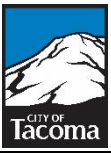


Application 2

Electric Fences





**2023 ANNUAL AMENDMENT
TO THE COMPREHENSIVE PLAN AND LAND USE REGULATORY CODE**

**Application:
Electric Fence Development Standard Amendments**

**Staff Analysis Report
March 1, 2023**

An application to amend appropriate sections of the Tacoma Municipal Code (TMC) to allow electric fences in multiple zoning districts, subject to certain standards. Currently, electric fences are allowed only in the City's Industrial Districts.

Project Summary	
Project Title:	Electric Fences
Applicant:	City of Tacoma
Location and Size of Area:	Citywide, in Commercial Districts (C-1 and C-2), CIX Commercial Industrial Mixed-Use District, and WR Warehouse Residential District. (Already allowed in M-1, M-2, and PMI)
Neighborhood Council Area:	Citywide
Staff Contact:	Jana Magoon, Land Use Division Manager, jmagoon@cityoftacoma.org
Staff Recommendation:	Staff proposes: <ul style="list-style-type: none">• Allow fence up to 10 feet in height;• In C-1 and C-2 Districts, prohibit between front of building and street;• In C-1 and C-2, require electric fence to be setback 5 feet from all property lines;• Electric fence shall not interfere with required landscaping;• Require a non-electric fence around electric fence: and• Prohibit electric fence in and around critical areas (except not applicable to the South Tacoma Groundwater Protection District).
Project Proposal:	See Exhibit "A"



2. Background

The City of Tacoma has seen a spike in applications for electric fences throughout the city. This is due to the rise in theft and other safety issues that has added expense to local businesses. However, electric fences are currently only allowed in Industrial Districts. Multiple business owners have contacted City Councilmembers seeking alternative ways to reduce further losses. On November 30, 2021, the City Council passed Resolution No. 40881, requesting that the Planning Commission explore development standards that could facilitate the construction of electric fences in commercial areas of the City of Tacoma. On May 10, 2022, the City Council passed Substitute Resolution No. 40955, adjusting the timeline for the study from 2022 Amendment cycle to 2023 Amendment cycle and providing the following additional suggestions for the Commission's consideration:

- (a) Businesses have raised concerns of increased theft and safety issues that have added severe expenses, hence the sense of urgency in the community for the regulatory review of this issue;
- (b) There are great concerns about equity, health, and safety regarding expansion of electric fences into areas outside the industrial zones that must be properly addressed; and
- (c) the Commission's review should include, but not be limited to, compatibility of the design and installation of electric fences with the surrounding environment, costs to businesses of permitting and installation of electric fences, site-by-site decisions or district-wide permissions, the applicability of conditional use permits, and the applicability of areas where commercial uses are present or allowed.

Existing Fence Regulations include:

TMC 13.06.090.K.1.b In Commercial, Mixed Use, and Downtown Districts:

- Barbed and razor wire allowed ONLY when not visible to public street or adjacent residential use
- Chain link is PROHIBITED between front of building and public street, except when necessary to protect a critical area or around a recreational use.
- Electrified fencing is PROHIBITED
- MAXIMUM height of a fence between front of building and public street is limited to 3 feet in height; EXCEPT a decorative fence may be allowed up to 8 feet in height provided at least 50% of the fence is transparent AND a minimum 5-foot landscaped area "softens" the view of fence. Fences required by Washington State Liquor Control Board are exempt from 3-foot height limit provided the area between 3 feet and 7 feet is 50% transparent.
- MAXIMUM height of a fence in the Street Level Residential Transition Area is 5 feet.
- MAXIMUM height of a fence along alley is limited to 3 feet in height; EXCEPT when fence design allows that the area between 3 feet and 7 feet is at least 20% transparent.

3. Analysis

Staff analysis of this application has been conducted in accordance with TMC 13.02.070.F.2, which requires the following four provisions be addressed, as appropriate:

- A staff analysis of the application in accordance with the elements described in 13.02.070.D;
- An analysis of the consistency of the proposed amendment with State, regional and local planning mandates and guidelines;
- An analysis of the amendment options identified in the assessment report; and

- An assessment of the anticipated impacts of the proposal, including, but not limited to: economic impacts, noise, odor, shading, light and glare impacts, aesthetic impacts, historic impacts, visual impacts, and impacts to environmental health, equity and quality.

a. A staff analysis of the application in accordance with the elements described in 13.02.070.D;

TMC 13.02.070.D, subsection 5.d.(1), requires that the following objectives shall be met by applications for the annual amendment:

