CITY OF CLEVELAND
DESIGN REVIEW GUIDELINES

DRAFT

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INTRODUCTION

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Building and zoning codes regulate the use of property and establish parameters for building size and density. Design review is an additional layer of regulatory control by which communities can influence the appearance of buildings, sites, and signage. Design guidelines typically address exterior materials, building features, roof forms, arrangement and design of windows, placement of garages, and signage. They also address location, orientation and relationships of buildings and parking lots, pedestrian circulation and safety, and the character and qualities of landscaping.

The City of Cleveland's design guidelines contained in this document provide a concise summary of the City's preferred design approaches in order to help the applicants through the city's design review process. Design review enables the City to ensure that new construction and the rehabilitation of existing structures will complement and enhance the character of the surrounding neighborhood or district.

GOALS OF DESIGN REVIEW

The goals of the design review process are to:

- Encourage well-designed buildings and sites
- Preserve and enhance the character of existing neighborhoods and development;
- Promote economic activity and increase property values;
- Improve the image of Cleveland neighborhoods and downtown;
- Promote sustainable building design and material choices;
- Protect the environment;
- Support healthy living;

Where does design review apply?

- City wide: All new residential, commercial, and institutional buildings in the City of Cleveland are subject to design review. New industrial buildings are not subject to design review, unless they are in a design review district or Cleveland historic landmark district (see below).
- Design Review Districts: All new construction and alterations for properties within a design review district are subject to design review. However, design review is not required if only interior work is proposed or the exterior work results in no change to the appearance of the building or the work does not require a building permit.

- Historic Local Landmark Districts: Exterior changes to a property that is located within a Local Landmark District or one that has been designated as an individual local landmark requires design review and Landmarks Commission approval.

ADMINISTRATION OF DESIGN REVIEW - HISTORIC LOCAL LANDMARK DISTRICT AND SITES

The Landmarks Commission is responsible for determining whether buildings, sites or historic districts are eligible for designation as landmarks. The Commission follows established criteria listed in the Landmarks Ordinance and uses the Secretary of the Interior's Standards for Rehabilitation to review proposed changes. Through the issuance of Certificates of Appropriateness the Commission reviews building and demolition permits for Designated Cleveland Landmarks and Districts. Local Design Review Committees act as advisory committees to the Landmarks Commission within designated historic districts.

More information on the Landmarks Commission, including locations of designated local landmark districts and properties, can be found at http://planning.city.cleveland.oh.us/designreview/cpc.shtml)

HOW DOES THE DESIGN REVIEW PROCESS WORK?

1. Process Flow Chart
   The flow chart on the next page illustrates 3 possible routes that design review process make follow:

   Major Projects: Projects that require approval by the Planning or Landmarks Commission before a permit can be signed by the Director or his designee :

   - Construction of new main buildings (except minor residential improvements as noted below)
   - Demolitions (except emergencies as noted below)

   Minor Projects: Projects where a permit may be signed by the Director or his designee after design review committee approval but without action by the Planning or Landmarks Commission

   - Signs
   - Site improvements (parking lot expansion, landscaping, fences, etc.)
   - Accessory structures (garages, sheds, rear additions, etc.)
   - 1 or 2 family residential projects of 5 or fewer units
   - Demolition of minor accessory structures not visible from the street

   Administrative approval: Projects where a permit may be signed by the Director or his designee without design review committee or planning or Landmarks Commission approval:

   - Temporary improvements in place 3 months or less

- Replacements or repairs using essentially the same material and color
- Ancillary improvements that have no discernible visual impacts
- Emergency demolitions, without documentation that the Building and Housing Department has made a declaration of a "forthwith demolition"

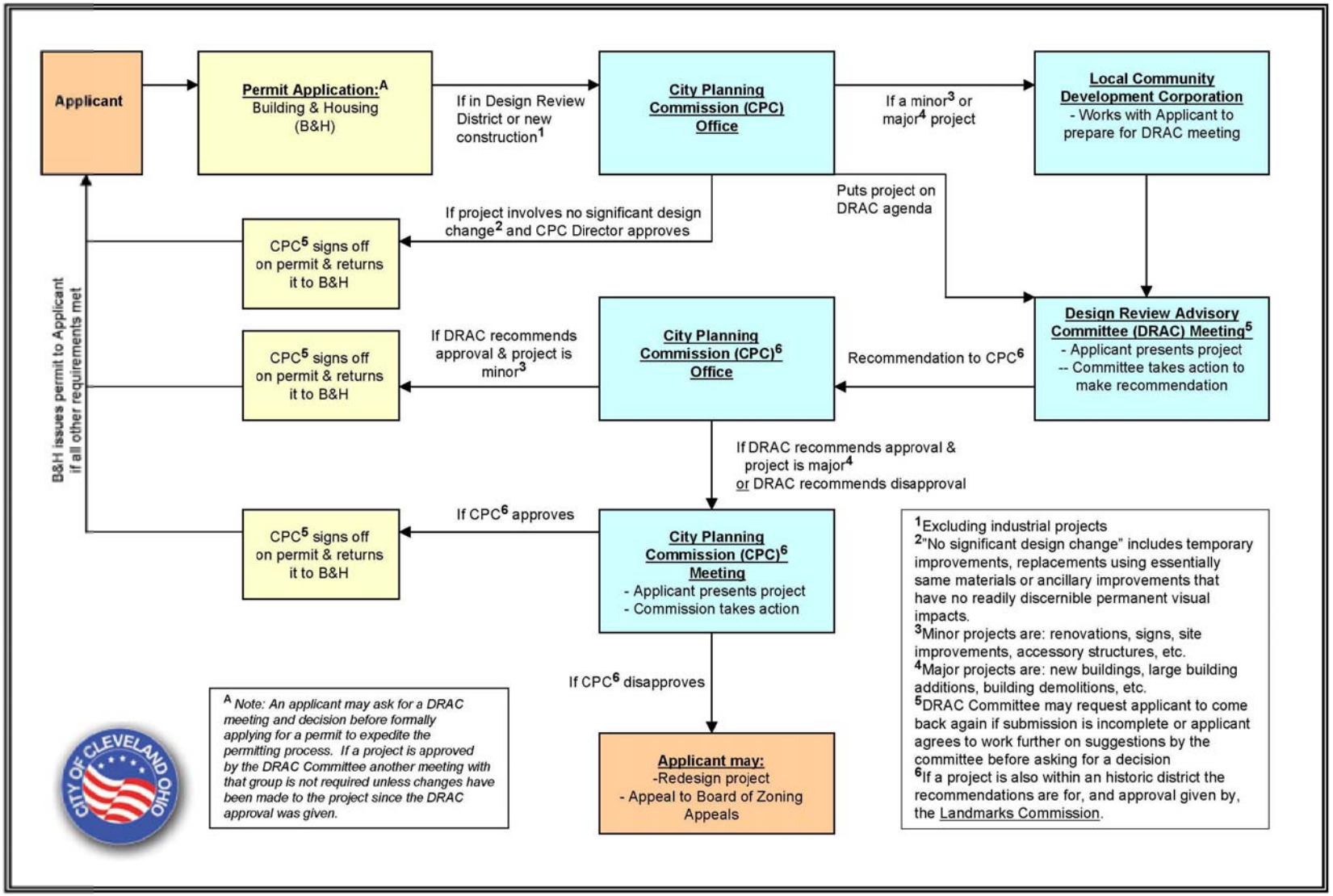
2. Submission Requirements

   The following checklist identifies the items that are required to be submitted for new buildings or major renovations. Minor improvements will require only certain items on the list. The staff at the Planning or Landmarks Commission can assist in determining what is required for your project.

   For more information please refer to the Design Review Applicants Guide at http://planning.city.cleveland.oh.us/designreview/applicantsGuide.pdf

   a. Application Form
   b. Written Project Summary: location, scale, investment, number of units, square feet, residents, employees, parking spaces, potential code issues
   c. Site Location Map: with respect to nearby streets
   d. Site Context Plan: site plan showing adjacent properties and buildings
   e. Site Plan: drawn to scale, key dimensions marked
   f. Landscape Plan: with plant list
   g. Parking Plan: key dimensions marked for spaces, aisles, curb cuts, etc.
   h. Site Amenities: locations, details including lighting fixtures, benches, trash receptacles, fences, bike racks, art projects, arbors, tables, flagpoles, clocks, recreation equipment, etc.
   i. Color Photographs: site and context, including nearby buildings
   j. Elevation Drawings: color versions if requested
   k. Floor Plans
   l. Wall Sections and Building Sections: sufficient to explain the design
   m. Perspective Renderings or Photo simulations: if requested
   n. Sign Plan: wall signs, freestanding signs, illumination, method of attachment, colors, etc.
   o. Lighting Plan: locations, fixtures, heights, etc.
   p. Material, Color, and Finnish Samples Lists (for final approval only)
   q. Sustainable Building Features Description (for informational purposes)

DESIGN REVIEW PROCESS



1. CONTEXT

Compatibility with adjacent buildings

Cleveland is a city of neighborhoods where residents value the character and design of their surroundings. New development projects and renovations must be designed to fit into the context of existing neighborhoods. Applicants must consider the architectural context in which they are planning to build. Context is typically established by drawing a circle from the center point of a property with a radius of 300 feet for residential construction and 500 feet for all other project types. This circle establishes the neighborhood context in which cues for proposed construction are to be taken to ensure neighborhood compatibility.

The Cleveland City Planning Commission does not dictate the particular styles of architecture that are permissible within the city. The Planning Commission's role is to facilitate the highest quality design outcomes in all of Cleveland's neighborhoods, commercial corridors and Landmark districts. The overriding emphasis is on compatibility between new and existing structures and development patterns.

Context is determined by a variety of factors, including a neighborhood's history and typology, the degree of density or vacancy in a neighborhood, the prevailing land uses, and the ecological characteristics of a neighborhood.

Facade articulation; base, middle and top

1.01 NEIGHBORHOOD CONTEXT

a. A new structure should be compatible with nearby buildings. Some variation in a building's details (materials, windows, color, roofing) is permissible, as long as an overall level of compatibility is maintained with neighboring development.

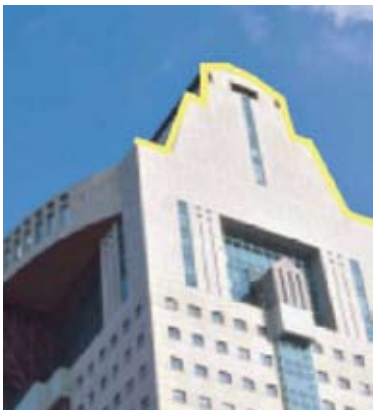
b. Many Cleveland neighborhoods have a distinctive appearance and form; new construction and renovations should complement the existing pattern of development.

c. A new building should be sited to preserve or highlight public or private views found on the site, including views of noteworthy structures or natural features.

1.02 STREETSCAPE COMPATIBILITY

a. A new building should be sited to reinforce and promote the character of the street. New construction should be designed to promote pedestrian activity on the street.

b. New structures should reinforce the street's sense of order, respecting the existing setback, height, scale and proportions.



Roof detialing to create visual interest

Height compatibility with adjacent buildings

Use of glass, trellises and upper story planters can aid in establishing a human scaled street

c. A continuous street edge should be reinforced by infill development.

d. Side elevations next to vacant sites or public open spaces should be compatible with the street façade.

1.2 DESIGN COMPOSITION (see zoning code Ch.331.01)

a. The architectural composition of building elevations should express base, middle, and top articulation on all street facades. The transition between the base and middle to middle and top is often articulated by the use of contrasting materials or ornamental projecting elements.

b. Roof articulation gives a building a distinctive silhouette when seen from the street level, and when viewed as a part of the skyline, especially in the downtown area. While it is important to be mindful of the neighboring buildings while designing the roof form, exceptions can be when the building is expected to make a bold and unique statement for the neighborhood.

c. The base of a building should include elements that relate to human scale, including doors, windows, projections, columns, awnings, canopies, architectural ornament.

d. New buildings should stay within the overall height range of neighboring buildings on the street, but it is not necessary to exactly match the height of the neighboring buildings. In general, the height of a building should be within 70% to 130% of adjacent buildings.

1.3 URBAN CONNECTIVITY

New development can breathe life into a neighborhood or commercial district. However, if new development is disconnected and insular in design, it can weaken a sense of place. These guidelines encourage creating strong physical links to adjacent transportation, recreation and community assets.

a. Open spaces on a site should be designed to be comfortable, attractive, and physically accessible.

b. Open spaces should be designed to encourage activities and social interaction.

c. Wherever possible, incorporate direct access to nearby parks, trails, green spaces, gardens, and other neighborhood amenities.

d. Wherever possible, incorporate direct access to bus stops, rapid transit stations, bicycle lanes, and other components of the transportation system.

e. Provide a direct connection from the main entrance of a building to the public sidewalk.

2. SITE CONSIDERATIONS

Site considerations addressed in this section include topography, setback, orientation, stormwater management, and buffer areas. Parking and landscaping are addressed in subsequent sections.

Please keep in mind that some sites in Cleveland are located in transitional environments with varying levels of vacancy. In these areas development patterns are likely to change, depending on future needs. Where neighborhoods are in transition, new development may establish the context to which future development will respond.

2.01 TOPOGRAPHY

a. Whenever possible, retain or restore the natural topography of a site.

b. Avoid total site clearing and re-grading; preserve existing topsoil wherever possible.

c. In ecologically sensitive areas, a long-term design and management plan should be developed for any on-site native habitats, wetlands, water bodies, and the buffers required for their protection.

d. Do not locate new development on or within 100 feet of critical environmental resources such as wetlands, high slopes, and land identified as habitat for a threatened or endangered species.

e. Avoid development on existing green spaces and land within priority areas for urban agriculture.

f. Avoid new development on land located in a 100-year floodplain.

2.02 BUILDING SETBACK

a. All new construction should adhere to the predominant building set-back line of the existing structures.

b. Variation of the building set-back line should not exceed 10 feet.

c. If it is desired to increase the variation beyond 10 feet for front yards or courtyards, then decorative walls, fencing and landscaping should be incorporated at the predominant building setback line to respond to adjacent existing structures.

d. On streets where 50% or more of existing structures have been demolished, greater variation from the established setback is permissible.

