need to be attached to each new landscaping plan to demonstrate compliance with the ordinance and the water budget for the project.

7. Are the formulas too complex for the average person to figure out?

While completing the formulas will take some time and effort, I don't believe they are complex or extremely difficult. They are deceiving because there are so many variables involved. The math involved is simple arithmetic. The tricky part is knowing what goes in the place of the variables. The trick is to summarize what the variables stand for and how to determine their values. Determining the values does not require arithmetic. It requires knowing what they stand for and then being able to make an estimation. So yes, the formulas are challenging, but I don't believe they are overly complex.

8. Can staff do the water calculations for applicants?

I don't believe there will be many properties, which will trigger the landscape ordinance, so it wouldn't be too much of a burden on staff to provide some assistance with the calculations.

9. Could a software program be created to do the water calculations?

The California Department of Water Resources has created an Excel sheet, which may be helpful.

10. Will the soil analysis add a significant cost to the installation?

There is some confusion over the soil analysis. Some are interpreting the soil analysis requirement to mean that an engineer or geologist will need to be hired to do a compaction analysis or similar study to determine what the soil can structurally support. This is not the case. The soil analysis requirement means the soil should be tested for things like nutrient level, salinity, pH levels etc. . . This can be done by taking a few samples and mailing them to a laboratory. The state model does not require a particular analysis to be done. It simply says that a soil analysis has to be completed and this analysis may include x, y, and z. Therefore, it is up to the applicant to determine which type of soil analysis is needed to determine the most appropriate plants. So for example an applicant could determine that to ensure the proper plants that he/or she only needs to know the pH level of the soil.

11. How much does a soil analysis cost?

It depends on what you are testing for. A soil analysis can cost anywhere from \$100 to \$500.

12. What are the costs to a single-family homeowner?

Assuming a new landscape for a single-family residence of 5,000 square feet in landscaped area the estimated cost to design and prepare construction plans to comply with AB 1881 would be \$24,500. The estimated cost to design and prepare construction plans for a single-family residence of 5,000 square feet not complying with AB 1881 is \$23,000.

13. What is the cost a professional would charge a homeowner to inspect a completed landscape and irrigation and prepare the Certificate of Completion to ensure compliance with AB 1881.

The estimated costs are between \$600 and \$1000. This does not include the soils analysis.

14. What are the costs to a commercial property owner?

Commercial properties will incur a 3% to 10% cost increase in landscape installation costs.

15. What are the costs to a multi-family homeowner?

Anywhere from a 5% to 10% increase in landscaping costs depending on the size of the development.

16. What are the costs to the City?

Cost to City will be minimal because the proposed ordinance requires the applicant to self-certify that their work is in compliance with the Water Efficient Landscape Ordinance.

17. Does the ordinance prohibit a HOA from prohibiting drought resistant or drought tolerant plants?

No. HOA's may not prohibit or include conditions that have the effect of prohibiting the use of low water using plants as a group.

18. Why is the State legislation referred to as SB 1881 in some parts of the ordinance and guidelines and AB 1881 in other parts?

The correct reference for the State legislation is AB 1881. There is one instance where it was incorrectly referenced as SB 1881 instead of AB 1881. This has been corrected.

19. Isn't it problematic that this ordinance refers to the State legislation as AB 1881, because these bill numbers are recycled after each legislative session?

The staff report refers to the State legislation as AB 1881, but the proposed ordinance refers to it as Government Code §65565. This number is part of the ordinance and will not be changed. There was one place in the guidelines where it did refer to AB 1881 instead of the government code. This has been corrected.

20. What is the history of this State legislation?

In 2004, AB 2717 was passed. It requested the California Urban Water Conservation Council (CUWCC) to convene a stakeholder task force, composed of public and private agencies, to evaluate and recommend proposals for improving the efficiency of water use in new and existing urban irrigated landscapes in California. Based on this charge, the Task Force adopted a comprehensive set of 43 recommendations, essentially making changes to the AB 325 of 1990 and updating the Model Local Water Efficient Landscape Ordinance. The recommendation of the bill charges DWR to update the Model Efficient Landscape Ordinance and to upgrade CIMIS.

The Water Conservation in Landscaping Act of 2006 (AB 1881) enacts many, but not all of the recommendations reported to the Governor and Legislature in December 2005 by the CUWCC Landscape Task Force (Task Force). AB 1881 requires DWR, not later than January 1, 2009 to update the model ordinance in accordance with specified requirements, reflecting the provisions of AB 2717. AB 1881 requires local agencies, not later January 1, 2010, to adopt the updated model ordinance or equivalent or it will be automatically adopted by statute.

21. Will the City issue a permit? Will there be a cost for this permit?
A final permit upon completion of the Landscape Documentation Package will be issued. It has not been determined if there will be a cost for this permit.

22. Does this ordinance encourage hardscape in residential yards because people will install more hardscape to stay under the 2500 feet of landscaping which triggers the ordinance?

Currently the zoning does not regulate paving. Regardless of the proposed ordinance, single-family property owners can pave any portion of the yard to reduce landscape maintenance. Since relatively few properties will be affected by the Ordinance, an increase in the percentage of pavement in new yards is not expected.

23. Can the staff report and ordinance be simplified so more people can comprehend it?
The requirements established by the State are very technical. Staff has looked at reports from several other cities regarding this issue and has attempted to make the report as understandable as possible.

24. Is the proposed City Ordinance doing the minimum requirements created by the State?

Yes. The City has not added any additional requirements. The City has simply revised it to make it administratively easier to implement and where possible changed it to make implementation easier for applicants, while still complying with the State Model Ordinance.

25. AB 1881 says that cities must adopt their own ordinance before January 1st, 2010. We missed this deadline; can the City still adopt its own ordinance?

Yes we can still adopt our own ordinance. As long as we are making progress towards implementing our own ordinance the Department of Water Resources said that it will allow cities to adopt their own ordinance after the deadline as long as it is as least as effect as the States Model Ordinance. I have been keeping the DWR updated on our progress. There are several cities, which have adopted ordinances after the January 1st deadline, and there are currently several cities, which have yet to adopt their own ordinance, but intend on doing so.

