

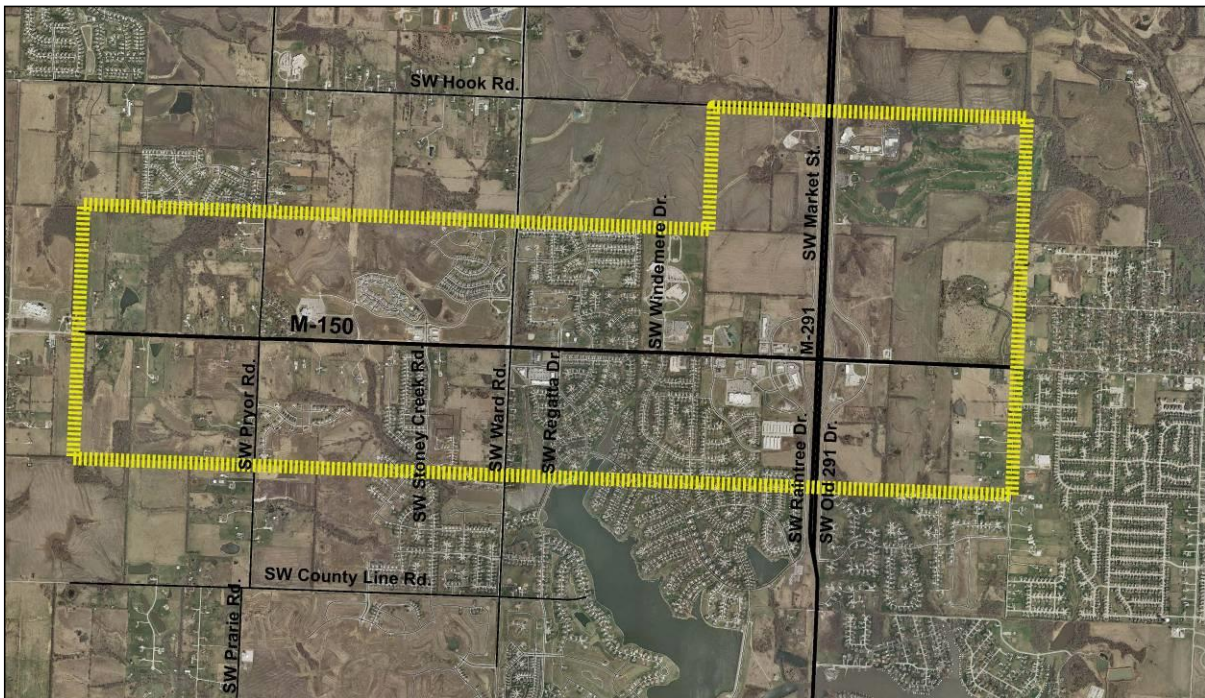
ARTICLE 6. OVERLAY DISTRICTS

DIVISION VI. M-150 CORRIDOR DEVELOPMENT OVERLAY (CDO) DISTRICT (Amend. #63)

Section 6.510 M-150 CDO Design Standards

A. General Provisions

- 1. Purpose.** The purpose of the M-150 (CDO) is to facilitate the development of property in the M-150 corridor in accordance with the M-150 Sustainable Corridor Vision and Framework Plan (M-150 Corridor Plan) with the highest possible levels of community and building design consistent with the healthy economic development and redevelopment of the plan area. Except as further amended by this Article, the administration, enforcement, and amendment of this M-150 Corridor Development Overlay shall be consistent with the M-150 Sustainable Corridor Vision and Framework Plan. All amendments to the CDO should maintain and enhance the consistency between the CDO and the M-150 Corridor Plan.
- 2. Applicability.** The CDO is applicable to specific land parcels along M-150 and M-291 traffic corridors identified on Map 1, below, as now or hereafter established. Development standards shall be applicable to multi-family and non-residential construction, reconstruction, alteration, or expansion. No land, building, structure, or premises shall be used for any purpose or in any manner other than that which is permitted in the applied zoning district and CDO standards.



Map 1: M-150 CDO Boundaries

3. Land Use and Transportation Framework: The following legends on the Framework Map above are more fully described below and correlate to their respective locations on the Map.

a) Activity Center-Mixed-Use:

Activity Centers or “Commercial Nodes” are situated at primary intersections along M-150 and are to include a concentrated mixed-use development that can be easily accessed and supported by existing and future neighborhoods. Ideally these centers will be multi-storied with a vertical mix of uses. These are not intended to be large developments but should be designed with social gathering places. Residential use above the first floor is highly recommended.

b) Retail:

Retail categories are intended to support large commercial retail stores, either individually or grouped together. These types of developments have increased traffic and parking demands, increased impervious surfaces and increased environmental impacts. Developments within this category are expected to increase necessary controls to minimize the environmental impacts they generate.

c) Commercial (Office/Retail)

Commercial areas include both office and retail uses which can be standalone buildings or a vertical mix of uses within a single building. This category promotes creative integration of more intensive retail uses and less intensive office uses in one general area.

d) Residential Mixed Density

This area supports residential housing of mixed densities with limited non-residential uses of neighborhood scale developed through compatible site planning.

e) Planned Mixed Use

Planned mixed-use accommodates a mix of retail, office, service and public uses with a complimentary mix of residential development of varying densities. Business park type of uses may also be mixed with retail and office uses where appropriate.

f) Park, Golf Course, Nature Preserve, Open Space

This category includes all public and private parks, golf courses and nature preserve areas.

4. Conflict. These design standards are additive; more than one set of standards may apply to a particular development project. The more restrictive provision, as determined by the Director, shall control in cases where standards conflict.

5. Alternative Equivalent Compliance

Commentary: This is a new procedure that is intended to provide some design flexibility. It is designed to allow an applicant to submit a development design that does not necessarily meet the exact standards of the overlay but meets the intent of the regulations.

- a. Purpose and Scope. To encourage creative and unique design, “alternative equivalent compliance” allows development to occur in a manner that meets the intent of this CDO yet through an alternative design that does not strictly adhere to

the CDO's standards. This is not a general waiver of regulations. Rather, this section authorizes a site-specific plan that is equal to or better than the strict application of the standard in meeting the goals and policies in the M-150 Corridor Plan.

- b. **Decision-Making Responsibility.** Final approval of any alternative compliance proposed under this section shall be the responsibility of the decision-making body responsible for deciding upon the application. Administratively approved projects proposing alternative compliance shall receive written approval of the alternative compliance from the Director.
- c. **Criteria.** Alternative equivalent compliance may be approved if the applicant demonstrates that following criteria have been met by the proposed alternative:
 - (1) Achieves the intent of the subject standard to the same or better degree than the subject standard;
 - (2) Advances the goals and policies of the M-150 Corridor Plan and this CDO to the same or better degree than the subject standard;
 - (3) Results in benefits to the community that are equivalent to or exceed benefits associated with the subject standard; and
 - (4) Imposes no greater impacts on adjacent properties than would occur through compliance with the specific requirements of this ordinance.
- d. **Effect of Approval.** Alternative compliance shall apply only to the specific site for which it is requested and shall not establish a precedent for approval of other requests.

B. Development Standards

Commentary: This section includes changes to existing development standards and new standards to be applied in the CDO to implement the M-150 Sustainable Corridor Vision and Framework Plan.