Porous parking and green pavers

Green roofs help regulate indoor temperatures and onsite management of stormwater

Sidewalk planting to manage stormwater runoff

2.03 BUILDING ORIENTATION

a. New construction should be oriented toward the street. Clearly visible main entries or front doors are encouraged.

b. Simple rectangular building forms reinforce the street more effectively than irregular shapes or buildings set at odd angles to the street.

c. Greater flexibility in building orientation is permitted in areas with greater vacancy where there is less context to draw from. The focus should be on creating a harmonious transition between adjacent development areas.

2.04 STORMWATER MANAGEMENT

Low impact design

The use of low-impact design (LID) techniques is encouraged. LID uses a site's natural features to manage stormwater and preserve natural hydrologic functions. LID manages stormwater at the source. Some basic LID techniques include:

a. Protect native vegetation and soils. Leave areas of a site undisturbed wherever possible.

b. Minimize impervious surfaces such as rooftops, driveways and parking areas by designing shorter, narrower roads and driveways.

c. Use various permeable (or porous) pavements wherever possible. Permeable pavements allow stormwater to drain directly through the surface into the underlying soil, thereby reducing stormwater runoff. There are porous varieties of asphalt, concrete, and interlocking pavers.

d. Install green roofs, wherever feasible. A green roof consists of a layer of vegetation that completely covers an otherwise conventional flat or pitched roof.

e. Install rain barrels, cisterns, and other water catchment systems. These devices are suitable where there is a use and need for the stored water or where there is a pervious area to which water can be slowly released between storms.

f. Use water from catchment systems and downspouts to provide landscape irrigation.

g. Maximize tree canopy over paved areas.

h. Manage stormwater runoff by disconnecting the paved areas from one another.

Bio-retention

a. Direct stormwater runoff to bio-retention areas such as rain gardens and vegetated swales. Bio-retention areas collect stormwater in planted areas and allow this water to infiltrate gradually into the ground. A swale is an open channel that collects water, planted with grasses, shrubs, and trees.

b. In landscaped areas, use soil amendments to increase the ability of soil to hold water and reduce the need for fertilizers and pesticides.

Rain garden adjacent to the building location

Ponds and retention areas for large scale commercial or industrial development

c. Select native or ornamental plants to limit the need for supplemental watering, fertilizers and pesticides. [List of recommended plants]

d. Ponds and wet basins (for large projects)

2.05 EDGES, TRANSITIONS, BUFFERS **(See zoning code ch. 352.03)**

In addition to landscaping required by zoning, buffer areas are encouraged when differing land uses occur adjacent to each other.

a. Where a commercial or industrial project abuts a lot or parcel in a residential parcel or development, a landscape buffer shall be provided using either Option A or B below.

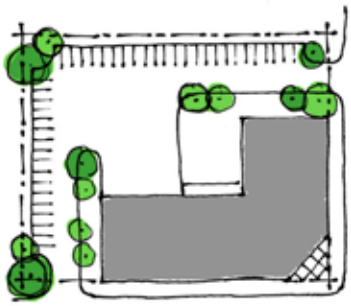
Option A – Landscape Buffer: A landscape buffer on the shared border consisting of natural landscape materials such as lawn, ground cover, shrubs, and trees. The buffer should not include impervious pavement. Landscaping should be designed to minimize sound, light, and noise impacts on the protected use.

Option B – Wall, Berm, Fence, or Vegetative Screen: An opaque wall, berm, fence, or dense vegetative screen on the shared border. If a fence or wall is provided, it should have a finished-in appearance on both sides. Acceptable fencing materials include wood and ornamental metal. Chain link fencing is discouraged. Barbed wire, metal spikes, razor ribbon, or other dangerous materials should not be used.

3. PARKING

Adequate signage makes access for off-site parking easy

Parking access behind buildings; chamfered corners increase visibility and safety



Parking on the side and rear of the building

Berms and landscaping with short retaining walls

These parking design guideline are intended to help apply the City of Cleveland's zoning code requirements, Ch. 349, to specific projects and provide additional information to enhance parking lot design. The guidelines are also intended to provide a design vision for parking areas in the City.

3.01 PARKING (See zoning code CO 339.02 for parking districts, and CO 349 for Off-street parking requirements)

a. Parking and loading spaces must be designed to meet the needs of individual sites.

b. Parking areas should be designed to encourage the use of alternative transportation modes, such as carpooling, transit, bicycling and walking

c. Promote sustainable design by reducing impervious paving, increasing shading of parking areas and making parking areas as compact as possible.

d. Parking behind or beside buildings is preferred as this decreases the visual impact of parking and creates a more "pedestrian friendly" environment, encouraging walking and the use of other alternative transportation modes.

e. If locating parking areas behind buildings is not possible, locating parking to the side of buildings is the next best choice.

f. Only when it has been demonstrated that neither of these locations is feasible should parking areas in front of buildings be considered.

g. Organize parking spaces and rows to provide consolidated soft landscaped areas and opportunity for on-site stormwater management.

h. Limit the length of parking rows to a maximum (20-23 contiguous spaces typical). Longer rows should include landscaped breaks, such as islands, with shade trees.

3.02 SITE GRADING

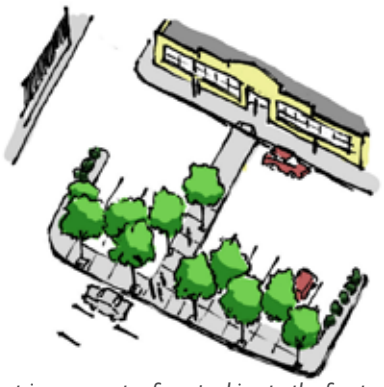
a. Ensure that any grade changes at the edge of surface parking lots provide a subtle transition to surrounding areas.

b. Avoid significant changes in grade (greater than 4% slope) between the public sidewalk and pedestrian access and circulation routes.

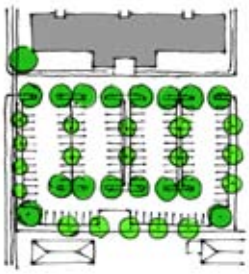
c. Ensure universally accessible routes are provided across any grade changes.

d. Limit the maximum grades on landscaped areas to 33% (3:1) or less to ensure that grassed slopes can be maintained.

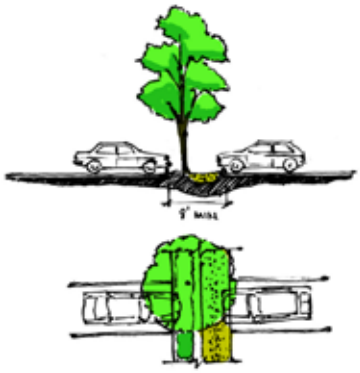
Pedestrian pathways and connectors



Pedestrian connector from parking to the front of the building



Parking layout showing medians and screening for neighbors



Median dimensions to accommodate bumper overhangs

e. Limit the use of retaining walls, particularly along street frontages, parks, ravines and other areas of the public realm.

f. When appropriate, use the existing site grading as berms to enhance the screening of parking lots.

3.03 CROSS ACCESS (See zoning code CO 339.03)

Cross access improves circulation efficiency and safety by allowing people and vehicles to move between properties more easily and directly. Cross access reduces the need for cars to exit onto and enter from public streets and to drive across sidewalks, all of which can pose dangers. By reducing the amount of maneuvering and driving necessary to get from site to site, cross access also reduces unnecessary driving.

a. Wherever possible, provide cross access between two or more properties for pedestrians, bicycles, or vehicles provided by internal drive aisles, bike paths or sidewalks.

3.04 PEDESTRIAN ACCESS

a. A safe and direct pedestrian pathway should be provided from the street or sidewalk to the primary building entrance in commercial, institutional and residential land use.

b. If a parking area is located in front of the building, a safe pedestrian pathway must be provided through the parking area.

c. Pedestrian pathways must be ADA compliant, and be separated from vehicular traffic or clearly designated, such as through a raised surface or distinctive paving.

d. Whenever possible, parking rows should be aligned perpendicular to the main building, as this provides for a safer and more direct pedestrian route.

e. Pedestrian pathways that cross driveways must be clearly marked.

3.05 LANDSCAPING

Per the Cleveland zoning code, a minimum of five percent (5%) of a parking area shall consist of landscaping.

a. Retain and protect existing trees, vegetation, natural slopes and native soils and integrate these features into the overall landscape plan.

b. Distribute landscaping throughout the site to soften and screen parking lot edges, reinforce circulation routes, create pleasant pedestrian conditions and maximize shade and stormwater benefits. The landscaping can be designed to serve as a feature of visible stormwater infrastructure.

c. Incorporate soft landscaped areas and trees within the parking lot to define major vehicle and pedestrian routes, provide shade and break-up the expanse of paved areas.

d. Provide continuous landscaped medians every 3 (or fewer) banks of parking.

e. Provide a 6' wide frontage strip.

f. Perimeter planting areas adjacent to the side and rear property lines should be installed to block the parking area visually from neighboring land uses.

g. The landscaping should be planted such that it doesn't block the lighting for the parking area.

h. Curbs along landscaping when provided with wheel stops aid in better maintenance and longer lifespan.

3.06 LIGHTING (See zoning code CO 337.20)

Select lighting fixtures that work well with the overall the landscape and building design

a. Provide a comprehensive lighting plan for the parking lot site. Lighting should create an identity for the parking lot, enhance adjacent streets and pedestrian environments and be appropriate to the location, context and scale of the areas being lit.

b. Select different luminaries with a coordinated appearance to light pedestrian pathways, parking spaces, drive aisles, building and site entrances and other relevant parking lot features.

c. Balance the need for safety and security with the reduction of energy consumption and light pollution.

d. Ensure all parking spaces and circulation routes are well-lit.

e. Install lighting that is appropriately scaled to its purpose, avoid over-lighting.

f. Direct light downward and avoid light overspill on adjacent properties, streets and open spaces.

Downward lighting with energy efficient LED bulbs

g. Use energy-efficient fixtures and bulbs.

h. Where feasible, incorporate opportunities for alternative energy generation, e.g. solar, wind, etc.

i. Provide pedestrian-scaled lighting, such as bollards or lower-scale pole fixtures along pedestrian routes.

j. Consider lighting elements for their aesthetic and design value, not simply their function or ease of maintenance.

k. Coordinate the location of lighting with pedestrian clearways, tree planting and other landscaping.

3.07 GREEN PARKING STANDARDS

Green parking refers to several techniques applied together to reduce the contribution of parking lots to the total impervious cover in a lot. Application of green parking techniques in the right combination can dramatically reduce impervious cover and consequently reduce the amount of stormwater runoff.

l. Do not exceed the minimum number of parking spaces required by the zoning code. (see zoning code Ch. 349.04 for Required parking spaces)

m. Minimize the dimensions of parking lot spaces.

n. Use pervious (porous) pavement for parking lots and in overflow parking areas.

o. Use bio-retention areas to treat stormwater.

p. Share parking with neighboring properties, wherever feasible.

q. Choose light-colored concrete, pavers or top coats to reduce the amount of heat generated and reflected by the parking surface. To lighten the color of asphalt, a white aggregate can be applied as a chip seal layer, or a light-colored surface coating can be used.

Pervious pavers for parking surfaces

3.08 BICYCLE PARKING (See zoning code CO 349.15)

Bicycle parking, storage and shower/changing rooms provide convenience and security for bicyclists and helps to reduce auto-dependency. Some developments like schools, universities, hospitals, places of assembly and worship, have the potential to generate a higher than average demand for bicycle parking. Developments such as these should be designed with the potential bicycle parking demand in mind. This can be accomplished by ensuring that the amount of bicycle parking provided exceeds the minimum requirements and reflects the expected usage of the site.

Bike racks on sidewalks and adjacent to properties

r. Provide bike racks near entrances into commercial, institutional, industrial, and multi-family residential properties.

s. Wherever possible, bicycle racks should be covered for weather protection; installing racks underneath awnings, overhangs or stairways can also provide shelter.

t. Bicycle racks should be made of galvanized steel and industrial grade materials for maximum durability. Racks should have a smooth outer surface to avoid scratching bikes.

u. Bicycle lockers

v. Freestanding bicycle parking facilities

w. Bicycle parking in parking garages should be located on the ground level, as access ramp slope needed for bikes are 6-7% as opposed to that for cars which is 15%. A dedicated, direct entrance from the main access street into the bike room in a parking garage will improve security and convenience.

Incorporating public art in bike parking design

3.09 PARKING FACILITIES (See zoning code CO 339 & 349.13)

Although parking facilities can take many forms as stand-alone or part of a mixed-use structure, self-park or valet, and automated in urban settings, all parking facilities should seek to meet the following basic criteria:

a. Site design:

- Optimizing site potential, by choice of site and its relationship to walking, driving, other transportation linkages and good design opportunities.
- The streets surrounding the facility and their traffic flow must be taken into consideration when planning entrances and exits and deciding on ramp designs.

Use of glass for stair and elevator core for the parking facility at Cleveland State University

- The entrances and exits are very important to the smooth functioning of the facility, with the type of use again determining the length from the opening and placement of the entry booths, as well as the quantity of entrances and exits.
- Maintain the urban street front by having the sidewalk condition of the facility contain stores or provide a safe and pleasant walk experience.
- Design for the points of intersection between man and the automobile for adequate safety of movement.

b. Building design & aesthetics:

- Signage should locate all major internal pedestrian access points as well as external major roads and buildings. Color-coding, numbering, visual cues, music, and even machines for marking tickets with your exact location can help with easy retrieval.
- Using landscaping and changes in architectural materials forms, and scales to enhance the facility façade along the street. Use landscaping to shied and enhance parking lot design.
- Architecturally breaking down the scale of the large structure along its façade.
- Designing beautiful stairs and elevator cores to enhance the community and walking experience. Open, glass stairwells and glass-backed elevators are preferred.
- Natural ventilation is always good, however detailed study is required in some areas and types of parking facility design to determine its effectiveness.
- The exterior façade should have a well-articulated and aesthetically pleasing composition using skin elements in combination with the bands created by columns and parapets.
- The overall composition of vertical and horizontal skin elements should be designed to break up the scale of the facility and create a layered effect on the facade.
- The use of vines on walls to soften the appearance of buildings and walls and to deter graffiti is encouraged.

c. Integrated and mixed use retail:

- In mixed-use projects there has been shared parking documenting how different users can maintain full facility occupancy, such as movie/theater goers, night use and residential use during the day. This can be calculated to the advantage of the facility owner and the community.
- Street-front retail and commercial spaces on road frontage or other levels should follow the guidelines for commercial and retail spaces for building design and signage.

