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January 7, 2010

Commissioner Arthur H. Rosenfeld Ph.D.
Commissioner Julia Levin, J.D.
California Energy Commission
1516 Ninth Street
Sacramento, Ca 95814-5514

Re: City Green Building Ordinance and the Building Energy Efficiency Standards

Dear Commissioners Rosenfeld and Levin,

Per the request of Commission Staff, we would like to express to you our firm commitment that the City will enforce the current Title 24 Building Energy Efficiency Standards as part of the implementation of our local energy ordinance. As the Chief Building Official, I will work with my staff involved in energy plan review and field inspection to improve their working knowledge of the energy standards. This includes special training as needed which focuses on enforcement of the energy standards and the special requirements of the energy ordinance.

On August 25, 2009, our staff presented the Green Building Ordinance and the Energy Cost Effectiveness Study to the City Council. The Council recognized the study analysis showing energy saving, and cost effectiveness, and opened the public hearing at their August 25, 2009 regular calendar business meeting. The Ordinance and Study were approved by the Council. A second reading and adoption of Ordinance will be held once the CEC approves our application.

In order to avoid a potential conflict with the federal NAECA standards in following a few of the prescriptive requirements in the Alameda County Small Commercial Green Building Checklist, the following language will be added to the Ordinance as section 15.76.050.E prior to final adoption by the City Council:

“Nothing in this ordinance shall require the Applicant to use covered products, as defined in the federal Energy Policy and Conservation Act (42 U.S.C. § 6201 et seq), that exceed any applicable federal energy conservation standards for such products.”

For clarification purposes, Section 15.76.030.A.2.a will be amended to indicate that all new residential construction is covered by the Ordinance, as well as additions and remodels that exceed 500 square feet in area.

Additionally, per the request of Commission Staff, language was amended in the Ordinance to require the demonstration of compliance with the California Building Energy Efficiency Standards (Title 24, part 6) of the California Building Code. This language change also reflects the City's commitment to enforce these standards as the minimum required by code, regardless of the green building rating system used, or the threshold required.

The above changes are reflected in the attached redlined Ordinance, which will be brought back to the City Council for a second reading upon CEC approval of our application.

Thank you for your consideration of the City of Union City's Green Building Ordinance. Please feel free to contact me at kevinr@unioncity.org or Avalon Schultz at avalons@unioncity.org with any questions you may have.

Sincerely,

A handwritten signature in cursive script that reads "Kevin Reese". The signature is written in black ink and is positioned above the typed name and title.

Kevin Reese,
Chief Building Official
City of Union City

CITY COUNCIL ORDINANCE NUMBER # -09

**ORDINANCE OF THE CITY COUNCIL OF THE CITY OF UNION CITY
AMENDING CHAPTER 15.76, GREEN BUILDING AND LANDSCAPING PRACTICES,
OF THE MUNICIPAL CODE TO ESTABLISH MANDATORY GREEN BUILDING
REQUIREMENTS FOR PRIVATE DEVELOPMENT PROJECTS AND TO MODIFY
THE CURRENT GREEN BUILDING AND LANDSCAPING REQUIREMENTS FOR
PUBLICLY FUNDED PROJECTS**

**THE CITY COUNCIL OF THE CITY OF UNION CITY DOES ORDAIN AS
FOLLOWS:**

SECTION 1. Pursuant to Section 18.64 of the City of Union City Municipal Code, the City Council of the City of Union City does hereby find the following textual changes to the Zoning Ordinance to be necessary and desirable to achieve the purposes of Title 18, *Zoning*, of the Municipal Code of the City of Union City and to promote the public health, safety, morals, comfort, convenience, and general welfare of the residents of the City of Union City,

SECTION 2. Chapter 15.76 of the Municipal Code is amended as shown in Exhibit A, attached hereto and made a part hereof by this reference, a copy of which is available in the office of the City Clerk,

SECTION 3. The proposed amendment to the City's Municipal Code is exempt from further environmental review in accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15308, Actions by Regulatory Agencies for Protection of the Environment.