1. Sensitive Lands and Natural Resources. The provisions of the stream preservation standards in the City's Design and Construction Manual shall be applicable to development in the CDO. Green design provisions as further listed herein shall be applied to all development within the CDO.

2. Pedestrian and Bicycle Connectivity and Mobility

Commentary: This is a new section that is proposed to work in conjunction with the City's Access Management Code to increase pedestrian and bicycle connectivity options in the M-150 CDO. This section implements the City's Livable Streets Policy in the corridor.

- a. **Purpose.** The purpose of this section is to:
 - (1) Support the creation of a highly connected transportation system within Lee's Summit in order to provide choices for drivers, bicyclists, and pedestrians;
 - (2) Increase effectiveness of local service delivery; promote walking



Fig. 6.480.B-1: Sidewalks on both sides of street

and bicycling; connect neighborhoods to each other and to local destinations such as employment, schools, parks, and shopping centers;

- (3) Reduce vehicle miles traveled; improve air quality and reduce emergency response times;
 - (4) Mitigate the traffic impacts of new development, and free up arterial capacity for long-distance travel needs; and
 - (5) Avoid the creation of large, isolated tracts without routes for through traffic or pedestrian and bicycle connections.
- b. Sidewalks Required. Sidewalks shall be installed on both sides of all arterials, collector streets, and local streets pursuant to the standards of City's Design and Construction manual. Connectivity is an important element in the implementation of the goals related to the "Community for all Ages" initiative that the City has embraced and is committed to. The Director may allow the use of alternative paving materials if a community improvement district or other long-term oversight board and funding mechanism is established to provide for ongoing maintenance.
- c. Block Pattern
- (1) New development shall establish a regular pattern of blocks to the extent feasible to avoid creating large "superblocks" that limit pedestrian, bicycle, and vehicular circulation.
 - (2) On large sites or where block consolidation is proposed as part of redevelopment (by right-of-way abandonment), pedestrian, bicycle, and vehicular circulation access to surrounding neighborhoods shall be maintained to the maximum extent feasible.
- d. On-Site Pedestrian Connections

- (1) All development in the CDO shall provide a network of on-site pedestrian walkways with a minimum width of five feet to and between the following areas:

- (a) Entrances to each building on the site, including pad site buildings;
- (b) Public sidewalks, walkways, or trails on adjacent properties that extend to the boundaries shared with the subject development;
- (c) Public sidewalks along the perimeter streets adjacent to the development;
- (d) Adjacent land uses and developments;
- (e) Adjacent public park, greenway, or other public or civic use; and
- (f) Adjacent public transit station areas, transit stops, park and ride facilities, or other transit facilities.



Fig. 6.480.B-2: On-site pedestrian connections

- (2) On-site pedestrian connections shall be constructed of stone, slate, exposed aggregate concrete, plain concrete, or concrete pavers. Jogging trails and pathways in multi-family residential neighborhoods may be constructed of approved synthetic or natural material provided that the property owner's association is required to ensure long-term maintenance.
- (3) Internal pedestrian walkways shall be provided through parking areas in excess of 50 spaces, constructed of materials distinguishable from the driving surface pursuant to Section 5.370.C.7.e(1), below.

e. Off-Site Pedestrian Connections

- (1) In high traffic areas, pedestrian walkways and crosswalks in public streets shall be identified to motorists and pedestrians through the use of one or more of the following methods:
 - (a) Changing paving color;
 - (b) Painted crosswalks; or
 - (c) Stamped concrete.



Fig. 6.480.B-3: Decorative materials for pedestrian crossings

Additional identification methods may be used in private streets provided an improvement district or other funding mechanism is provided for long-term maintenance.

- (2) Pedestrian circulation routes along storefronts shall be emphasized with special design features that establish them as areas where pedestrians are physically separated from the flow of vehicular traffic and/or are protected from the elements. Techniques shall include one or more of the following:
 - (a) Arcades, porticos, or other shade structures;
 - (b) Pedestrian light features,
 - (c) Bollards,
 - (d) Seat walls or benches;
 - (e) Drinking water fountains; and
 - (f) Landscape planters.

- (3) The placement of street furniture and other decorative or functional items on the sidewalk shall not narrow the sidewalk at any point to less than four feet wide.

f. Trail Linkages.

- (1) Trail linkages shall be incorporated into the design of all new , multifamily, and non-residential developments in support of the "Community for all Ages" initiative. Trail linkage shall



Fig. 6.480.B-4: Residential trail connection

be located and designed so as to provide public access, to connect residences and businesses to open space and the City's trail system, and to promote pedestrian and bicycle movement between residential areas and employment/ business areas.

- (2) All development shall be required to demonstrate that the design of the proposed development includes trail linkages pursuant to the M-150 Corridor Plan, Lee's Summit Greenway Master Plan, Metro Green, or other applicable plan.
- (3) Trails shall be constructed at the time of development in accordance with adopted City standards and specifications.

3. Screening

Commentary: These new screening standards address mechanical equipment and service/loading areas not addressed by current regulations.

The following screening standards shall apply in the M-150 CDO in addition to the requirements of Article 14, Landscaping, Buffers, and Tree Protection.

- a. Multi-Family, Mixed-Use, and Commercial Screening. The following mechanical equipment screening standard shall apply to the maximum extent practicable.

- (1) Roof-Mounted Mechanical Equipment. Roof-mounted mechanical equipment shall be screened by a parapet wall or similar feature that is an integral part of the building's architectural design. The parapet wall or similar feature shall be of a height equal to or greater than the height of the mechanical equipment being screened. Roof-mounted mechanical equipment, except solar energy collection systems, is prohibited on single-family residential dwellings.



Fig. 6.480.B-5: Parapet wall screening roof mounted equipment

- (2) Wall-Mounted Mechanical Equipment. Wall-mounted mechanical equipment, except air conditioning equipment (e.g., window AC units), that protrudes more than six inches from the outer building wall shall be screened from view by structural features that are compatible with the architecture and color of the subject building. Wall-mounted mechanical equipment that protrudes six inches or less from the outer building wall shall be designed to blend with the color and architectural design of the subject building.
- (3) Ground-Mounted Mechanical Equipment. Ground-mounted mechanical equipment shall be screened from view by landscaping or by a decorative wall that is compatible with the architecture and landscaping of the development site. The wall shall be of a height equal to or greater than the height of the mechanical equipment being screened.
- (4) Utilities
 - (a) Utility poles (other than wooden poles erected by a public utility company) and supports shall be painted or be of materials neutral in color.

- (b) All transformers and other facilities and equipment, including telecommunications equipment, shall either be screened through the use of architectural materials compatible with the architectural materials present on the site or, alternatively, through landscape screening.
 - (c) Such screening shall be adequate to completely screen such facilities from all rights-of-way.
- (5) Alternate Screening. Mechanical equipment that is not screened in full compliance with the screening standards of this section shall be reviewed in accordance with the procedures of Section 5.370.C.5, Alternative Equivalent Compliance. Alternate screening methods may include, but shall not be limited to, increased setbacks, increased landscaping, grouping the equipment on specific portions of a site, and painting or otherwise camouflaging the equipment.
- b. Screening of Service, Loading, and Storage Areas
- (1) Applicability. These screening requirements are applicable to all service, loading, and storage areas. Owners are encouraged to locate the types of features listed in this subsection where they are not visible from off-site or from public areas of a site, so that screening is unnecessary.
 - (2) Placement
 - (a) All service areas shall be placed at the rear, on the side of, or inside buildings.
 - (b) No service area shall be visible from a public right-of-way or from adjacent residential areas.
 - (c) Service areas and access drives shall be located so they do not interfere with the normal activities of building occupants or visitors on driveways, walkways, in parking areas or at entries.
 - (3) Outside Storage Areas and Loading Docks
 - (a) All storage areas, service areas, and loading docks not screened by an intervening building shall be screened from view from any public street right-of-way. In addition, storage and loading areas must be screened from view from any adjoining property when that property requires a buffer as identified in Table 14.1, Buffer/Screen Impact. On property zoned or used industrial, all outside storage areas that are adjacent to nonindustrial zoned property must also be screened from view.



