

# GENERAL DEVELOPMENT STANDARDS

## 5.1 USES

### 5.1.1 PROHIBITED USES

Uses not to be established in any district of the Knoxville South Waterfront include all **major agriculture, heavy industrial, waste-related services, truck depots, cremation facilities, cemeteries, and storage facilities for Class 1 flammable and combustible liquids** (having an aggregate total of more than 100 gallons) but excluding storage that is part of a motorized vehicle or pleasure craft facility.

- A. **Heavy industrial** includes any use that is potentially dangerous, noxious or offensive to neighboring uses in the district or those who pass on public ways by reason of smoke, odor, noise, glare, fumes, gas, vibration, threat of fire or explosion, emission of particulate matter, interference with radio, television reception, radiation or any other likely cause; heavy industrial asbestos and radio active materials products; animal processing, packing, treating, and storage, livestock or poultry slaughtering, concentrate plant, processing of food and related products, production of lumber, tobacco, chemical, rubber, leather, clay, bone, paper, pulp, plastic, stone, or glass materials or products, production or fabrication of metals or metal products including enameling and galvanizing, automobile dismantlers and recyclers; batch plant; bulk storage of flammable liquids; chemical, cosmetics, drug, soap, paints, fertilizers and abrasive products; commercial feed lot; concrete batching and asphalt processing and manufacturing, batch plant; earth moving and heavy construction equipment and transportation equipment; explosives; fabricated metal products and machinery; impound lot, wrecker service includes city wreckers, auto storage; leather and leather products includes tanning and finishing; petroleum, liquefied petroleum gas and coal products and refining; primary metal manufacturing; pulp mills; rubber and plastic products, rubber manufacturing; scrap metal processors; saw mill, pulp mill; secondary materials dealers; tire recapping; tobacco products; transportation equipment; wrecking, junk or salvage yard; dredging, earth extraction, clearing or grading (timber cutting); extraction of phosphate or minerals; extraction of sand or gravel, borrow pit; metal, sand stone, gravel clay, mining and other related processing; stockpiling of sand, gravel, or other aggregate materials; or any similar uses.
- B. **Waste-related service** includes any use that generally receives solid or liquid wastes from others for transfer to another location, collects sanitary waste or manufactures a product from the composting of organic material. Waste-related service includes the following: animal waste processing, rendering; landfill, incinerator; manufacture and production of goods from composting organic material; outdoor recycle processing center; outdoor storage of recyclable material, including construction material; transfer station; or any similar use.
- C. **Major agriculture** includes animal raising including horses, hogs, cows, sheep, goats, and swine, poultry, apiculture, aquaculture, dairying, personal or commercial animal breeding and development; floriculture, horticulture, pasturage, row and field crops, viticulture, tree or sod farm, silviculture; animal boarding, outdoor; livestock auction; milk processing plant; packing house for fruits or vegetables; plant nursery; plant nursery with landscape supply; retail or wholesale sales of agriculturally-related supplies and equipment; stable; or any similar use.

### 5.1.2 GATED COMMUNITIES

Private developments such as “gated communities” are prohibited in the Knoxville South Waterfront. They inhibit access to public spaces and create physical and social enclaves. Public rights-of-ways shall remain open, facilitating access to the site and fostering connectivity.

# GENERAL DEVELOPMENT STANDARDS

## 5.2 BUILDING ENVELOPE AND MATERIALS

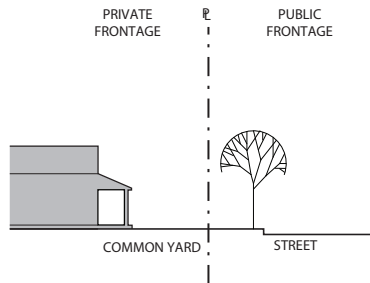
- A. The intent of these standards is to utilize a discipline of form when designing new buildings in order to foster a high quality Knoxville South Waterfront identity.
- B. Building walls should reflect and complement the traditional materials and techniques of the Tennessee Valley's regional architecture. They should express the construction techniques and structural constraints of traditional, long-lasting building materials.
  - 1. Acceptable building façade materials include: brick and block masonry, glass, wood, stucco, metal panel and native stone. The use of composite or synthetic materials not mentioned above must have equivalent or superior visual and performance properties to those mentioned.
  - 2. Windows shall use clear glass with at least 90 percent light transmission.
  - 3. Specialty windows may use stained or opaque glass.
  - 4. Detail facades on retail frontages such as **storefronts** shall have at least 70 percent glass at the ground level.
  - 5. Window openings above the first story shall be at least 25 percent of the building wall area, with each façade calculated independently.
  - 6. Buildings may have flat roofs enclosed by parapets or sloped roofs.
  - 7. Flat roofs shall be enclosed with parapets a minimum of 42 inches high or as required to conceal mechanical equipment to the satisfaction of the Knoxville South Waterfront Advisory Committee.
  - 8. Balconies, porches, bay windows and other projections are encouraged and may be incorporated into the building setback.
- C. Requirements of these Form Based Codes apply only where the subject is "**clearly visible from the street**". The definition of the street includes parks, riverwalks, civic greens, squares and all proposed public areas except alleys. The intention of these parameters are to restrict control to the public realm where it has special significance and limit public preference in the private realm.