SECTION 4. The proposed standards are cost effective and will require the diminution of energy consumption levels permitted by the 2008 Statewide energy efficiency standards, based upon the findings of the January 21, 2009 study entitled "Energy Cost Effectiveness Case Studies Using the 2008 Title 24 Building Energy Efficiency Standards," adopted by the Stopwaste.Org org Board on April 22, 2009 and made a part hereof by this reference, a copy of which is available in the Economic & Community Development Department.

SECTION 5. The proposed Municipal Code Amendment is reasonably necessary because of local climatic, geological, or topographical conditions in accordance with Health and Safety Code Sections 17958.5 and 17958.7:

- A. The City is located in Climate Zone 3, which is characterized by periods of extremely hot, dry weather during the summer and fall months. In addition, during the winter, the City frequently experiences cold days with temperature inversions that trap certain air pollutants near the ground and exacerbate conditions leading to respiratory disease and other health risks. Average temperatures in Union City range from a low of 41.7 degrees in December to a high of 78.6 degrees in August. Topography ranges from approximately one foot above sea level at the Bay edge to over 1,500 feet above sea level in the eastern hills portion of the City. Union City has a relatively high potential for

air quality impacts during the summer and fall. When high pressure dominates, low mixing depths and bay and ocean wind patterns can concentrate and carry pollutants from other cities to Union City, adding to the locally emitted pollutant mix. In winter and spring the air pollution potential in Union City is moderate. These local features contribute to the Bay Area's status as a "nonattainment area" under the federal Clean Air Act for ozone and particulate matter.

- B. In June 2006 ICLEI – Local Governments for Sustainability in partnership with the Alameda County Waste Management Authority & Recycling Board (StopWaste.Org) and the Alameda County Conference of Mayors launched the Alameda County Climate Protection Project. Union City committed to the project and embarked on an ongoing, coordinated effort to reduce the emissions that cause global warming, improve air quality, reduce waste, cut energy use and save money. The City of Union City is committed to reducing community-wide greenhouse gas emissions by 30% below our 2005 levels by 2020. While climate change is a global problem influenced by an array of interrelated factors, climate change is also a local problem with serious impacts foreseen for California, the Bay Area and Union City. Local impacts include:
- i. *Sea level rise:* According to the Union of Concerned Scientists, the sea level in the State of California is expected to rise up to 12 inches of the next hundred years. The Pew Center on Climate Change has reported that this would result in the erosion of beaches, bay shores and river deltas, marshes and wetlands and increased salinity of estuaries, marshes, rivers and aquifers. This increased salinity has the potential to damage or destroy crops in low-lying farmlands. Infrastructure at or near sea level, such as harbors, bridges, roads and even the San Francisco International and Oakland International Airports are at risk of damage and destruction. The San Francisco Bay Area Conservation Commission has modeled the impact of a sea level rise of 3 feet (approx 1 meter) on the San Francisco Bay Area. Areas such as the Oakland Airport would be under water as well parts of Alameda, San Leandro, Hayward, Union City, Fremont and Newark, including sections of Interstate 880. Under this scenario, large portions of the 511 Area west of Union City Boulevard could be under water.
 - ii. *Impacts on water:* Water quality and quantity are at risk as a result of changing temperatures. With warmer average temperatures, more winter precipitation will fall in the form of rain instead of snow, shortening the winter snowfall season and accelerating the rate at which the snowpack melts in the spring. Not only does such snow melt increase the threat for spring flooding, it will decrease the Sierras' capacity as a natural water tower, resulting in decreased water availability for agricultural irrigation, hydroelectric generation and the general needs of a growing population. The Sierra snowpack is the origin of the Mokelumne River, the primary source of water for the jurisdictions within Alameda County.