Fig. 6.480.B-6: Loading area placement and screening

- (b) An opaque screen consisting of one or a combination of the following shall be used:
 - 1) Freestanding walls, wing walls, or fences;
 - 2) Earthen berms in conjunction with trees and other landscaping; or
 - 3) Landscaping, that must be opaque and eight feet in height within 18 months of planting.
- (c) Screening shall be a minimum height of eight feet to screen truck berths, loading docks, areas designated for permanent parking or storage of heavy vehicles and equipment or materials.
- (d) Screening shall be long enough to screen the maximum size trailer that can be accommodated on site. Sites that can accommodate a full size tractor-trailer shall provide a 48-foot wing wall, where wing walls are used.
- (4) Shopping Cart Storage. All shopping carts shall be stored inside the building they serve. Shopping cart corrals shall be made of a material suitable for withstanding weathering and rusting. Plastic corrals are prohibited.
- (5) Refuse Facility Screening. All refuse facilities, including new refuse facilities placed on an existing development, shall be large enough to accommodate a trash dumpster and shall be completely screened from view of public streets and adjoining nonindustrial zoned properties by:
 - (a) Meeting the requirements of the other sections of this section; or
 - (b) Screening on three sides by a minimum six-foot masonry wall surrounded by evergreen landscaping. An opening shall be situated so that the container is not visible from adjacent properties or public streets and the opening shall be a metal clad opaque gate. Chain-link gates are not permitted. Gates must have tie backs to secure in the open position.
- (6) Design of Screening. All screening shall be complementary to the building served in landscaping approach and through the use of similar colors and material palette.



Fig. 6.480.B-7: Refuse facility screening

4. Multi-family Development Design Standards

Commentary: This section includes a combination of existing and new design standards for multifamily development to address some of the most common design issues.

a. Applicability: Triplex, Fourplex, Townhome, Apartment



Triplex



Quadraplex/Fourplex



Townhome



Apartment

- (1) The design standards in this subsection apply to all new dwellings to be occupied by three or more households, including individually constructed buildings, townhomes, and multiple buildings constructed as parts of a larger development
- (2) **Elevator required. Multi-family buildings, 3 stories and above, shall at a minimum equip one (1) out of every three (3) buildings with an ADA approved elevator. This requirement is an instrument to establish the goals set out in the City’s commitment to provide “A Community For All Ages”.**
- (3) This section replaces Sections 7.030 to 7.040 in the M-150 CDO. Sections 7.050, Planned Residential District Open Space Requirements; 7.060, Residential Street Design; 7.080.B, Pedestrian Lighting; 7.090, Residential Parking Locations; and 7.100, Residential Traffic Calming, are applicable within the M-150 CDO.

b. Site Layout and Building Orientation

(1) Minimum Building Separation. Multi-family structures shall be separated pursuant to the standards of the Building Code.

(2) Building Orientation

(a) Individual buildings within a multi-family development shall be oriented to:

- 1) Common open space, such as interior courtyards or on-site natural areas or features;
- 2) Perimeter streets;
- 3) Other residential buildings; or
- 4) Through-access drives.

(b) To the maximum extent practicable, buildings shall be oriented or arranged in a manner to enclose common open spaces such as gardens, courtyards, recreation or play areas, that shall contain a minimum of three of these features:

- 1) Seasonal planting areas,
- 2) Trees,
- 3) Pedestrian-scaled lighting,
- 4) Gazebos or other decorative shelters,
- 5) Seating,
- 6) Play structures for children, or
- 7) Natural features or areas, unless the City determines that for preservation reasons the buildings should avoid the feature or area.

(3) Entrance Orientation

(a) Primary entrances and façades shall not be oriented towards parking lots, garages, or carports.

(b) All multi-family buildings shall comply with at least two of the following requirements:

- 1) At least one main building entry faces an adjacent public street;
- 2) A building entrance faces a courtyard or common open space that has a direct and visible connection to an adjacent public street;
- 3) A building entry is connected to a public sidewalk by a system of interior walkways; or
- 4) The pedestrian entries to the site from the public right-of-way are emphasized with enhanced landscaping, special paving, gateways, arbors, or similar features.



**Fig.6.480.B-13:
Courtyard Orientation**



**Fig.6.480.B-14: Perimeter
Street Orientation**

- (c) All ground-floor units with frontage along the primary street shall have an entrance that faces the street. Multi-family buildings located with multiple street frontages shall provide entrances to the building along each local street frontage.

- 1) Exterior entrances from a public sidewalk or common open space are permitted for dwelling units on the ground floor.
- 2) Exterior entrances shall be raised from the finished ground-floor level of the sidewalk a minimum of two feet.



Fig.6.480.B-15: Ground-floor unit entrances

- (d) Dwelling units above the ground floor shall have interior unit entrances, except that exterior stairs are permitted for access to upper-floor units only if they are oriented towards a central plaza not visible from any street.

- (4) Private Common Space. Developments with at least four units shall provide 400 square feet of private common open space for each multifamily dwelling unit. A minimum of 40 percent of the open space shall be usable for recreation, including uses such as swimming pools, sport courts, playgrounds with equipment, and/or community gardening. Required landscaping is excluded from open space calculations.

c. Building Design

- (1) Four-Sided Design. All sides of a multi-family building visible from property occupied by or designated for single-family residential uses, an existing public street right-of-way, or other public lands shall display a similar level of quality and architectural detailing as on the front elevation.



Fig.6.480.B-16: Four-sided design

- (2) Single-Family Attached Dwelling Façades

- (a) The attached single-family dwellings in any one row structure shall be required to have distinctly different facades. No attached single-family structure facade shall be repeated more than once every four structures on the same side of the street.

- (b) The facades of single-family attached townhomes shall be punctuated by a change in texture or material, offset, or other architectural feature to differentiate individual units
- (c) Any building (excluding parking garages and other accessory buildings) viewed from a public right-of-way or public open space shall either face such right-of-way or open space, or shall have a façade facing such area in keeping with the character of the front façade, including the utilization of similar fenestration and materials.



Fig. 6.480.B-17: Single-family attached building articulation

(3) Building Mass and Articulation

- (a) The elevations of all multi-family buildings shall be articulated through the incorporation of at least three or more of the following:
 - 1) Balconies;
 - 2) Bay or box windows;
 - 3) Porches or covered entries;
 - 4) Dormers or other variations in the roof plane;
 - 5) Accent materials such as brick, stone, or stucco with banding highlights;
 - 6) Shutters;
 - 7) Variation in window sizes and shapes; or
 - 8) Vertical elements that demarcate building modules.