Facade skins on parking garages

- Planning for loading or unloading conditions are required by mixed-use, so as not to interfere with facility traffic.

3.10 ADDITIONAL PARKING CONSIDERATIONS

a. Integrate shopping cart corrals, ticket or payment kiosks, signage, public art, and other applicable site elements into the design and layout of the parking lot.

b. Structures related to site elements, such as bicycle parking or shopping carts, should incorporate sustainable materials and technologies whenever possible.

c. Explore opportunities for incorporating public art. Examples of public art opportunities in parking lots might include enhancement to the street edge, screening, a marker of the entrance or exit, or a focal point sculpture.

4. LANDSCAPING

(see zoning code Ch. 352.03)

Careful selection of plants can enhance and/or frame views

4.01 PLANT MATERIALS (See zoning code CO 352.05)

a. Plant materials (including trees, shrubs, ground cover, perennials, and annuals) should be part of an overall landscaping plan in which all vegetation is appropriate for its intended use.

b. Turf and lawn vegetation should be drought tolerant.

c. To the extent possible, select native plants, preferably sourced within 250 miles. [Refer to Ohio State University's Native Plants of Ohio list, Bulletin 865]

d. Avoid the use of invasive species. [Refer to Ohio Invasive Plant Council]

e. Aesthetics should be a prime consideration. Plant form, texture, color, bloom time and fragrance are important to the overall feel of the site. Plants can be used to enhance and frame desirable views or screen undesirable views. Care should be taken to not block views at entrances, exits, or along difficult road curves.

f. Stressors (e.g. wind, exposure, salt tolerance, insects, drought and inundation tolerance, and disease), micro-climates, and sunlight conditions should also be considered when laying out the planting plan.

g. When choosing landscape plants, take into account available sunlight and rainfall, seasonal temperature range, and wind exposure of the site.

h. Landscapes should be designed to direct movement, frame vistas, and moderate the environment of the site.

i. Consider the height of plant materials at maturity, their silhouette (rounded, pyramidal, spreading), texture (fine, medium, coarse), color, seasonal interest (flowers, fruit, fall color), and growth habits (fast or slow).

j. Group plants according to their water needs.

k. The use of vines on walls to soften the appearance of buildings and walls and to deter graffiti is encouraged.

Plant variety should be incorporated in the overall site design

4.02 TREES

a. All street trees shall be from the City of Cleveland's recommended street tree list. [http://www.cityofclevelandtn.com/Parks/recommendedtrees.evergreen.pdf]

b. Existing trees shall be maintained to the maximum extent possible to protect the city's air and water quality and aesthetic value, while recognizing the need to remove some trees for development, safety, view preservation, and other purposes.

Trees help reduce heat island effect and help provide shade and areas of respite

Native ground cover generally requires less maintenance

c. All healthy trees that are removed, damaged, or destroyed as a result of new construction or renovation activities shall be replaced in accordance with the City of Cleveland Zoning Code. (See zoning code CO 509)

d. Minimum tree size is covered in section 352.11 of the city of Cleveland Zoning Code. (caliper and planting)

e. As a general standard, one tree should be planted per 300 square feet of landscape area. At least 30 percent of the trees planted should be deciduous shade trees to increase shade and reduce urban "heat island" effect.

4.03 LAWN OPTIONS

a. Applicants are encouraged to plant native ground covers instead of conventional turf grass, using turf grass only where they want part of their lawn/garden to have a traditional look. Native ground covers require less maintenance, irrigation, pesticides, fertilizers, and fuel-powered lawn tools.

b. Limit turf areas to those needed for practical uses.

c. Use turf grass only where it aesthetically highlights the house or buildings or where it has practical function, such as in play or recreation areas.

d. Grouping turf areas can increase watering efficiency and significantly reduce evaporative and runoff losses.

e. Select a type of grass that can withstand drought periods and become dormant during hot, dry seasons. (examples, details)

f. Consider a low mow lawn or a meadow landscape.

g. Incorporate multiple species rather than a monoculture of one grass.

h. All irrigation systems for development should be designed, installed, and operated to minimize run-off and over-spray of irrigation water onto roadways, sidewalks, and adjacent properties, and shall be installed with rain sensors to turn the system off during rainy conditions.

5. SUSTAINABLE BUILDING DESIGN

5.01 GREEN BUILDING MATERIALS

Green building materials are encouraged for all developments and composed of renewable, rather than nonrenewable resources. What makes a material green?

- Products with recycled content
- Natural, plentiful or renewable products
- Products with a resource efficient manufacturing process
- Materials that are locally available
- Products that are salvaged, refurbished, or remanufactured
- Products that are reusable or recyclable
- Materials that can be easily dismantled and reused or recycled at the end of their useful life.
- Products with recycled or recyclable product packaging
- Durable products

5.02 LEED: LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN

The design of LEED certified buildings is encouraged. LEED is a third-party certification system designed for rating new and existing commercial, institutional, and high-rise residential buildings. LEED certified buildings:

- Conserve energy, water, and other natural resources.
- Strengthen established goals related to increased density, mixed use, and transit-oriented development, storm water and erosion control, brown field redevelopments, and increased bicycle and pedestrian access.
- Save the city, building owners, and tenant's money through increased operation and maintenance efficiencies.
- Improve indoor air quality and the health, well being, and productivity of occupants.
- Help reduce public infrastructure costs related to development.
- Minimize local ecological degradation (habitat, air, soil, and water) through efficient site and building design, sustainable construction practices, and low impact building materials and operational practices.
- Keeps more money in the local economy and creates new local industries and jobs.

Solar panels on roof for energy generation

Wind turbine tower height

Roof mounted wind turbine

5.03 ON-SITE ENERGY GENERATION

Applicants are encouraged to investigate on-site energy generation systems such as solar panels and smaller scaled wind turbines.

a. Encourage on-site production of renewable energy. New technologies exist to produce renewable energy, even on small sites, such as wind turbines and photovoltaic cells. Benefi ts include reducing air pollution, lowering greenhouse gas emissions, and reducing dependence on foreign oil.

b. Wind Turbines on properties: (See zoning code CO 354A)

- Wind turbines should be sited well above trees, buildings, and other obstacles. When the wind fl ows over an obstacle like a building or a tree, the wind is slowed down and turbulent air is created. One way to get above the zone of turbulence is to put the wind turbine on a tall tower.
- A simple rule-of-thumb to specify a minimum tower height for a residentialsized wind turbine is to make sure that the tower is tall enough so that the entire turbine rotor is at least 30 feet above the tallest obstacle within 500 feet of the tower.
- Local zoning usually stipulates that there should be a minimum setback for a wind turbine, equal to the height of the tower plus the blade length of the turbine and would typically apply to all property lines, road rightsof- way, and overhead power lines.

5.04 SOLAR ORIENTATION

c. Orient new buildings and major additions so that the building, its massing, and its site orientation enhance the project's solar exposure as well as minimize the impact of the project's shadow on its surroundings.

d. Provide for the building occupants a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building.

e. Buildings should be screened or located to avoid glare from automobile headlights and direct street lighting.

f. Shallow floor plans, permanent shading devices, and high performance glazing reduce energy demands for lighting, heating, and cooling.

g. Orient the building to minimize thermal loss due to infiltration from prevailing winds while taking advantage of natural ventilation.

h. Carefully consider the placement of existing and proposed deciduous and evergreen trees on site. When practicable, locate so that deciduous trees block summer sun to the south and west of the building and evergreens block winter wind on the north face of the building.

5.05 DESIGNING NEW BUILDINGS FOR FUTURE ADAPTABILITY

Buildings designed for adaptability ideally have a much better use of space and materials during their life cycle. Increased longevity: Designing for adaptability elongates the lifetime of a building without having to go through renovations that significantly affect the integrity of the structure and infrastructure, minimizing the environmental impacts. Such impacts include the embodied energy needed to make reinforced concrete, or the energy needed to process different elements of a building like wood, metal, glass and landscaping material to create new construction. Designing for adaptability also increases the flexibility of spaces allowing the occupants to use the floor areas more effectively.

a. Design foundations to allow for potential vertical expansion of the building – rational analysis should be done to arrive at a reasonable estimate for possible future expansion.

b. Include installation of isolation joints or other features that avoid the potential for differential settlements and for progressive collapse due to accidental loading.

c. Design building to rely on a central core for lateral load resistance and to allow local modifications to the structure while maintaining complete structural integrity.

d. Use a wide structural grid with a minimum width of 6m or roughly 20ft – the redundancy in structural strength that a wide grid introduces can increase adaptability considerably.

e. Design the lower few floors for heavier live load - the increased capacity will enable the building to easily accommodate all of the likely conversions with no structural modification.

f. Add sufficient height to lower floors to enable a range of uses. (specify minimum/ideal floor to ceiling height)

g. Devise a structural floor system that accommodates a number of mechanical and electrical service distribution schemes based on different occupancies;

h. Design the building envelope independent of the structure - i.e., functionally discrete systems, with the interfaces designed for separation

i. Design a versatile envelope capable of accommodating changes to the interior space plan

5.06 GUIDELINES FOR BIRDS AND WILDLIFE

Cleveland is in the migratory path for many bird species. Sensitive architectural design can help to protect migratory birds and allow them safe passage through the city. These guidelines are intended to provide a list of design strategies to make new and existing buildings less dangerous to migratory birds.

Bird 'collisions' or 'strikes' are a result of a variety of causes. Daytime strikes occur because birds cannot perceive images reflected in glass as reflections,

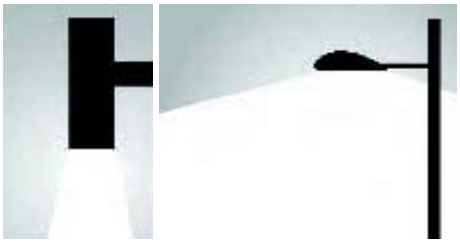
Patterned glass as visual markers to prevent bird 'collisions'

Angling glass to reflect images downward is effective in reducing bird strikes

and thus will fly into windows that they think are trees or sky. They also cannot comprehend clear glass as a solid object. At night, the problem is light pollution. The light emitted from urban areas disorients migrating birds and draws them into brightly lit downtown areas, where they get disoriented, exhausted and fall.

a. Glass and strategies for creating visual markers

- Patterned or 'fritted' glass which has an image or abstract pattern embedded in it can be a good option. By using dots of various sizes and densities, manufacturers can create any kind of image, translucent or opaque. The image in the glass then projects enough visual markers to be perceived by birds.
- Film applied to windows and other external surfaces, film products can be designed with any image or pattern. On buildings, the film could be integrated with the architectural design of the building.
- Decorative grills and louvers are another means of projecting visual markers to birds.



Light fixtures should project light downward to minimize light pollution

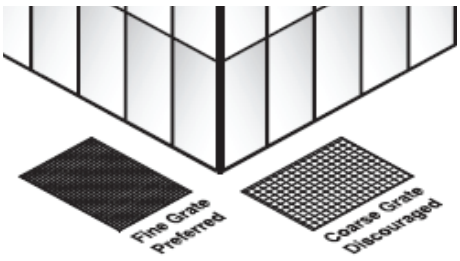
b. Strategies for muting reflections

- Angling glass panes in such a way as to project reflected images downward is a fairly effective way of reducing bird strikes, especially at ground level. Angles become effective at a minimum angle of 20 degrees with 40 degrees known to be more effective.
- Awnings and overhangs can cover windows in ground floor lobbies and mute image reflections in them.

c. Light pollution

Light pollution creates 'artificial sky glow', which is an issue for migratory birds

- For a building to be bird-friendly, light pollution from external lighting must be minimized.
- External lighting used to illuminate the surrounding site of a building should be efficient while providing enough illumination to effectively make the site safe and secure at night. Light fixtures should project light downward to minimize direct upward light, spill light, glare and artificial sky glow.



Ventilation grates with fine porosity preferred

d. Ventilation

A building's ventilation grates on a building present a deadly hazard for birds. An injured and helpless bird that falls onto a ventilation grate with porosity large enough for the bird to fall through will find itself trapped when it recovers enough to attempt flight.

- Ventilation grates should have a porosity no larger than 2 cm x 2 cm or should be covered with netting in order to prevent birds from falling through.

6. RESIDENTIAL

These residential design guidelines illustrate the kinds of design approaches likely to be recommended for approval by the city's Design Review Advisory Committees, and the considerations taken into account as projects are reviewed. General guidelines outline major neighborhood defining elements. Specific considerations address more detailed aspects of residential design.

HISTORY OF CLEVELAND HOUSING'S STOCK

In the early years of Cleveland's history, the city's residential structures were traditional log cabins and timber frame homes. As the city grew and became more architecturally sophisticated, new housing began to evolve into a much wider array of styles.

HISTORIC HOUSING STYLES

Cleveland's housing styles ranged from high style, exuberant designs, like the mansions that were prominent along Euclid Avenue, to working class vernacular homes, as can be found along a typical Cleveland residential street. Historical styles possibly originated from late 18th and early 19th century builders guides and pattern books continued in use into the 20th century. Historic styles found in the city include:

- Greek Revival
- Italianate
- Second Empire
- Gothic Revival
- Queen Anne
- Eastlake
- Shingle and Stick Style
- Colonial
- Tudor
- Georgian
- Prairie
- Art Moderne/International

VERNACULAR HOUSING STYLES

Many houses were built without an architect's involvement, as home builders sought to meet the housing needs of Cleveland's growing population in the last century. While the single-family detached frame house may be the most common housing type, there are

also numerous examples of two-family detached houses, four-flats, and larger, multi-family buildings. Single-family homes still dominate the city's housing stock today. Some examples of Cleveland's vernacular housing include:

- Homestead
- American Foursquare
- Two story Frame
- One and a half story frame
- Gabled Ell
- Bungalow
- Cleveland Double
- Craftsman
- Ranch
- Split level

Decks, porches, and windows overlooking the street

EVOLUTION OF STYLE AND TYPOLOGY

Newer housing styles in the city include single-family row houses, cluster homes, flat and prefabricated modular construction. These housing styles are interspersed among the city's historical houses. New types and styles of housing are encouraged in the city, provided their design is context-sensitive and creative in massing, detail and materials.

