

City of Berkeley
Zoning Ordinance Steering Committee

Wednesday, November 1, 2023
6:00 p.m. – 8:30 p.m.

AGENDA

- 1. Check in (5 min)**
- 2. Review of Previous Work (15 minutes)**
 - a. Parking Minimum Requirements
- 3. Review of Draft Articles (1 hour)**
 - a. Draft Article 10 – Sign Regulations
 - b. Draft Article 12 – Landscaping and Screening
 - c. Draft Article 13 – Exterior Lighting Standards
- 4. Joint Meeting of Planning Commission & City Council (30 min)**
 - a. Discussion
 - b. Direction
- 5. Preview: Specific Use Provisions (15 min)**
 - a. Ideas
 - b. Advice
- 6. Check out (5 min)**
 - a. Community education and communication – Workshops scheduled
 - b. Joint City Council & Planning Commission meeting – November 30, 2023
 - c. Steering Committee: Questions & suggestions to staff by November 8, 2023
 - d. Staff & CWA: Materials for next meeting to Steering Committee by November 22, 2023
 - e. Next meeting date: December 6, 2023 at 6 p.m.

Decision-Making Process

The Steering Committee will make decisions by consensus, i.e., all members agree.

If consensus is not reached, CWA and staff will draft a memo to the Planning Commission, cc'd to City Council, explaining both sides of the issue. The Planning Commission would make a decision at its next meeting that would be acted upon during the Zoning Ordinance rewrite.

TO: City of Berkley Zoning Ordinance Steering Committee

FROM: Megan A. Masson-Minock, AICP
Michelle Marin

DATE: October 18, 2023

RE: November 2023 Zoning Ordinance Steering Committee Meeting

Thank you for another productive meeting earlier this month where we discussed sign regulations. At the upcoming November meeting, we would like to review the following draft Articles:

- **Article 10 – Sign Regulations:** The draft article is based on your input provided at the last two meetings, best practices, and the Downtown Design Guidelines.
- **Article 12 – Landscaping & Screening:** Since there are hardly any regulations on landscaping in the current Zoning Ordinance, we felt that it was easier to present you with a draft Article with choices detailed in this memo. The draft is based on your input at the last meeting, the Downtown Design Guidelines and standard language we use in landscaping articles.
- **Article 13 – Exterior Lighting Standards:** These regulations are fairly straightforward, and we felt it was simpler and more efficient to present any changes as part of a draft article. The draft is based on your input at the last meeting and best practices.

Review of Previous Work

At the previous meeting, we were asked to research minimum parking requirements for medical spas and multiple-family dwellings and to create a diagram showing the impact of a parking lot depth of 18 as opposed to 20 feet. The results are below:

Medical Spas

Medical spas have dissimilar trip generation from day spas. Their trip generation more closely mirrors medical office uses. Several communities define “cosmetic spa” or “medical spa” as a use group, but none that we found offer unique parking requirements for these uses. The minimum parking requirements instead relied on parking requirements for similar uses:

- Beverly Hills, CA: 1 space per 350 sq. ft. of floor area (medical offices).
- Greenwich, CT: 1 space per 250 sq. ft. of usable floor area (commercial uses).

We recommend that any uses incorporating a medical use, such as a medical spa, use the medical office minimum parking requirements.

Multiple-Family Dwellings

The parking standards for multiple-family uses in Ferndale, Birmingham, Southfield, and Oak Park are on the following page:

Ferndale:

Dwelling, multifamily	2 spaces per unit
Dwelling, multifamily in UR (urban residential) or CC (city center) zone	Studio apartment: 1 space per unit One-bedroom apartment: 1.5 spaces per unit Multifamily dwellings with 2 or more bedrooms: 1.5 spaces per unit

Birmingham:

Residential Uses in R8 – Attached single family residential district	
residential occupancy	2 spaces per unit
Residential Uses in B2, B2B, B3 and MX – general business, office-residential, and mixed use districts	
residential occupancy - 2 or less room unit	1 spaces per unit
residential occupancy - 3 or more room unit	1.25 spaces per unit
Residential Uses in B4 – business-residential district	
residential occupancy - 2 or less room unit	1.25 spaces per unit
residential occupancy - 3 or more room unit	1.5 spaces per unit
Residential Uses in PP, R1A, R1, R2, R3, R4, R5, R6, R7, O1, O2, P and B1 – single-family residential office, parking, public property, and neighborhood business districts	
residential occupancy - 2 or less room unit	1.5 spaces per unit
residential occupancy - 3 or more room unit	2 spaces per unit

Southfield:

- 1.5 parking spaces per dwelling units when 2 bedrooms or less
- 2.0 parking spaces per dwelling units when 3 bedrooms or more. + 1 space per employee max. shift

Oak Park:

- 1.5 spaces per dwelling unit in any strictly multiple family building
- 1 space per unit in any mixed use multiple family building

Impact of Reduction of Parking Space Length

At the last meeting, the Steering Committee discussed at length whether the parking lot length should be reduced from 20 feet to 18 feet. Many communities have reduced the parking lot length in order to minimize impervious surface. The graphic on the next page shows the Oxford parking lot recently developed as part of the consent judgement for Vinsetta Garage, per the approved site plan (upper image) and with 18 foot long parking stalls. The graphic shows increased space for landscaping along the southern and northern property lines in the scenario with 18 foot long parking stalls.

Please come prepared to discuss the following items regarding parking:

- *Should a different minimum parking standard other than medical office be used for unanticipated uses with a medical component?*
- *What should the minimum parking requirement be for multiple-family dwellings?*
- *Should the minimum length of a parking space be 18 feet or 20 feet?*

Review of Draft Articles

In each sub-section below, we have included a table with current requirements and our recommended changes as well as discussion questions.

Draft Article 10 -Sign Regulations

Current Sign Requirements	CWA Recommended Changes
<ul style="list-style-type: none"> ● Lean “purpose” section. Article in general code of ordinances. ● Tables to regulate by each sign type. ● Frequent content-based regulations. ● Regulations for illuminated signs differ by sign type: awning, external illumination, LED message, neon. 	<ul style="list-style-type: none"> ● Robust “intent” section to be consistent with other ZO articles. ● Reorganization to minimize the number of tables, reduce redundancies, and simplify some dimensional regulations to offer more consistency. Permanent signs split into two tables: freestanding and building mounted. ● Removal of all content-based regulations. ● Design section added to include recommendations from the Downtown Design Guidelines that are possible to regulate ● Illumination section was retooled to offer consistent requirements across all illuminated sign types and use best practices for modern technology. ● Pole mounted signs permitted at low heights in all but the R-1 and R-2 districts to reflect Downtown Design Guidelines. ● The sign copy for nonconforming signs may change.

Please come prepared to discuss:

- *Does the draft Article allow for the creation and preservation of the best signs in Berkley?*
- *Is Table 10.07 – Permitted Signs helpful or should this information be incorporated into the subsequent sections?*
- *Should electronic message signs be allowed?*
- *What regulations are too restrictive?*
- *What have we missed?*

Draft Article 12 - Landscaping & Screening

Current Landscaping Requirements	CWA Recommended Changes
<ul style="list-style-type: none"> ● Separate chapter of City Code, not within ZO ● Tree survey and protection plan required as part of site plan ● Tree replacement calculations dictate that the DBH of a removed tree determines the number of replacement trees required ● No integration of stormwater management 	<ul style="list-style-type: none"> ● Create Landscaping & Screening ZO article ● Landscaping requirements for screening between land uses, parking lots, general site landscaping, and along streets ● Tree replacement calculations include the size of the required replacement trees in addition to the number ● Stormwater management practices integrated to reflect Downtown Design Guidelines and Master Plan

Please come prepared to discuss:

- *In Section 12.05.B, we have used the screening in the Downtown Design Guidelines. Is this appropriate? If so, should a numerical value be attached, such as lot depth?*
- *In Section 12.07, an additional 5% of the site area is required to be landscaped with a list of options to meet that requirement. Should that percentage be higher for certain uses or zoning districts?*
- *Section 12.09 is modeled after the City of Dexter's requirements. Are these too restrictive?*
- *What regulations are too restrictive?*
- *What have we missed?*

Draft Article 13 - Exterior Lighting Standards

Current Lighting Requirements	CWA Recommended Changes
<ul style="list-style-type: none"> ● Luminaires shall shield the source of glare above 72 degrees from the vertical ● The level of lighting must not exceed 0.0 footcandles at any residential property line or 1.0 footcandles at any nonresidential property line. ● Dimming: lights must be turned off or reduced to no more than 0.5 footcandles in lighting intensity between 11:00 p.m. and sunrise 	<ul style="list-style-type: none"> ● Lighting under canopies must be recessed or full cutoff luminaires aimed straight down ● Illumination for uses adjacent to residentially zoned or used property must not exceed 0.5 footcandles at ground level along common property lines. Lighting for uses adjacent to nonresidential properties must not exceed 1.0 footcandles at property lines. This reflects the Downtown Design Guidelines. ● A light color standard not to exceed 3500 Kelvin. ● Dimming: must be reduced to at least fifty (50%) percent of the light level at full illumination one (1) hour after closing. ● Design and/or screening of the development must ensure that glare from automobile and commercial or industrial vehicle headlights must not be directed

Current Lighting Requirements	CWA Recommended Changes
	into any adjacent property, including residential property


Please come prepared to discuss the following:

- *What regulations are too restrictive?*
- *What have we missed?*

Thank you for your time and contributions. We look forward to meeting with you on November 1st, 6 - 8:30 p.m.! Should you have any questions, please do not hesitate to contact us.