Fig. 6.480.B-18: Multi-family building articulation

- (b) The height of each multi-family building taller than 35 feet shall be stepped down from its highest roofline at least one full story on any end of the building located within 50 feet of an adjacent area zoned or used for single-family residential.
- (c) Multi-family buildings shall provide concentrated unit access points. Access balconies and corridors running the length of the exterior of a building are prohibited.

(4) Vertical Articulation

- (a) For all structures three stories or more in height, the base (first 20 feet) of a building shall be distinguished from the remainder of the building by providing a minimum of three of the design elements listed above in subsection (4)(a).

- (b) Multi-family buildings shall be designed to incorporate visually heavier and more massive elements at the building base, and lighter elements above the base. Upper stories shall not appear heavier or demonstrate greater mass than the lower stories of the building.
 - (5) Building Length. The maximum length of any multifamily building shall be 180 feet. Additional building length may be utilized when a minimum off-set of 4 feet for every one hundred (100) feet of building length to create a visually pleasing effect.
 - (6) Transparency. At least 20 percent of all walls facing a public street shall contain windows or doorways.
 - (7) Design of Multiple Buildings
 - (a) Developments with more than one multi-family building shall incorporate a variety of distinct building designs according to the scale of the development, as follows:
 - 1) 2-6 buildings: two models minimum; and
 - 2) 7 or more buildings: three models minimum.
 - (b) Distinct building designs, as required above, shall be easily distinguished through a minimum of two of the following:
 - 1) A variation in length;
 - 2) A variation in the footprint of the building ;
 - 3) A distinct variation in color and use of materials;
 - 4) A variation in the type of dwelling unit contained in the building that results in a significantly different scale and mass, i.e., apartments vs. townhomes ; or
 - 5) A distinct variation in building height and roof form.
 - (8) Materials. All material shall be durable and long-lasting. The following materials are acceptable for multi-family residential construction:
 - (a) Brick, concrete stucco, stone, stone facing, wood, glass in combination with metal, or similar, durable architectural materials as approved by the Planning Commission.
 - (b) Vinyl siding, EIFS, or synthetic stucco may be approved by the Planning Commission on a case-by-case basis.
- d. Parking Location and Layout
- (1) Location and Layout
 - (a) To the maximum extent feasible, garage entries, carports, parking areas, and parking structures shall be internalized in building



Fig.6.480.B-19: Multi-family parking located behind primary structure

groupings or oriented away from street frontage.

- (b) Parking areas and freestanding parking structures (detached garages or carports) shall not occupy more than 30 percent of each perimeter public street frontage of a multi-family development.
- (c) To the maximum extent practicable, freestanding parking structures that are visible from perimeter public streets shall be sited so that the narrow end of the parking structure is perpendicular to the perimeter street.

(2) Carports and Detached Garages

- (a) Detached garages and carports shall incorporate compatible materials, scale, colors, architectural details, and roof slopes similar to those of the primary multi-family buildings.
- (b) Rear walls of detached garages over 40 feet in length that back onto the perimeter street shall be articulated or punctuated through the use of window openings or other similar techniques.

5. Mixed-Use/Non-Residential Design Standards

- a. Applicability. The design standards in this section apply to all mixed-use and commercial structures. These standards replace the standards in Article 7, Division III: Office, Commercial, and Industrial district design standards and Division IV: Other Required Design Standards. Industrial development in the M-150 Corridor is not subject to these standards and remains subject to the provisions of Article 7.
- b. Vertical Mixed-Use. Vertical mixed-use developments are highly desirable within the CDO. Areas indicated as activity centers shall require multi-storied vertical mixed uses with buildings placed up to the front property line at the street. These areas are located at the major intersections of M-150 and Pryor Road, Ward Road and M-291. The required placements of these buildings enhance the desired urban environment along this corridor. Parking proposed in front of buildings located in the activity center areas is highly discouraged and, if allowed, shall only be permitted on a very limited basis through the development approval process. Additional planting materials shall be provided to minimize the visual impact for front loaded parking from the street.
- c. Site Layout and Building Organization
 - (1) Private Common Spaces

- (a) Required Private Common Spaces. Mixed-use, commercial, and office development shall incorporate at least one on-site indoor or outdoor common space per building. Common space shall be visible and accessible and shall be located, where possible, along street frontages. Common spaces shall be connected, to the maximum extent practicable, to pedestrian



Fig.6.480.B-20: Private common space

areas, sidewalks, trails, or public open space in order to create functional pedestrian connectors.

- (b) Features and Amenities. The following features may be used to satisfy the private common space standard:
 - 1) Patio or plaza with seating and landscaping;
 - 2) Landscaped mini-parks or square;
 - 3) Rooftop or community garden; or
 - 4) Similar features as approved by the Director.
- (c) Design. Private common spaces shall be constructed of materials that are of a comparable quality and be of a compatible design as the building they are attached to or the public space in which they are placed.
- (d) Quantity and Amount. The quantity and amount of required private common spaces shall vary as follows:
 - 1) For buildings 10,000 square feet or less – 1,000 square feet;
 - 2) For buildings between 10,001 and 20,000 square feet – 2,000 square feet that may be divided into two 1,000 square foot spaces; and
 - 3) For buildings over 20,000 square feet – an extra 1,000 square feet of common space per 10,000 square feet of building or portion thereof.

(2) Building Orientation

- (a) Individual Buildings. In cases where the long axis of a building is perpendicular to the primary street, the portion of the structure facing the primary street shall be configured with at least one operable entrance and one or more transparent windows as approved by the Director.

(b) Multi-Building Developments

- 1) Buildings shall be organized to promote a compact pattern of development, pedestrian-friendly spaces, streetscapes, areas of naturalized landscaping, and to screen parking areas.
- 2) Buildings shall be arranged and grouped so that their primary orientation complements one another and adjacent, existing development by:



Fig.6.480.B-21: Buildings arranged to create pedestrian-friendly spaces

- i. Framing the corner of an adjacent street intersection or entry point to the development;
- ii. Framing and enclosing a pedestrian and/or vehicle road or access corridor within or adjacent to the development site;

- iii. Framing and enclosing on at least three sides parking areas, public spaces, or other site amenities;
 - iv. Framing and/or enclosing outdoor dining or gathering spaces for pedestrians between buildings; or
 - v. Framing one or more areas of natural vegetation.
- (c) Entrance Orientation
- 1) To the maximum extent feasible, the principal building entrance shall face:
 - a) An adjacent public street;
 - b) An adjacent public plaza; or
 - c) An adjacent primary public walkway.
 - 2) In cases where the principal entrance does not face the principal street, the entrance shall be connected to the street and adjacent parking areas with a sidewalk(s).

(3) Outparcel Development

- (a) To the maximum extent practicable, outparcels and their buildings shall be clustered in order to define street edges, entry points, and intimate spaces for gathering or seating between buildings. The even dispersal of outparcel sites in a widely-spaced pattern along streets is strongly discouraged.
- (b) Spaces between buildings on outparcels shall be improved to provide small-scale pedestrian amenities such as plazas, seating areas, pedestrian connections, gathering spaces, or well-landscaped parking areas.



Fig.6.480.B-22: Site layout of outparcel development

d. Streetscape Design and Character

Commentary: These provisions represent a change from the City's current approach to providing sidewalks. Because mixed-use developments typically include sidewalks designed and installed as part of the overall development, rather than for a single lot or installed by the City, it is becoming increasingly more common to extend the design of the site to include the sidewalks.