# GENERAL DEVELOPMENT STANDARDS

## 5.3 FRONTAGE TYPOLOGIES

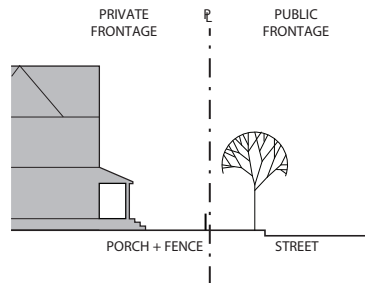
### 5.3.1 COMMON YARD

A frontage where the building is setback substantially from the property line. The front yard is visually continuous with adjacent yards.



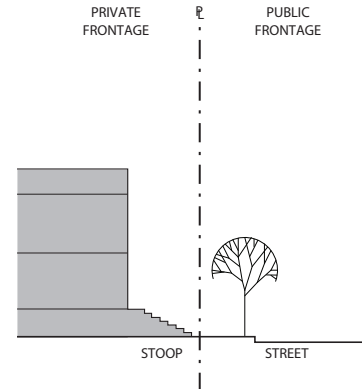
### 5.3.2 PORCH + FENCE

A frontage type where the building is setback from the property line and the building includes an attached porch. A fence at the property line demarcates the front yard from the street.



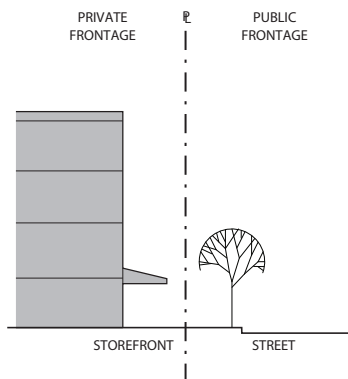
### 5.3.3 STOOP

A frontage type where the raised entry platform is on the principal frontage and the first story is above the level of the ground creating a change in elevation.



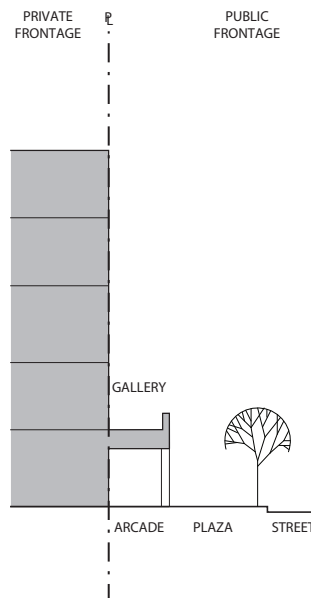
### 5.3.4 SHOPFRONT/AWNING

A frontage type where the building meets the property line and a shopfront or awning extends into the setback space.



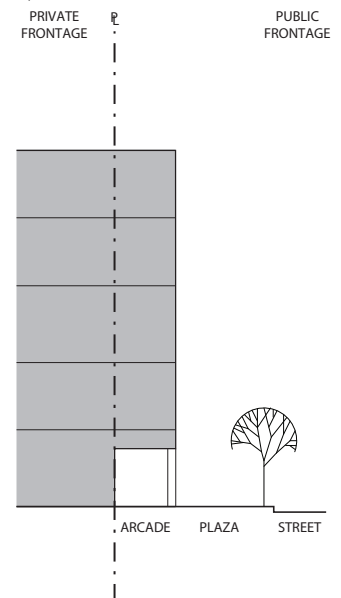
### 5.3.5 GALLERY

A frontage type where the building façade is close to the property line and a continuous, covered space is attached to the length of the façade.