CARLISLE/WORTMAN ASSOC., INC
Megan Masson-Minock, AICP
Principal



CARLISLE/WORTMAN ASSOC., INC.
Michelle Marin
Community Planner

Article 10

SIGN REGULATIONS

Section 10.01 INTENT

- A. The intent of this Ordinance is to regulate the location, size, construction, and manner of display of signs and outdoor advertising in order to minimize their harmful effects on public health, safety and welfare. While this Ordinance recognizes that signs and outdoor advertising are necessary to satisfy the needs of sign users for adequate identification and communication, failure to regulate them may lead to poor identification of individual businesses, deterioration and blight of the business and residential areas of the City, conflicts between different types of land use, reduction in traffic safety to pedestrians and motorists, and other impacts that are contrary to the purposes, intent, and interests identified in this section.
- B. The following municipal interests are considered by the City to be compelling government interests. Each interest is intended to be achieved under this Ordinance in a manner that represents the least restrictive means of accomplishing the stated interest, and in all events is intended to promote an important government interest that would not be effectively achieved absent the regulations in this Ordinance. Regulating the location, size, construction, and manner of display of signage in the most narrowly tailored manner represents the least restrictive means of addressing the targeted government interests of avoiding unsafe and nuisance-like conditions while maintaining and improving pedestrian and vehicular safety and efficiency; character and quality of life; economic development and property values; property identification for emergency response and wayfinding purposes; and unique character of areas of the City.
1. **Public Safety.** Maintaining pedestrian and vehicular safety are predominant and compelling government interests throughout the City, with particular emphasis on the safety of pedestrians. The safety path and sidewalk network provide facilities for pedestrians situated between vehicular roads and private properties throughout the City in areas of the City without sidewalks or safety paths, pedestrians typically travel along the edge of the roadways.

Since most signage on the private properties is intended and designed to attract the attention of operators of motor vehicles, thereby creating distractions that can jeopardize traffic and pedestrian safety, this ordinance is intended to regulate signs so as to reduce such distractions and, in turn, reduce the risk of crashes, property damage, injuries, and fatalities, particularly considering the rate of speed at which the vehicles are traveling in the districts identified in this article.

This Ordinance is also intended to protect public safety by requiring signs that are poorly maintained and/or structurally unsafe to be repaired or removed to protect against fallen signs or deteriorating sign debris from entering improved roadways, sidewalks and safety paths and causing dangerous conditions for vehicular traffic and pedestrians.

- a. The City encourages signage that will inform motorists and pedestrians of their desired destinations without conflicting with other structures and improvements. These interests are legitimately supported by limiting the maximum size of signage, providing setbacks, and specifying minimum-sized characters for efficient perception by motorists and pedestrians, while minimizing distractions that could put pedestrians at risk.
- b. In some circumstances, adjusting the size, setback, and other regulations applicable to signage may be important to avoid confusion and promote clarity where vehicular speeds vary on commercial/business thoroughfares.
- c. In multi-tenant buildings and centers, it is compelling and important to provide distinct treatment with a gradation of regulation for individual identification depending on base sign size, amount of road frontage, and the like, all intending to provide clarity to alleviate confusion and thus additional traffic maneuvers, provide a minimum size of characters to allow identification, and maintain maximum-sized overall signage to prevent line-of-sight issues.
- d. Maximum size and minimum setback of signage is compelling and important to maintain clear views for both traffic and pedestrian purposes.

2. **Character and Quality of Life.** Achieving and maintaining attractive, orderly, and desirable places to conduct business, celebrate civic events, entertain people, and provide for housing opportunities is directly related to the stability of property values needed to provide and finance quality public services and facilities within the City. This Ordinance intends to allow signs that are of sufficient, but not excessive, size to perform their intended function as necessary to provide and maintain the City's character and support neighborhood stability. Signs that contribute to the visual clutter, contribute to the potential conflict between vehicular and pedestrian traffic, and distract from scenic resources and views, will be prohibited in efforts to preserve the character, aesthetic qualities and unique experience within the City. It is also the intent of this Ordinance that signs will reflect the character of unique districts as may be established by the City's Master Plan, other adopted plans, the Zoning Ordinance, or this Ordinance.
3. **Economic Development and Property Values.** The establishment of the restrictions in this Ordinance has a direct relationship to creating stability and predictability, allowing each private interest to secure reasonable exposure of signage, and thus promoting business success. The application of the restrictions in this Ordinance allows businesses to reasonably command attention to the content and substance of their messages while concurrently allowing the promotion of other visual assets, including (without limitation) landscaping and architecture, all of which contribute to economic development and property value enhancement.
4. **Avoidance of Nuisance-Like Conditions.** Due to the concentration of people and activities, there is a potential for, and it is a compelling interest to avoid, blight, physical clutter, and visual clutter in the City. The result of these conditions leads to diminished property values, reduced attractiveness of the community, and reduced quality of life within the districts. Minimum regulations that substantially relate to signage are important and necessary for the maintenance and well-being of positive conditions, good character and quality of life in the City. Ultimately, these regulations are compelling and important for the protection of all police power values.

- a. An excessive number of signs in one location creates visual blight and clutter, as well as confusion for the public. Thus, limiting the number of signs on properties, establishing setbacks from property lines, and requiring reasonable spacing between signs are compelling interests that can be directed with minimum regulation.
 - b. Signs that are too large can lead to confusion, undermine the purposes of the signs, and ultimately lead to physical and visual clutter. Establishing maximum sizes can be the subject of clear and effective regulations that address this compelling and important interest.
 - c. Requiring maintenance specifications for signs can minimize the creation of blight and clutter due to the deterioration of signs that are not durable or otherwise well-constructed, and such regulations would be consistent with construction codes for other structures.
 - d. There is a compelling governmental interest that signs avoid glare, light trespass, safety, and skyglow. The selection of proper fixture type(s) and location, use of supportive lighting technology, and control of light levels in a reasonable fashion is consistent with regulations that are narrowly tailored to achieve the City's interests.
5. ***Property Identification for Emergency Response and Wayfinding Purposes.*** Locating a business or residence by police, fire, and other emergency responders can be a matter of life and death, and thus it is a compelling interest to ensure that proper, understandable, unambiguous, and coordinated signage be permitted and required, and specifications for such purposes can be accomplished in a simple and narrow manner. Wayfinding for vehicular and pedestrian purposes is also a compelling interest to avoid confusion in public rights-of-way, and unnecessary intrusions on private property. Sign specifications for such wayfinding can be coordinated with property identification for such emergency and other purposes.
6. ***Maintaining Unique Character of Areas of the City.*** Acknowledge the unique character of certain areas and districts, and establish special time, place and manner regulations that reflect the unique aesthetic, historical, and/or cultural characteristics of these areas/districts.

7. **Protection of the Right to Receive and Convey Messages.** The important governmental interests and regulations contained in this Ordinance are not intended to target the content of messages to be displayed on signs, but instead seek to achieve *non-speech* objectives. In no respect do the regulations of signage prohibit a property owner or occupant from an effective means of conveying the desired message. Nothing in this Ordinance is intended to prohibit the right to convey and receive messages, specifically noncommercial messages such as religious, political, economic, social, philosophical, or other types of speech protected by the First Amendment of the United States Constitution.

Section 10.02 SIGN COMPUTATION

- A. **Sign area.** The area of a sign face shall be considered the smallest square, circle, rectangle, triangle, or combination of these that encompass the extreme limits of the writing, representation, emblem, or other display that forms an integral part of the background of the sign. The sign face shall not include any supporting framework. In the case of awning signs, all three sides of the awning shall be considered one sign face.
- B. **Height.** The height of a sign shall be computed as the distance from the base of the sign at ground level to the top of the highest attached component of the sign.