The following standards apply in lieu of the standard sidewalk requirements.

- (1) Public Sidewalks Required. In order to create an environment that is supportive of transit and pedestrian mobility, public sidewalks shall be provided along both sides of all streets in the mixed-use districts. Such sidewalks shall be at least 12 feet in width and no more than 16 feet in width, unless otherwise approved as part of the design review process. The 12-foot minimum requirement shall apply regardless of the available right-of-way.

Where required, the sidewalk shall extend onto private property to fulfill the 12-foot minimum requirement, with a sidewalk easement provided. Property adjacent to M-150 or an arterial road shall provide a 10-foot wide landscaped linear buffer or a single-loaded row of parking between the public sidewalk and the roadway.

- (2) Delineation of Sidewalk Area. Sidewalks shall be organized into two distinct areas: a street tree/furniture area located adjacent to the curb, and a clear area.

- (a) Street Tree/Furniture Area. The street tree/furniture area shall have a minimum width of six feet (from face-of-curb) and shall be continuous and located adjacent to the curb. The area shall be planted with street trees at an average spacing of 20 to 30 feet on center, based on the mature canopy width of the tree species selected and in accordance with Article 14. The area also is intended for the placement of



Supplemental Zone (Optional) Clear Zone (Min. 6') Street Tree/Furniture Zone (Min. 6')

Fig.6.480.B-23: Delineation of Sidewalk Area

street furniture including seating, street lights, waste receptacles, fire hydrants, traffic signs, newspaper vending boxes, bus shelters, bicycle racks, public utility equipment such as electric transformers and water meters, and similar elements designed to city specifications and located in a manner that does not obstruct pedestrian access or motorist visibility, and subject to applicable requirements of this UDO

- (b) Clear Area. The clear area shall be a minimum width of six feet, shall be hardscaped, and shall be located adjacent to the street tree/furniture area. The clear area shall be unobstructed by any permanent or nonpermanent element for a minimum width of six feet and a minimum height of eight feet. Additional sidewalk width located between the clear area and the building may be used for outdoor dining or seating areas

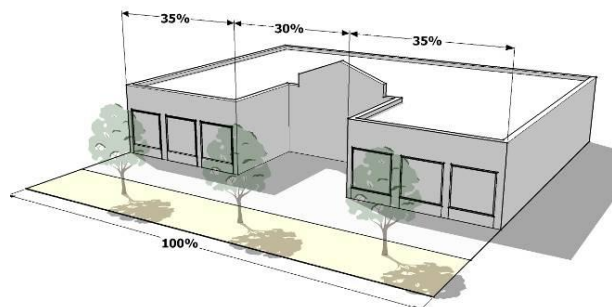


Fig.6.480.B-24: Building set to sidewalk clear area

- (c) Supplemental Zone. A supplemental zone may be provided at the option of the applicant between the street-facing façade or a side-facing facade and the required clear area, to provide additional areas for outdoor dining, porches, terraces, landscape and water features, and plazas. A supplemental zone, if provided, may be a maximum of 20 feet deep and may extend up to 30 percent of the linear frontage of the development. The supplemental zone shall not provide any parking or vehicle circulation areas.
- (d) Improvement District. An improvement district or other long-term oversight board and funding mechanism shall be established to provide for the maintenance of required streetscape.
- (3) Building Placement. At least 70 percent of the building facade facing a public street shall be brought up to the clear area if provided.
- (4) Sidewalk Entries
 - (a) Spacing. Sidewalk entries shall be provided to all buildings and individual units that front on the sidewalk.
 - (b) Sidewalk Entry Hierarchy. Entrances into residential buildings in mixed-use areas are encouraged to follow a hierarchy of sizes and functions as follows:
 - 1) Carriage way: A centrally located twelve-foot wide entrance at sidewalk level for visual and direct access to a private courtyard.
 - 2) Secondary entry: A six-foot wide entrance with ornamental entrance gate and defined by a stoop with low cheek walls and planters at the sidewalk. Mailboxes, bike racks, and trash receptacles should be grouped around these secondary entries.
 - 3) Other entries: Home office and retail storefront entries which are either at grade or stooped shall be sized to accommodate specific requirements of the individual space.
- (5) Utilities. Transformers, switchgear, and related utility service equipment shall not be located above-ground in pedestrian access easements. Building service panels are to be located on the inside of all buildings.
- (6) Paving. Paving is intended to highlight or accentuate special areas along the ground plane while at the same time complementing the design of adjacent building and streetscape elements.
- e. Mix of Uses. A diverse range of commercial, office, residential, and civic uses is desired within the PMIX zoned districts. The appropriate mix of uses will vary by



Fig. 6.480.B-25: Secondary entry

its location, size, and the surrounding development contexts. Generally, larger sites located in areas where higher levels of activity are desirable should have a greater mix of uses than smaller sites. Vertical mixed-use developments are encouraged to create the desired urban context being promoted along the corridor.

(1) Ground-Floor Uses

- (a) Intent. The incorporation of commercial uses such as retail shops and restaurants at the street level is strongly desired within the mixed-use districts to promote a more active environment for pedestrians and support residential and office uses located within the same building



Fig.6.480.B-26: Active street-level uses and outdoor gathering spaces

(on upper floors) or nearby.

- (b) Standards

- 1) Location. Commercial uses shall be concentrated adjacent to transit stops, major public spaces, and in other areas where a high level of pedestrian activity and visibility is desirable. If a limited portion of a structure's ground level will be devoted to commercial space, such space shall be located along those facades adjacent to or most visible from transit corridors, primary street frontages, or major pedestrian walkways.
- 2) Design and Use of Commercial Space. Although the ground-floor commercial spaces may be used for residential units/office use, they should be designed for easy conversion to retail/commercial uses and shall be constructed to commercial standards.

- (2) Residential Uses. Residential uses, where included, shall be incorporated within a mixed-use development to be visually and/or physically integrated with nonresidential uses. This shall be achieved by ensuring that residential uses meet at least two of the following:

- (a) Residential uses are vertically located above street-level commercial uses;
- (b) Residential uses are horizontally integrated into site development to provide a transition between the highest intensity uses within the center or development and the adjacent neighborhood;
- (c) No internal block walls are used that separate residential and nonresidential uses from each other; and
- (d) A pedestrian circulation system (i.e., sidewalks, crosswalks, trails, etc.) is provided that reduces conflict between pedestrian and vehicular movements and increases pedestrian activity between residential and nonresidential uses.

- e. Parking Standards for Mixed-Use Districts. The purpose of parking area requirements is to ensure that the parking areas themselves are not the dominant feature of the mixed-use development. These requirements severely restrict on-

site surface parking (other than incidental parking in association with residential development leasing offices, or head-in or parallel spaces to support retail uses) and encourage physical consistency throughout the development, including the appearance of parking garages. In all mixed-use districts, the following standards apply:

- (1) Allowable Parking. On-street parking shall not be designated per individual business or occupancy but may count toward the minimum parking requirements for the entire structure along the adjacent frontage. Parallel parking, head-in parking along streets, and/or minimal surface parking is permitted subject to approval through the site plan or development plan process and approval of a maintenance agreement.
- (2) Parking Location. Off-street parking is prohibited between the principal street and the corresponding street-facing facade line.
- (3) Bicycle Parking.