26. Does this ordinance apply to people who have recently installed landscaping?

It does not apply to any landscape installed prior to January 1st, 2010. Landscapes installed after that are subject to the State Model Ordinance, until the City adopts its own ordinance.

27. How does self-certification work?

A licensed landscaped professional will sign a Certification of Landscape of Design, which includes his or her license number and/or professional stamp, stating that the landscape design is in conformance with the City regulations and Guidelines. The permit will not be issued unless the Landscape Documentation Package is complete, including this certification. Once construction of the landscape is complete, the installation contractor or designer will sign the Certificate of Completion stating that the installation is complete and is in substantial conformance with the original plan. Once the Certificate of Completion is accepted by the City staff the project will be considered complete.

28. Is the Landscape Documentation package too complicated for most people to comprehend?

The State Model Ordinance is a document with many technical requirements.

29. The proposed City ordinance states that water used for landscaping accounts for 60% of domestic water use. Is this true? Are there calculations, which show this is true? Are there documents, which can verify this? Is such a claim actually needed in the ordinance?

Several documents provided by State entities use this figure, but no it is not necessary for this figure to be included in the ordinance.

30. What department will be put in charge of enforcing this ordinance?

Department of Development Services.

31. Should it be mandatory that the Development Plan Review Board approval be required in granting a minor deviation to this ordinance? The current proposed ordinance says that the Director of Development Services or his or her designee may grant minor deviations without the approval of the DPRB.

Council's pleasure.

32. The proposed ordinance says that the Water Efficient Landscape Ordinance Guidelines shall be adopted by resolution of the Planning Commission. Should it be changed to the City Council?

Council's pleasure.

33. Should defensible space as noted in numerous fire agency documents be given more consideration?

The proposed Guidelines recommend reviewing title 32 of the Los Angeles Fire code before installing landscaping.

34. Why isn't fire resistant landscaping given equal weighting with drought resistant landscaping?

Staff has tried to create a middle ground where there can be an aesthetically pleasing landscape with the potential damage caused by fire minimized. The proposed Guidelines recommend reviewing title 32 of the Los Angeles Fire code before installing landscaping. Staff feels that by placing too strong of an emphasis on fire resistant landscaping greatly reduces the visual appeal while not significantly decreasing the potential damage which could be caused by fire conditions.

35. How many parcels are there of one acre or more?

553 parcels. Note: This number reflects total parcel size and not landscaped area.

36. How many parcels of vacant land are there of 2500 square feet or more?

361 parcels. Note: This number reflects to the total parcel size of parcels with the land use designation of vacant and not landscaped area.

37. How many applications are expected to be submitted to the City?

San Dimas is an urbanized area with minimal land for new construction. Base on average lot sizes, amount of existing lot coverage by structures and pavement, and building permit activity, a minimal number of applications are expected to be submitted.

38. Does AB 1881 require long-term monitoring?

The State Ordinance requires that after a landscape plan is approved, the City shall administer programs that may include, but are not limited to, irrigation water use analysis and irrigation surveys to ensure that a landscape project complies with its approved water limits. The ordinance does not mandate audits or recommend specific durations or the frequency of the audits.

39. Are parks subject to the ordinance?

Yes

40. Are swimming pools and other water features included in the landscaped area?

Yes

41. What penalties exist for non-compliance with the proposed code or State Model Ordinance?

The state ordinance does not determine specific penalties. Cities can impose penalties or fines at their own discretion.

42. What if the City chooses to ignore the State Model Ordinance?

No penalties have been established by the State nor do any State agencies have enforcement power, but non-compliance by the City leaves it wide open for litigation.

Questions Regarding Artificial Turf

1. What is artificial turf?

Artificial turf has three layers – drainage, shock absorbing, and surface. The surface has polyethylene plastic blades that simulate grass and a several inch layer of infill that keeps the blades upright. The infill varies by manufacture and may include ground-up recycled tires, ground-up soles of athletic shoes, silica sand, and/or new thermoplastic or rubber material.

2. Does the ordinance prohibit a HOA from prohibiting artificial turf?

Since the City added the section on Artificial turf, the state model ordinance does not address artificial turf.

3. If a HOA does not allow artificial turf or has guidelines more restrictive than the City's guidelines and a property owner wants to install artificial turf pursuant to the City's guidelines what happens? Does the HOA supersede and the City stays out of the matter or is the HOA compelled to adhere to the City's requirements?

The State is proposing legislation that would provide a provision that says that any of the governing documents of a common interest development would be void and unenforceable if it prohibits, or includes conditions that have the effect of prohibiting the use of artificial turf. Until that bill is passed it is up to the Council to decide what to do if the City allows artificial turf, but a HOA prohibits it. The City could allow the HOA to determine whether or not artificial turf is permitted, the City can say the HOA's are not permitted to prohibit artificial turf, or the City can handle it on a case-by-case basis.

4. Can a process and guidelines similar to the one for vinyl siding be created for artificial turf?

Yes. A process could be created where one has to apply for a permit if they wish to install artificial turf.

5. Will it be difficult to enforce the proposed guidelines for artificial turf?

Staff is not recommending any additional resources to monitor the installation of artificial turf, so compliance is voluntarily and will be enforced the same way as any other property requirement.

6. How long before artificial begins to fade?

Responses vary. Some companies say ten to fifteen years. Some companies back it up by offering a ten to fifteen year warranty. Some articles have reported artificial turf starting to fade in as little as five years after installation. The average response is eight to ten years. The current ordinance states that worn or faded turf must be replaced. The City could require that a warranty of x number of years be purchased with the installation of artificial turf.

7. Will a large amount of artificial turf end up in landfills?

It is speculative as to how it will effect landfills, but artificial turf is made up of many materials that are not recyclable, so yes artificial turf will end up in the landfills.

8. Is it harmful to the environment?

There has not been a conclusive study on artificial turf. Below are some of the concerns, which have been addressed over the last several years. Most concerns addressing artificial turf have mainly been directed towards large community recreational areas (primarily athletic fields, and parks to a smaller extent).