- Address inconsistencies or errors in the Comprehensive Plan or development regulations;
Staff Response: This requested code change does not address inconsistencies or errors in the Comprehensive Plan or development regulations.
- Respond to changing circumstances, such as growth and development patterns, needs and desires of the community, and the City’s capacity to provide adequate services;
Staff Response: The City has seen a spike in applications for electric fences throughout the city of Tacoma. This is due to the rise in theft and other safety issues that has added expense to local businesses.
- Maintain or enhance compatibility with existing or planned land uses and the surrounding development pattern; and/or
Staff Response: Historically, electric fences have been considered unsightly and dangerous. In addition, over the years, the Land Use Code has been modified to limit type, location, and height of fences in commercial and mixed-use districts. Appropriate development standards are critical if electric fences are allowed in commercial districts. In particular, potential conflicts between electric fences and residential development (which is allowed in C-1 and C-2 Commercial Districts, CIX Mixed Use District, and WR Warehouse Residential District) should be minimized.
- Enhance the quality of the neighborhood.
Staff Response: The purpose of this change is to reduce vandalism and theft of certain properties, which can be construed as an enhancement to the neighborhood. However, appropriate development standards will be an important element of this proposal if quality of neighborhood will be protected.

b. An analysis of the consistency of the proposed amendment with State, regional and local planning mandates and guidelines;

Staff has identified the following pertinent policies for the Planning Commission’s review of the proposal for consistency with the Comprehensive Plan. Staff notes that the proposal is generally compatible with the following goals and polices contained within the One Tacoma Comprehensive Plan. Provided appropriate development regulations are adopted, the expansion of electric fences into commercial and downtown areas will be consistent with applicable policies.

Urban Form:

- **Goal UF–10.6:** Encourage public street and sidewalk improvements along Avenues to support the vitality of business districts, create distinctive places, provide a safe and attractive pedestrian environment, and contribute to creating quality living environments for residents.
- **Policy UF–13.10:** - Maintain and enhance the existing commercial areas while preserving the unique features of these neighborhoods.
- **Policy UF–13.38:** Support the development of Pacific Avenue as a growing business and employment center and enhance streetscapes to improve pedestrian safety and promote the corridor as a civic footprint.

Design + Development:

- **Goal DD–8:** Promote development practices that contribute to a sense of safety and reduction in opportunities for crime.
- **Goal DD–1.1:** Encourage excellence in architecture, site design, and infrastructure and durability in building materials to enrich the appearance of a development's surroundings.
- **Goal DD–1.12:** Encourage building and site design approaches that help prevent crime.
- **Policy DD–5.3:** Promote building and site designs that enhance the pedestrian experience in centers and corridors, with windows, entrances, pathways, and other features that provide connections to the street environment.
- **Policy DD–8.3:** Promote an understanding of the benefits of CPTED among design, development, and investment interests.
- **Policy DD–8.4:** Promote natural sightlines and visibility through the design and placement of features on sites in ways to provide opportunities for people to observe the space, uses, activities, and people around them.

c. An assessment of the anticipated impacts of the proposal, including, but not limited to: economic impacts, noise, odor, shading, light and glare impacts, aesthetic impacts, historic impacts, visual impacts, and impacts to environmental health, equity and quality.

As part of the annual amendment cycle, staff conducts an environmental review, including a non-project action SEPA checklist, to consider the potential environmental impacts of the proposals. In addition, the City Council has adopted a policy to consider equity in all Council actions. As a result, potential impacts need to be assessed through an equity lens utilizing the Tacoma Equity Index and other tools, including the historical context of planning in the area.

Over the years, the Land Use Code has been modified to limit type, location, and height of fences in commercial, downtown, and mixed-use districts. Landscaping is also required in certain instances to soften the appearance of the fence. Limiting fence height and type is a CPTED practice that allows natural sightlines and visibility. This practice, along with landscaping, also facilitates high quality pedestrian scale development at the public right of way.

However, theft and vandalism has become a greater concern in recent years. Staff note that small, locally owned businesses are less able to absorb the cost of property theft and other crime on their property. The

recent increase in property crime, vandalism, and thefts targeting businesses threaten our local economy. The fence code should be updated to support our local businesses.

Regarding impacts to the natural environment, electric fences create a hazard to wildlife that utilize the City's critical areas. Consideration should be given to use of electric fences around/adjacent to critical areas.

4. Public Outreach

The Commission is scheduled to conduct a public hearing on the 2023 Amendment in early 2023. Additional public outreach for all the applications for the 2023 Amendment will be conducted prior to and during the public hearing process.