NEW RESIDENTIAL CONSTRUCTION (See zoning code CO 337)

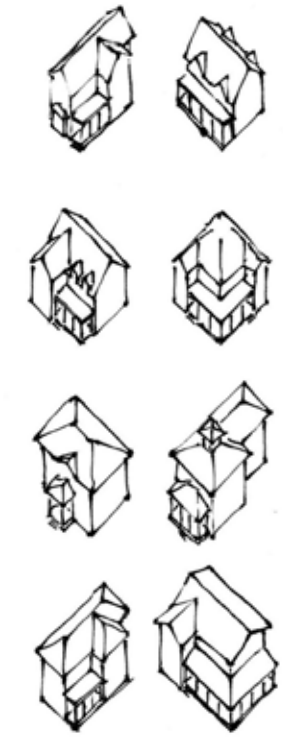
The City Cleveland encourages the development of new housing that is affordable to operate and maintain, energy efficient, health, accessible and transit oriented. New housing should reduce impact on the environment by managing stormwater run-off and providing green space for healthy communities.

The Cleveland Green Building Standard handbook is available online at http://www.ehw.org/AGHC/Cleveland-Green-Housing-Handbook(1).pdf . All residential development projects receiving direct financial assistance from the City of Cleveland and/or tax abatement must be designed to meet the Cleveland Green Building Standard.

6.01 NEIGHBORHOOD CONTEXT

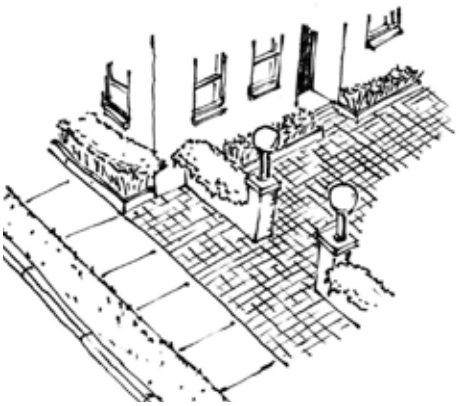
a. When proportioning designs to be compatible with adjacent buildings consider natural lighting within each unit, optimal views to the outside, and privacy concerns.

b. Buildings should foster an appearance of a residential neighborhood. Individual units should have a presence on the street and not be walled-off or oriented inward. Living areas with windows, decks and porches which overlook common areas and streets are encouraged.



Massing options commonly found in Cleveland

Compatible housing elements can reinforce a street's order



Houses oriented towards central open spaces

6.02 MASSING/SCALE/PROPORTION

a. New structures should reinforce a street's sense of order through a consistent setback, height, scale, proportion, rhythm, spacing, and window/door openings.

b. New construction should be compatible with the predominant building height of neighboring structures. If there is greater variety in the heights of buildings, other design aspects of new development (such as building massing, materials, and window patterns) should kept more compatible and consistent.

c. Refer to the building and zoning codes regarding height limitations for new buildings.

d. Groups of housing units should be spaced so as to not block out light or views.

e. Building massing should typically emphasize individual units. [illustration]

6.03 WINDOWS AND DOORS

a. Windows and doors come in all shapes and sizes, but the best approach for new structures is create building openings that are consistent with buildings found in the surrounding neighborhood.

b. Greater variability is acceptable in neighborhoods where little historic context exists.

c. Avoid large blank walls with few or no windows.

d. Entries should be located so they are easily visible, and they should be oriented toward the street. Make it easy for visitors (and emergency personnel) to find the front door.

e. Study the surrounding architectural context to get design ideas for entrances and doors.

f. For new construction, a simple entry design usually looks better than more ornate ones. Avoid heavy ornamentation on doors and entrances.

g. Avoid narrow trim around window and door openings. The trim should be minimum 6" wide.

6.04 EXTERIOR MATERIALS

a. For residential infill projects and in new developments, contemporary building materials should be used in ways that the proposed development is compatible with the surrounding context.

b. Contemporary materials that simulate traditional ones are often appropriate choices.

c. Stucco surfaces are not typical of Cleveland architecture and should be avoided.

d. During project planning and before any final decisions are made on materials for a project, prepare a sample board. The City's Design Review Committees can provide advice and guidance on the appropriateness of various materials.

e. If the design calls for non-traditional materials such as industrial metal siding the standard of neighborhood context may still be applied.

Porches may vary, but should generally consists of materials similar to the primary building

6.05 PORCHES

The open front porch is a predominant architectural feature of Cleveland's single family housing stock.

a. Porches may vary in form, size and material selection; however, a porch generally consists of materials similar to the primary building.

b. In areas where the majority of the surrounding structures have front porches, new residential structures should have front porches.

c. Porches should be deep enough to allow for outdoor seating and use.

Partly enclosed porch on a historic house

6.06 SPECIAL CONSIDERATIONS FOR ROWHOUSES/TOWNHOUSES (See zoning code CO 337.031)

Rowhouses and townhouses are a more recent addition to Cleveland's residential mix. There are some special considerations which apply to this housing type.

a. The massing of rowhouses should break the main façade into three of four distinct elements: entry; main facade; a single or two story element and the roof.

b. Front building facades may have stepbacks, particularly above the second floor. Building facades and roof lines may provide articulation and surface changes to provide identity for individual units.

c. Long horizontal eaves and roof elements across the façade should be broken up with building projections and set backs. Facade articulation should reflect the rhythm of nearby residential areas with porches, projecting eaves and overhangs, and other architectural elements such as bay windows, chimneys, and porches which provide residential scale and help to break up building mass.

d. On corner lots, sides should maintain the architectural design quality consistent with the main facade.

e. Where end units are oriented to a street, driveway, or neighboring property, massing and design quality should be consistent with other building facades.

f. Massing and orientation of rowhouses and townhouses should respect neighboring structures by stepping back the third story to minimize visual impact. Sun and shade impacts on adjacent properties should be considered.

g. Privacy of neighboring structures should be respected, with windows and upper floor balconies positioned so they minimize views into neighboring properties.

h. Entry features, such as stoops and porches should be the predominant entry feature. These features should typically be single-story elements, or incorporated into two-story vertical elements to break up the building mass along the street.

i. House or address number should be included near the entrance to help identify it. For multi-family units, number style, material, and location should be consistent.

Good examples of facade detailing and set backs for row houses

Street facing garages in row houses should be avoided

Garages located in the rear of the property

Driveway with partial paving to minimize impervious surface

Landscaping for a small front yard

6.07 GARAGES/OUTBUILDINGS (See zoning code CO 337.013-337.018)

a. Cleveland houses often have detached garages along with an assortment of outbuildings, including garden sheds or other support buildings.

b. A garage should be smaller in scale than the main house.

c. Materials, roof pitch and details of the garage/outbuilding(s) should match that of the main structure.

d. Garages should be located in the rear of a property.

e. Garages should be set-back a minimum of 18' from the front façade of the residence.

f. Garage doors typically should not face the main street, except for detached rear located garages. Facing a side street is preferred.

g. For multifamily residential buildings, outside storage should be provided for bikes, play equipment, lawn furniture, gardening supplies and barbeque equipment.

6.08 DRIVEWAYS

a. Whenever possible, parking, driveway and garage access should be from the side or rear of a property so that front lawns and associated plantings remain undisturbed by a driveway.

b. Driveways coming from the street should be as narrow as possible, to minimize the width of curb cuts and to preserve green space.

c. Parking areas should be located as far to the rear of a property as possible. Avoid locating parking in front yard areas. Side yards may be appropriate for parking, but the parking area should be located as far to the rear as possible and screened from the street with landscaping, fencing or walls.

d. Concrete is the most common material used for sidewalks and driveways. However brick pavers, cobblestones, granite pavers, and slate are also acceptable. Porous pavements are preferred.

e. The use of pervious (or porous) paving materials for all low-traffic areas, including driveways, is encouraged.

f. Driveways for multi unit projects should consider using special accent paving such as textured paving or paving blocks in lieu of concrete.

6.09 RESIDENTIAL LANDSCAPES, WALLS, AND FENCES (See zoning code CO 358.06)

a. Side yard and front yard landscaping, gardens, sidewalks and fencing are essential to creating a distinctive sense of place. Landscaping is the common element that ties the sometimes diverse character of neighborhoods together.

b. As a minimum requirement, all new construction should have seeded lawns around the entire house and foundation plantings along their front facades.

c. Landscape should be designed to provide privacy and shading, but residential structures should not be completely hidden from view by landscaping.

Landscaping can be used as a common element that ties together the character of a neighborhood

d. At least 35% of the total site area should be landscaped. Balconies are not included in the percentage of landscaped open area.

e. Provide common open space areas, such as playgrounds or gardens, to create a sense of community among residents. Multi-family residential projects should include small, private open spaces of at least 40 square feet. These spaces may include front yards, porches, patios or decks. Every unit need not have a private open space.

f. Wherever possible, connect new development to existing open spaces, such as public parks or gardens, that are in close proximity to the site.

g. Fencing in front yards is defined in section 358.04 of the zoning code. In residential districts, only ornamental fences can be installed in front yards, and in side street yards if located within four feet of the side street property line.

h. Preferred fence types include masonry walls, cast and wrought iron fences, wood rail or board fences, rows of trees and shrubs, or a combination of these.

i. Avoid concrete, basket-weave, stockade, and chain link fencing. These materials should be considered only along interior side yards (starting beyond the setback line, approximately 18 feet from the face of the front elevation to the street line) and rear lot lines.

j. Materials for fences and walls should complement the character of the building and facilitate easy maintenance.

The use of a single color on all surfaces should be avoided

6.10 COLOR

The color palette of a residence is composed of the colors of the main body of the residence, trim and accent colors. The colors chosen for awnings, shutters and roofs also contribute to the overall color scheme of a residence. The overall color scheme of a residence or development should reflect a cohesive pattern.

These guidelines recognize that the review of a residence's color scheme is a balance between an owner's creativity and individuality, the architectural style of the building and an overall harmonious vision for the neighborhood.

a. The use of a single color on all surfaces should be avoided.

b. A two or three-color scheme is encouraged to provide visual appeal.

c. The main body color should be the predominant color of the residence.

d. The trim color is applied to architectural elements such as windows, doors, columns, porches etc. The trim color should be a lighter or darker tone of the main body color, a complimentary color to the main body color or a neutral color.

e. In a three-color scheme, the accent color should be used sparingly to highlight certain architectural elements such as a front door.

f. Appropriate:

- The number and type of building colors appropriate for and consistent with the architectural style

- Low reflectance exterior colors
- Gutters, downspouts, utility boxes, meters, etc. painted as part of the overall color scheme

g. Inappropriate:

- Colors that are garish, gaudy, loud, excessive and ostentatious
- Colors that constitute a glaring and unattractive contrast to surrounding residences
- More than three different colors or color shades used on a single residence unless appropriate to the architectural style of the residence
- The use of fluorescent or day glow colors
- Single color schemes. For example using one color on every surface
- Color used to obscure important architectural features

Dumpster enclosure for multi-family residential

6.10 UTILITIES AND LIGHTING (See zoning code CO 551)

a. Service utilities, including trash and loading areas, should be located behind the building. Where buildings face more than one public street, service and loading circulation may be located along secondary streets where appropriate.

b. Screen trash and loading areas and utilities with design features such as fencing or landscaping.

c. Common trash storage areas should be fully enclosed.

d. The site layout should facilitate trash removal.

e. Sufficient lighting should be provided along walkways, entryways, and between buildings and parking areas.

f. Consider installing daylight sensors or timers on all outdoor lighting, including front and rear porch lights in single-family homes.

Avoid concrete, basket-weave, stockade, and chain link fencing for screening

6.11 STREET CONNECTIVITY

a. All new residential construction should be connected to the existing public streets and the existing pedestrian network.

b. Where new streets/drives will be constructed, these connections should be an extension of the existing street grid, not a closed or gated system.

c. Internal streets should act as connective links enhanced with sidewalks, lighting and landscaping.

Internal streets and sidewalks acting as connective links

7. RESIDENTIAL ADDITIONS & REHAB

7.01 IMPORTANT FEATURES

While the entire house is important for existing homes being rehabilitated, there are certain items, that are critical to the neighborhood's character that can be found on desirable examples in existing houses.

a. Front porches: Front porches place a high priority on high-quality porch columns and short walls.
   - During rehabilitation, where porches have been made inconsistent with their original appearance, they should be replaced to fit their original context, scale and material, and must match the floor height
   - If a home is missing a porch - a porch must be added.

b. High quality and quantity of windows: In most cases, there are very few areas of walls that do not have windows.
   - Original windows are very attractive and should be preserved when possible.
   - They can be made as energy efficient and secure as modern windows by adding modern glass into the sashes.
   - Storm windows may be added to existing windows.
   - Replacement windows should be consistent with original openings, and the stile and rail width and sight lines must match existing original windows.

c. Welcoming front doors with porch lights, mailboxes and house numbers are attractive features and should be retained or added as necessary. Restored and replacement doors must fit their original openings.

d. Chimneys: Existing external chimneys must not be removed. Exceptions will be made if the chimney is to the rear of the home and is not an important visual feature that can be seen from any street or open space. If a new chimney is added, it must be masonry (brick) or stone. If it is exterior, it must have its own foundation, so that it does not appear to float from the exterior wall.

Replace porches that have been removed

7.02 IMPROPER CHANGES DURING REHABILITATION

Many houses have been improperly changed over time resulting in the loss of certain characteristics, which were highly important to the integrity of the appearance. These should be corrected when possible as indicated below.