### 5.3.6 ARCADE

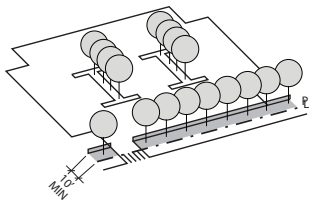
A frontage type where the building façade is close to the property line and the ground floor is recessed from the building façade to allow for a continuous, covered passageway.



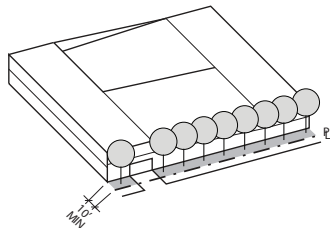
# GENERAL DEVELOPMENT STANDARDS

## 5.4 OFF STREET PARKING AND LOADING

### 5.4.1 SURFACE PARKING



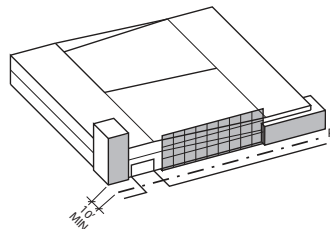
Surface Parking with Vegetation Buffer and Low Wall



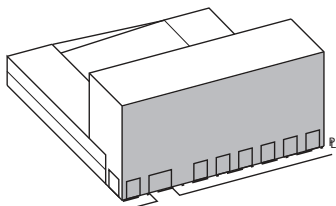
Structured Parking with Vegetation Buffer

- A. Parking shall be placed behind the buildings, but where accommodation of the minimum parking requirements are not adequately met, parking on the side of buildings is acceptable provided that the parking is screened from view from any adjoining right-of-way. On street parking available along the frontage lines that correspond to each lot shall be counted toward the parking requirement for the parcel. By exemption, the required parking may be provided within a five minute (1/4 mile) walking radius of the site which it serves.
- B. Avoid large, unbroken expanses of pavement. Divide large parking lots into smaller paved areas that are separated by landscaping, access driveways or ancillary structures. Parking lots shall include parking islands to breakdown the scale of the surface lot, with the inclusion of pedestrian-scale lighting in lieu of standard lot lighting. A visual buffer of landscaping shall be provided towards adjacent properties. Any parking lot adjoining a public street shall be screened from view to a height of three feet by walls, berms or landscaping or a combination of these three. If landscaping is used, the planting bed shall be a minimum of 10' wide. Separate parking areas from buildings by use of a raised walkway or planting strip. Avoid directly abutting parking aisles or spaces to the edge of a building.
- C. One bicycle rack space shall be provided for every 10 vehicular parking spaces.

### 5.4.2 STRUCTURED PARKING



Structured Parking with Screening



Structured Parking with Building Buffer

- A. Future parking structures in the Knoxville South Waterfront should be constructed with the understanding that **required parking spaces for an area should be shared over the course of a day to maximize efficiency.** While the construction of new parking garages will be critical to accommodate future vehicles in the study area, it is important to establish parking ratios that promote the use of public transportation and encourage development that generates less traffic. New parking facilities must be designed in such a way that does not adversely affect their surroundings.
- B. Monotonous and unadorned parking structure elevations are prohibited. No blank walls or exposed parking levels should face directly onto primary streets. Attempts should be made to reduce the overall visual mass of the parking garage through the architectural expression of stair towers, canopies and screening devices. Parking garage elevations shall be screened from view with the incorporation of lightweight design elements that add visual interest to the elevations (such as trellis panels) and filter the view to parked cars. When possible, building edges that face primary streets should incorporate programmable spaces into the ground floor of the parking structure (such as small commercial/retail uses) to activate the street edge. Garage entries shall not exceed 16' clear height and 24' clear width. Provisions shall be made for audible and visible warnings at garage exits to protect pedestrians from vehicles.

### 5.4.3 SERVICE LOADING

Curb cuts and service roads leading to service areas shall be located as far away as possible from public entrances. Service areas to buildings shall be screened from view by plantings or low walls.

# GENERAL DEVELOPMENT STANDARDS

## 5.5 SIGNAGE

Knoxville's Signage Ordinance shall apply.