Section 10.03 EXEMPT SIGNS

- A. The following signs are permitted in all districts and are generally exempt from the regulations of the ordinance from which this article was derived.
 1. Any public notice or warning required by a valid and applicable federal, state, or local law, regulation, or ordinance.
 2. Any sign inside a building that is not attached to a window or door and is not legible from a distance of more than three feet beyond the building that such sign is located.

3. Signs mounted to a wall, mailbox, or lamppost not exceeding two (2) square feet in size, located on single family residential structures only.
 4. Flags.
- B. The following signs are permitted in non-residential districts and are generally exempt from the regulations of the ordinance from which this chapter was derived.
1. Banners, not exceeding six square feet, one per location.
 2. Barber poles, not exceeding 12 inches in diameter and eight feet in height.
 3. Fuel pumps.
 4. Time/temperature signs, not exceeding twenty (20) square feet, one per location.
 5. Vehicle signs.
 6. Window signs, not exceeding twenty-five (25) percent of glass.

Section 10.04 PROHIBITED SIGNS

All signs not expressly permitted under the ordinance from which this article was derived, or exempt from regulation in accordance with Section 10.03 are prohibited. Prohibited signs shall include, but not be limited to:

- A. Off-premises advertising signs.
- B. Animated signs.
- C. Electronic messaging signs.
- D. Banners, exceeding six square feet.
- E. Beacons.
- F. Pennants.
- G. Signs that mimic official traffic control signs and devices.
- H. Illuminated signs that shine light directly onto traffic or that shine directly onto adjacent property.
- I. Illuminated signs that have blank sign faces.

- J. Sign support structures that do not support a sign or sign face.
- K. Sign support structures that no longer support a permitted sign.
- L. Any sign unlawfully installed, erected, or maintained.
- M. Signs installed in the public right-of-way without a permit.

Section 10.05 GENERAL STANDARDS

- A. **Safety.** All signs shall meet the following requirements:
 - 1. All signs shall be erected and maintained in compliance with all applicable state construction codes, and other applicable ordinances governing construction within the City. In the event of conflict between this Ordinance and other laws, the most restrictive shall govern.
 - 2. All signs shall be placed so as to not interfere with the visibility or effectiveness of any official traffic sign or signal; driver vision at any access point or intersection; or, pedestrian movement on any public sidewalk or safety path. No signs shall be erected or maintained which imitate, or may be confused with or construed as, an official traffic sign, signal or device, in size, color, lettering, or design any traffic sign or signal or other word, phrase, symbol, or character in such manner as to interfere with, mislead, confuse or create a visual impediment or safety hazard to pedestrian or vehicular traffic.
 - 3. No sign shall be established or maintained on any parcel that will cause a traffic hazard by obstructing the view of drivers. Signage must also comply with the requirements of the Road Commission for Oakland County. No sign shall be located within, project into or overhang a public right-of-way, except as otherwise permitted herein.
 - 4. No sign shall be erected, relocated, or maintained so as to obstruct fire fighting or prevent free access to any door, window, or fire escape.
 - 5. Within all non-residential zoning districts, the street address shall be displayed either on the building or premises in a manner that is observable to public safety services from the street or road to which the address refers. Up to four (4) square feet of the area devoted to the street address shall not be included in the allowable sign area.

- B. Framework.** All signs shall be designed so that the supporting framework, other than the supporting poles on a freestanding sign, is contained within or behind the face of the sign or within the building to which it is attached so as to be totally screened from view.
- C. Illumination.** All signs which have illumination must meet the following standards:
1. **General Requirements.** If illumination is proposed, signs shall be illuminated only by steady, stationary, shielded electrical light sources directed solely at the sign, or internal to it. All external lighting fixtures used to illuminate a sign shall be shielded to direct light towards the sign.
 2. **Traffic Hazards.** Sign illumination that could distract motorists or otherwise create a traffic hazard shall be prohibited.
 3. The illumination of all signs shall not exceed 0.3 footcandles above ambient light levels based upon illumination measurement criteria set forth in Table 10.05.

Table 10.05	
Sign Area Versus Light Measurement Distance	
Area of Sign (Sq. ft.)	Light Measurement Distance (ft.)
10	32
15	39
20	45
25	50
30	55
35	59
40	63
45	67
50	71
*For signs with an area in square feet other than those specifically listed in this table (e.g., 12 sq. Ft., 400 sq. Ft., etc.), the measurement distance may be calculated with the following formula: Measurement Distance = $\sqrt{\text{Area of Sign Sq. Ft.} \times 100}$	

Section 10.07 PERMITTED SIGNS

Table 10.07 below indicates the zoning district or corridor where certain sign types are permitted. Regulations for specific sign types are in sections 10.08, 10.09, and 10.10.

Table 10.07								
District/ Corridor	Awning	Monument	Pole	Pylon	Projecting	Roof	Wall	Portable
R-1 LL & SL		Permitted						
R-2		Permitted						
R-M & R-M-H		Permitted	Permitted					
Community Centerpiece		Permitted	Permitted				Permitted	
RC: <i>Greenfield</i>		Permitted	Permitted		Permitted		Permitted	Permitted
RC: <i>11 Mile</i>		Permitted	Permitted	Permitted	Permitted		Permitted	Permitted
Downtown	Permitted	Permitted	Permitted	Permitted	Permitted		Permitted	Permitted
Woodward	Permitted	Permitted	Permitted	Permitted	Permitted	Permitted	Permitted	Permitted
Gateway Corridor	Permitted	Permitted	Permitted	Permitted	Permitted	Permitted	Permitted	Permitted
Flex	Permitted	Permitted	Permitted	Permitted	Permitted		Permitted	Permitted
Cemetery	Permitted	Permitted		Permitted			Permitted	

Section 10.08 PERMANENT SIGNS

Permanent signs are to be designated as either freestanding signs or building mounted signs. Freestanding signs include monument signs, pole signs, and pylon signs.

All permanent freestanding signs must comply with the following regulations.

Table 10.08 A				
Regulations for freestanding signs by zoning district or corridor				
District/ Corridor	Minimum Setback (ft)	Maximum Height (ft)	Maximum Area Per Side (sq. ft.)	Number of permitted signs per business
R-1 LL & SL	3	3.5	15	1
R-2	3	3.5	15	1
R-M & R-M-H	3	7 5 ft for pole signs	40	1
Community Centerpiece	3	7 5 ft for pole signs	50	1

Table 10.08 A				
Regulations for freestanding signs by zoning district or corridor				
District/ Corridor	Minimum Setback (ft)	Maximum Height (ft)	Maximum Area Per Side (sq. ft.)	Number of permitted signs per business
RC: Greenfield	3	7 5 ft for pole signs	15	1
RC: 11 Mile		7 5 ft for pole signs	40	1
Downtown	3	10 ft for pylon signs 5 ft for pole signs 7 feet for monument	40	1 None if the lot is less than 50' in width and/or the building is less than 10' from the ROW
Gateway Corridor	3	10 ft for pylon signs 5 ft for pole signs 7 feet for monument	40	1 None if the lot is less than 50' in width and/or the building is less than 10' from the ROW
Woodward	3	20 ft for pole signs 10 ft for pylon signs 7 feet for monument	50	1
Flex	3	10 ft for pylon signs 5 ft for pole signs 7 feet for monument	40	1
Cemetery	3	10 ft for pylon signs 5 ft for pole signs 7 feet for monument	50	1

Building mounted signs include awning signs, projecting signs, roof signs, and wall signs. All permanent building mounted signs must comply with the following regulations.

Table 10.08 B			
Regulations for building mounted signs by zoning district or corridor			
District/Corridor	Maximum Area Per Side (sq. ft.)	Number of permitted signs per business	Additional regulations
R-1 LL & SL	6 sq. ft.	1	Projecting and awning signs vertical clearance from ground level: 8 ft
R-2	6 sq. ft.	1	
R-M & R-M-H	10% of adjoining wall	1	
Community Centerpiece	10% of adjoining wall	1	Projecting and awning signs max projection into ROW: 5 ft
RC: Greenfield	10% of adjoining wall	1	
RC: 11 Mile	10% of adjoining wall	1	Roof sign max height: no higher than roof structure
Downtown	10% of adjoining wall	1	
Gateway	10% of adjoining wall	1	
Woodward	10% of adjoining wall	1	
Flex	10% of adjoining wall	1	Signs may not obscure windows, molding or other architectural details
Cemetery	50 sq. ft.	1	

Section 10.09 TEMPORARY AND PORTABLE SIGNS

A. Temporary Signs in Non-Residential Districts.

1. All temporary signs in non-residential districts are subject to the regulations in Table 10.09A below:

Table 10.09A			
Type of Sign	Ground	Banner	Portable
Maximum Number per Business	1	1	1
Maximum Height	6 feet	6 feet, if ground mounted Height of building facing the street on which the sign is located if wall-mounted	3.5 feet
Maximum Sign Area (per side)	20 sq. ft.	20 sq. ft.	6 sq. ft.
Minimum Setback from R-O-W	15 feet	15 feet	
Illumination Allowed	No	No	No
Permit Needed	No	No	No

2. **Requirements for Portable Signs:** Portable signs may be allowed when the following standards are met:
- a. Signs are placed at public entrances to businesses, on either private property or the public sidewalk. For businesses with front and rear customer entrances, or frontages on two streets, one sandwich sign may be permitted at the second entrance.
 - b. No sign shall be placed within a distance of ten (10) feet from any fire hydrant, or twenty-five (25) feet from any intersection.
 - c. The sign must be placed at least five feet from the curb. A clear path of five (5) feet of pedestrian passage must be maintained at all times.
 - d. Each sign shall be placed outside only during the hours when the business is open to the general public and shall be stored indoors at all other times.
 - e. Portable signs on wheels are prohibited.