New Dormers must be either consistent or complementary to the existing roof form, such as these gable dormers.

a. Roofs - pitch, gables and eaves: If a roof form or pitch has been previously altered from its original condition, it should be rebuilt to be consistent with the original intent of the home. If eaves and gables that once extended past the body of the house have been removed to save money during re-roofing projects, they should be replaced or corrected.

b. Dormers & attic vents or windows: Original dormers, as well as attic vents or windows, are critical to the character of homes. Many homes that once had these features have had them removed during re-roofing or re-siding activity in an effort to save money. For homes where the loss of a dormers and attic vents or windows has negatively effected the house, they should be replaced as originally built.

7.03 MATERIALS

a. Use exterior materials commonly found in Cleveland, such as wood siding, vinyl siding, brick, or stone.

b. New materials used on an addition do not necessarily have to match the original materials of an older building, but should be comparable in terms of n terms of color, size and texture.

c. Houses that were originally, but materials of stark contrast such as diagonal rough-cut siding or painted concrete block should be avoided.

Houses originally made of wood siding must not be replaced with brick

d. Brick and masonry:

- Houses that were originally made of wood siding must not be re-faced with brick. This is not true to the original intent for the house.
- Any re-pointing mortar must closely match the existing house in composition, such as profile, material, color and texture.
- Sandblasting or strong chemicals should not be used on masonry.
- Unpainted masonry should not be painted. Previously painted masonry may be left painted or repainted.
- No cement, plaster, stucco, or other coating should be applied over brick that has previously not been coated.

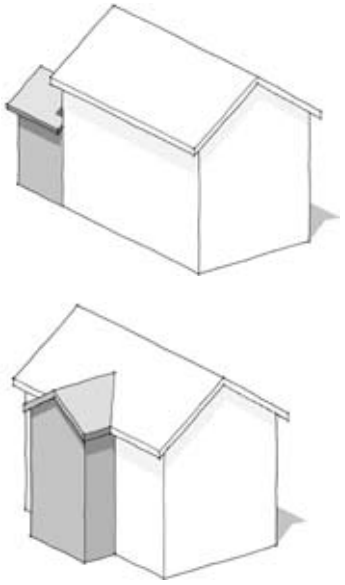
e. Clapboard and vinyl:

- Existing siding, if original to the home, should be maintained whenever possible.
- When replacing siding on portions of the house, new siding must match the material, color, pattern and style of what is in place.
- If a house must be fully re-sided, materials should be consistent with the original materials of the home. For example, if the original home used scalloped siding, new siding must be scalloped. If a synthetic lap siding is used (i.e. cement hardboard, vinyl) the widths of the exposure must be consistent with the original siding.

- New siding must be of a smooth finish, unless it is to match an existing material that is designed to have texture, such as cedar shakes.
- The use of vinyl siding during rehabilitation is highly discouraged. However, if a house is re-sided in vinyl, no exposed j-channels will be permitted and vinyl must conform to standards given in the "New Construction" section.

f. Trim:

- Original detailing should not be removed if in serviceable condition, but any
- Later added detailing which is inconsistent with the style of the home should be removed.
- It is encouraged that original exterior details that have been lost over the years be replaced and/or restored.
- New and/or replacement trim must match the material, color, pattern, size and style of existing or original trim.
- Houses should not be over-decorated with extensive additional detailing, unless that detailing was a significant feature of the original home, as is found on Victorian, Craftsman and other styles.



New additions must be made to the side or rear of the home, and should not overpower the original structure as the primary focus of the house.

7.04 MASSING

a. An addition should be subordinate in appearance to the main building. It should not overwhelm and dominate the original building.

b. Additions should be made to the side or rear of the home and not project closer to the street than the original face of the home.

c. Additions should not infringe upon existing side-yard setbacks that were established by the original construction, unless there is ample space in the side yard due to a house being narrow or an unusually wide lot.

d. Major additions should be to the rear of the home. If they must project higher than the existing roof line, the new roof must match the pitch and detailing of the existing roof, trim, and main body.

e. Foundations for additions must be exposed and match the existing foundation in material and floor height.

f. Some differentiation between old and new may be made in details such as window design and trim around openings and at eaves.

g. Avoid large blank walls with few or no windows.

h. Location on corner lot or next to open space: original homes are typically well articulated on side walls and will be attractive on corner lots or next to open space once they are rehabilitated. However, in the event that one of these side walls is not attractive or does not address the side street or open space well, it may add character by adding features such as a wing with a gable, an extension of the front porch that wraps to the side, a side door with access from the front or the street, or more windows.

7.06 PRESERVING FORM

During rehabilitation, it is important to preserve the main formal characteristics of existing homes.

a. Existing roofs should not change in pitch or form during renovations. Original eaves and gable extensions should be maintained. If these are in poor condition, repairs should be made with like-sized materials.

b. Roofing material may change, but should be consistent throughout the house and garage.

c. The existing form of the body of the house should remain the dominant form during any renovation activity.

d. No wings, dormers, porches or chimneys should be removed during rehabilitation. If these items are in poor condition, they should be repaired so that all walls are flush and stable.

e. If foundation walls are being repaired or replaced, any new materials should be similar to the original in size, color, and texture.

7.07 GARAGES AND CARRIAGE HOUSES

The term carriage house was originally used to refer to the area behind a home where horse-drawn carriages were stored. These have often been turned into accessory dwelling units and the name is now used for dwelling units above garages.

Carriage house converted into a dwelling above the parking area

a. If a garage exists on a lot of a rehabilitation project, it should be rehabilitated as feasible. All materials, siding, trim, door and window requirements that apply to main structures also apply to garages.

b. Garages should be built on lots of rehabilitations - for both corner lots and lots that face open space.

c. Foundations of new construction accessory units should match the primary unit in the height of the exposed foundation and in material.

d. The roof pitch must either match the main structure or have a minimum 6:12 pitch.

e. For new carriage houses, greater leniency is permitted in design vocabulary to allow for interesting decks, offices, and other features that will not negatively affect the block as viewed from the street.

f. Sheds, above ground pools, and other accessory structures are generally discouraged, unless they contribute to the appeal of the neighborhood by servicing food production or composting.

8. COMMERCIAL

Building placement with respect to the street edge and the urban fabric; CSU's recreation center in downtown

8.01 BUILDING SITING AND ORIENTATION (See zoning code CO 353)

a. The placement of the building(s) on the site should take advantage of sun angles, prevailing winds, tree stands, and other natural conditions to save energy in heating and cooling.

b. Proposed building sites are to be oriented to offer views to and from the site.

c. Wherever possible, principal buildings should overlook open space and not parking or road areas.

d. Locate the building as close to the street as possible to help define the street edge.

e. Align the building façade with adjacent building facades.

f. Locate the main entrance directly off of the pedestrian walkway or design a clear, pedestrian friendly connection from the walkway to the entrance.

g. On a corner lot, locate the main entrance on the corner or off of the more major street.

8.02 BUILDING FEATURES (See zoning code CO 343 & 350)

a. Compose the massing of the building to create a transition to the height, bulk and scale of development in adjacent areas with less-intensive zoning regulations. Buildings where the different intensity zoning areas meet should be developed in a manner that creates a step in perceived height, bulk and scale between the existing development as well as the proposed development potential of the adjacent zones.

b. The use of stepbacks should depend on the comparative proportions of the street width, the sidewalk width, and the building height.

c. Design facades of different scales using architectural features, window patterns and materials that refer to the scale of human activities contained within.

d. Provide active, not blank, facades: building should not have large blank walls facing the street, especially near sidewalks. Facades can be enlivened by providing:

- Small retail spaces
- Visibility into building interiors
- Limited lengths of blank walls.
- Vertical landscape or tall shrubs that will obscure seeing a blank wall.

Textures and materials to break the continuity of blank facades


Buildings with distinctive/decorative entry bay

Welcoming entry and overhead weather protection

Mechanical equipment setback from the parapet

- Different textures, colors, materials that break up a walls surface
- Small setbacks, indentations, to break up the continuity of blank walls.
- Special lighting, canopy, awnings, a horizontal trellis
- Seating ledges or perches

e. Reinforce building entries with one or more of the following architectural treatments:

- Extra-height lobby space
- Distinctive doorways
- Decorative lighting
- Distinctive entry canopy
- Projected or recessed entry bay
- Building name and address incorporated into the façade or sidewalk
- Distinctive landscaping including plants, water features and seating
- Ornamental glazing, railings, and balustrades

f. Overhead weather protection should be encouraged as it helps define the pedestrian realm and reduce the scale of tall buildings. Transparent or translucent canopies along the length of the street provide welcome weather protection.

g. Integrate roof shape, surface materials, and colors with the building's overall design concept.

h. Locate rooftop mechanical equipment, antennas, mechanical penthouses, and other equipment behind relatively high parapet walls to hide the utilities from view from the street, but organize it so as to not appear as an eyesore when seen from above.

i. Consider rooftop terraces, gardens, and landscaped areas for stormwater management.

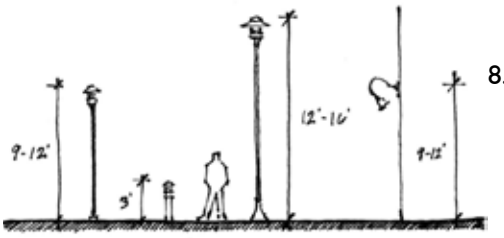
8.03 BUILDING MATERIALS

a. Use building materials that promote quality and permanence.

b. Green roofs are strongly encouraged for at least part of the roof's surface area. The remainder of the roof should be covered with light colored roofing materials.

c. Large expanses of smooth material (e.g., concrete) should be broken up with expansion joints, reveals, or changes in texture and color.

d. Building walls that may be prone to graffiti should be treated with a graffiti resistant coating.



Lighting should be at a pedestrian scale

Minimizing paved area for drive-through facilities allows for soft landscaping and pedestrian amenity

Signage should respond to the architectural character of the building

8.04 COMMERCIAL LANDSCAPES AND PUBLIC SPACES

a. New commercial buildings are encouraged to incorporate public spaces to enhance the pedestrian environment and reinforce existing open spaces.

b. Use landscaping, natural shading, and light-colored materials around the building and in parking areas to reduce ambient surface temperatures.

c. Develop transitions between buildings and public spaces. Use gathering areas and/or landscaping to define transition areas.

d. Incorporate recessed entries along sidewalk. Use transparency and large window openings in the walls of the ground level of the building.

e. When designing landscape and screening features, do not block visibility into and out of open spaces.

f. Lighting in open spaces should be at pedestrian scale.

8.05 DRIVE-THROUGH FACILITIES

a. Locate driveways and stacking lanes at the rear or side of the building so as to keep out of view from the public street and pedestrian walkways.

b. Minimize the number of curb cuts wherever possible

c. Incorporating a drive-through building into a larger building is typically a more successful design approach than designing a stand-alone building.

d. Directional signage should be compatible with the building and landscape design.

8.09 SIGNAGE (See zoning code CO 350: Sign Regulation)

Signage can contribute to creating strong building identity when it is well-integrated with the design of the architecture. A project's signage program must begin during design development to better achieve integration with the architecture. Signs should add interest to the street front environment and should be appropriate for the scale and character desired in the area. Zoning code standards dictate the size and number of signs allowed, but this section allows for greater flexibility in terms of sign standards.

e. A comprehensive signage plan that includes all signs, both existing and proposed, must be provided.

f. Context & compatibility (See zoning code CO 350.08)

- The location, size, and appearance of tenant identification signs should contribute to street activity and enhance the street-level experience that is appropriate to each Downtown district or neighborhood.
- Establishing a rhythm along the street-level façade through continuity and spacing of signs helps to create a human scale.
- The location, size, and appearance of tenant identification signs should contribute to street activity and enhance the street-level experience that is appropriate to each Downtown district or neighborhood.

Example of multi-tenant signage

Creative signage design through the use of materials and architectural and streetscape elements

- Historic buildings with ground floor retail shall have signs that do not obscure the architecture, but are integrated into the original or restored storefront elements.
- Because residential and commercial uses generally exist in close proximity, signs should be designed and located so that they have little or no impact on adjacent residential neighborhoods.

g. Character (See zoning code CO 350.14)

- Wall signs should be designed to integrate with the overall architectural style of the building and should be integral to the character of the building.
- The scale of signs should be appropriate for the building on which they are placed and the area in which they are located. The size and shape of a sign should be proportional with the scale of the structure.
- Signage should be used to help distinguish the ground level of a building from the upper levels of a building.
- Creativity and individual expression in the design and placement of signs is encouraged.
- Retail signs should be appropriately scaled from the primary viewing audience (pedestrian-oriented districts require smaller signage than fast moving automobile-oriented districts).

h. Color:

- Colors should be selected to contribute to legibility and design integrity. Too many colors used thoughtlessly can confuse the reader and negate the message of a sign.
- Contrast is an important influence on the legibility of signs. A substantial contrast should be provided between the color and material of the background and the letters or symbols to make the sign easier to read in both day and night. Light letters on a dark background or dark letters on a light background are most legible. Light letters on a dark background work best for both day and night time use.
- Sign colors should complement the colors used on the adjacent buildings and the project as a whole.

i. Materials :

- Sign materials should be compatible with the design of the facade on which they are placed.
- The selected materials should also contribute to the legibility of the sign. For example, glossy finishes are often difficult to read because of glare and reflections.
- Sign materials should be extremely durable. Paper and cloth signs are not suitable for exterior use (except on awnings) because they deteriorate quickly. If wood is used, it should be properly sealed to keep moisture from soaking into the wood and causing the sign's lettering to deteriorate.

j. Illumination: (See zoning code CO 350.07)
Like color, illumination can provide more effective visual communication, or it can confuse the sign's message. Consider if the sign needs to be lighted at all.