Signage within the Knoxville South Waterfront should be clear, informative and durable. Appropriate signage is important for commercial uses that need to effectively advertise their goods and services. Inappropriate advertising signage contributes to visual clutter of the environment by their design, location, material choice or obtrusive size. Primary concerns regarding signage revolve around the sign's location, size, material and illumination.

### 5.5.1 SW1

The sign regulations of Article 5, Section 10B, Residential Districts, shall apply in the SW1 District.

### 5.5.2 SW2 THROUGH SW7

#### A. Sign Area

The total allocated sign area shall not exceed one square foot per linear foot of building frontage per principal building. Except for arcade and hanging signs and window signs, the combination of all other permitted sign types shall not exceed the maximum allocated sign area for the building.

#### B. Permitted Sign Types

The following types of signs shall be permitted.

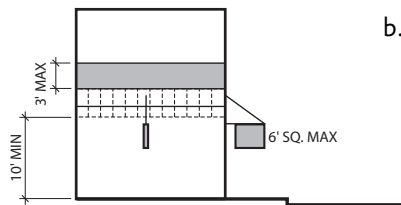
##### 1. STOREFRONT SIGNAGE

##### a. Arcade and Hanging Signs

- i. Arcade or hanging signs shall provide a minimum clearance of eight feet above the sidewalk.
- ii. The maximum sign area shall not exceed six square feet per arcade or hanging sign.

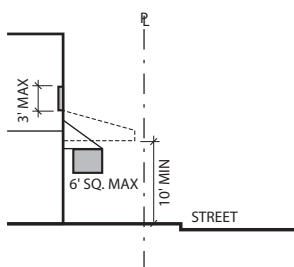
##### b. Awning and Canopy Signs

- i. Awnings or canopies shall provide a minimum clearance of 10 feet above the sidewalk and shall have a minimum depth of six feet. An awning or canopy may extend into the public right-of-way with the City's Engineer's approval.
- ii. The maximum sign area shall not exceed six square feet per awning or canopy.



##### c. Projecting Signs

- i. Projecting signs shall provide a minimum clearance of eight feet above the sidewalk and shall extend no more than four feet from the façade of a building. A projecting sign may extend into the public right-of-way with the City's Engineer's approval.
- ii. When placed at the ground story level, projecting signs shall not exceed six feet in area. When placed at the second story level, projecting signs shall not exceed 12 square feet in area. When placed at the third story level, projecting signs shall not exceed 18 square feet in area. Projecting signs on the third story level are only permitted on the corner of a block, where they may project from a building corner.



**Storefront Signage**

##### d. Window Signs

Window signs shall not collectively exceed 10 percent of the window area on each façade.

# GENERAL DEVELOPMENT STANDARDS

## 5.5 SIGNAGE

### 2. WALL SIGNAGE

- i. Wall signs are permitted within the area between the bottom of the second story windows and the top of first floor windows within a horizontal band not to exceed three feet in height. In no case shall this band be higher than 18 feet or lower than 12 feet above the adjacent sidewalk.
- ii. Wall signs are also permitted immediately below the roof line of the building or structure and shall not extend more than 30 percent of the width of the building façade. Wall signs shall not project above the elevation of any building or structure.
- iii. A wall sign may extend up to 12 inches into a public right-of-way.

### 3. ROOF SIGNAGE

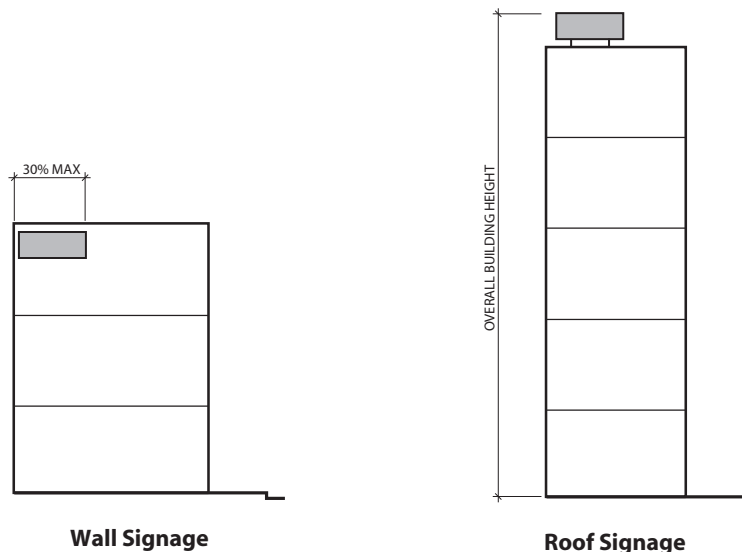
Roof signs are discouraged in the Knoxville South Waterfront. Roof signs will be included in the overall calculation of building height.