B. **Temporary Signs in Residential Districts.** All temporary signs in residential districts are subject to the regulations in the table below:

Table 10.09B			
Land Use	Single Family Homes	Non-Residential Uses	Special Event for Non-residential Use
Type(s) Allowed	Ground	Ground or banner	Ground or banner
Maximum Number per Parcel	4	1	1
Maximum Height	4 feet		
Maximum Sign Area	6 sq. ft. R-1 & R-2 10 sq. ft. R-M and R-M-H	25 sq. ft. for banners, 16 sq. ft. for ground signs	25 sq. ft. for banners, 16 sq. ft. for ground signs
Minimum Setback	15 feet from all property lines		
Illumination Allowed	No	No	No
Permit Needed	No	No	Yes

C. Standards for All Temporary Signs.

1. Temporary signs shall be constructed of durable, all-weather materials and designed to remain in place and in good repair so long as they remain on display.
2. The maximum display time of temporary signs is thirty (30) days unless additional time is granted under subsection 3 or 4 below. After this time expires, the sign shall be removed. Once the temporary sign is removed, there shall be a gap of at least thirty (30) days between display of a temporary sign on the same property.
3. In recognition that there is a need for additional expression of speech prior to a scheduled election, the following applies for a period of thirty (30) days prior to until three (3) days after a City-designated election day on which there is at least one ballot item: the maximum allowable area of temporary signs shall be increased to sixty-four (64) square feet in all districts. The maximum area of an individual sign remains as stated in the table above during this period.
4. When all or a portion of a building or land area is listed for lease, the maximum display time of freestanding temporary signs and temporary signs mounted on buildings shall be ninety (90) days. When all or a portion of a building or land area is listed for sale, the maximum display time of freestanding temporary signs for all uses and temporary signs mounted on buildings for all uses except residential uses shall be the duration the building, building unit or land is listed for sale.
5. Display of temporary banners and temporary signs mounted on building walls (temporary wall signs) shall be limited to a total of twenty-eight (28) days per calendar year. Such signs shall not be displayed for any continuous period greater than fourteen (14) days.

Section 10.10 DESIGN, CONSTRUCTION, AND MAINTENANCE REQUIREMENTS

- A. **Location.** Building mounted signs should not obscure windows, moldings, or other architectural details of a building.

- B. **Character.** Signs must be designed to be subordinate to the overall building composition and feature simple design character. Fluorescent colors are not permitted. No more than three (3) colors are permitted on a single sign. A sign's lettering should be easy to read. Contrasting and/or complementary colors should be utilized to increase a sign's readability.
- C. **Materials.** Sign materials should be compatible with a building façade. Permanent durable materials are preferred, including glass, plastic with a matte finish, wood, metal, fabric, stone, or concrete. Highly reflective materials should be avoided.
- D. Building mounted signs for businesses in the Downtown and Corridor Zoning Districts that share the same building should be aligned with one another.

Section 10.11 NONCONFORMING SIGNS

No nonconforming sign or its support structure:

- A. Shall be replaced by another nonconforming sign;
- B. Shall be structurally altered so as to prolong the life of the sign or so as to change the shape, size, type, or design of the sign;
- C. Shall be reestablished after the activity, business, or usage to which it relates has been discontinued for ninety (90) days or longer;
- D. Shall be reestablished after damage or destruction if the estimated expense of reconstruction exceeds thirty-five (35) percent of the appraised replacement cost.

The words or symbols used or the message displayed on a nonconforming sign, or its support structure may be replaced as long as the nonconformity is not increased.

Article 12

LANDSCAPING AND SCREENING

SECTION 12.01 INTENT

The intent of this section is to promote public health, safety, and welfare and the visual appearance and character of the City by requiring landscaping and/or screening for each development for which site plan and subdivision plat review is required. It is further the intent of this section to achieve the following:

- A. Minimize noise, air, and visual pollution.
- B. Improve the overall aesthetics and appearance, divide the expanse of pavement, and define parking areas and vehicular circulation within off-street parking lots and other vehicular use areas.
- C. Require buffering of residential areas from more intense land uses and public road rights-of-way.
- D. Prevent soil erosion depletion and promote subsurface water retention.
- E. Encourage an appropriate mixture of plant material, such as evergreen and deciduous trees and shrubs, to protect against insect and disease infestation and produce a more aesthetic and cohesive design.
- F. Promote the integration of existing trees and vegetation in landscape plans.

SECTION 12.02 APPLICATION OF REQUIREMENTS

These requirements must apply to all uses for which site plan review is required in Article 14. No site plan may be approved unless a landscape plan is provided that meets the requirements set forth herein.

SECTION 12.03 LANDSCAPE PLAN REQUIREMENTS

A separate landscape plan must be prepared by a landscape architect registered in the State of Michigan. The landscape plan must be submitted in conjunction with the review of a site plan. The landscape plan must demonstrate that all requirements of this section are met, include the landscape plan requirements in Section 14.06.F, as well as, but not necessarily be limited to, the following items:

- A. The location, spacing, size (caliper), and root type (bare root, balled and/or burlapped) and

descriptions for each plant type, including grass and ground cover, to be used within the required landscape area.

- B. A minimum scale of one (1) inch equals thirty (30) feet for property less than one (1) acre or one (1) inch equals fifty (50) feet for property greater than one (1) acre.
- C. Existing and proposed grades on site and fifty (50) feet beyond the site at intervals not to exceed two (2) feet.
- D. Height and type of construction of fences and walls, including footings, and typical straight cross section including slope, height, and width of berms and type of ground cover.
- E. Construction details to resolve specific site conditions, such as tree wells to preserve existing trees or culverts to maintain natural drainage patterns.
- F. Details in either text or drawing form to ensure proper installation and establishment of proposed plant materials.
- G. Identification of existing trees and vegetative cover to be preserved.
- H. Demonstration that the Clear Vision requirements set forth in Section 14.03 are met.
- I. Identification of landscape maintenance program including a statement that all diseased, damaged, or dead materials must be replaced in accordance with the standards of this Ordinance.

SECTION 12.04 SCREENING BETWEEN LAND USES

Transitions between neighborhoods are required to ensure compatibility between new or redeveloping commercial or mixed uses and adjacent low-scale residential neighborhoods.

- A. Buffering between commercial or mixed uses and single-family residential uses shall be achieved by a wall, decorative fencing, a landscaped screen barrier, a planting strip, and/or landscape berm as determined by the Planning Commission.
- B. A screening wall or decorative fencing must be a minimum of six (6) feet in height as measured on the side of the proposed wall having the higher grade. A required wall must be located on the lot line except where underground utilities interfere and except in instances where conformity with front yard setback is required. Upon review of the landscape plan, the Planning Commission may approve an alternate location for a wall.
- C. The following screening requirements apply to commercial and multiple-family residential properties. When calculating the required number of trees and shrubs, round up to the

nearest whole number.

Table 12.04						
Subject property		When adjacent to these land uses				
		Single Family Residential	Multiple Family Residential	Office/Retail /Institutional	Industrial	Automotive
	Single Family Residential					
	Multiple Family Residential	Screen 1	Screen 1	Screen 1	Screen 1	Screen 1
	Office / Retail / Institutional / Service	Screen 2	Screen 2			
	Automotive	Screen 3	Screen 3	Screen 3		
	Industrial	Screen 3	Screen 3	Screen 3		

Screen One: 1 ornamental AND 1 evergreen tree every forty (40) lineal feet along the property line.