- Illuminated signs that use appropriate means of illumination and reflect the individual character of the different districts are encouraged.
- If the sign can be illuminated by a projected light (e.g., spotlight), this is usually the best arrangement because the sign will appear to be better integrated with the building's architecture.

k. Freestanding signs:

- Freestanding signs should be of a ground-mounted monument style and signage for multi-tenant buildings, that exceed 3 businesses, should be limited to the name of anchor tenant, building or plaza. Lighting for signs shall be inconspicuous or concealed.
- Individual tenant sign panels should be uniform in size recognizing that the major tenant, or the name of the center may have a slightly larger sign panel.
- Sign panels should be limited in size to the width of the architectural support elements of the sign.
- The sign structure should be architecturally designed and incorporate design details, materials, and colors of the associated buildings.

l. Changeable copy signs/reader boards are strongly discouraged.

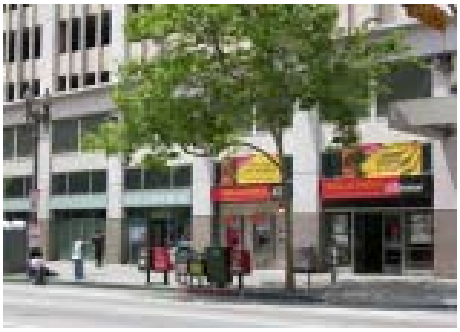
m. Trees and signage:

- Except in locations where street trees are not required, no signs shall be located between 14 feet above sidewalk elevation and 40 feet above sidewalk elevation to avoid conflicts with the tree canopy, except where it can be demonstrated that no conflict will occur.
- Trees may not be topped or headed back on the sides to expose signs

n. Corporate campus signage
A corporate campus refers to a commercial property that may include multiple buildings with commercial or institutional tenants, often with ground floor commercial and retail spaces, open space, parking garage and loading dock:

- Signage should reinforce the corporate or campus identity.
- All signs integrate with the architecture, landscaping and lighting, relate to one another in their design approach, and convey a clear hierarchy of information.
- For projects that have multiple storefront tenants of similar size, generally all signage should be of the same type (i.e., cut out letters, blade, or neon) and the same relative size and source of illumination. Retail tenants will appear to be different by their store name, font, color and type of retail displays.

Good example of a freestanding sign


Signage and street trees

Signage for wayfinding around a campus

Retail signage for historic buildings

- Signage should reinforce the identity of the residential complex and be visible from the most prominent public corner or frontage.
- All signs shall be integrated with the design of the project's architecture and landscaping. As a family of elements, signs should be related in their design approach and convey a clear hierarchy of information.
- Signage should identify the main/visitor entrance or lobby, resident or visitor parking, community facilities, major amenities and commercial uses. These signs should be related in style and material while appropriately scaled for the intended audience.

o. Historic signs and signage on historic buildings:

The Cleveland Storefront renovation Program Design manual prepared by the Department of Community Development in 2002 is a detailed guide for storefront rehabilitation. It has detailed sections describing guidelines for signage for historic buildings, and should be referenced for the same.

8.10 AWNINGS (See zoning code CO 350)

The Cleveland Storefront renovation Program Design manual prepared by the Department of Community Development in 2002 is a detailed guide for storefront rehabilitation. It has detailed sections describing guidelines for awnings, canopies and marquees, and should be referenced in addition to these guidelines.

a. Awnings should be mounted in locations that respect the design of the building, including the arrangement of bays and openings. Awnings should not obscure transom windows, grille work, piers, pilasters, and other ornamental features.

b. Awnings should be designed to project over individual window and door openings. Awnings that are a continuous feature, extending over several windows, doors, masonry piers, or arches, are strongly discouraged. Awnings should be mounted on the wood or metal framing within a door or window opening (and not on the wall surrounding the opening).

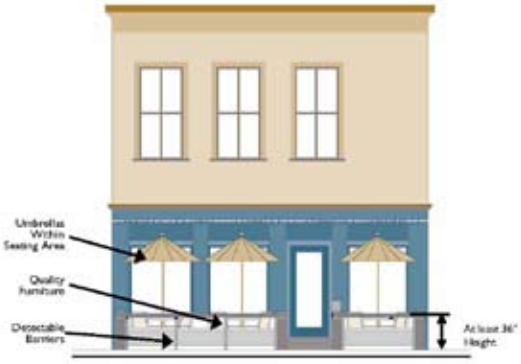
Compatible design for awnings at Eton Place in Beachwood, OH

c. Shed awnings, with no end panels, are the preferred awning style. Shed awnings are visually lighter and simpler, and they are more traditional in appearance than convex (bullnose) or box awnings. Awnings with no end panels are more transparent and allow better views into storefronts. Convex-shaped (domed) awnings may be appropriate for locations with round-arched window/door openings.

Shed awnings with no end panels are preferred

d. Awnings with a single, solid color are preferred. Awning colors should complement the colors of the building. Colors that call more attention to the awning than the building are inappropriate.

e. Awnings with striped colors may be appropriate for some buildings without ornamental facades. Striped awnings with highly contrasting, bright colors are discouraged, including those used for corporate/franchise identity.



Elements of quality outdoor seating area: detectable barriers, quality furniture, and umbrellas in the seating area

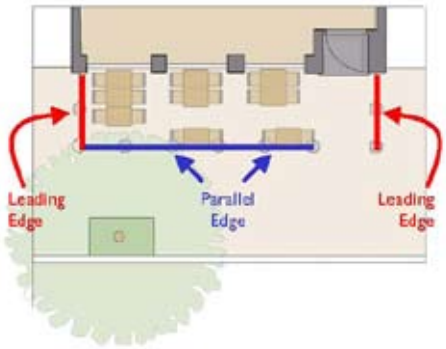


Illustration showing barrier edges

Outdoor dining on East Fourth street

f. Metal or glass canopies may be appropriate on some buildings if they are compatible in scale and overall design. Canopies should be simple in design and not obscure architectural features. Elongated bullnose entrance canopies are inappropriate because of their exaggerated scale and projection.

8.06 OUTDOOR CAFES (Se zoning code CO 512: Outdoor restaurant permit)

While the City of Cleveland encourages the use of outdoor dining arrangements, restaurant operators must be mindful of two important considerations: the safety and flow of pedestrian traffic, and visual appropriateness.

a. Outdoor dining areas must leave at least 5' of unobstructed pedestrian space

b. Barriers:

- Barriers of at least 36" height are required for leading edge for all dining areas, and for full-perimiter for dining areas serving alcohol, with only one opening to the sidewalk for access.
- Sectional fencing made of metal or wood is desirable for outdoor seating, since it is convenient to dismantle for winter.
- All barriers must be free standing, without any permanent or temporary attachment to the sidewalk, buildings or any other infrastructure.
- Access openings within the barrier must be at least 44" in width and must be in a location that does not create confusion for visually impaired pedestrians.
- Planters and light fixtures are encouraged in addition to the main fencing barriers

c. Furniture:

- Outdoor dining furniture including the tables, chairs and the umbrellas must contribute to the overall atmosphere of the specific district and be complementary in both appearance and quality.
- All furniture and fixtures must be durable and of sufficiently sturdy construction as not to blow over with normal winds.
- Furniture and fixtures must not be secured to trees, lampposts, street signs, hydrants, or any other street infrastructure by means of ropes, chains or any other such devices, whether during restaurant operating hours or at times when the restaurant is closed.
- Tables and chairs of a natural unpainted material like wood, metal etc. are encouraged. Plastic or fluorescent chairs and tables are not permitted.
- To ensure effective pedestrian flow, all parts of any umbrella (including the fabric and supporting ribs) must be contained entirely within the outdoor seating area.
- When extended, the umbrella must measure at least 7 feet above the surface of the outdoor dining area in order to provide adequate circulation space below.

8.06 SERVICE AND UTILITIES (See zoning code CO 352.10)

a. There are two main considerations when deciding where to construct utilities: service access and screening. Access is important for both the businesses and for the utility providers who need to supply service and access the system.

b. The proposed layout should facilitate trash removal and other similar utility services.

c. Service elements like trash dumpsters, loading docks and mechanical equipment should be located away from the street front where possible. When these elements cannot be located away from the street, they should be situated and screened from view and must not be located in the pedestrian right-of-way.

d. Utilities should be placed to make their construction and maintenance economical and efficient.

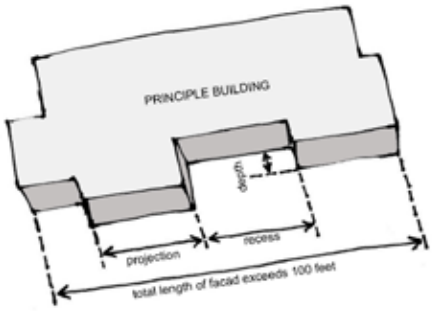
e. Electric and telephone lines located within a project should be placed underground.

f. Electric and gas meters, transformers, and other utilities should be screened otherwise located out of sight from roadways and public areas.

g. Common trash storage areas must be screened and fully enclosed.

9. LARGE-SCALE RETAIL

These guidelines apply to "big box" retail establishments of more than 50,000 square feet. All of the preceding commercial design guidelines also apply to large-scale retail establishments.



Projections/recesses shall comprise at least 20% of facade length with a minimum depth of 3% of facade length

9.01 SCALE AND MASSING **(See zoning code CO 343 & 353)**

a. Facades should be adjusted and divided into segments to reduce the massive scale and the uniform, impersonal appearances of large retail buildings and provide visual interest.

b. Developments with facade over 100 feet in length should incorporate wall projections or recesses for at least 20% of the façade length with a minimum of 3% of façade length.

c. Developments shall use animating features such as arcades, display windows, entry areas, or awnings along at least 60 percent of any façade facing a public right-of-way.

d. The rear or sides of buildings often present an unattractive view of blank walls, loading areas, storage areas, HVAC units, garbage receptacles, and other such features. Architectural and landscaping features should mitigate these impacts.

e. Any back or side of a building visible from a public or private right-of-way shall be designed with some level of detailing keeping with the front or main elevation.

Building facades should include repeating patterns to reinforce street order

9.02 ARCHITECTURAL FEATURES **(See zoning code CO 350)**

a. Buildings should have architectural features and patterns that provide elements of visual interest at the scale of the pedestrian.

b. Building facades should include a repeating pattern that shall include no less than three of the elements listed under 9.24. At least one of these elements shall repeat horizontally.

c. Each principal building on a site shall have clearly defined, highly visible customer entrances featuring:

- Canopies or porticos
- Overhangs
- Recesses/projections
- Arcades
- Peaked roof forms

Visible entry with display windows

- Outdoor patios
- Display windows
- Architectural details such as tile work and moldings integral planters or wing walls that incorporate landscaped areas and/or places for sitting

d. Color, texture, and material changes can help break up the scale of large facades.

e. Variations in roof lines should be used to add interest to, and reduce the massive scale of large buildings. Roof lines should be varied with a change in height every 100 linear feet in the building length.

f. Parapets and other roof forms shall be used to conceal roof top equipment from public view.

9.03 BUILDING MATERIALS

a. Exterior building materials and colors should be aesthetically pleasing and compatible with materials and colors used in adjoining buildings.

b. Green roofs are strongly encouraged for at least part of the roof's surface area. The remainder of the roof should be covered with light colored roofing materials.

c. Large expanses of smooth material (e.g., concrete) should be broken up with expansion joints, reveals, or changes in texture and color

d. Materials and colors of wall and monument signs should be compatible with the main buildings on the site.

e. Building walls that may be prone to graffiti should be treated with a graffiti resistant coating.

9.04 OUTDOOR STORAGE, TRASH COLLECTION, AND LOADING AREAS

Loading areas must be sited to minimize visual and sound impacts

a. Loading areas and outdoor storage areas must be sited and located to minimize visual and noise impacts on surrounding neighborhoods. When visible from adjoining properties and/or public streets, these areas should be screened, recessed or enclosed.

b. Appropriate locations for loading and outdoor storage areas include

c. Areas between buildings, where more than one building is located on a site and such buildings are not more than 40 feet apart, or the sides of buildings that do not have customer entrances.

d. Areas for outdoor storage, truck parking, trash collection or compaction, loading or other support uses should not be visible from public or private rights-of-way.

e. No areas for outdoor storage, trash collection or compaction, loading, or other such uses may be located within 20 feet of any public or street, public sidewalk, or internal pedestrian way.

f. Loading docks, truck parking, outdoor storage, utility meters, HVAC equipment, trash, dumpsters, trash compaction, and other service functions shall be incorporated into the overall design of the building and the landscaping so that the visual and acoustic impacts of these functions are fully contained and out of view from adjacent properties and public streets.

g. Non-enclosed areas for the storage and sale of seasonal inventory shall be permanently defined and screened with walls and/or fences. Materials, colors, and designs of screening walls and/or fences and the cover shall conform to those used as predominant materials and colors of the building.

h. Temporary sales/displays, such as Christmas trees, landscape materials shall follow all outdoor requirements as described in the Zoning Ordinance. Location and time/duration of such sales/displays shall be reviewed as part of the design review process.

9.05 LARGE PARKING LOTS (mainly for commercial, industrial and institutional)

Walkways should feature landscape areas for no less than 50% of their length

a. Design major internal driveways with some elements of streetscaping to appear more as streets rather than driveways within a parking lot. Major internal driveways to include sidewalks and street trees with large canopies.

b. Distribute parking areas to shorten the distance between buildings and to shorten the distance to the public sidewalks, and to reduce the scale of the paved surface area.

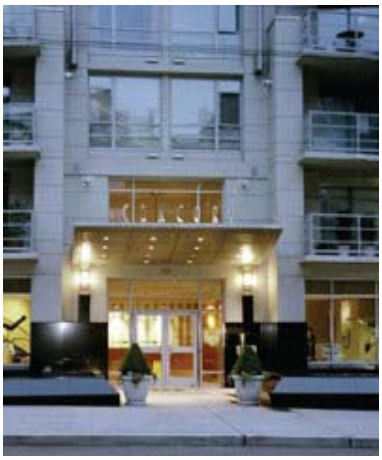
c. Continuous internal pedestrian walkways, no less than five feet in width, shall be provided from the public sidewalk or right-of-way to the principal customer entrance(s) of all principal buildings on the site.

d. At a minimum, walkways shall connect focal points of pedestrian activity such as, but not limited to, transit stops, street crossings, building and store entry points, and shall feature adjoining landscaped areas that include trees, shrubs, benches, flower beds, ground covers, or other such materials for no less than 50 percent of their length.

e. Sidewalks, no less than five feet in width, shall be provided along the full length of the building along any facade featuring a customer entrance, and along any facade abutting public parking areas. Such sidewalks shall be located at least six feet from the facade of the building to provide planting beds for foundation landscaping, except where features such as arcades or entryways are part of the facade.

f. Internal pedestrian walkways shall be distinguished from driving surfaces through the use of durable, low maintenance surface materials such as pavers, bricks, or scored concrete to enhance pedestrian safety and comfort.

g. Curbs shall be designed to act as edges and durable enough to withstand the impacts of traffic, snowplows. They must also be visible easily, especially at night.