- iii. *Natural disasters:* Climate models predict a 4°F temperature increase in the next 20 to 40 years, with an increase in the number of long dry spells, as well as a 20-30% increase in precipitation in the spring and fall. More frequent and heavier precipitation cause flooding and mudslides, which would incur considerable costs in damages to property, infrastructure and even human life. In addition, the increase of wildfires due to continued dry periods and high temperatures is another expected impact of continued climate change. In these conditions, fires burn hotter and spread faster.
 - iv. *Public health impact:* Warming temperatures and increased precipitation can also encourage mosquito-breeding, thus engendering diseases that come with mosquitoes, such as the West Nile Virus, a disease of growing concern in Union City and the surrounding region. Heat waves are also expected to have a major impact on public health and be a determinant factor of mortality. Increased temperatures also pose a risk to human health when coupled with high concentrations of ground-level ozone and other air pollutants, which may lead to increased rates of asthma and other pulmonary diseases. The incidence of bad air days in California's urban areas has increased, mostly in hot summer days. In the summer of 2006, the Bay Area Air Quality Management District (BAAQMD) registered 11 Spare the Air days for the region and exceeded the California 1-hour standard for ozone (set at 90 ppb) 18 times.
 - v. *Impacts on plants and vegetation:* Native plants and animals are also at risk as temperatures rise. Scientists are reporting more species moving to higher elevations or more northerly latitudes in response. Increased temperatures also provide a foothold for invasive species of weeds, insects and other threats to native species. The increased flow and salinity of water resources could also seriously affect the food web and mating conditions for fish that are of both of economic and recreational interest to residents. In addition, the natural cycle of plant's flowering and pollination, as well as the temperature conditions necessary for a thriving locally adapted agriculture could be affected, with perennial crops such as grapes taking years to recover.
- C. Union City's local climatic, topographic, and geological conditions exacerbate the impacts of global climate change in several ways to make the adoption of green building requirements reasonable and necessary:
- i. Increasing summer temperatures increase the need for air conditioning, thereby increasing average load demand and peak load demand for energy within Union City. This heightened demand increases the risk of power outages and power shortages, with associated adverse public safety and economic impacts. Increased energy demand and usage also increases local and regional air pollution impacts. Decreasing energy consumption through energy efficiency and other green building techniques reduces each of these impacts.
 - ii. Increasing summer and year-round temperatures also adversely affect the city's water supply, which is already subject to periodic drought conditions and potential water cutback. Decreasing water usage through conservation, sustainable landscaping (such as Bay-Friendly

Landscaping), use of drought-tolerant and native plants, and other green building techniques reduces these adverse impacts.

- D. The City finds that the design, construction, and maintenance of buildings and landscapes within the city can have a significant impact on the city's environmental sustainability, resource usage and efficiency, waste management, and the health and productivity of residents, workers, and visitors to the city.
- E. Green buildings play a significant role in reducing the amount of waste sent to landfills. Construction and demolition debris comprise up to 30% of all materials disposed of in California's landfills, and over 21% of materials disposed of in Alameda County. Many of these materials have green house gas implications once landfilled – from both the process of organic materials breaking down in the landfill and producing methane and other green house gasses, and the energy needed to produce more building materials from raw materials.
- F. This green building ordinance furthers Union City's efforts to enhance the community's social, economic, and environmental well-being and to mitigate the efforts of global warming on the city's weather, water supply, physical infrastructure, ecological diversity, human health and economy.

SECTION 6. Within fifteen (15) days from and after adoption, this Ordinance shall be published once in the Tri-City Voice, a newspaper of general circulation printed and published in Alameda County and circulated in the City of Union City, in accordance with California Government Code Section 36933. This Ordinance shall take effect and be enforced thirty (30) days after its adoption.

EXHIBIT A

Note: All of the existing text within Chapter 15.76 will be replaced with the following wording.

CHAPTER 15.76 GREEN BUILDING AND LANDSCAPING PRACTICES

15.76.010 Purpose.

The purpose of this chapter is to create a more environmentally and economically sustainable community by incorporating green measures into the design, construction, demolition, renovation, operation, and maintenance of buildings and landscaping within the city. This chapter establishes requirements for green building and landscaping practices to be used in City-sponsored, public partnership, and privately funded development projects. The green building and landscaping practices referenced in this chapter are designed to reduce landfill waste, conserve natural resources, increase energy efficiency, lower costs associated with operations and maintenance, improve indoor air quality, and minimize impacts on the natural environment.