Many brands of artificial turf are made with crumb rubber. Crumb rubber may contain the following. Toxic metals, carcinogens, latex and other rubbers (which may cause an allergic reaction in some people), and phthalates (which can have adverse effects on reproductive organs, lungs, and the liver). There is also a concern that artificial turf can degrade from weather and leach toxic chemicals into surface or ground water. The major artificial turf companies have said that harmful materials have either been completely removed from their product or are in such small amounts that they will not cause any damage.

Other concerns include: artificial turf absorbs and retains more heat than a natural surface, contributes to a loss of habitat, and debris such, as leaves or animal waste does not decompose as quickly as it would on a natural surface.

9. Should there be installation standards?

The proposed ordinance has requirements for the finished product and requires that it be installed by a professional licensed to install artificial turf.

10. Should the amount of artificial turf, which can be installed, be limited?

Council's pleasure. A provision could be added which limits the area of artificial turf to a percentage of the yard.

11. Will water drain through artificial turf?

Artificial turf is designed to handle water in the same way that natural grass does. It is designed with channels of permeability over the entire surface of the backing. Any water landing upon the grass fiber surface has the capability of being absorbed by the ground.

12. Can weeds grow through artificial turf?

Makers of artificial turf say no. Artificial turf is composed of several layers with microscopic holes for water drainage. The backing layer is rather thick so weeds cannot pass through. Some companies treat the bottom layers with chemicals that repel the weeds. However weeds are resilient and herbicide treatments may be necessary.

13. Will anybody be required to install artificial turf?

Nobody will be required to install artificial turf. It was just added to give people another tool to help conserve water.

14. Should we require that artificial turf only be purchased from installers that have been pre-approved by the City?

Council's pleasure. The proposed ordinance currently sets standards for a final product, but staff can research and seek out artificial turf installers and/or invite artificial companies to apply to the City.

15. Can minimum permeability standards be created for artificial turf?

Yes permeability rates can be established. An example of a permeability rate would be artificial turf must be able to handle two inches of water per hour without pooling.

16. Does the ordinance need to state what kinds of materials can be used in artificial turf?

There are some products in artificial turf, which are considered harmful if exposed in certain amounts. These materials could be prohibited.

17. What steps does the City have to take to ensure that artificial turf is in compliance with Federal Clean Water Act (Storm Water Permit)?

There are no county, state, or federal laws that are evident in the public record that restrict the use of synthetic grass and artificial turf, properly installed, on private or public land. The proposed ordinance can prohibit certain materials used to make artificial turf and/or attempt to regulate runoff from artificial turf.

18. What steps does the City have to take to ensure that artificial turf is in compliance with County Fire Codes?

Artificial turf is fire-retardant and anti-flammable.

19. Do requirements need to be set for the amount of recycled content used in artificial turf?

Artificial turf is made of many products, most of which cannot be recycled. There are new products being developed which will contain more recyclable materials.

20. Should the installer of artificial turf be required to take back used turf for recycling and/or disposal at the end of their useful life consistent with the City's Extended Producer Responsibility?

Council's pleasure. At the moment most artificial turf products contain many different materials, most which cannot be recycled.

21. Shouldn't AB 1793 be taken into consideration?

AB 1793 provides that a provision of any of the governing document of a common interest development would be void and unenforceable if it prohibits, or includes conditions that have the effect of prohibiting, the use of artificial turf or any other synthetic surface that resembles grass. AB 1793 is in committee and has not yet been scheduled for a hearing. Staff feels that that the City would be better served by creating citywide guidelines for artificial turf rather than having no guidelines, especially since the fate of AB 1793 has not been determined at this point.

22. Are the standards for artificial turf such that they will be a headache much like overnight RV parking?

Currently the code is silent on artificial turf. It could be argued that as the code is currently written that artificial turf is not permitted. If the City is going to allow the installation of artificial turf staff feels that these requirements are necessary to ensure that a quality product is installed.

23. Why doesn't the code promote drought tolerant landscaping over artificial turf?

Artificial turf is just an option property owners have to reduce their water consumption. The City would not be encouraging property owners to install artificial turf. Property owners could install drought resistant plants, fire resistant plants, or artificial turf.

24. What about the lawsuits associated with artificial turf?

California's Attorney General has initiated lawsuits against three artificial grass makers, claiming they violated California's strict environmental laws by failing to disclose that their products contain lead. According to the suits, all the companies use or used pigments containing lead that can rub off consumers' hands or feet or be accidentally ingested by children and pets. The products at the center of the disputes are widely used for athletic fields, lawn replacements, and for indoor/outdoor carpeting. They're sold by big retailers such as Home Depot and Lowe's as well as by specialty companies. AstroTurf one of the companies in the lawsuit has settled with the State of California, agreeing to eliminate almost all lead from its product used on playing fields and residential yards. Litigation is still pending for the other two artificial turf producers being sued by the Attorney General. Representatives of artificial turf say that most manufactures are already voluntarily phasing out the use of lead-based pigments and that federal regulators have found that their current products are safe.

25. Should the regulation of artificial turf be limited to the front yard or the front and back yard?

Council's pleasure. However it is difficult to enforce property standards when the area is not in the public's view.

26. Can artificial turf be considered separately from the Water Efficient Landscape Ordinance?

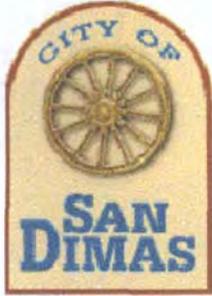
Council's pleasure. Artificial is not part of the State mandate, so there is nothing preventing us from removing it from the Water Efficient Landscape Ordinance.

27. Will it fade in the sunlight over time?

The synthetic grass fibers have been coated to protect and maintain its appearance and strength for years to come.

28. Does it mildew?

It's very unlikely that mildew will grow on plastic pitches or simulated grass. Mildew is a fungus formed in warm damp surfaces. Since simulated grass has a built in drainage layer and does not absorb water, it should not form mildew.