Screen Two: 1 ornamental OR 1 evergreen tree AND seven (7) upright shrubs per each thirty (30) lineal feet along the property line

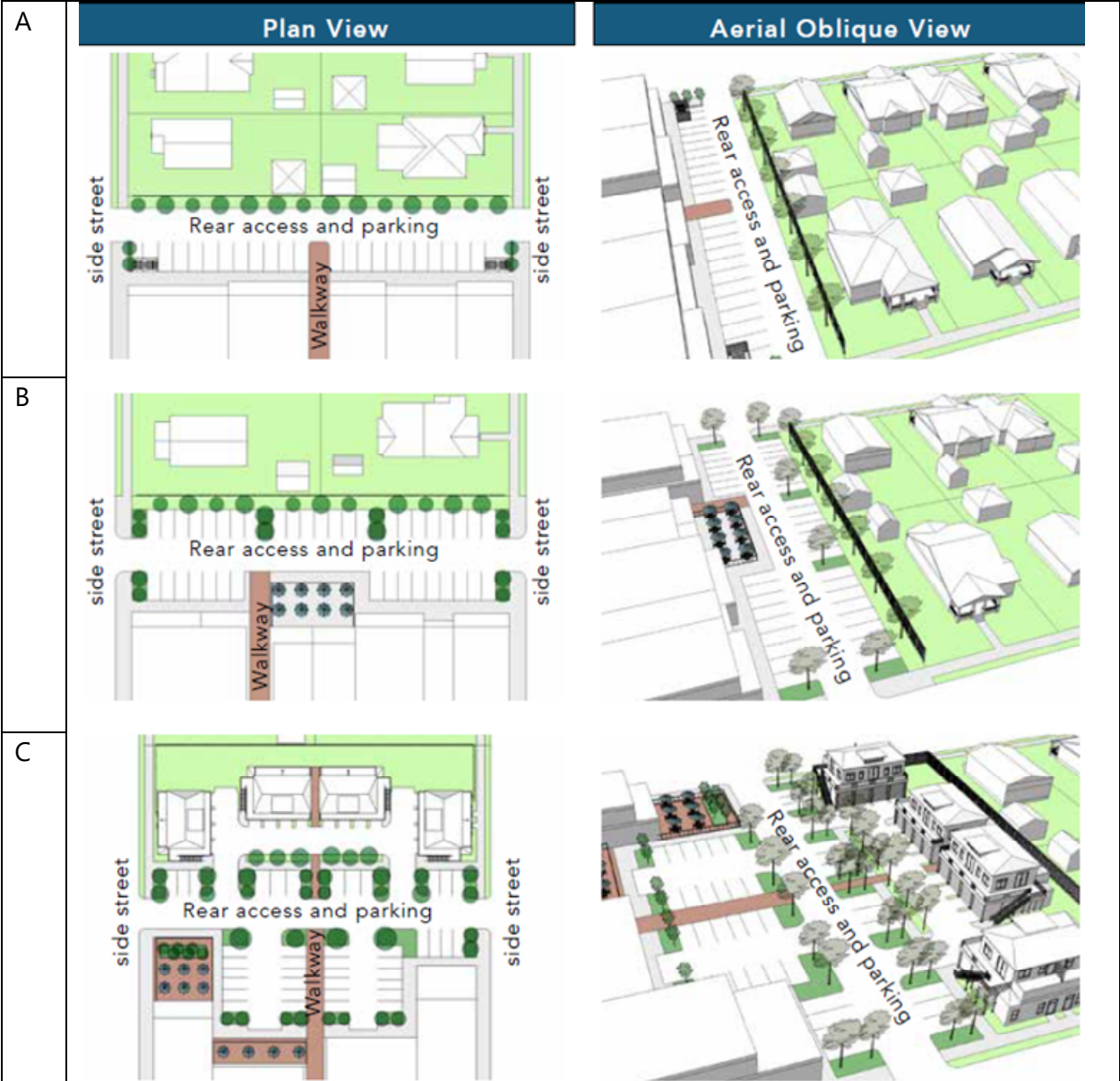
Screen Three: 1 ornamental AND 1 evergreen tree AND 4 upright shrubs per each thirty (30) lineal feet along the property line.

SECTION 12.05 PARKING LOT LANDSCAPING

A. **Required landscaping within parking lots.** Separate landscape areas must be provided within parking lots that break up the broad expanse of pavement, guide the circulation of vehicular and pedestrian traffic, and moderate the changes to the micro-climate that results from additional pavement. The following requirements must be met:

1. There must be a minimum of one (1) tree for every eight (8) parking spaces.
2. Landscaping must be arranged in curbed islands within the parking lot which must not be less than fifty (50) square feet in area.
3. A minimum distance of three (3) feet from the backside of the curb and the proposed landscape plantings must be provided. Where vehicles overhang a landscape island or strip, a minimum distance of five (5) feet from the backside of the curb and the proposed landscape plantings must be provided.

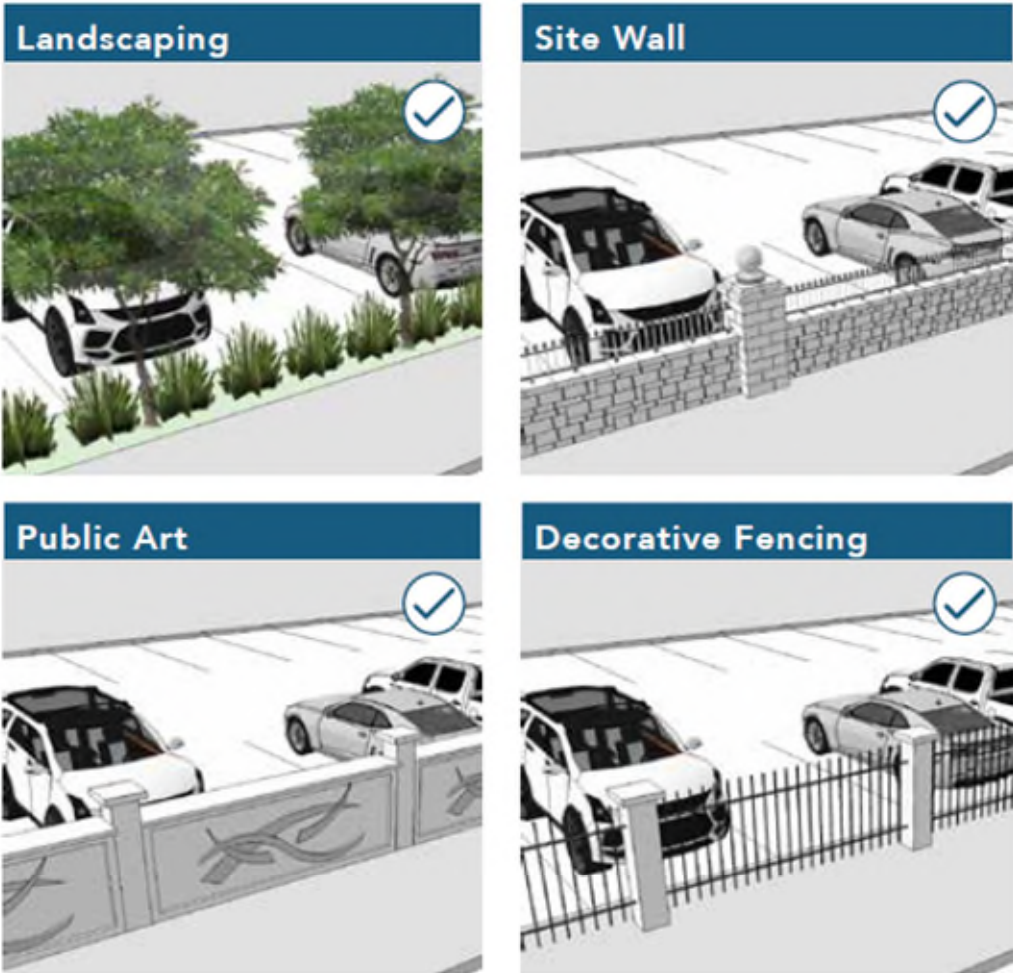
B. Where a parking lot in a Site Design Based Corridor District abuts a low-scale residential neighborhood or single-family land uses, the screening requirements depend on the site type, as indicated below.



C. **Landscaping at the perimeter of parking lots.** No parking shall be permitted between the building and the street. All off-street parking areas shall be screened or buffered in a matter that separates the parking areas as seen from the public right-of-way. A minimum six (6) foot-wide buffer between the parking lot and street right-of-way or sidewalk shall be shown. The buffer shall include one (1) or combinations of the following:

- 1. Landscaping (minimum 1 tree and 10 shrubs every 40 feet)
- 2. Masonry screening wall (30 inches high)
- 3. Public art or various possible building materials (30 inches high)

4. Decorative metal fencing (30 inches high)



The Planning Commission, at its discretion, may approve alternative landscape plantings at the perimeter of parking lots where landscaping within parking lots would be impractical due to the size of the parking lot or detrimental to safe and efficient traffic flow, or would create an unreasonable burden for maintenance and snowplowing.

