

UNIVERSITY OF DAYTON

CAMPUS DESIGN STANDARDS



Revised: July 15, 2014

CAMPUS DESIGN STANDARDS

ARCHITECTURAL GUIDELINES

The design guidelines that follow provide a cohesive set of architectural and landscape standards applicable to the University of Dayton campus. The guidelines are not intended to prescribe solutions nor limit creativity but rather to establish a flexible framework that respects University of Dayton's past, adequately addresses its present needs, and retains innovation for future projects.

The guidelines present design principles common to buildings and sites within the University, addressing topics such as building typologies, massing, materials, and fenestration. The guidelines also specify treatments for open space connections. All new buildings and site improvements should be consistent with these principles or carry the burden of showing how they improve upon the proposed recommendations.

CAMPUS IDENTITY

While accommodating programs needs, new construction should respect the scale of its context to establish a campus of related building forms that is welcoming and highly identifiable. The design of new buildings should take into account the architectural character of existing buildings, especially those adjacent to the site. However, new construction should avoid duplication of specific historic features; they should evoke tradition without replicating past styles.

New buildings on the University campus should be like a good academic curriculum – both reflective of history, while being inventive ranging from traditional to transitional to contemporary. Strict adherence to a singular architectural style will not necessarily create a strongly identifiable and relatable space. Rather, sense of place is dependent on architectural character and language, which derives from a broad set of interrelated visual and spatial properties including scale, rhythm, proportion, materials, and texture. By incorporating the architectural character of the existing campus into the design of new buildings, the University will build an interesting and varied collection of visually related buildings, as opposed to a collection of “carbon-copied” buildings.

BUILDING TYPOLOGIES

A building can be described by its program, size, form, location on campus, and the way it is used to define an exterior space. Campuses are composed of collections of buildings with similar programs representing academic, residential, athletic, and student life uses. The program contained in a building often dictates the building's size and location. Groupings of similar uses frequently occur because of the desire to maximize functional adjacencies and congregate similar typologies.

Intuitively, a building should portray its use with characteristics embodied in the building envelope, mass, and detailing. For example, numerous windows, well-detailed entries, and connections to pedestrian pathways and open space will characterize residence halls. Large expanses of glass, tall floor-to-floor heights to accommodate interstitial utility distribution, roof treatments to conceal fume hood exhaust stacks, and width to length proportions to satisfy classrooms, lecture halls, and lab module requirements will characterize academic buildings.

BUILDING PLACEMENT

Campus buildings generally define two types of areas: streets and open spaces. In some cases, buildings will define both. On University of Dayton's core campus, like other traditional campus cores, buildings most frequently define open spaces. Regardless of the space a building frames, it should be designed as an "edge definer," actively shaping the spaces around it with public interfaces at the street level that relate to existing adjacent buildings.

Siting and design of new structures should result in areas that are lively and secure through twenty-four hour use. Designers are encouraged to use the campus palette of building and landscape materials, walkways, lighting, signage, and street furniture to create both active gathering and contemplative spaces. These types of spaces should reinforce linkages and gateways within the campus and at its edge.

There is value in both the formal and informal arrangement of buildings on campus; it is in this theme that future architecture can reflect the importance of not only the structure, but also the design of the exterior environment including the entry, path, and place before arriving at the destination. Consideration of building orientation, axis, exterior space, sensitivity to existing context, and the dialogue created between structures is of utmost importance when thinking schematically about the future design of the campus.

BUILDING MASSING: HEIGHT AND LENGTH

Massing is the three-dimensional bulk of a structure: height, width, and depth. The massing of a building is defined by several key elements including: building height, geometry of plan (length and width), and roof form. Architectural scale is important because it helps to define the overall character of a campus. This is accomplished by how the features of buildings, particularly at the ground level, relate to the scale of the human body. It is further reinforced by how buildings relate to each other and the surrounding open space.

Scale is the perceived relative height and bulk of a building relative to that of neighboring buildings. Proper scale, proportion, and details are essential when blending any new building into the existing campus fabric. The massing of new buildings must have a scale and form articulation that establishes ties to the older campus, reflecting an understanding of the University of Dayton's architectural tradition.