MEMORANDUM

DATE: April 27, 2010

TO: Mayor and City Council
Planning Commission

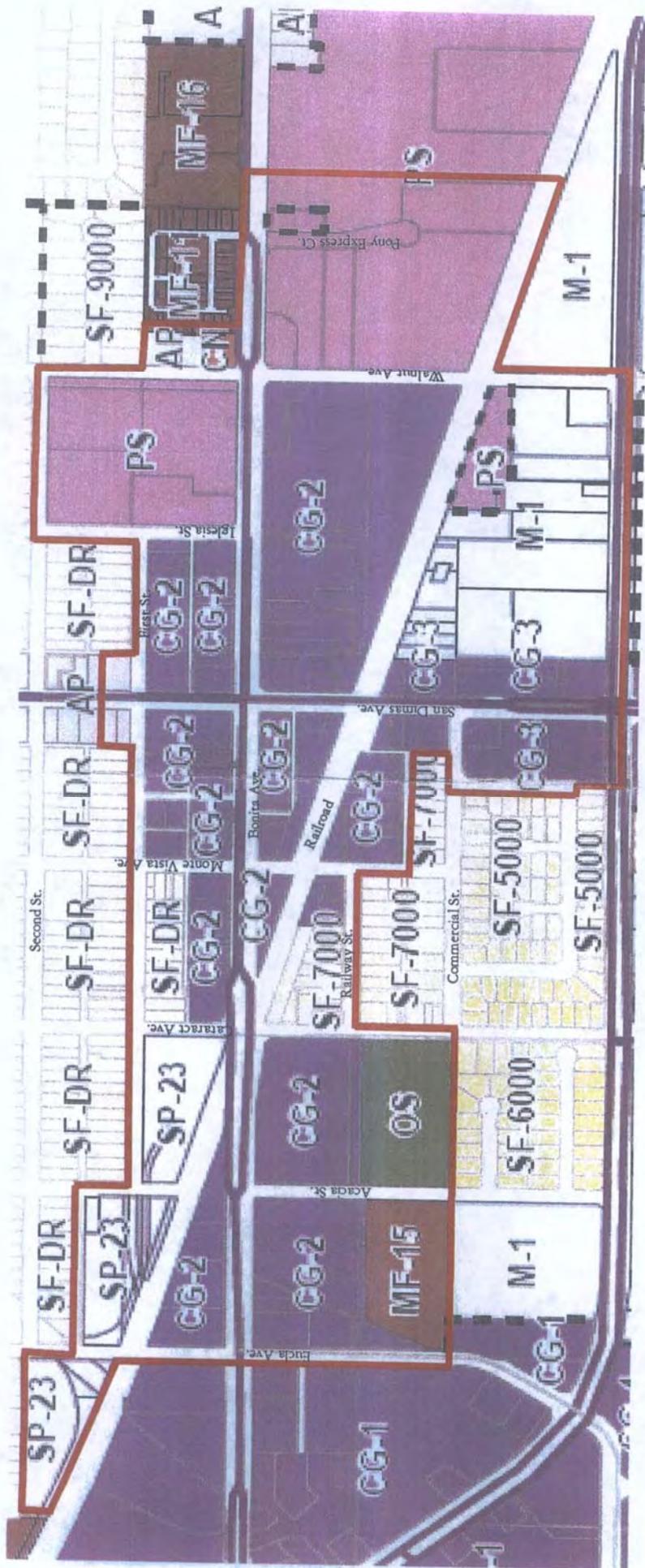
FROM: Larry Stevens, Assistant City Manager for Community Development

SUBJECT: Downtown Specific Plan Update

The Attachment includes the following:

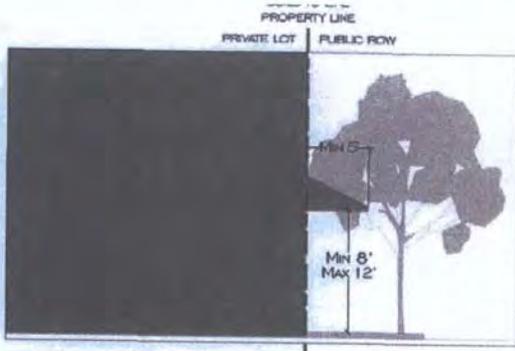
1. Boundary Map – Illustrates the scope of the needed General Plan Map changes and related Zoning Changes. Note that this includes most of CG Areas 2 and 3 plus some other properties.
2. Illustrations (3 pages) – The approach to the Specific Plan will be to use a “Form-Based Code”. This is completely different than and zoning currently in the City although it is the more common approach to downtown zoning in many cities throughout the State. A Form-Based Code focuses more on building form/site development than it does on regulating uses. It will encourage specific building types, building locations and sizes, and pedestrian/parking linkages. Creating an appropriate downtown form is a primary strategy.
3. Sub-Area Categories/Map (2 pages) – Included is a brief description/vision of each of the three proposed sub-areas (Corridor Mixed Use, Traditional Downtown and Civic Center) and a Regulating Map showing the boundaries of each.
4. Parking Discussion (no materials in Attachment)
5. Next Steps (no materials in Attachment) – The approach is based largely on the input received in prior charrette and workshops. Remaining steps include:
 - a. Staff finalizing draft plan with consultant
 - b. Community Workshop to unveil, explain and answer questions regarding Hearing Draft of Specific Plan
 - c. Joint Study Session with Planning Commission to review and discuss Hearing Draft
 - d. Planning Commission Public Hearing
 - e. City Council Public Hearing

Downtown Zoning Map



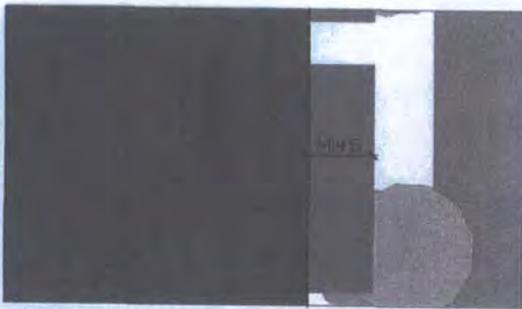
Arrow Hwy.