5. Recommendation

Staff recommends releasing a draft code that includes the following:

- In all districts where allowed, an electric fence may be constructed up to 10 feet tall.
- In C-1 and C-2 Commercial Districts, the electric fence should be prohibited between front of building and public street (same as cyclone).
- In C-1 and C-2 Commercial Districts, electric fences must be setback 5 feet from all property lines
- Electric fence shall not interfere with required landscape buffer and/or perimeter strip and/or street trees, when applicable. (enhanced pedestrian experience)
- In districts, require a secondary fence be constructed between the electric fence property line. (safety)
- Electric Fences are prohibited around or adjacent to a critical area (except not applicable to the South Tacoma Groundwater Protection District). (restricts movement of wildlife)

Below are alternatives that Planning Commission could consider after Public Comment:

- Fence color. In Commercial Districts, the secondary fence should be transparent and should be black in color. (safety and enhanced pedestrian experience - less visible)
- Set forth distance between electric and non-electric fence
- Set maximum AND minimum height requirement
- Prohibit electric fences (as is currently the case) in Warehouse Residential regardless of location.
- Restrict allowance for certain Variances
- Limit the allowance of electric fences to certain uses
- When no building on site, what are appropriate limitations for fence location

6. Exhibit

- Exhibit "A" – Electric Fences, Draft Code

7. Supplemental Information

- Attachment "A" - Electric Fences, Frequently Asked Questions

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**2023 ANNUAL AMENDMENT
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Exhibit A:

Electric Fences - Draft Code

TACOMA MUNICIPAL CODE 13.06.090.K

K. Fences and Retaining Walls.

1. Applicability. These fence and retaining wall regulations apply to all zoning districts. Regulations within specific zones are set forth below.

2. Purpose. [The purpose of fence and retaining wall regulations is to implement the Comprehensive Plan polices that seek to enhance the pedestrian experience while also reducing opportunity for crime.](#)

3. [The Director may attach any reasonable conditions found necessary to make proposed fencing or retaining walls compatible with its environment, to carry out the goals and policies of the City's Comprehensive Plan, and/or to provide compliance with other criteria or standards set forth in the City's Land Use Regulatory Codes.](#)

4. Fencing.

[a. Residential Districts](#)

[\(1\) Fencing Type Limitations](#)

[\(a\) Barbed or razor wire. The use of barbed or razor wire is prohibited.](#)

[\(b\) Electrified fences are prohibited](#)

[\(c\) Chain link. Chain link is permitted; except](#)

[\(i\) In the case of a 4-plex, multi-family, or single-family attached \(townhouse\) development, chain link or similar wire fencing is prohibited between the front of a building and a public street, except for wetland preservation and recreation uses; and](#)

[\(ii\) chain link, with or without slats, is prohibited for required screening.](#)

[\(2\) Fence and Wall Height](#)

[\(a\) In the case of single-family attached \(townhouse\), the maximum height of free-standing walls, fences, or hedges between any public street and building shall be 3 feet. Exception: Decorative fences up to 8 feet in height may be allowed between a public street and any residential use provided such fence is at least 50 percent transparent and features a planting strip at least 5 feet wide with Type C or D landscaping to soften the view of the fence and contribute to the pedestrian environment.](#)

[\(b\) See TMC 13.06.090.M for fence limitation specific to Building Transition. In the case of conflicts, the most restrictive section will apply.](#)

[b. Commercial Districts, MUCs, and Downtown](#)

(1) Fencing Type Limitations.

(a) Barbed or razor wire. The use of barbed or razor wire is limited to those areas not visible to a public street or to an adjacent residential use.

(b) Chain link. Chain link or similar wire fencing is prohibited between the front of a building and a public street, except for wetland preservation and recreation uses.

(c) Electrified. Electric fences are allowed in Commercial Districts, the Commercial industrial Mixed-Use District, and Warehouse Residential District, subject to the following standards. Electric Fences are not subject to the height standards in subsection (2) below. These standards shall not apply to underground or invisible pet fences that are used to contain small domestic animals.

(i) Location

(a) Electric fences shall be prohibited between the front of a building and the adjacent public street.

(b) Electric fences shall be prohibited adjacent to any R District, any residential use, or residential mixed-use, except in the case when an electric fence is in place prior to the residential use or residential mixed-use.

(c) Except for the South Tacoma Groundwater Protection District, electric fences shall not be around or adjacent to a critical area as defined in TMC 13.01.110.C.

(ii) Standards

(a) Electric fences shall be limited to a height of 10 feet.

(b) Electric fences shall be setback a minimum of 5 feet from all property lines.

(c) An electric fence shall be surrounded by a decorative, non-electric, transparent fence. This fence shall be no lower than 6 feet and no taller than 7 feet.