- D. Parking areas adjacent to a sidewalk must include sidewalk landscaping.
- E. Buildings set back from the sidewalk’s edge must include streetscape landscaping.
- F. Landscaped curb extensions must be installed at intersections.

Section 12.06 REQUIRED STREET TREE GREENBELT PLANTING

The frontage of all public or private streets for any new or altered use which requires site plan review must be landscaped with street trees as follows:

- A. **Location.** The street trees must be centered between the sidewalk and the back of the street

curb. Planning Commission may grant a waiver of this condition with a finding that utilities necessitate a different location, or that the proposed location of the trees will align with already-established street trees along the same block face, provided that said existing trees are to remain. Trees should be planted at roughly even intervals.

- B. **Quantity.** A minimum of one (1) tree for every thirty (30) lineal feet of frontage, inclusive of proposed or existing access drives. Existing trees in good health to be preserved may count towards the street tree requirements.
- C. **Planting Area Size.** Tree pits provided for street trees must be sufficient for the species of tree provided. Where no sufficient planting bed exists or can be provided for street trees within the right-of-way, the applicant may choose to either plant and maintain the required trees within the front yard; or to provide a fee in lieu of planting in the amount of one hundred (100%) percent of the materials and installation cost.
- D. **Placement and Utilities.** Street trees shall not be planted within six (6) feet of water or sewer lines and shall not interfere with overhead utility lines or underground utilities. Consideration should be given to the mature size and height of the tree when evaluating placement and species selection near utilities, both underground and overhead.
- E. **Required Species.** Street trees must be deciduous trees. Non-deciduous conifers/evergreens are not permitted to be used as road trees since they interfere with visibility, pedestrian safety, and vehicular circulation.
- F. **Recommended Species.** Native species are generally preferred. Canopy trees are preferred for road trees, but ornamental trees may be allowed under overhead utility lines.

SECTION 12.07 SITE LANDSCAPING

- A. In addition to any adjacent land use screening, street tree greenbelt, and/or parking lot landscaping required by this section, five percent (5%) of the site area, excluding existing public rights-of-way, must be landscaped. Such site area landscaping may include a combination of the following:
 - a. Preservation of existing tree cover
 - b. Planting of new trees and plant material
 - c. Landscape plazas and gardens
 - d. Bioswales, raingardens, or retention ponds
 - e. Planter beds
 - f. Green roofs

- g. Green walls
- B. Site area landscaping must be provided to screen potentially incompatible, unsightly and/or objectionable site features such as, but not limited to, retention/detention ponds, transformer pads, air conditioning units, and loading areas.

SECTION 12.08 WASTE RECEPTACLES AND MECHANICAL EQUIPMENT SCREENING

- A. **Where Required.** The standards set forth in this Section must apply to all uses that have refuse disposal service by collective trash container as well as exterior mechanical equipment such as generators and air conditioning units. This does not include curbside pickup for single-family residential uses.
- B. Standards.
 - 1. Screening for waste receptacles and mechanical equipment can contribute to five (5%) percent site area requirement for general site landscaping.
 - 2. Waste receptacles and mechanical equipment must be screened on all sides with a wall, and gate at least as high as the container, but no less than six (6) feet in height and must be constructed of durable material and construction which is compatible with the architectural materials used in the site development.
 - 3. Waste receptacles must be consolidated to minimize the number of collection sites, located in close proximity to the building they serve, and easily accessed by refuse vehicles without potential damage to parked vehicles.
 - 4. Enclosures for waste receptacles and mechanical equipment must be located in a side or rear yard and screened from public view whenever possible.
 - 5. Receptacles, equipment, and enclosures must be situated so that they do not cause excessive nuisance or offense to occupants of nearby buildings.
 - 6. Concrete pads and aprons of appropriate size and construction must be provided.

SECTION 12.09 TREE REPLACEMENT STANDARDS

The standards below are intended to encourage the preservation of existing mature, healthy trees on private property which contribute to the character, welfare, and quality of life in Berkley. These standards are intended to prevent the unnecessary removal of trees prior to, during, and following construction on a site. The standards of this Section in conjunction with the standards for site plan review promote the goals of the Berkley Master Plan.

- A. **Tree Replacement.** All existing trees identified on the site plan with an eight (8) inch or larger

caliper to be removed must be replaced according to the following table, except for the exemptions in item B of this Section. The Planning Commission may allow replacement trees to satisfy up to fifty percent (50%) of landscaping requirements in this Article.

Table 12.09	
DBH of Removed Tree	Number of Trees Required to be Planted
Landmark Trees	1:1 replacement of the DBH of the Landmark Tree with trees of at least 2.5" caliper
23.9" or larger (non-native)	Four (4) trees of at least 2.5" caliper
12" - 23.9"	Three (3) trees of at least 2.5" caliper
8" - 11.9"	Two (2) trees of at least 2.5" caliper

*DBH is the diameter measured at a height of four and one-half (4.5) feet above the natural grade. (Diameter at Breast Height, D.B.H.)

The Planning Commission may not require tree preservation when trees are in proposed building envelopes, essential services, sidewalks, paths driveways or streets, but may require tree replacement.

B. **Exemptions from Replacement.** The following shall be exempt from the requirements of these Tree Replacement:

1. Parcels of land that are not subject to site plan review.
2. Tree trimming and removal necessary to the operation of essential service facilities of a municipal or other governmental department or agency or public utility franchised to operate in the City.
3. Tree clearing within an existing public road right-of-way or an existing private road easement.
4. The removal of any tree which is demonstrated by the property owner to the Zoning Administrator or designee's satisfaction to have a health and condition standard factor of less than fifty percent (50%) percent based upon the standards established by the International Society of Arboriculture.
5. Trees that are considered invasive by the International Society of Arboriculture.
6. Removal of trees that have become a potential danger to human life or property.

C. **Clearance of Twenty-five percent (25%) or more of Existing Trees.** Any property owner or his representative proposing to clear more than twenty-five percent (25%) of the trees of eight (8) inch diameter at breast height (D.B.H.) or greater on a site, as determined by the Planning Commission, shall first notify the City of the intent of such clearing and/or earth change and submit a proposed plan describing the site's features for review and approval by the Planning Commission.

This sub-section shall not prevent tree clearing for approved building envelopes, swimming pools, decks, essential services, utility lines or construction drives; nor shall this ordinance prohibit site alterations for farming purposes. The Planning Commission may waive the DBH standard for select clearing of lower quality and non-native species including, but not limited to box elders, elms, poplars, willows, and cottonwoods.

- D. **Tree Replacement Off-Site as Last Option.** Every effort should be made to relocate or mitigate trees on site. Off-site mitigation or contribution to the City's Tree Replacement Program shall only be allowed after the applicant has demonstrated that on site mitigation is not practical or feasible. The requirement for on-site mitigation may be altered or waived by the Planning Commission if the proposal meets the following criteria:
 - E. The proposal meets all other ordinance requirements.
 - F. The applicant can clearly demonstrate that there is inadequate planting area for the healthy installation of the required trees on site and that maximum effort has been put into locating as many of the required trees as possible.
 - G. The applicant has made every reasonable effort to preserve as many of the existing on-site trees as possible.
 - H. The proposal demonstrates environmentally sensitive design in terms of topography, stormwater management, soil erosion management, etc.

Should the proposal meet the above criteria, the Planning Commission may reduce the requirement for on-site mitigation of replacement trees and permit mitigation off-site at an approved location or by contribution to the City's Tree Replacement Program. Off-site mitigation or financial contribution shall only apply if the Planning Commission determines that no practical or feasible alternative exists for on-site mitigation. Payment to the program per tree removed shall be in accordance with the replacement fee schedule as established by City Council resolution. Contributions placed in the Tree Replacement Program shall be used in accordance with the Tree Replacement Program Policy Statement.

SECTION 12.10 LANDSCAPE ELEMENTS

- A. **Quality.** Plant materials must be of generally acceptable varieties and species, free from insects and diseases, hardy to this county, conform to the current minimum standards of the American Association of Nurserymen, and must have proof of any required governmental regulations and/or inspections.
- B. **Composition.** A mixture of plant material, such as evergreen and deciduous trees and shrubs, is recommended as a protective measure against insect and disease infestation. A limited mixture of hardy species is recommended rather than a large quantity of different

species to produce a more aesthetic, cohesive design and avoid a disorderly appearing arrangement. Native and/or drought-tolerant species, suitable to the climate of the City, are encouraged. High-maintenance plants, if necessary, should be limited to small areas.