Storefront Section



Storefront. A Storefront frontage is characterized by a façade which is aligned very close to the public right-of-way line with the building entrance at sidewalk grade. Storefront frontages have substantial glazing on the ground floor, and provide awnings or canopies cantilevered over the sidewalk. Building entrances may either provide a canopy or awning, or alternatively, may be recessed behind the front building façade.

Storefront – Plan View



Storefront Frontage Dimensions	
Characteristic	Measurement
Awning Depth (minimum projection, over the sidewalk)	5 feet
Height (from ground level to the top of the awning)	8 foot minimum, 12 foot maximum clear
Percent of Building Front	50% minimum

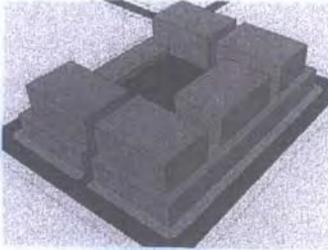
guidance in Downtown San Dimas through a form based approach by providing building and frontage typologies for all development in Downtown San Dimas. All new development must comply with these form based types. Section 4a.6 (Development Standards) provides the detailed schematics and dimensions for development standards of Downtown San Dimas, while Section 4a.7 establishes "building block" typologies that best display the desired building character for Downtown San Dimas. Building types refer to the building massing, layout, and use. Frontage types refer to the architectural style of the front façade of a building (the part of the building that faces the street). Together, these two typologies shape building character and the building's relation to semi-public spaces, areas accessible to the general public but designed for use by residents.

- B. **Allowed Building Types.** The following building types are intended to provide a variety of flexible building styles appropriate for the small City character of San Dimas that can be used to guide future development. These provisions work in coordination with the underlying district and other development standards. Allowed building types in the different districts are listed in Table 4a.7-1 (Allowed Building Types) and defined below. Building types are organized by intensity from most (Half-Block Liner) to least (Front Yard Housing) intense. An "X" means that the building type is allowed; a blank cell means that the building type is not allowed.

Table 4a.7-1: Allowed Building Types

	Corridor Mixed-Use District	Traditional Downtown District	Civic Center District
Podium	X		X
Full-Block Liner	X		X
Half-Block Liner	X	X	X
Infill		X	X
Terraced	X	X	X
Carriage House	X	X	
Multi-Family Faux House	X		X
Duplex, Triplex, and Quadplex	X	X	X
Side Yard Housing	X		
Side Yard House	X		
Courtyard Housing	X		
Front Yard Housing	X	X	

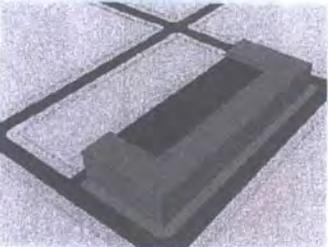
C. Building Type Descriptions.



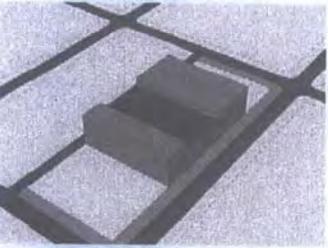
Podium. This building type refers to a commercial building up to three stories tall that has a large first floor area compared to the other floors.



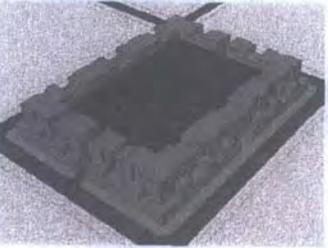
Full-Block Liner. An attached building with a frontage that spans the length of a downtown block, and has zero side yard setbacks. It is used for mixed-use, residential, and commercial development.



Half-Block Liner. An attached building with a frontage of approximately one-third to one-half the length of a Downtown block, and zero side yard setbacks. It is used for mixed-use, residential, and commercial development land uses.



Infill. An attached building with a frontage that is less than one-third the length of a Downtown block, and zero side yard setbacks. It is used for mixed-use, residential, and commercial development.



Terraced. A mixed-use, residential, or commercial building characterized by individual units that are accessed via multi-leveled outdoor terraces. The terraces are intended to be semi-public spaces that are extensions of the public realm.

Corridor Mixed-Use District - Vision

The vision for the Corridor District will be to create a more pedestrian and bicycle friendly hub of entertainment, cultural, and transit-oriented activities integrated with public art. This area is also the future anticipated home of the Gold Line light-rail station and park and ride lot. Therefore, district uses will include city and regional transportation services, transit-oriented retail (such as coffee shops, cafés, breakfast and lunch eateries, newsstands, etc.), new entertainment uses such as sit-down restaurants or a movie theater, new office buildings, and higher density housing options. Additionally, Pioneer Park can be programmed with regular community events that encourage residents to visit the downtown area.