(a) Required Number of Spaces. Bicycle parking shall be provided as follows:

Use	Bicycle Parking Spaces ¹
Dwelling, Multi-Family	1 per 20 units
Group Home	1 per 4 bedrooms
Office	1 per 40,000 sq. ft. net area
Retail Sales and Service	1 per 5,000 sq. ft. net area
Community Uses (non-utility)	1 per 10,000 sq. ft. net area
Schools	2 per classroom

(b) Design and Location

- 1) Bicycle parking facilities shall include a rack or storage facility (e.g., locker) that enables bicycles to be secured. Where racks are used, they shall meet the following standards:
 - a) The bicycle frame and one wheel can be locked to the rack with a high-security, U-shaped shackle lock if both wheels are left on the bicycle;
 - b) A bicycle six feet long can be securely held with its frame supported so that the bicycle cannot be pushed or fall in a manner that will damage the wheels or components; and
 - c) The rack must be securely anchored.
- 2) Bicycle racks and storage facilities shall be accessible without moving another bicycle.
- 3) Bicycle racks and storage facilities shall be located in convenient, visible, well-lit areas with easy access and near main entrances of all commercial, residential, and institutional buildings. Such locations shall be clearly noted with signage.

- 4) The racks and storage facilities shall be located so they do not interfere with pedestrian traffic and shall be protected from potential damage by motor vehicles.
 - 5) Bicycle parking shall not be within any required landscape area nor interfere with any pedestrian pathway.
- (4) Parking Lot Screening. In all mixed-use districts, all surface parking lots adjacent to a public street shall be screened using one of the following methods below:
- (a) An informal hedge at least three feet in height at maturity consisting of a double row of shrubs planted three feet on-center in a triangular pattern; or
 - (b) Berming of the grade to at least 2 ½ feet in height above the finish grade of the parking lot, and with slopes no greater than 2:1. Slopes shall be covered with shrubs spaced a maximum of three feet on center. Trees and flowering plants may be included in the berm plantings where the Director finds that long-term maintenance will be provided.
- (5) Parking Structure Design. The off-street parking required by mixed-use and non-residential development may be located in a parking structure. Such structure shall be subject to the following standards:
- (a) Design
 - 1) Parking structures shall be constructed of materials of similar quality and shall be compatible in appearance with adjacent buildings and shall contain lighting sufficient for security as approved by the City.
 - 2) Ground floor facades of parking structures not occupied by active public uses shall be articulated through the use of three or more of the following architectural features.
 - a) Windows or window-shaped openings with decorative mesh or similar features as approved by the Director;
 - b) Masonry columns;
 - c) Decorative wall insets or projections;
 - d) Awnings;
 - e) Changes in color or texture of materials;
 - f) Approved public art;
 - g) Integrated landscape planters; or
 - h) Other similar features approved by the Director.
 - (b) Entry Design. Vehicle entries to off-street parking structures shall be integrated into the placement and design of adjacent buildings or oriented away from the primary street frontage. At a minimum, parking structures shall have user vehicles access from a location that minimizes conflicts with pedestrian circulation.

- (c) Wrapping of Parking Structure. Where feasible, the ground floor of parking structures in mixed-use or non-residential districts shall be wrapped with active public uses along at least 60 percent of the ground-floor street frontage. Parking structures with ground floors that are not wrapped with active public uses on the sides facing a public street or open to public view shall not:



Fig. 6.480.B-27: Parking structure wrapped with active uses

- 1) Abut street intersections or public/civic use areas,
- 2) Be adjacent to public squares, or
- 3) Occupy sites that are the terminus of a street vista.

f. Building Design

(1) Four-Sided Design

- (a) All sides of a building shall be architecturally finished with equal levels of materials and detailing. Blank walls void of architectural details or other variation are prohibited.
- (b) Exceptions from the above standard may be granted for those areas of the building envelope that the applicant can demonstrate are not visible from adjacent development and public spaces.
- (c) Corporate or franchise architecture is discouraged in favor of architecturally compatible designs. The Director may require photographic examples of the more minimized corporate architecture in the designs and completed structure by the same company in other communities.



Fig. 6.480.B-28: Franchise design consistent with surrounding structures

(2) Consistent Architectural Theme

- (a) The architectural design within a multi-building development of structures (including freestanding outparcel structures) shall be organized around a consistent architectural theme in terms of the character, materials, texture, color, and scale of buildings. Themed restaurants, retail chains, and other franchise-style structures shall adjust their standard architectural model to be consistent with a development's architectural character.
- (b) All buildings in a single development, whether developed at a single time or in phases, shall share at least four architectural features in order to

create continuity within the overall development. These features include, but are not limited to, the following:

- 1) Overhangs,
- 2) Canopies or porticos,
- 3) Recesses/projections,
- 4) Arcades,
- 5) Raised corniced parapets over the entrance,
- 6) Peaked roof forms,
- 7) Arches,
- 8) Outdoor patios,
- 9) Tower elements (at strategic locations),
- 10) Display windows,
- 11) Integral planters that incorporate landscaped areas or seating areas, and
- 12) Public art/sculptures.

(3) Building Materials and Colors

(a) Permitted Materials. Building materials shall comply with Section 7.210.

(b) Mix of Materials

- 1) No single building material shall cover more than 80 percent of the front building façade. Windows and doors shall not be counted as additional building materials.
- 2) Structures 20,000 square feet or less shall require a minimum of two distinct building materials on all facades to provide architectural detail and interest.
- 3) Structures over 20,000 square feet shall require a minimum of three distinct building materials on all facades to provide architectural detail and interest.

(c) Prohibited Materials. The following materials are prohibited as primary cladding or roofing materials:

- 1) Aluminum siding or cladding,
- 2) Plastic or vinyl siding,
- 3) Exposed aggregate, and
- 4) Wood shingles.



Fig. 6.480.B-29: Mix of building materials

(d) Façade Colors

- 1) Colors of paint, stains, and other finishes or materials shall complement each other.
- 2) Generally, no more than four colors per building are permitted.
- 3) Fluorescent colors are prohibited.
- 4) Primary colors are prohibited.
- 5) The use of stark white is discouraged.

(e) Transparency and Glazing

- 1) At least 25 percent of all walls facing a public street shall contain windows or doorways.
- 2) Glazing shall be effectively clear, and shall not exceed 40 percent reflectance. Divided-light windows are encouraged. Materials that create noticeable glare or which restrict the ability of the public to view the inside of a structure from the outside are generally prohibited but may be allowed in limited locations in structures intended for financial or other uses with documentable safety concerns.
- 3) Energy conserving window films and coatings are permissible within these standards.

(4) Gateways. Buildings located at entrances to a development demarcate a gateway that will create an overall identity, set the tone for the development, and mark arrival or entry.

- (a) At major entry points of a development with three or more buildings, buildings shall be organized along the street and at the intersection to create a gateway.
- (b) Architectural features shall be incorporated into the facades of buildings at major entry points to help emphasize arrival or entry points into the development. These features may include, but are not limited to:
 - 1) Eaves,
 - 2) Planters,

- 3) Mounted signs,
- 4) Pilasters,
- 5) Tower elements,
- 6) Water features, or
- 7) Arcades.

g. Building Massing and Form

(1) Vertical Articulation. Buildings greater than two stories or taller than 30 feet shall be designed to reduce apparent mass by including a clearly identifiable base, body, and top, with horizontal elements separating these components. The component described as the body must constitute a minimum of 50 percent of the total building height.