(iii) Electrification

(a) The energy source (energizer) for electric fences must be provided by a storage battery not to exceed 12 volts DC. The storage battery may be charged by a solar panel. The solar panel may not be augmented by a trickle charger.

(b) The electric charge produced by the fence upon contact shall not exceed energizer characteristics set forth in in the International Electrotechnical Commission (IEC) Standards.

(iv) Warning Signs

(a) Electric fences shall be clearly identified with warning signs that read "Warning - Electric Fence" at intervals of 50 feet or less. Signs shall also contain imagery or symbols of, or similar to, the International Organization for Standardization (ISO) warning symbol for electric hazard to alert individuals that the fence is electrically charged (e.g. lightning bolts).

(2). Fencing and Wall Height Standards.

(a) The maximum height of free-standing walls, fences, or hedges between any public street and building shall be 3 feet.

(b) Decorative fences up to 8 feet in height may be allowed between a public street and any residential use provided such fence is at least 50 percent transparent and features a planting strip at least 5 feet wide with landscaping pursuant to the requirements of TMC 13.05.502 to soften the view of the fence and contribute to the pedestrian environment.

(c) Fences required by the Washington State Liquor Control Board shall also be exempt from the maximum height limitation, provided any portion of the fence between 3 and 7 feet above grade is at least 50 percent transparent.

(d) Fences shall not exceed 5 feet in height in required Street Level Residential Transition Areas.

(e) Fences along alleys are allowed provided fences greater than 3 feet in height are at least 20% transparent between 3 and 7 feet above grade. If no transparency is provided, the maximum height of such fence shall be 3 feet.

(f) Exception. In Downtown Districts, fences greater than 3 feet in height are allowed if the portion of the fence between 3 and 7 feet above grade is at least 20 percent transparent.

c. Industrial Districts

(1) Fence Type Limitations

(a) Barbed or razor wire. The use of barbed or razor wire is limited to those areas not adjacent residential use.

(b) Chain link. Chain link or similar wire fencing is permitted.

(c) Electrified. Electric fences are allowed in all Industrial Districts subject to the following standards. These standards shall not apply to underground or invisible pet fences that are used to contain small domestic animals.

(i) Location

(a) Electric fences shall be prohibited adjacent to any R District, any residential use, or residential mixed-use.

(b) Electric fences shall not be around or adjacent to a critical area as defined in TMC 13.01.110.C.

(ii) Standards

(a) Electric fences shall be limited to a height of 10 feet.

(b) An electric fence shall be separated from property line by a non-electric fence a minimum of 6 feet tall.

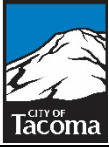
(iii) Electrification

(a) The energy source (energizer) for electric fences must be provided by a storage battery not to exceed 12 volts DC. The storage battery may be charged by a solar panel. The solar panel may not be augmented by a trickle charger.

(b) The electric charge produced by the fence upon contact shall not exceed energizer characteristics set forth in in the International Electrotechnical Commission (IEC) Standards.

(iv) Warning Signs

(a) Electric fences shall be clearly identified with warning signs that read "Warning - Electric Fence" at intervals of 50 feet or less. Signs shall also contain imagery or symbols of, or similar to, the International Organization for Standardization (ISO) warning symbol for electric hazard to alert individuals that the fence is electrically charged (e.g. lightning bolts).



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Attachment A: Electric Fences - FAQ (From November 16, 2022 - Planning Commission Presentation)	
FAQ	Staff Response
What type of uses are most interested in installing electric fences?	Car repair and business that store equipment or vehicles outside.
Why are owners asking for a 10-foot-tall fence?	It is believed that 10-foot is minimum height to keep people from getting over the fence.
What voltage runs through the fence?	7000 Volts pulse through fence every 1.5 seconds
Is it dangerous to touch an electric fence?	Touching an electric fence should not cause serious harm. It will produce a shock that will be remembered. Tacoma Power suggested watching the following video. https://www.youtube.com/watch?v=hoBXpXzaYYc .
Are there regulations governing electrical fences?	The International Electrotechnical Commission (IEC) provide safety standards for electric fences. These are not regulations; but best practices. The Organization for Standardization (ISO) provide standards for warning signs. The draft code references these standards.
Is the entire fence electrified or just the upper 3 feet?	The lower portion, chain link, is not electrified it is often "enhanced" with electric wires at regular intervals.
Under current code, can a company request a Variance?	Yes, we are processing one at this time at 9249 Pacific Avenue. It is a used car sales lot in the C-2 Commercial District.