Traditional Downtown District- Vision

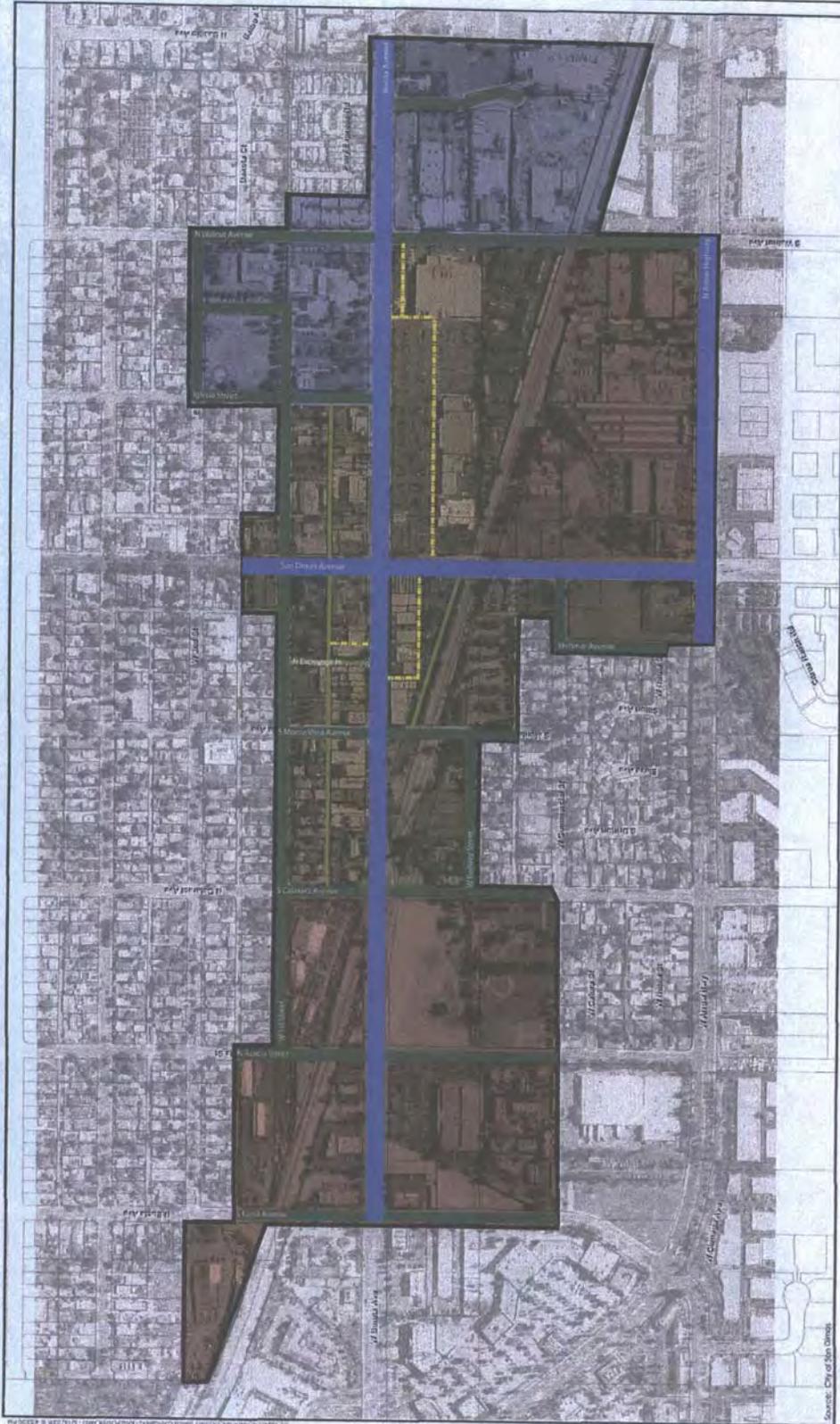
The Traditional Downtown District vision is one of a traditional downtown. Retail storefronts will line vibrant, well-furnished sidewalks that enhance the pedestrian shopping experience, attracting residents and visitors alike. The character will reflect restored original western-style facades from the historic era of downtown San Dimas. Traffic along Bonita Avenue will be "calmed," and pedestrian and bicycle safety will be a priority. Additionally, a retail-wrapped structured parking garage will be located at the southeast corner of San Dimas Avenue and 1st Street. Local niche boutique shops, elegant sit-down restaurants that spill out onto the sidewalks, unique signage, public spaces with pedestrian amenities, and an overall enhanced street environment will add to the downtown atmosphere.

Civic Center District - Vision

The Corridor Mixed-Use District acts as a civic and services hub for the City of San Dimas. City services residing in this district include the City Hall, the Community Building, the Senior/Community Center, an LA County Sheriff's Department, LA County Fire Station 64, and the Post Office. The vision for the Civic Center District will be to create a bicycle and pedestrian-friendly hub of civic and community activity. District uses will include senior and recreational community facilities, worker-serving retail uses, public safety facilities, and other civic uses.

**SAN DIMAS
DOWNTOWN
SPECIFIC PLAN**

Regulating Plan



KEY

Street Typologies

Primary Street



Secondary Street



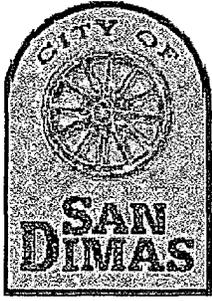
Alley & Paseo



Districts

- Downtown San Dimas Specific Plan Area
- Corridor Mixed-Use District
- Traditional Downtown District
- Civic Center District





MEMORANDUM

DATE: April 27, 2010

TO: Mayor and City Council
Planning Commission

FROM: Larry Stevens, Assistant City Manager for Community Development
Kevin Frey, Administrative Aide

SUBJECT: Façade Program Update

At previous meetings both the Planning Commission (March 3, 2010) and City Council (November 2009 and February 23, 2010) have been presented information relative to Downtown facades including the case study and possible program approaches. Staff has met with the three additional owners identified in the highest priority category to understand their circumstances and possible participation. The following table summarizes possible costs and likely participation:

Address	Design (\$)	Construction ¹ (\$)	Other ² (\$)	Total (\$)	Participation
125 W. Bonita – Cynthia Williams	\$7500	\$40-45,000	\$9,000	\$54-59,000	Willing to participate. Prefers a wood/western façade. Believes cost estimates too high. May consider mural on east building elevation.
151 W. Bonita – Shoemaker Trust	\$10,000	\$107,000	\$9,000	\$124,000	Prefers to sell property. May be willing to participate depending on program.
155 W. Bonita – Gray & Frazier Trust	\$7500	\$37,000	\$9,000	\$51,000	Willing to participate.
157 W. Bonita – Meyers Trust	\$7500	\$63,000	\$9,000	\$77,000	May be willing to participate depending on program.
161 W. Bonita	\$7500	\$43,000	\$9,000	\$57,000	May be willing to

- Mark Salehpour					participate depending on program. Plans submitted for interior remodel including mezzanine. Also thinking of longer term multi-story development opportunity.
169 W. Bonita - Jerry Thornell	\$7500	\$40-60,000 ³	\$9,000	\$54-74,000	Willing to participate. Concerns about design approach.
213 W. Bonita - Paul Kirby	\$7500	\$40-60,000 ³	\$9,000	\$54-74,000	Willing to participate but may prefer to use own resources. Possible development opportunity with existing 2 nd floor and/or adjacent property.
TOTAL	\$55,000	\$370-415,000	\$63,000	\$488-533,000	

1. Assumes Mid-Term Renovation which is renovation/restoration of historic facades where feasible.
2. Estimated costs for asbestos and lead based paint testing and abatement.
3. No preliminary plans available.