15.76.020 Definitions.

For the purposes of this chapter, the following definitions shall apply:

A. “Applicant” means any person, firm, partnership, association, joint venture, corporation, or any entity or combination of entities who applies to the City for permits to undertake any construction or renovation for a building and/or landscaping project.

B. “Bay-Friendly Landscape guidelines” means the most recent version of guidelines developed by StopWaste.Org for use in the design, construction, and maintenance of landscapes.

C. “Bay-Friendly Landscape scorecard” means the most recent version of the scorecard developed by StopWaste.Org for the Bay-Friendly Landscape program.

D. “Bay-Friendly Landscaping” means a whole systems approach to the design, construction, and maintenance of the landscape in order to support the integrity of the San Francisco Bay watershed.

E. “Board of Appeals” means a body comprised of one or more hearing officers appointed by the City Council who are qualified by experience and training to pass upon matters pertaining to building construction and are not employees of the jurisdiction.

F. “Build It Green” is a non-profit membership organization that developed the GreenPoint Rating Systems for Residential and Mixed-Use projects in order to promote sustainable buildings.

G. “Building Official” means the Chief Building Official of the City of Union City.

H. “City-sponsored project” means any new construction, renovation, or landscaping project funded by the City or Redevelopment Agency and conducted on City- or Redevelopment Agency-owned property.

I. “Construction” means the building of any facility or structure or any portion thereof including any tenant improvements to an existing facility or structure.

J. “Covered project” shall have the meaning set forth in this chapter.

K. “Green building” means a whole systems approach to the design, construction, operation and maintenance of buildings and structures that helps mitigate the environmental, economic, and social impacts of construction, demolition, and renovation. Green building practices recognize the relationship between natural and built environments and seek to minimize the use of energy, water, and other natural resources and provide a healthy, productive indoor environment.

L. “Green Building in Alameda County” is a program developed by Stopwaste.Org that serves Alameda County Waste Management Authority’s seventeen member agencies, design and building industry professionals, and residents of Alameda County.

M. “GreenPoint Rated” is a third party rating system for homes based on a set of green building measures incorporated from Build It Green’s Green Building Guidelines and used to evaluate a home’s environmental performance.

N. “GreenPoint Rated Checklist” means the most recent version of the checklists developed by Build It Green for the GreenPoint Rated system.

O. “Historical” means any building or site deemed of importance to the history, architecture or culture of an area by an appropriate local, state or federal governmental jurisdiction, including historical buildings or properties on, or determined eligible for, national, state or local historical registers or inventories, such as the National Register of Historic Places, California Register of Historical Resources, State Historical Landmarks, State Points of Historical Interest, and City or county registers, inventories or surveys of historical or architecturally significant sites, places, or landmarks [as regulated by the California Historic Building Code \(Title 24, Part 8\)](#).

P. “LEED™” means the Leadership in Energy and Environmental Design rating system used by the United States Green Building Council.

Q. “LEED™ checklist” means the most recent version of the checklists used by the United States Green Building Council for the LEED™ rating system.

R. “LEED™ Accredited Professional” means an individual who has passed the LEED™ accreditation exam administered by the U.S. Green Building Council.

S. “Mixed-use” means a building with residential and non-residential uses.

T. “Multifamily dwelling” means a building or portion thereof designed or used as a residence for two or more families living independently of each other and doing their own cooking in the building. This definition includes two-family houses, three-family houses, four-family houses, apartment houses and apartment hotels but does not include automobile courts, trailer parks and tourist camps.

U. “Public partnership project” means any new construction or renovation project constructed on City- or Redevelopment Agency-owned land, and/or that includes funding by the City or the Redevelopment Agency, and/or is built under a Development Agreement or Disposition and Development agreement with the Redevelopment Agency.

V. “Public works projects” means construction projects such as pump stations, flood control improvements, roads, bridges, as well as traffic lights, sidewalks, bike paths, bus stops, street median projects, and associated infrastructure on City-owned and maintained property but does not include landscaping projects greater than 5,000 sq. ft.