- C. **Berms.** Berms must be constructed with slopes not to exceed a one to three (1:3) gradient. Berm slopes must be protected with sod, seed, or other form of natural ground cover. Utility lines and structures must be shown on the landscape plan.
- D. **Coordination with Utilities.** Provision must be made to coordinate landscaping with existing and proposed underground and overhead utility lines that avoid interference with plant growth.
- E. **Credit for Existing Vegetation.** The preservation and incorporation of existing trees and shrubs is encouraged. Existing shrubs and trees may be used to satisfy the requirements of this section, if all of the following requirements apply:
 1. Paving or other impervious site improvements do not encroach upon the drip line of the existing tree(s) to be preserved.
 2. If existing plant material is labeled "To Remain" on site plans by the applicant or required by the City, protective techniques must be installed during construction. No vehicle or other construction equipment may be parked or stored within the drip line of any plant material intended to be saved.
 3. The shrubs and/or trees are in good health. In the event that healthy shrubs or trees which are used to meet the minimum requirements of this Ordinance or those labeled to remain are cut down, destroyed, damaged, or excavated at the drip line, as determined by the City, the applicant must replace them with trees which meet Ordinance requirements.
 4. The trees or shrubs proposed for credit are not a species that is invasive, brittle, susceptible to disease and insects, has a root structure that will interfere with underground utilities, drops excessive litter or other undesirable characteristics. Species ineligible for credit are listed in Section 12.11-G.
 5. The shrubs and/or trees meet the following minimum sizes and may receive credit in lieu of new plantings based on size shown in the table below:

Plant Material	Minimum Size	Size	Credit
Trees	2.5" in caliper	2.5" – 8"	1
		8" – 12"	2
		12" – 20"	3
		Over 20"	5

Shrubs	24" in height	All sizes	1
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F. **Prohibited materials.** The following plant materials are specifically prohibited for use in any plan considered under provisions of these regulations:

Table 12.10B	
Scientific Name	Common Name
<i>Ailanthus altissima</i>	Tree of heaven
<i>Alnus glutinosa</i>	Black alder
<i>Elaeagnus angustifolia</i>	Russian olive
<i>Phellodendron amurense</i>	Amur corktree
<i>Populus alba</i>	White poplar
<i>Populus nigra</i>	Lombardy poplar
<i>Pyrus calleryana</i>	Bradford pear
<i>Rhamnus utilis</i>	Buckthorn
<i>Robina pseudoacacia</i>	Black locust
<i>Ulmus pumila</i>	Siberian elm
<i>Acer ginnala</i>	Amur maple
<i>Acer platanoides</i>	Norway maple
<i>Aesculus hippocastanum</i>	Horse chestnut
<i>Betula pendula</i>	European birch
<i>Crataegus monogyna</i>	Common hawthorn
<i>Kalopanax septemlobus</i>	Kalopanax
<i>Pinus nigra</i>	Austrian pine
<i>Pinus sylvestris</i>	Scotch pine
<i>Salix alba</i>	White willow
<i>Salix euxina</i>	Crack willow
<i>Salix purpurea</i>	Basket willow
<i>Juglans nigra</i>	Black walnut
<i>Lonicera japonica</i>	Japanese honeysuckle
<i>Lonicera maackii</i>	Amur honeysuckle
<i>Lonicera morrowii</i>	Morrow honeysuckle
<i>Lonicera tatarica</i>	Smooth Tartarian honeysuckle
<i>Lonicera x bella</i>	hybrid honeysuckle
<i>Lonicera xylosteum</i>	European fly honeysuckle
<i>Picea pungens</i>	Blue spruce

G. Installation, maintenance, and completion.

1. All landscaping required by this section must be planted before obtaining a certificate of occupancy or the appropriate financial guarantee such as cash, letter of credit, and/or certified check must be placed in escrow in the amount of the cost

of landscaping to be released only after landscaping is completed.

2. All landscaping and landscape elements must be planted, and earth moving, or grading performed, in a sound workmanlike manner, according to accepted planting and grading procedures. All unpaved portions of the site must be planted with grass, ground cover or other suitable living plant material which must extend to the edge of any abutting street pavement edge Grass areas in the front yard of all nonresidential uses must be planted with sod.

3. Landscaping required by this section must be maintained in a reasonably healthy condition, free from refuse and debris. All unhealthy and dead material must be replaced within one (1) year of damage or death or the next appropriate planting period, whichever comes first. All landscaped areas must be provided with a readily available and acceptable watering system that provides water to plant materials on a regularly scheduled basis. The watering system must be separately metered unless otherwise approved by the City.

SECTION 12.11 MINIMUM SIZE AND SPACING REQUIREMENTS

Where landscaping is required, the following minimum size and spacing requirements for representative landscape materials must be applicable, unless otherwise specified in this section. Where caliper of a tree is referenced, it must be measured at diameter breast height (DBH), which is the diameter of the tree at four and a half (4 ½) feet above the ground.

Table 12.11 Minimum Size and Spacing Requirements								
	<i>Minimum Size Allowable</i>				<i>Recommended On-Center Spacing (in feet)</i>			
	<i>Height/Caliper (DBH)</i>							
<i>Trees</i>	<i>6'</i>	<i>3' - 4'</i>	<i>2"</i>	<i>2.5"</i>	<i>30</i>	<i>25</i>	<i>15</i>	<i>10</i>
Evergreen Trees, such as Fir, Spruce, Pine & Hemlock	.						.	
Narrow Evergreen Trees, such as Red Cedar, Arborvitae, and Juniper (selected varieties)		.						.
Large Deciduous Trees, such as Oak, Maple, Beech, Linden, Ginko (male only), Honeylocust (seedless & thornless), Birch, and Sycamore				.	.			
Small Ornamental Deciduous Trees, such as Flowering Dogwood, Cherry, Plum, Pear, Crabapple, Redbud, Magnolia, and Hornbeam			.				.	

	Minimum Size Allowable				Recommended On-Center Spacing (in feet)				
	Height								
Shrubs	6'	3' - 4'	24" - 36"	18" - 24"	10	6	5	4	3
Large Evergreen Shrubs (upright), such as Pyramidal or Hicks Yew, Alberta Spruce, Chinese Juniper, Savin Juniper, and Mugho Pine		•					•		
Large Evergreen Shrubs (spreading), such as Spreading Yews or Junipers			•				•		
Small Evergreen Shrubs (upright), such as Brown's or Ward's, or Yews, and Boxwood				•			•		
Small Evergreen Shrubs (spreading), such as horizontal Juniper varieties or spreading Euonymous varieties				•			•		
Large Deciduous Shrubs, such as Lilac, Sumac, Weigela, Dogwood (Red Osier and Grey), and Viburnum varieties			•			•			
Small Deciduous Shrubs, such as Spirea, Fragrant Sumac, Japanese Quince, Cotoneaster, and Potentilla				•					•

SECTION 12.12 ACCESSORY STORMWATER CONTROL FEATURES

The integration of stormwater retention and detention ponds in the overall landscape concept is recommended. Naturalized stormwater management features that are integrated in a cohesive and logical manner to take advantage of site topography, orientation, and visibility should be utilized. Ponds with a natural, rather than square or rectangular, design and appearance are encouraged. Only seed mixes and native plants may be used to vegetate retention and detention ponds. The following Low Impact Development (LID) principles for stormwater management are recommended for incorporation into landscape design:

- A. **Swales.** Biofiltration swales are permitted in all districts.
- B. **Pervious paving.** Pervious paving is permitted in all districts, subject to adopted engineering standards.
- C. **Rain gardens.** Rain gardens installed accessory to one- or two-family uses in the R-1A/R-1B, R-1C/R-1D, and R-2 districts do not require engineering review.
- D. **Rain barrels or cisterns.** Rain barrels or cisterns are permitted in all districts. Underground cisterns or rain barrels are subject to engineering review and constructed in accordance with the State Building Code. Aboveground rain barrel or cistern systems in

excess of 250 gallons must conform to the accessory building standards in place for those building types and be subject to engineering review and constructed in accordance with the Building Code.

- E. **Vegetated roofs.** Vegetated roof systems are permitted in all districts in accordance with the Building Code.
- F. **Other methods.** Other methods of onsite stormwater control may be submitted to the Community Development Director and, at their discretion, may be approved, approved subject to another City department(s) review, approved subject to Planning Commission review, or denied.
- G. The plant material required by this section may be used to meet plant material quantity and placement requirements of this Chapter, provided that Planning Commission or other approving body finds that the intent of this Chapter is met.

SECTION 12.13 WAIVER OR MODIFICATION OF STANDARDS FOR SPECIAL SITUATIONS

The Planning Commission or Zoning Administrator, when administrative review is allowed under Section 14.04, may determine if existing landscaping or screening intended to be preserved, or a different landscape design, would provide all or part of the required landscaping and screening. In making a determination to waive or reduce the landscape and screening requirements of this Article, the following may be considered.