Subsequent to these meetings, because of possible concerns about grant programs involving larger sums of money, staff also reviewed a number of façade programs developed by other cities. California Redevelopment Law provides statutory authority to redevelopment agencies to purchase any interest in property within a redevelopment area. Section 33391 of the Health and Safety Code states,

“An agency may purchase, lease, obtain option upon, acquire by gift, grant, bequest, devise, or otherwise, any real or personal property, any interest in property, and any improvements on it, including repurchase of developed property previously owned by the agency.”

Detailed comments on the Fontana and Santa Ana Façade Programs follow:

Fontana

The City of Fontana felt their Downtown was in need of revitalization and in 2002 created a program to improve the façades of the buildings in the Downtown core.

They implemented a three-phase, multiyear program. Each year a separate block of buildings would have their façades renovated. The City was responsible for design

and construction costs. The city purchased an 18 inch façade easement from the property owners. The City owns the first 18 inches of each building front for a period of ten years. The property owner receives back 10% of the façade each year for ten years (until ownership of the façade is completely returned to the owner). The property owner is required to maintain the new façade and is subject to City ordinances regarding signage, banners, temporary signs, and lighting. If the property or business changes ownership the new owner is responsible for new signage and lighting costs. Any changes to the façades are subject to City approval.

The City of Fontana reports that they are very happy with the results. They said that several of the business owners have seen an increase in business traffic. They said that because the City did façade improvements that this caused businesses to do interior tenant improvements to their buildings. They felt that the best way to achieve the desired quality and consistency that the City Council and the Community expected was for the City to fund and complete the entire project.

They used Redevelopment revenue to completely fund the work including the architectural fees and construction costs. The first phase of improvements which included costs for nine buildings totaled \$670,000. The average improvement cost was about \$50,000 per business.

Santa Ana

The City of Santa Ana developed a program that gives a cash rebate for improvements made to façades. Any building located within a specified boundary in the Downtown is eligible to receive a rebate for improvements. The City provides a list of projects which are eligible for funding.

The City funds the project with Redevelopment money. The property owner pays for the entire project then receives a rebate from the City. If the applicant spends between \$1 and \$14,999 then they are eligible to receive 75% of their costs back (maximum: \$11,250). If they spend between \$15,000 and 26,000 they are eligible to receive 65% of their costs back (maximum \$16,900). The City will also remove old signs and awnings with no cost to the applicant. In addition to the above rebate the City also offers a \$2,000 rebate for architectural and design drawings and a \$3,000 rebate for new signage or improvements to existing to signage. The total maximum rebate allowable is \$21,900.

In the case of Santa Ana the applicant is responsible for paying all the costs upfront. And then for any projects which have been approved, by the City, the applicant is eligible for a partial rebate of their costs.

In addition, a less extensive survey of other façade programs was also conducted and is set forth in Attachment B.

Funding Strategies

(1) City pays for the entire project and completes all the work:

The City of Fontana had a clear vision of what they wanted their Downtown to look like and the property owners in the Downtown either did not have the resources or the interest to improve their building façades. In light of this Fontana's strategy was to completely fund the project and complete all the work.

California Redevelopment Law provides statutory authority to redevelopment agencies to purchase any interest in property within a redevelopment area. Section 33391 of the Health and Safety Code states, "An agency may purchase, lease, obtain option upon, acquire by gift, grant, bequest, devise, or otherwise, any real or personal property, any interest in property, and any improvements on it, including repurchase of developed property previously owned by the agency."

(2) Loan Program

A loan would be provided to business owners in order to complete façade improvements. The loan could be structured as a low interest loan or a no interest loan. The loan also could be forgiven in several years. Loan programs typically award anywhere from 50% to 100% of the improvement costs.

(3) Grant Program

A typical grant program would award applicants money to improve facades. The amount of funds may be awarded unilaterally or may vary as determined by the size of the building frontage, amount of owner participation, or some other predetermined factor. A grant can simply be awarded based on eligibility or a matching requirement can be implemented. Most of the grant programs are designed to provide partial funding.

(4) Rebate Program

The applicant pays for all the work and after completion receives money rebated back. Rebates typically range from 50% to 100% of the total cost but are generally limited to circumstances where less work is needed.

Analysis

Most city façade programs include matching dollar grants and loans. In many cases participation was low and the work that was completed resulted in moderate, and largely unnoticed or unremarkable improvement. That has been the case with our own past façade program.

A loan program (which will not be forgiven) is favorable, in certain respects, because it gives the applicant flexibility as to what kind of work to do and it allows the City to recoup some of its costs, but there are several cons associated with a loan program. Some of them include the following:

- Since the money must be repaid there tends to be a low participation rate; and
- It requires staff time to monitor the loan requirements, interest rates, and repayment schedules.

Grants tend to have higher participation rates than loans, but because of state law it becomes tricky to award large amounts of money. Some cities have opted to fund façade improvements through forgiveness of loans or by purchasing easements and paying for the entire cost of the project. This allows a City to pay for partial or entire façade improvement projects without issuing a grant or a loan which must be repaid. It also allows the City to pay for façade improvements without placing a financial burden on the applicant.

The recommended Façade Program (see Attachment A) recognizes that it is critical to secure high participation levels and has been developed to achieve the following:

1. Maximize the opportunity for the identified priority properties to participate
2. Understand that the current economic climate makes it difficult for these businesses to invest in this type of improvement
3. Recognize that affected businesses in the Historic Downtown currently have limited financial resources and need flexibility to participate
4. Achieve some recycling of the monies invested by the City over time

It is certainly possible to make further adjustments to the draft Downtown Façade Program as set forth in the attachment. Any comments are welcomed so that Staff may finalize the program and take the next step of securing participation agreements and start design/plan preparation.