W. “Remodel” means any change or modification to an existing building or structure, including, but not limited to, tenant improvements.

X. “Secondary dwelling” means an additional dwelling unit on a single-family lot which has kitchen, sleeping and full bathroom facilities, and a separate external access.

Y. “Single-family dwelling” means a detached building designed for or occupied by one family

Z. “Small Commercial Green Building Checklist” is a green building checklist for non-residential new construction, additions, and remodels developed by Green Building in Alameda County.

AA. “Stopwaste.Org” is the Alameda County Waste Management Authority and the Alameda County Source Reduction and Recycling Board operating as one public agency. The Alameda County Waste Management Authority is a public joint-powers agency comprised of the County of Alameda, each of the fourteen cities within the county, and two sanitary districts that provide refuse collection services. Stopwaste.Org offers many programs in the areas of public education, green building, recycled product procurement, waste reduction, and market development.

15.76.030 Applicability.

A. The following shall be considered Covered Projects for the purposes of this chapter:

1. City-sponsored and public partnership projects. City-sponsored and public partnership building projects initiated on or after the final adoption of the ordinance codified in this chapter, except as otherwise provided herein, whose estimated cost of construction is equal to or greater than three million dollars (to be adjusted annually according to the Building Cost Index published in Engineering News-Record Magazine using 2006 as a base year) and City-sponsored and public partnership landscape projects greater than five thousand square feet.

2. Privately funded projects. Privately funded construction projects, except as otherwise provided herein, for which an application for a building permit is received after January 10, 2010, or after the date the California Energy Commission and California Building Standards Commission approve the green building standards required by this Chapter, whichever date is later, consisting of:

a. Residential: New construction, additions greater than 500 square feet, ~~or and~~ remodels greater than 500 square feet.

b. Non-Residential: New construction, additions, ~~or and~~ remodels

B. The Building Official shall make the final determination as to whether any initiated project qualifies as a Covered Project.

15.76.040 Exemptions.

The provisions of this Chapter apply to Covered Projects, with the following exemptions, however, all projects must comply with the 2008 California Energy Efficiency Building Standards (Title 24, Part 6) regardless of the exemptions provided herein.

A. City-sponsored and public partnership projects:

1. Historical buildings, as defined by this chapter;
2. Permits issued exclusively for foundation repair, re-roofing, repair of fire damage, work required by termite reports, upgrades for accessibility, or other items of building or structural maintenance, as determined by the Building Official;
3. Public works projects, as defined by this chapter;
4. Projects where it can be demonstrated that complete compliance is not possible due to unusual building circumstances, subject to approval by the City Council;
5. Projects where it can be demonstrated that compliance with this Chapter is not financially feasible by either the City or the Redevelopment Agency, and that the proposed building will provide an overriding benefit to the community, subject to approval by the City Council.

B. Privately funded projects:

1. Historical buildings, as defined by this Chapter;
2. Permits issued exclusively for foundation repair, re-roofing, repair of fire damage, work required by termite reports, upgrades for accessibility, or other items of building or structural maintenance, as determined by the Building Official;
3. Projects that received Site Development Review or Administrative Site Development Review Approval prior to the effective date of the Ordinance.

15.76.050 Standards for compliance.

All Covered Projects must demonstrate compliance with 2008 California Energy Efficiency Building Standards (Title 24, Part 6) by submitting all required forms and calculations for review and approval by the Building Official.

A. City-sponsored and public partnership projects:

1. City-sponsored and public partnership buildings that are Covered Projects shall meet a minimum LEED™ Silver rating and be so certified by the US Green Building Council. These projects shall also have a LEED-Accredited Professional as a principal member of the design team. The LEED™ rating option to be used shall be the one most appropriate for the project, subject to review and approval by the Building Official.

2. City-sponsored and public partnership landscapes that are Covered Projects shall meet the most recent minimum Bay Friendly Landscape Scorecard points recommended by StopWaste.Org.

3. The Director of Public Works Department or his/her designee shall regularly review the project specifications used in bidding public works projects to include the best green building/environmental practices applicable.