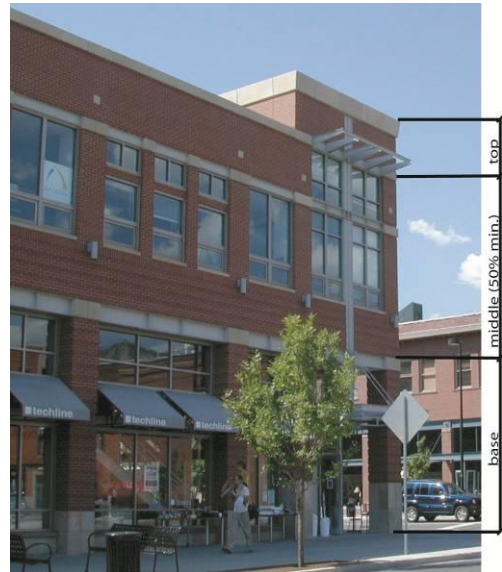


Fig. 6.480.B-30: Vertical articulation

(2) Horizontal Articulation. Buildings shall be designed to reduce apparent mass by dividing facades into a series of smaller components. No individual component shall have a length of more than 60 feet. Components shall be distinguished from one another through two or more of the following:

- (a) Variations in roof form and parapet heights;
- (b) Pronounced recesses and projections;
- (c) Distinct changes in texture and color of wall surfaces;
- (d) Ground level arcades and second floor galleries/balconies;
- (e) Protected and recessed entries; and
- (f) Vertical accents or focal points.

(3) Relationship to Surrounding Development. New developments that are significantly larger than adjacent existing development in terms of their height and/or mass shall provide a development transition using an appropriate combination of the following techniques:

- (a) Wrapping the ground floor with a building element or integrated architectural feature (e.g., pedestrian arcade) that is the same height as the adjacent structure; or



Fig. 6.480.B-31: Appropriate transition in building height and mass

- (b) Graduating building height and mass in the form of building step-backs or other techniques so that new structures have a comparable scale with existing structures; or
- (c) Orienting porches, balconies, and other outdoor living spaces away from the shared property line to protect the privacy of adjacent residents where applicable.

(4) Entrances and Pedestrian Areas

- (a) Primary entries and pedestrian frontages shall be clearly visible from the street and accentuated from the overall building facade by:
 - 1) Differentiated roof, awning, or portico;
 - 2) Covered walkways or arcades;
 - 3) Projecting or recessed entries from the surrounding building facade;
 - 4) Detailed doors and doorways with transoms, sidelights, trim details, and/or framing; and
 - 5) Windows within doorways equivalent in size to 50 percent of door surface area.
- (b) Secondary entrances shall have minor architectural detailing that adds visual interest to that portion of the façade.



Fig.6.480.B-32: Entrance design and pedestrian areas

(5) Roofs

- (a) Roofline Articulation. Variations in roof lines shall be used to add interest and reduce the scale of large buildings. Roof features shall complement the character of the overall development.
- (b) Flat Roofs. Flat roofs shall include parapets that adhere to articulation requirements for the main face of the structure. The average height of the parapet shall not exceed 15 percent of the height of the supporting wall, unless rooftop equipment cannot be sufficiently screened. A three-dimensional cornice treatment is encouraged for parapets. Parapets shall look complete from all sides if visible at any distance from the ground.
- (c) Overhanging Eaves. Overhanging eaves shall extend no less than three feet past the supporting walls.
- (d) Roof Pitch. Pitched roofs shall have a pitch consistent with the majority of buildings within 1000 feet. This requirement excludes roofs for entries and dormers.
- (e) Architectural Elements. Architectural elements that add visual interest to the roof, such as dormers and masonry chimneys, are encouraged.

- (f) Roof Materials
 - 1) Asphalt shingles, industry-approved synthetic shingles, standing seam metal or tile roofs are allowed.
 - 2) Wood shingles are prohibited. Corrugated metal, tar paper, and brightly-colored asphalt shingles may be permitted by the Director where they will not be visible from a roadway, public park, or residential district or use.
- (6) Awnings, Canopies, Arcades, and Overhangs. Structural awnings are encouraged at the ground level to enhance the articulation of the building and provide shade.
 - (a) The material of awnings and canopies shall complement the building.
 - (b) Awnings shall not be internally illuminated.
 - (c) Canopies shall not exceed 40 linear feet without a break.
 - (d) Awnings shall not extend more than five feet over the sidewalk, unless otherwise approved by the Director, up to a maximum of 10 feet, and are in keeping with the architectural style of the building.
 - (e) Canopies shall respect the placement of street trees and lighting and shall not interfere with them.
 - (f) All large canopies that require structural columns for support shall have a minimum six-foot masonry (or other approved material) finish measured from the finished grade. Materials used on columns and canopies shall be complementary to the building.
- h. Residential Compatibility Standards
 - (1) Applicability. The residential compatibility standards in this subsection apply when nonresidential or mixed-use development is proposed adjacent to lots used by or zoned for detached or attached single-family structures in a residential district.
 - (2) Use Limitations. Where these compatibility standards apply, the following uses or features shall be prohibited as principal or accessory uses:
 - (a) Public address/loudspeaker systems;
 - (b) Outdoor storage; and
 - (c) Uses providing delivery services via large tractor trailers (not including package delivery services).
 - (3) Off-Street Parking Location
 - (a) Off-street parking shall be established in one or more of the locations listed below. The locations are listed in priority order; the applicant shall select the highest feasible location from this list, and shall demonstrate why that application was selected over other alternative locations.
 - 1) Adjacent to off-street parking lots serving nonresidential uses on abutting lots;
 - 2) Adjacent to lot lines abutting nonresidential development;

- 3) Adjacent to lot lines abutting mixed-use development;
 - 4) Behind the building;
 - 5) In front of the building; or
 - 6) Adjacent to lot lines abutting residential uses.
- (b) In cases where an off-street parking lot serving a nonresidential use is located on an abutting lot, connection between the two parking areas via a cross-accessway with a minimum width of 12 feet and a maximum width of 24 feet is strongly encouraged. A cross-access easement shall be recorded.

(4) Relationship to Surrounding Uses

(a) Multi-building developments shall be configured to locate the tallest and largest structures within the core of the site and provide a gradual decrease in building height and mass towards adjacent residential land uses.



Fig. 6.480.B-33: Gradual decrease in building height and mass towards adjacent residential uses

(b) Horizontally integrated mixed-use developments shall locate nonresidential uses away from lots in adjacent residential areas.

(c) Medium to high density housing shall be incorporated to the maximum extent feasible both within and around the development to facilitate connections between residential and non-residential uses.

(d) Nonresidential structures taller or larger than adjacent residential uses shall be broken up into modules or wings with the smaller or shorter portions of the structure located adjacent to residential uses.

(5) Facade Configuration

(a) Service functions like refuse collection, incidental storage, and similar functions shall be integrated into the architecture of the building unless an alternate location places these functions farther from adjacent residential uses.

(b) Windows shall be arranged to avoid direct lines-of-sight into abutting residential uses.

(c) Multi-story structures with balconies, patios, or other public gathering spaces more than 24 feet above grade shall orient these features to avoid direct views into lots in low- and medium-density residential districts.