Recommendation

Staff recommends as follows:

1. Provide any comments regarding revisions with the intent of bringing the Final Façade Program to the May 11, 2010 Council meeting
2. Direct Staff to bring back any needed budget adjustments at the same meeting
3. Authorize Staff to solicit participation commitments from the seven identified properties
4. Authorize Staff to seek design/plan preparation cost proposals for any committed participants

ATTACHMENT A

DRAFT DOWNTOWN FAÇADE PROGRAM

Participation:

Voluntary with initial focus on identified priority properties in first two years

Available Funding:

Redevelopment Agency (RDA) to provide approximately \$200,000 in FY 2009-10 and 2010-11 (NOTE: Recommended amounts could be affected by CRA lawsuit related to state takeaway of RDA funds.)

Design Costs:

Paid by RDA up to \$7500 with pre-commitment letter from property owner to participate

Loan Options:

Maximum amount: Up to 100% of construction costs not to exceed \$50,000, unless larger amount approved by RDA*

Terms: Deferred – Full amount due and payable upon sale of property or after 10 years with 10% per year forgiveness if paid earlier than 10 years up to a maximum of 25% [*Maximum Forgiveness = \$12,500*]
No interest – Monthly payments (estimated \$416 for a 10 year loan of \$50,000 at 0%) with forgiveness after 7 years of any remaining amounts due if all payments timely [*Forgiveness = \$15,000 or 30%*]
Low interest loan - Monthly payments (estimated \$483 for a 10 year loan of \$50,000 at 3%) with forgiveness after 5 years of any remaining amounts due if all payments timely [*Forgiveness = \$21,000 or 42%*]

Duration: Up to a maximum of 10 years

Rebate Options:

60% rebate with no loan (\$30,000 for the \$50,000 project)

Permits & Fees:

Waived

* Larger amount approvals may consider an RDA right of first refusal to purchase based on suitability for property as a land assembly opportunity

ATTACHMENT B

	Eligible Improvements	Funding	Lead: City or Applicant	Approved By	Extras provided by City i.e. designs
Atascadero	exterior painting; façade treatment; signs; canopies; awnings; exterior lighting; landscaping; streetscaping; doors; windows	Rebate up to \$10k.	Applicant	Program Committee	City will provide the services of an architect to assist in project development.
Beaumont	awnings & canopies; doors; windows; exterior façade improvements including clean & repair, painting, lighting, signage, landscaping	Reimbursement grant for 50% of costs. Maximum amount is \$50k.	Applicant	Administratively	
Buena Park	standard façade improvements; paint; brick; tile; awnings; stucco; signage; molding; lighting; windows; landscaping	Grant & loan combination. Grant for 75% of costs from small projects & repair. 60% grant for larger projects. The rest can be covered with a 15 yr. loan with 4% interest. Maximum amount for grants for small projects is 2k, large projects 25k & 50k for loans.	Applicant	Administratively	
Chico	storefronts; windows; paint & wood treatment; exterior lighting; painting; wall repair; awnings & canopies; ADA accessibility; landscaping	.05% - 6% loans paid over 15 years or less for 80% of the project not to exceed \$30k.	Applicant	Administratively	City will offer financial assistance for architectural plans.
Escondido	Standard façade improvements; paint; brick; tile; awnings; stucco; signage; molding; lighting; windows; landscaping	No interest loan, forgivable after 5 years. Maximum amount \$10k.	Applicant	Administratively	
Fontana	Standard façade improvements	City pays for everything. City acquires façade & returns 10% of it each year to the applicant	City	Administratively	City pays for architectural fees & construction costs.
Lompoc	removal of old signs & awnings; exterior cleaning & painting; new doors; new windows & window treatment; awnings; signage, exterior lighting; ceramic tile on exterior walls; landscaping; pavers in doorways; resurfacing & restriping of parking lots	Low interest & no interest loans & grants to defray costs for permits & architectural designs. 50% grant up to \$1k. Loans up to 30k.	Applicant	Administratively	
Oceanside	standard façade improvements; paint; brick; tile; awnings; stucco; signage; molding; lighting; windows; landscaping	Grant for 50% of cost. 65% if three businesses participate together. Maximum amount is 25k.	Applicant	Administratively	
Pasadena	standard façade improvements; paint; brick; tile; awnings; stucco; signage; molding; lighting; windows; landscaping	Grant for 50% of costs. Maximum amount is \$10k, 15k if historic.	Applicant	Administratively	
Palm Springs	signs; awnings; painting or exterior surface treatment; asphalt paving, sidewalk paving; repair or replacement of masonry walls, outdoor lighting; fencing; windows; landscaping; fountains.	If the City provides all of the funds there is a maximum grant of \$2500. If the applicant provides matching funds \$5k in grants is available.	Applicant	Administratively	City will provide some assistance in scoping the project.
San Juan Capistrano	standard façade improvements; paint; brick; tile; awnings; stucco; signage; molding; lighting; windows; landscaping	Grant ranging from 50%-90% of costs. Depends on size of the building. Maximum grant is \$20k	Applicant	Administratively	
Santa Ana	new facades; landscaping & irrigation; painting; signage & awnings; exterior lighting; parking lots	Rebate program: If \$1 to \$15k is spent then 75% is rebated back. If 15k to 26k is spent then 65% is rebated back	Applicant	Rebate Committee	City will removed unsightly signs, awnings & other exterior clutter.
Sierra Madre	standard façade improvements; paint; brick; tile; awnings; stucco; signage; molding; lighting; windows; landscaping	Grant for 75%of costs for small projects & 50% for large projects. Maximum amount is \$2k for designs & \$10k for improvements	Applicant	Administratively	
Tulare	permits; lead paint testing; windows; doors; awnings; signage; masonry; stucco or brick repairs; disposal; ADA compliance	3 year loan between 3% % 9% with a maximum amount of \$100k.	Applicant	Loan Review Committee	
Whittier	standard façade improvements; paint; brick; tile; awnings; stucco; signage; molding; lighting; windows; landscaping	Loan for 50% of costs. Maximum loan is \$45k. No interest & forgivable after 5 years.	Applicant	Administratively	