4. City-sponsored and public partnership projects that are not considered Covered Projects are encouraged to:

- a. Incorporate as many green building measures as feasible from the green building rating system most appropriate for the project, if applicable.
- b. Meet as many Bay-Friendly Landscape Scorecard points as feasible, taking into account available resources and design objectives, if applicable.
- c. Provide documentation demonstrating level of compliance.

B. Privately funded Covered Projects:

1. Residential:

a. Multifamily Residential and Mixed-Use Buildings. Applicants for new multifamily residential and mixed-use Covered Projects shall submit the GreenPoint Rated checklist with their building permit application. Prior to final approval, applicants for new multifamily residential and mixed-use Covered Projects shall submit documentation demonstrating the building(s) has/have been certified through Build it Green. New landscapes shall incorporate Bay-Friendly Landscaping measures.

b. New Single-Family Dwellings and Secondary Dwellings. Applicants for new single-family and secondary dwelling Covered Projects shall submit a GreenPoint Rated checklist with their building permit application. Prior to final approval, applicants shall submit documentation demonstrating the building(s) has/have been certified through Build It Green. New landscapes shall incorporate Bay-Friendly Landscaping measures.

c. Residential Additions, or Remodels Over 500 Square Feet. Prior to building permit submittal, applicants for residential Covered Projects, consisting of remodels and/or additions greater than 500 square feet to existing single-family or multifamily dwellings, shall consult with City staff to consider the incorporation of green building measures into the project and submit a completed GreenPoint Rated Checklist with the building permit application. New landscapes shall incorporate Bay-Friendly Landscaping measures.

2. Non-Residential:

a. New Construction, Additions, or Remodels Over 1,000 Square Feet. Applicants for non-residential Covered Projects shall submit the Green Building in Alameda County Small Commercial Green Building Checklist with their building permit application. Plans submitted for building permits shall clearly show where each applicable measure has been incorporated into the project. The plan review shall verify the incorporation of applicable checklist items into the plans. The building inspection process shall verify the inclusion of these items in the construction. Final approval shall not be granted until the

incorporation of applicable checklist items is verified. New landscapes shall incorporate Bay-Friendly Landscaping measures.

b. New Construction, Additions, or Remodels Less Than 1,000 Square Feet. Prior to building permit submittal, applicants for non-residential Covered Projects, consisting of remodels and/or additions less than 1,000 square feet, shall consult with City staff to consider the incorporation of green building measures into the project and submit a completed Small Commercial Green Building Checklist with the building permit application.

3. Public Landscaping Installed by Private Development. Landscaping within private development projects to be dedicated to the City for long-term maintenance by the City shall meet the most recent minimum Bay Friendly Landscape Scorecard points and provide documentation demonstrating level of compliance prior to acceptance.

C. Determination of Compliance. The Building Official shall make the final determination as to whether a project has complied with [the 2008 California Energy Efficiency Building Standards \(Title 24, Part 6\)](#) and the requirements of this chapter.

D. Alternative Green Building Requirements. A comparable equivalent rating system may be used if the Building Official finds the proposed alternate method is satisfactory and complies with [the 2008 California Energy Efficiency Building Standards \(Title 24, Part 6\)](#) and the intent of this Chapter. The applicable systems are those in effect at the time a building permit application is filed.

[E. Nothing in this ordinance shall require the Applicant to use covered products, as defined in the federal Energy Policy and Conservation Act \(42 U.S.C. § 6201 et seq\), that exceed any applicable federal energy conservation standards for such products.](#)

15.76.060 Appeal.

Any person affected by a decision of the Building Official regarding compliance with this Chapter may appeal the decision to the Board of Appeals by filing a notice of appeal with the City Clerk. The Board of Appeals shall be comprised of one or more hearing officers appointed by the City Council. The City Clerk shall give written notice of the time and place of the hearing to the applicant. The decision of the appointed hearing officer(s) is final as to any related Appeals Board and City Council actions. [No action by the Appeals Board or the City Council shall allow the permitting of a building that does not comply with the 2008 California Energy Efficiency Building Standards \(Title 24, Part 6\).](#)