(6) Landscaping. Native landscape materials are required. (See the native plant list at <http://grownative.org/native-plant-info/plant-picker> as amended from time to time). The native plant list provides plant species that are well suited for growing in the Midwest. Plants from this list shall be incorporated

into all development landscape plans. The use of materials other than those listed is prohibited unless specifically approved as part of the development plan approval.

(7) Landscaping/Screening

- (a) Screening shall not interfere with public sidewalks, vehicular cross-accessways, or improved pedestrian connections.
- (b) Any parking designated for trucks, recreational vehicles and other large vehicles shall be placed in a location which is not adjacent to either any street or to any residentially zoned property.

(8) Operation

- (a) Nonresidential uses with outdoor components (e.g., outdoor dining, performance venues) located adjacent to lots in a residential district shall curtail outdoor activities by 10:00 pm.
- (b) Loading or unloading activities shall take place only between the hours of 7:00 am and 11:00 pm.
- (c) Alternate hours of activities may be approved through the development plan approval process.

i. Green Design (See the Sustainability section below)

(1) ;

(2) .

C. Sustainability

Commentary: The provisions in this section are intended to implement the sustainability objectives outlined in the M-150 Sustainable Corridor Vision and Framework Plan.



1. Purpose

This section is intended to promote sustainable development within the M-150 Corridor by:

- a. Encouraging infill and redevelopment to slow the absorption of raw land and promote a more compact pattern of growth;
- b. Encouraging the integration of water and energy conservation techniques in site planning and building design;
- c. Protecting natural features, wooded areas, and mature trees that absorb greenhouse gases, reduce storm water runoff and pollutants, and provide wildlife habitat;
- d. Encouraging development patterns that encourage bicycling, walking, and other alternative modes of travel to promote a healthy community and improved air quality;
- e. Encouraging local production of food; and
- f. Encouraging the use of alternative energy sources.

2. Sustainability requirements:

a. New mandatory minimum development requirements:

- 1) **Stormwater Best Management Practices (BMP's) identified in Section 5600 of the Kansas City Metropolitan Chapter of APWA Design Criteria and Section 5600 of the Design and Construction Manual as amended from time to time shall be utilized in all new and redevelopment projects as further provided herein.**

Environmental health and quality of life issue requires mitigation of the environmental impact of increased stormwater runoff due to development. By controlling the large water quantities produced by developing watersheds and minimizing resulting impairment, peak flows and overall quantity of stormwater can be maintained upon completion of the development activities.

Proposed stormwater management system design is sensitive to site characteristics including slopes, soil types, cover types, and infiltration capacity. These characteristics shall be considered in the site layout to improve both site drainage and water quality. The following BMP's shall be utilized either independently or in combination to meet the requirements established in the City's Design and Construction Manual.

(a) Source Control BMP's for stormwater management may include:

- **Infiltration Trenches**
- **Filter Strips**
- **Pervious Paving**
- **Rain Gardens**
- **Spill Prevention**
- **Street and Storm Drain Maintenance**

(b) Source Filtration BMPs may include:

- **Bio-retention**
- **Storm Filters**
- **Dry Swales and Grass Channels**

(c) Regional Retention and Treatment may include:

- **Wet Ponds**
- **Constructed Wetlands**
- **Extended Retention Wetlands**

- 2) **Erosion control as established in the Design and Construction Manual and maintained throughout the completion of the project or development**
- 3) **LED lighting with flat lens full cut-off approved fixtures adhering to the International Dark-Sky Association (IDA)**
- 4) **Native plants per the approved list**
- 5) **Locally sourced construction materials when possible**
- 6) **Solar ready buildings**

- 7) Durable materials
 - 8) **Construction and demolition debris and waste management plan**

The waste management plan is intended to reduce the amount of construction/demolition related debris going into the land fill and to cull out recyclable materials for future use. Such waste management plan shall include provisions relating to:

 - (a) Land clearing debris
 - (b) Waste handling procedures
 - (c) Location of waste dumpsters/bins
 - (d) Waste segregation if proposed
 - (e) Potential recycle location
 - 9) **Waste containment on site shall be documented as to:**
 - (a) Method of containment
 - (b) Pick up/removal schedule
 - (c) Person in control of collection including method of 24 hour contact
 - 10) **Construction staging area including:**
 - (d) Fencing material
 - (e) Location on site
- b. New buildings shall incorporate a minimum of 3 of the following features:
- 1) Solar (passive or active), wind or geothermal renewable energy systems
 - 2) Energy-efficient materials, including recycled materials that meet the requirements of this Code;
 - 3) Materials that are produced from renewable resources;
 - 4) A green roof, such as a vegetated roof, or a cool roof;
 - 5) Materials and designs that meet the U.S. Green Building Council's LEED-NC certification requirements;
 - 6) A greywater recycling system;
 - 7) Electrical vehicle charging station;
 - 8) **Xeriscape or water-conserving landscape materials**
 - 9) Drip irrigation system for landscaped areas;
 - 10) Shared parking;
 - 11) Shade structures, covered parking, or shaded walkways

Article 6. Overlay Districts

		Maximum Points
	▪	20
	▪	10
		10
		10
		5
		50
	▪	5
		5
	○	10
		35
		5
		5
		10
	▪	10
	▪	10
	▪	15
	▪	10
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		15
		15
		50
		10
		10
	▪	50
		20
		10

Article 6. Overlay Districts

		Maximum Points
	▪	5
		5
	▪	5
		5

3. Renewable Energy System Standards

Commentary: These are new standards that are intended to guide the use of small solar power systems. These standards could alternatively be located in Article 17: Renewable Energy and Green Development Standards.

- a. Solar Array Standards. All solar arrays shall be accessory to a principal use and shall comply with the following requirements:

(1) Setbacks, Location, and Height

(a) A solar array shall not be located in the front yard between the principal structure and the public right-of-way.

(b) A solar array shall be located a minimum of six feet from all property lines and other structures.

(c) An accessory solar array in any residential district shall not exceed the greater of one-half the footprint of the principal structure or 600 square feet, whichever is greater. The size of accessory arrays in mixed-use and nonresidential districts shall not exceed one-half of the footprint of the principal structure.

(d) Solar arrays are permitted as an accessory use in a parking lot. However, the maximum lot coverage of any solar array shall not exceed 80 percent.

(e) A solar array shall not exceed 20 feet in height.

(2) Code Compliance. Solar arrays shall comply with all applicable building and electrical codes contained in the adopted building code.

(3) Solar Easements. A property owner who has installed or intends to install a solar array shall be responsible for negotiating with other property owners in the vicinity for any necessary solar easement and shall record the easement with the county register of deeds.

- b. Solar Collection Standards

(1) Setbacks, Location, and Height

(a) A solar collection system shall be located a minimum of six feet from all property lines and other structures, except the structure on which it is mounted.

(b) A solar collection system shall not extend more than five feet above the roofline or the maximum height permitted in the zoning district in which it is located, whichever is less.

(c) A solar collection system may be located on an accessory structure.

(d) A development proposed to have a solar collection system located on the roof or attached to a structure, or an application to establish a system on



Fig.6.480.C-1: Accessory solar arrays in a parking lot

an existing structure, shall provide a structural certification as part of the building permit application.

- (2) Code Compliance. Solar collection systems shall comply with all applicable building and electrical codes contained in the City's adopted building code.
- (3) Solar Easements. A property owner who has installed or intends to install a solar collection system shall be responsible for negotiating with other property owners in the vicinity for any necessary solar easement and shall record the easement with the county register of deeds.