Varied luminaries at pedestrian pathway and building entry

9.06 LIGHTING

a. The design and location of outdoor lighting fixtures should preclude direct glare onto adjoining property and streets. Illumination devices should be installed, directed, and shielded to confine light rays within the property.

b. Outdoor lighting should be designed to foster security. Site and building entries should have enhanced illumination to increase visibility and safety.

c. Select different luminaries with a coordinated appearance to light pedestrian pathways, building and site entrances and other relevant site features.

d. Install lighting that is appropriately scaled to its purpose, avoid over-lighting.

e. Direct light downward and avoid light overspill on adjacent properties, streets and open spaces.

f. Where feasible, incorporate opportunities for alternative energy generation, e.g. solar, wind, etc.

g. Provide pedestrian-scaled lighting, such as bollards or lower-scale pole fixtures along pedestrian routes.

h. Consider lighting elements for their aesthetic and design value, not simply their function or ease of maintenance.

10. INDUSTRIAL

Front and street facades of large buildings that include architectural features to add interest to the building elevation

The design guidelines in this section are applicable only for new industrial developments located within the boundaries of a design review district. Industrial development should fit within the context of its surroundings, should not negatively impact adjacent uses, should provide quality architectural detailing and achieve an efficient/aesthetic arrangement of onsite facilities. (See zoning code CO 345)

10.01 BUILDING DESIGN

a. The architectural design of a structure must consider many variables, from the functional use of the building, to its aesthetic design, to its "fit" within the context of existing development. The following guidelines help buildings achieve the appropriate level of design detail on all facades, avoid blank/uninteresting facades, and provide for the proper screening of equipment and refuse areas.

b. The mass and scale of large, box-like industrial buildings should be reduced through the incorporation of varying building heights and setbacks along the front and street side building façades.

c. Front and street side facades of large buildings visible from a public street should include architectural features such as reveals, windows and openings, changes in color, texture, and material to add interest to the building elevation and reduce its visual mass.

d. Primary building entries should be readily identifiable and well defined through the use of projections, recesses, columns, roof structures, or other design elements.

e. Service and loading doors should not be located on front or street side facades adjacent to a public right-of-way.

Large expanses of smooth material should be broken up with expansion joints, reveals, or changes in texture or color

10.02 MATERIALS

a. A comprehensive material and color scheme should be developed for each site. Material and color variations in multi building complexes should be complementary and compatible among buildings.

b. Large expanses of smooth material (e.g., concrete) should be broken up with expansion joints, reveals, or changes in texture and color.

c. Large expanses of highly reflective surface and mirror glass exterior walls should be avoided to prevent glare impacts on adjacent public streets and properties.

d. Materials and colors of wall and monument signs should be compatible with the main buildings on the site.

Identifiable building entry

e. Building walls that may be prone to graffiti should be treated with a graffiti resistant coating.

10.03 ACCESSORY BUILDINGS

a. The design of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) should be incorporated into and be compatible with the overall design of the project and the main buildings on the site.

b. Temporary buildings (e.g., portable modular units) should not be located where they will be visible from adjoining public streets.

c. Modular buildings should be skirted with material and color that is compatible with the modular unit and the main buildings on the site.

10.04 SITE CONSIDERATIONS

a. If adjacent to a residential zoning district, additional building setbacks should be provided adjacent to the residential use to reduce the visual impact of the large-scale industrial buildings.

b. Site elements such as buildings, parking, driveways, and out-door activities should be arranged to emphasize the more visually pleasing components of the site (e.g., landscaping and architectural features) and disguise less attractive elements (e.g., service facilities, outside storage, equipment areas, and refuse enclosures) through proper placement and design of buildings, screen walls, and landscaping.

Primary entry drives should be enhanced with ornamental landscaping

c. Noise generating functions should be located as far as possible from adjacent properties, especially residential uses. Sound attenuation walls should be used where appropriate to mitigate/reduce noise.

d. If refuse storage areas, fuel tanks, generators, and fire check safety valves cannot be located out of public view, the design of refuse storage areas should incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site.

10.05 ACCESS & CIRCULATION

a. Control site access with appropriate maneuvering areas for trucks separated from general vehicle circulation.

b. The number of site access points should be minimized and located as far as possible from street intersections in order to minimize points of potential vehicle conflict, especially between automobiles and trucks.

c. Primary entry drives for automobiles, especially visitors, should be enhanced with ornamental landscaping, low-level decorative walls, monument-type signs, and decorative paving to emphasize site access locations.

d. Site access and internal circulation should promote safety, efficiency, convenience, and minimize conflict between vehicles and large trucks. Appropriate maneuvering and stacking areas for trucks should be a primary consideration in the overall design of the circulation system.

e. The design and location of loading areas and dock facilities should minimize the interaction between trucks and visitor's automobiles. Access to loading and delivery areas should be separated from parking areas to the greatest extent feasible.

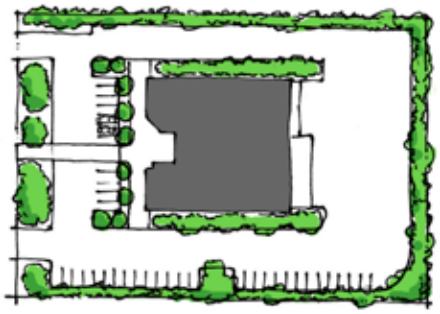
f. The design and location of loading facilities should take into consideration the specific dimensions required for the maneuvering of large trucks and trailers into and out of loading position at docks or in stalls and driveways

g. Pedestrian walkways should provide safe, convenient, and well-defined access between parking areas and the public sidewalk and the main public access to the building.

h. Pedestrian circulation should be clearly delineated and separate from vehicle circulation. The use of landscaping, walkways, and decorative paving to delineate pedestrian circulation should be used to the greatest extent feasible,

i. Uses such as distribution centers where large truck volumes are anticipated, should be planned with separate entry/exit drives for truck use only. Entry drives should be separated from exit drives a minimum of 100 feet when appropriate to accommodate safe truck maneuvering.

j. Refuse storage areas should be located at the rear of the development and screened from public view.



Clearly delineated pedestrian circulation access

10.06 PARKING (See zoning code CO 339.03)

a. Parking lots should not be the dominant visual element at the front of the site. Large expansive paved areas located between the street and the building should be avoided.

b. Large parking areas (usually over 100 spaces) should be divided into smaller multiple lots and provided with canopy trees located throughout the parking area to reduce the visual impacts of large parking areas.

c. Visitor parking spaces should be located to produce the shortest route of travel from a building.

d. Employee parking and service areas should be located at the sides and/or rear of buildings.

e. Convenient public access and short-term visitor parking should be provided near the main entrances.

Planing trees for shade in pedestrian and/or parking areas is encouraged

10.07 LANDSCAPING (See zoning code CO 352.03)

a. Landscape design should follow an overall concept and should link various site components together.

b. The use of trees to create canopy and shade, especially in parking areas and pedestrian open space areas is strongly encouraged.

c. The use of vines on walls to soften the appearance of buildings and walls and to deter graffiti is encouraged.

Landscaping adjacent to the pedestrian walkway

d. More intense landscaping and special landscape features should be provided at major focal points, such as entry ways and pedestrian gathering areas.

e. When industrial/warehouse uses are located adjacent to less intense uses (e.g., residential or retail commercial), additional landscaping in conjunction with appropriate decorative walls and setbacks should be provided to mitigate potential adverse impacts.

f. The front, public portions of buildings should be separated from parking areas by landscaping and pedestrian walkways.

g. When security fencing is required adjacent to streets, it should consist of decorative metal, tubular steel or similar material supported by masonry piers.

10.08 LIGHTING

a. The design and location of outdoor lighting fixtures should preclude direct glare onto adjoining property and streets. Illumination devices should be installed, directed, and shielded to confine light rays within the property.

b. Outdoor lighting should be designed to foster security. Site and building entries should have enhanced illumination to increase visibility and safety.

c. Select different luminaries with a coordinated appearance to light pedestrian pathways, building and site entrances and other relevant site features.

d. Lighting that is appropriately scaled to its purpose should be used and over-lighting should be avoided.

e. Lighting should be directed downward to avoid light overspill on adjacent properties, streets and open spaces.

f. Provide pedestrian-scaled lighting, such as bollards or lower-scale pole fixtures along pedestrian routes.

11. INSTITUTIONAL

Visually intereting building form can help create an engaging streetscape; CSU's Visual Arts Center

Aligning building facades with adjacent facades helps maintain the continuity of the streetscape

11.01 BUILDING ORIENTATION (See zoning code CO 340)

a. Site buildings to take advantage of sun angles, prevailing winds, tree stands, hills, and other natural conditions to save energy in heating and cooling.

b. Proposed building sites should be oriented to on- and off- site views. Buildings should overlook open space and not parking or road areas.

c. Try to locate open spaces to the west or south of the building for ideal solar orientation.

d. Locate the building as close to the street as possible to help define the street edge.

e. Align the building façade with adjacent building facades.

f. Locate the main entrance directly off of the pedestrian walkway or design a clear, pedestrian friendly connection from the walkway to the entrance.

11.02 BUILDING DESIGN (See zoning code CO 340.06)

a. Design facades should be designed using architectural features, fenestration patterns and materials that refer to the scale of activities contained within.

b. Buildings should not have large blank walls facing the street, especially near sidewalks. Facades can be enlivened by providing visibility into building interiors; different textures, colors, materials that break up a wall's surface; small setbacks and indentations; special lighting; and/or seating ledges.

c. Reinforce building entries with one or more of the following architectural treatments:

- Extra-height lobby space
- Distinctive doorways
- Decorative lighting
- Distinctive entry canopy
- Projected or recessed entry bay
- Building name and address incorporated into the façade or sidewalk
- Distinctive landscaping including plants, water features and seating
- Ornamental glazing, railings, and balustrades

d. Integrate roof shape, surface materials, and colors with the building's overall design concept.

Rooftop terraces for public use and stormwater management

e. Size and place rooftop mechanical equipment, penthouses, other components, and related screening elements to enhance views

f. Develop rooftop terraces and gardens for public use and stormwater management.

11.03 BUILDING MATERIALS

a. Use building materials that promote quality and permanence.

b. Green roofs are strongly encouraged for at least part of the roof's surface area. The remainder of the roof should be covered with light colored roofing materials.

c. Large expanses of smooth material (e.g., concrete) should be broken up with expansion joints, reveals, or changes in texture and color

d. Building walls that may be prone to graffiti should be treated with a graffiti resistant coating.

11.04 PEDESTRIAN ACTIVITY

a. Spaces for street level uses should be designed to engage pedestrians with the activities occurring within them. Sidewalk-related spaces should appear safe, welcoming and open to the general public.

b. Incorporate elements of pedestrian network in the vicinity; slopes, mid block crossings, through block passageways, etc.

c. Design street-front public spaces that features artwork, street furniture, and landscaping.

Incorporate elements of pedestrian network on the street facade

d. Develop transitions between buildings and public spaces. This can be accomplished by:

- Using gathering areas and/or landscaping to define transition areas
- Incorporating recessed entries along sidewalks
- Developing semi-public open spaces as transition from public space of the sidewalk to private space of the building
- Developing a sequence of transition spaces
- Incorporating private outdoor spaces as transitions to public space
- Using the scale of the building to emphasize the transition
- Including human-scale elements at areas of transition
- Creating large openings in the walls of the ground level of the building
- Considering extending street level spaces into the sidewalk inviting pedestrians into buildings with: multiple and varied entries, open facades and variations in paving materials, textures and colors.

Promote pedestrian activity with the use of canopies and walkways

e. Overhead weather protection with the use of canopies or awnings is encouraged as it helps define the pedestrian realm and reduce the scale of tall buildings.

Pedestrian scale lighting

Incorporate native plants in the landscape design and limit the use of lawn as much as possible

f. Chamfering corners of buildings increases visibility and safety for pedestrians and vehicles when buildings are at property lines.

11.05 LANDSCAPING AND OPEN SPACES (See zoning code CO 352)

a. When designing landscape and screening features, do not block visibility into and out of open spaces.

b. Lighting in open spaces should always be at pedestrian scale.

c. Use turf grass lawns only where necessary; incorporate multiple species in to the planting plan, rather than a monoculture of one grass.

11.06 SERVICE AND UTILITIES (See zoning code CO 352.10)

a. The proposed site layout should facilitate trash removal and other services and functions.

b. Trash dumpsters, loading docks and mechanical equipment should be located away from the street front where possible. When these elements cannot be located away from the street, they should be situated and screened from view and must not be located in the pedestrian right-of-way.

c. Utilities should be placed to make their construction and maintenance economical and efficient.

d. Electric and telephone lines located within a project should be placed underground.

e. Electric and gas meters, transformers, and other utilities should be screened or otherwise located out of sight from roadways and public areas.

f. Common trash storage must be screened and fully enclosed.

11.07 ADDITIONAL GUIDELINES FOR SCHOOL BUILDINGS

Schools are signature buildings in Cleveland neighborhoods, with a unique function to perform in the life of the surrounding community. As such, several special guidelines apply to the design of school buildings in addition to the above listed institutional guidelines.

a. Connectivity to the community:

- Community should be involved into the planning process through an integrated design process.
- Design the school so that the athletic fields, gymnasium, media center, cafeteria and the classrooms can be shared at appropriate times with the community.
- Through good site design, link the school to the surrounding communities through safe bicycle routes and pedestrian pathways.
- Location of parking and bus area should be near the building entrances.