### C. Sign Illumination

1. Signs may be illuminated from within or from an external source, but such illumination shall be in a manner that avoids glare or reflection which in any way interferes with traffic safety.
2. Internally illuminated signs shall be designed with:
  - a. Individually illuminated letters;
  - b. An opaque background; or
  - c. The background of the sign face having a darker color than the content or message of the sign.
3. Neon or any similar exposed tube lighting is permitted provided that such lighting shall not be used solely to outline the perimeter of the sign face or sign structure, or outline or highlight architectural features on a building or structure.

### D. Street Addresses

The street number of the business is not required on each sign, provided that the street number is placed on each entry door or within three feet of the door.



# GENERAL DEVELOPMENT STANDARDS

## 5.6 LIGHTING AND NOISE

### 5.6.1 EXTERNAL LIGHTING STANDARDS

#### A. Intent

The intent of the outdoor lighting standards are to:

1. Provide adequate light for safety and security,
2. Promote efficient and cost effective lighting and to conserve energy,
3. Reduce light pollution, light trespass, glare, and offensive light sources,
4. Reduce sky-glow to increase night sky access,
5. Reduce development impact on nocturnal environments,
6. Prevent inappropriate, poorly designed or installed outdoor lighting,
7. Encourage quality lighting design; light fixture shielding, establish maximum uniformity ratios and establish maximum light levels within and on property lines.

#### B. Illuminance

Meet and maintain the recommended illuminance range and uniformity for each use and/or structure specified in the latest issue of the Illuminating Engineering Society of North America's (IESNA) publications including but not limited to:

1. car dealerships,
2. service stations,
3. buildings & monuments,
4. intersections,
5. outdoor merchandising,
6. parking facilities,
7. pedestrian ways,
8. walkways/bikeways,
9. roadways,
10. security locations/tasks.

#### C. Light Trespass

Meet and maintain the recommended illuminance range to minimize light trespass as specified in the latest issue of Illuminating Engineering Society of North America's (IESNA) publications. Refer to each District Standard for the relevant Environmental Zone designation.

#### D. Light Colors

Yellow spectrum lamps such as sodium lamps are permitted only within City right-of-ways and prohibited on private property.

#### E. Controls

Use and maintain automated external lighting controls to minimize light pollution and energy consumption. Such controls include but are not limited to:

1. time clocks and/or dimmers,
2. motion and/or light sensors,
3. phased switching of multiple circuits.

#### F. Prohibitions

No person shall install any of the following types of outdoor lighting fixtures:

1. Blinking, flashing, moving, revolving, flickering, changing intensity or color, and chase lighting, except for temporary seasonal displays or for public safety.
2. Any light fixture that may be confused with or construed as a traffic control device.

# GENERAL DEVELOPMENT STANDARDS

## 5.6 LIGHTING AND NOISE

### G. Exceptions

The standards of this Section shall not apply to the following types of exterior lighting:

1. Landmark Signs: Illumination of cultural significant signs designated by the community as a landmark.
2. Ornamental Lighting: Low voltage (12 volts or less), low wattage ornamental landscape lighting fixtures, and solar operated light fixtures having self-contained rechargeable batteries, where any single light fixture does not exceed 100 lumens.
3. Strings of Light: Strings of light, not exceeding a maximum of 50 lumens per lamp (equivalent of a seven watt C7 incandescent light bulb) on properties that are used exclusively for residential uses.
4. River Navigation Lighting: Lighting used exclusively for river navigation and safety purposes.
5. Right of Way Lighting: Public lighting that is located within the right of way on State or Federal controlled land.
6. Seasonal Lighting Displays: Lighting displays from November 15 through January 30 of the following year.
7. Temporary Events: Temporary outdoor activities that include, without limitation, fairs, carnivals, sporting events, concerts, and promotional activities that require temporary outdoor lighting.

### 5.6.2 NOISE

Knoxville's Noise Ordinance shall apply.