- A. Extent to which existing natural vegetation provides desired screening.
- B. The existence of a steep change in topography which would limit the benefits of required landscaping.
- C. Existing and proposed building placement.
- D. The abutting or adjacent land is developed or planned by the City for a use other than residential.
- E. Building heights and views.
- F. Conditions similar to the above exist such that no good purpose would be served by providing the landscaping or screening required.

SECTION 12.14 TREE PROTECTION DURING CONSTRUCTION

Protected trees shall be preserved to the greatest extent practicable through the use of site development techniques including, but not limited to the following:

- A. **Placement of Materials Near Trees.** No person shall conduct any activity within the drip line of any tree designated to remain including, but not limited to, placing solvents, building materials, construction equipment, or soil deposits within the drip line. Nor shall vehicles or construction equipment be operated in such close proximity of an existing tree so as to cause compaction of the soil within the drip line or the critical root zone of the tree which is to remain.
- B. **Attachments to Trees.** During construction no person or entity shall attach any device or wire to any tree which is to remain after construction.
- C. **Critical Root Zone (CRZ).** Maintain grades and moisture conditions within the CRZ of trees. Many of the native hardwood trees, such as oaks, hickories, maples, beeches, and most old trees, do not adapt to environmental changes brought about by construction. Grading changes should not occur within the CRZ of a tree. In addition, grading on a site should neither increase nor decrease moisture conditions within a tree's CRZ. The area of concern around an important tree may be significantly larger than the CRZ. The drip line of the tree shall be used for comparison, and if larger than the CRZ, the dripline should be used to determine how best to protect an important tree.
- D. **Protective Barriers.** Before development, land clearing, filling, or any other land alteration for which a permit is required, the developer and/or property owner shall erect and maintain suitable barriers to protect existing trees which are to remain after construction. Protective barriers shall remain in place until the City authorizes their removal or issues a final Certificate of Occupancy, whichever occurs first. Wood, metal, or other substantial material shall be utilized in the construction of barriers. Barriers are required for all trees designated to remain except in the following cases:
 - 1. **Rights-of-Way and Easements.** Street rights-of-way and utility easements may be cordoned by placing stakes a minimum of fifty (50) feet apart and tying ribbon, plastic tape, rope, or similar material from stake to stake along the outside perimeters of areas to be cleared.
 - 2. **Large, Separate Areas.** Large areas of property separate from the construction or land clearing area on which no equipment will venture may also be cordoned off as described in Paragraph A, above.

Article 13

EXTERIOR LIGHTING STANDARDS

Section 13.01 INTENT

The intent of this section is to provide reasonable regulations to direct the location, design, illumination level, and use of outdoor lighting from both direct and indirect sources to minimize its undesirable effects. Off-street parking and loading areas, driveways, building entryways, walkways, and other outdoor pedestrian ways, and building complexes with common areas need to be sufficiently illuminated to ensure the security and safety of people and property. Lighting standards set forth herein are also intended to:

- A. Provide for and control lighting in outdoor public places where public health, safety, and welfare are potential concerns.
- B. Protect drivers and pedestrians from the glare of non-vehicular light sources.
- C. Protect neighbors, the environment, and the night sky from nuisance glare and light trespass from improperly selected, placed, aimed, applied, maintained, or shielded light sources.
- D. Highlight the distinctive features of a site, such as the building entrance, architectural details, signs, outdoor use areas, or public art.
- E. Promote energy efficient lighting design and operation.
- F. Protect and retain the visual character of Berkley.

Section 13.02 APPLICABILITY

All outdoor lighting installed after the effective date of the Zoning Ordinance must comply with the requirements of Article 13. This includes, but is not limited to, new lighting equipment, light fixtures, replacement lighting, or any other outdoor lighting whether it is attached to structures, poles, buildings, or any other location.

Section 13.03 STANDARDS FOR EXTERIOR LIGHTING

Lighting from direct source must be subject to the following standards:

- A. **Shielding and Light Trespass.** Lighting must be placed, directed, and shielded to direct the light onto the site and away from adjoining properties with the use of full-cutoff luminaires. Lighting must be shielded so that it does not cause glare for vehicles, bicycles, and pedestrians. Directional luminaires such as floodlights and wall-mounted luminaires must be shielded and aimed so they do not create glare when viewed from neighboring property. The use of floodlights and wall-mounted luminaires to light parking areas must be prohibited unless there is a finding by the Planning Commission that no other acceptable means of lighting is possible. Lighting under canopies must be recessed or full cutoff luminaires aimed straight down.
- B. **Maximum Illumination Levels.** Lighting for uses adjacent to residentially zoned or used property must be designed and maintained such that illumination levels do not exceed 0.5 footcandles at ground level along common property lines. Lighting for uses adjacent to nonresidential properties must be designed and maintained such that illumination levels do not exceed 1.0 footcandles at ground level along common property lines. Maximum light levels must not exceed 20.0 footcandles in any given area measured at ground level.
- C. **Maximum Height.** Lights on poles, including the base, shall not be taller than the building whose area they illuminate nor taller than twenty (20) feet, whichever is shorter.
- D. **Light Color Standard.** Correlated color temperature of any outdoor light source must not exceed 3500 Kelvin and must be specified on the lighting plans set forth in Section 13.03.D.
- E. **Lighting Plans.**
- F. All lighting, including ornamental lighting, must be shown on site plans in sufficient detail to allow determination of the effects of such lighting upon adjacent properties and traffic safety.
- G. The lighting plan must include a photometric plan which plots illuminance in

footcandles on a ten (10) feet by ten (10) feet horizontal grid over the entire site up to and including all property boundaries. The lighting plan must include a layout of all proposed and existing luminaires, and a photometric analysis plotted in a manner that demonstrates that Ordinance requirements are met. The lighting plan must also include luminaire details, glare reduction devices, mounting heights, and pole and pole foundation details.

- H. Lighting plans must be coordinated with landscape plans to minimize conflict between landscaping and intended light distribution; and
- I. Reduction of Lighting at Night. All outdoor lighting must be reduced to at least fifty (50%) percent of the light level at full illumination one (1) hour after closing. Lighting reductions must not be required under the following circumstances:
 - 1. Where a business operates twenty-four (24) hours.
 - 2. Where lighting is intended to reduce real or perceived risk.
 - 3. Where lighting is intended to discourage intruders, vandals, or burglars, and to protect merchandise and property.

Section 13.04 CONDITIONS OF APPROVAL

Lighting from indirect sources must be subject to the following standards:

- A. Glare from any process (such as or similar to arc welding or acetylene torch cutting) which emits harmful ultraviolet rays must be performed in such a manner as not to be seen from any point beyond the property line, and so as not to create a public nuisance or hazard along lot lines.
- B. The design and/or screening of the development must ensure that glare from automobile and commercial or industrial vehicle headlights must not be directed into any adjacent property, including residential property.
- C. Exterior doors must be located, operated, and maintained so as to prevent any glare and light from creating a nuisance or safety hazard to operators of motor vehicles, pedestrians, and neighboring land uses.

Section 13.05 EXEMPTIONS

The following types of lighting are exempt from this Ordinance:

- A. Luminaires used for public roadway illumination.
- B. All temporary emergency lighting needed by the police, fire, or other emergency services, as well as all vehicular luminaires, must be exempt from the requirements of this Ordinance.
- C. All hazard warning luminaires required by federal regulatory agencies are exempt from the requirements of this article, except that all such luminaires used must be red and must be shown to be as close as possible to the federally required minimum lumen output requirement for the specific task.
- D. Luminaires used primarily for signal illumination may be mounted at any height required to ensure roadway safety, regardless of lumen rating.
- E. Illumination of the American and state flags must be exempt from the requirements of this Ordinance, providing that such lighting does not produce glare on roadways and neighboring residential properties.
- F. Installations existing prior to the enactment of this Ordinance are exempt from its requirements. However, any changes to an existing lighting system, fixture replacements, or any grandfathered lighting system that is moved must meet these standards.

Section 13.06 PROHIBITED LIGHTING

The following types of outdoor lighting are specifically prohibited.

- A. Lighting that could be confused for a traffic control device.
- B. Lighting that is oriented upward, except as otherwise provided for in this Ordinance.
- C. Searchlights, beacons, and laser source light fixtures.
- D. Lights that blink, flash, move, revolve, flicker, change intensity, or change color.
- E. Any lamp or bulb when not within a luminaire and which is visible from the

property boundary line of the parcel on which it is located, except for landscape ornamental lighting.

- F. Lighting inside of an awning when the awning material is translucent.
- G. Building or roof-mounted lighting intended to attract attention to the building and/or use and not strictly designed for security and safety purposes must not be permitted.
- H. Outlining windows with LED or other lighting materials is not permitted in the Downtown or Corridor Districts.