Natural daylight and ample ventilation in the common areas

Natural daylight and ample ventilation in the common areas

b. Building Design:

- Design for diffuse, uniform daylight throughout classrooms.
- Design for interesting spatial types that allow for exploration for the children.
- Provide for daylight in classrooms. Consider skylights, building orientation, and room layouts to allow diffuse, uniform daylight to penetrate as far as possible into the room.
- Covered walkways and outdoor waiting areas should emphasize entries, connections and bus & car drop-off areas.
- Embrace the concept of the building as a teaching tool. Connect the indoor environment to the outdoors by providing operable view windows in classrooms and easy access from classrooms to gardens and other outdoor areas that can be utilized in the curriculum.
- To foster students' sense of community and individuality:
  - » Classrooms should be clustered around common areas.
  - » Spaces should connect visually through the use of colors and patterns, particularly for elementary and middle school children.
  - » Provide platform spaces for gathering, sitting, and presenting and alcoves for quiet play, reflection, and reading.
  - » Decentralize administrative spaces to encourage active leadership and maximize interaction with students.
  - » Provide a "home base" for each student and teacher.
- To ensure flexibility and adaptability for changing programs and enrollments:
  - » Operable walls can be used to increase the efficiency of large, multi-purpose spaces, such as the cafeteria and gymnasium.
  - » There should be room to accommodate technology upgrades.
  - » Allow classrooms to change with the activity and group size.

c. Safety/Security

- Entries into the building(s) should be visible from public right-of-way
- Natural surveillance through visually porous facades, doors and windows facing the streets should be provided.
- Administrative offices should be located toward entrances to monitor visitors.
- Increase occupants' sense of ownership and "territoriality" by providing comfortable, not institutional, rooms and by clearly defining the school boundaries.
- Use durable, non-toxic building materials.

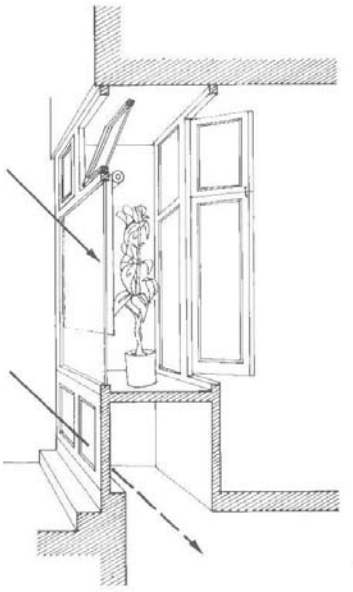
Examples of landscapes converted into classrooms

d. Landscape

- The building premises should incorporate green space for recreational activities, as well as attempt to provide productive landscapes for educational purposes.
- Explore the use of the school premises for providing alternate and innovative classroom venues by incorporating opportunities for learning in the overall landscape design (see Learning Landscapes, an initiative of the University of Colorado).

12. ADAPTIVE REUSE/CONVERSION

Creative new uses can extend the productive life of a building. Adaptive reuse is an inherently "green" process that conserves existing resources and reduces waste. The adaptability of any building depends on its design, form, materials, floor plan, and structure. The most cost-efficient adaptive reuse projects retain most of a building's existing structural elements, while allowing for necessary changes in use.



Storefront adapted for residential use

12.01 GENERAL PRINCIPLES

a. Wherever possible, retain a building's existing components such as structural supports, exterior walls, roofs, foundations, interior features, and architectural details.

b. Look for opportunities to improve operating performance through insulation, high-performance windows and doors, and updated heating and cooling systems.

12.02 HISTORIC BUILDING RENOVATION

The Cleveland Storefront renovation Program Design manual prepared by the Department of Community Development in 2002 is a detailed guide for rehabilitation of historic buildings. It describes the architectural features that contribute to the quality of commercial buildings and outlines standard and techniques for their rehabilitation, and should be referenced for historic renovation as well as storefront improvement.

12.03 CONVERTING STOREFRONTS TO HOUSING

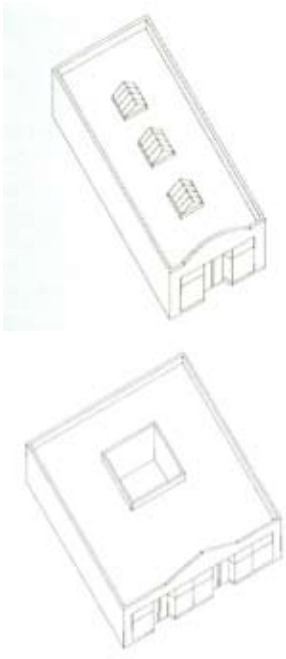
a. Storefronts can be adapted for residential uses, acting as a revitalization tool for previously commercial streets throughout the city.

b. Historic details, spatial possibilities, and a flexible floor plan are essential to a successful storefront conversion. The neighborhood context and adjacent buildings also play a big role.

c. Multi story corner buildings work well, as these buildings often have existing residential uses on the floors above and usually have windows on two or three sides.

d. One story buildings allow for the addition of operable skylights and courtyards.

e. On major streets, traffic noise can be a problem, but this can be mitigated through the use of insulated glass, landscaping, and interior buffering with draperies and shades.



Maximize daylight for residential units via skylights or courtyards

Industrial buildings are well suited to adaptive reuse because of its large, open spaces

Warehouse converted into art school

f. The light from large display windows can create dramatic interior spaces and provide good views of the street. However, a residential use requires more privacy than the original commercial use. This can be achieved with screening, using plants or creating a low wall. Patterned or translucent glass can also be used. A second tier of glass separated by plants or patio furniture can also be used effectively.

g. Most storefronts have recessed entries into the shop, which can create visual interest. Avoid flattening out the façade to create an enclosed vestibule. Regardless of its location, the entry will affect the layout of the entire space. For those units with parking in the rear, the back doors is used as a functional entry and so the front shop entry niche can be retained for appearance, adding landscaping to direct visitors.

h. Avoid setting any portions of the front facade back a few feet to provide planting space or buffering from the sidewalk. Hollowing out the building façade is disruptive to the look of the building and the entire street.

i. South or southwest facing facades can take advantage of large expanses of glass for passive solar heating during winter.

j. Bulkhead level windows should have translucent glass to provide light to the basement. If there is no basement, the bulkhead level can have different materials like wood siding, panels or masonry, depending on the materials of the rest of the building.

k. Wrought iron gates, doors and low walls can be compatible, particularly if they occur in recessed doorways and in the gaps between buildings.

l. Awnings and blinds can shade windows where necessary. Deciduous trees planted in front of windows can offer shade in the summer, but allow sunlight to come through in the winter.

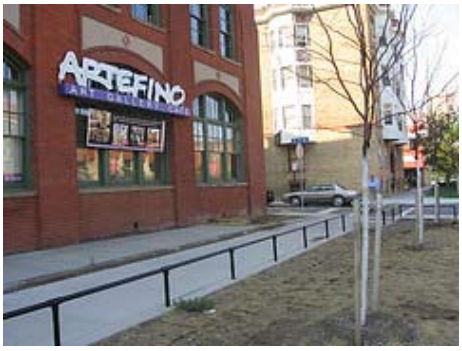
m. To maximize daylight for the residential units:

- Locate habitable rooms (bedrooms, living and dining) on the outside walls.
- Use operable skylights for interior rooms.
- Design an open plan for the living spaces, using low walls and furniture as dividers to allow for the best use of natural light and ventilation.
- Allow interior rooms to borrow light from rooms with direct sunlight and natural ventilation.
- Carve out new courtyards for one story buildings, coordinating these spaces with the existing structural grid.

12.05 INDUSTRIAL REUSE (See zoning code CO 346)

Industrial buildings are especially well suited to adaptive reuse due to their large, open spaces. Many industrial buildings are significant primarily for their architecture, as vernacular relics from the industrial age, and may be less so for their association with prominent people and events. There are countless reuse

Industrial building reuse



Retail at ground level of Towerpress building in Cleveland downtown

options available for industrial buildings. Some of the more popular conversions are of industrial building to museums, art studios, live-work units, offices, residential units, schools, retail, and increasingly more are combining several uses together.

a. Light and ventilation:

- The indoor spaces in the building should make the maximum use of natural daylight.
- Provision of sufficient daylight access for living and work areas may be difficult especially in existing buildings originally constructed for non-residential purposes. Where direct access to daylight cannot be provided to a living or work area, when located at the rear of a unit, daylight may be borrowed from exterior wall windows through a living or work area adjacent to these windows.
- Where it is proposed to enclose a living or work area that does not have direct access to daylight, at least one wall of the enclosed area with primary exposure to the building's exterior wall windows should be located no more than 25' back of the building's exterior wall windows and of no less than 60% transparent or translucent glazing.

b. Live-work parking should be separate and secure, similar to security provisions for separating residential parking from commercial parking.

c. Private and/or semi-private open space is desirable to provide an amenity. Open space should be provided consistent with the open space guidelines under Landscape Guidelines in chapter 4 of this document.

d. Artist studios on the ground floor of developments are generally not encouraged on pedestrian-oriented streets in commercial, historic and comprehensive development districts, unless it is a love/work studio in which case the storefronts and windows should be retained. Windows should not be blocked and should allow for viewing work underway in the studio.

12.05 CHURCH CONVERSION

(Guidelines)

Church converted into retail store

DEFINITIONS

Arcade: a blind or open range of arches with pier or column supports

Architectural Features: prominent or significant parts or elements of a building or structure

Axonometric Drawing: orthogonal projection using a 45-degree from horizontal and vertical to create a three dimensional drawing of a structure with three surfaces showing and with horizontal and vertical distances drawn to scale, but diagonal and curved lines distorted

Bay: a structural division of a building in a horizontal plane

Bio-retention: containment of rain and ground water on site

Bulkhead: the unit that occupies the lowest level of the storefront and can be described as the base which supports the display window

Buttress: an engaged pier design to strengthen a wall

Canopy: a removable fabric or plastic covering over a public walkway or sidewalk.

Capital: the uppermost part of a column or other support

Clerestory: an upper windowed portion of a building designed to provide natural light to a high ceilinged room

Column: a vertical support, usually round, normally having three parts: base, shaft, and capital

Compatibility: the size and character of a building element relative to other elements around it. For example, the size and proportion of windows in a building facade are usually related to one another, the spaces between them, and the scale of surrounding buildings

Context: the characteristics of the buildings, streetscape, and landscape that supports or surrounds a given building, site, or area such as predominance of period architecture or materials, wide sidewalks, or continuous and overhead weather protection, or consistent street trees

Cornice: a horizontal molded projection that crowns or completes a building or wall

Cross access: a way across an open space to a building or another open space

Façade: the front or “face” of a building

Frieze: the middle member of a classical entablature, often providing a location for signage

Gable: the triangular part of an end wall under the pitched roof

Gable Roof: a pitched roof having a gable at each end and a ridge down the middle

Hipped Roof: a roof having a slope on all four sides; a hip is the line of meeting of two of these slopes

Keystone: the top member of an arch

Lintel: a beam supported on vertical posts or walls at its ends; the most common method of spanning an opening

Massing: the three dimensional bulk of a structure: height, width, depth

Mansard Roof: a pitched roof having two slopes, the lower one of which is much steeper then the upper

Modulation: a stepping back or projecting forward of sections of a structure's facade within specified intervals of building width and depth as a means of breaking up a structure's apparent bulk

Mullion: a vertical or horizontal member dividing a window into individual sashes or a division between grouped windows

Open Spaces: land and/or water area with surface open to the sky and predominantly undeveloped, which is set aside to serve the purposes of providing active or passive recreational opportunities, conserving valuable natural resources, and structuring urban development and form.

Parapet: a low protective wall at the edge of a roof

Permeable pavements: hard surfaces that do not retain water

Piers: vertical supporting members which frame the width of the building; also called columns or posts.

Proportion: the balanced relationship of parts of a building, landscape, and structures to each other and to the whole

Rain garden: a landscaped depression that allows rainwater runoff from impervious urban areas like roofs, driveways, walkways, parking lots, and compacted lawn areas the opportunity to be infiltrated/absorbed on-site.

Repointing: the process of removing deteriorated mortar from the joints of a masonry wall and replacing it with new mortar

Row buildings: structures built as part of a row of similar buildings, sharing side walls and roof

Rustication: stone with emphasized joints, achieved by beveling the edges or giving the edges a special decorative treatment

Rhythm: reference to the regular or harmonious recurrence of lines, shapes, forms or colors, incorporating the concept of repetition as a device to organize forms and spaces in architecture

Scale: the spatial relationship among structures along a street or block front, including height, bulk and yard relationships. Proportional relationship of the size of parts to one another and to the human figure

Scale, Human: used to describe the quality of a building that includes structural or architectural components of size and proportions that relate to the human form and/or that exhibits through its structural or architectural components the human functions contained within.

Setback: the required or actual placement of a building a specified distance away from a road, property line, or other structure

Shaft: the section of a classical column between the base and the capital; also used to describe the middle section of buildings

Siding: exterior wall covering which generally consists of wood boards nailed to a frame

Signage: loosely defined as any publicly displayed information that is presented in the form of words, symbols, and/or pictures.

Site Plan: a detailed plan showing the proposed placement of structure, parking areas, open space, landscaping, and other development features, on a parcel of land

Storefront: the street-level façade of a commercial building, usually having display windows

Streetscape: the visual character of a street as determined by elements such as structures, access, greenery, open space, view, etc. along a public street composed of natural and man-made components including buildings, paving planting, street hardware, and miscellaneous structures

Swale: a low tract of land designed to slow and capture runoff by spreading it horizontally across the landscape (along an elevation contour line), facilitating runoff infiltration into the soil.

Transom Window: a small operable or fixed window located above a door or other window

Transparency: a street level development standard that defines a requirement for clear or lightly tinted glass in terms of a percentage of the facade area between an area falling within 2' and 8' above the adjacent sidewalk or walkway

To add

REFERENCES

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CONTACT INFORMATION