All new construction must respect the existing context and building relationships in order to maintain the established campus image. Where new buildings are to be significantly taller than adjacent ones, the massing should be transitional in order to minimize contrasts in scale.

Traditionally, building massing and scale have been broken down by a repetition of window fenestration, establishing a rhythm across the length of a building. Scale is broken down even more by providing a number of mullions within door and window fenestration proportional to those of human beings. Shadow lines created by the mullions and various façade movements help to add to this overall scale breakdown.

A combination of roof lines with varying roof heights adds visual interest and termination from the building form to the sky. Roof pitch should be consistent within individual structures, with no more than two pitch changes per primary structure.

Much like the campus, buildings are composed of many different elements such as door treatments, window types, columns, arches, cupolas, chimneys, and cornices. How these elements are applied often gives intuitive visual clues as to the programmatic use of the building. However, roofscape elements such as dormers, cupolas, vents, or chimneys should support a program function and not be a decoration. Future buildings must reflect the intimacy of the existing campus's scale in their details. This respect will allow a wide range of architectural styles to coexist in an elegant and cohesive manner.

Composition of building mass is to be generally symmetrical. The use of gabled or pedimented projecting pavilions, L-shaped wings, setbacks, and central porticos are common to achieve formality while reducing the overall size and scale of large structures to a more human scale. It is imperative that future buildings maintain these characteristics so that the campus aesthetic remains consistent. The potential mass of a new building will be dictated by topography, site area, build-to setbacks, and the height of adjacent buildings. Each site on campus will be different; therefore, each new building must be responsive to those parameters. Although symmetrical building composition is preferred, asymmetrical composition is also compatible with the existing context.

FAÇADE RHYTHM

There are several features comprising a building's façade that, when employed correctly, will reduce a large scale into one that is understandable to the human form. Arranging a façade into three major vertical pieces is a principal approach to accomplishing this. The three vertical pieces include:

- A base of cast stone or brick. The height of the base will be proportional to the height of the building.
- A middle portion of brick generally with pre-cast accents.
- A top or roof that caps the project rather than a condition in which there is no defined top edge to the building.

Base

Cast stone bases are encouraged for all buildings fronting open spaces, principal streets, or major pedestrian spines in order to distinguish the building at street level. The stone should be predominately light in color and should be of a height proportionate to the overall building size. Articulation of the surface is encouraged. Brick is also an acceptable material for bases, particularly when detailed to differentiate the base from the upper levels.

Subtle visual emphasis is to be given to the main or ground floor through door and window scale, architectural detailing, and greater floor-to-floor height on this level; detailing features designed to alter the perceived scale should also be employed.

Middle

The primary material of the walls above the base shall consist of brick, traditionally associated with the University of Dayton's architecture. Other brick sizes may be used for decorative purposes and/or on secondary walls internal to the site. Consideration should be given to the compatibility of brick and stone colors of adjacent and opposite buildings. This should not, however, discourage visual richness on the campus. Window frames and mullions, sun screens, metal elements, and railings may be used to introduce color into building façades when appropriate.

Top

The manner in which a building 'meets the sky' also contributes to its sense of scale. Articulating a building's roofline provides visual termination to a façade and further minimizes one's perception of its scale. Future buildings should incorporate treatments into their design that will accomplish this goal. A change in plane and/or a change in material will create shadow, texture, and visual interest. Unless incorporated into a building's design, mechanical equipment should be screened from view and placed away from main pedestrian circulation paths.

MATERIALS AND COLORS

University of Dayton has already established a detailed materials palette for the campus, as outlined below. By respecting this palette, new building designs will foster a sense of architectural continuity with existing buildings across the campus. Other approved materials may be employed to highlight particular features of the façade, and the University encourages architects and designers to use these accent materials in a way that explores and expands upon the basic vocabulary of the campus building. The interplay of materials and textures with the traditional campus building palette is one way to respect the campus' historic building styles while creating an aesthetic that is modern.

Standard materials and colors:

- a. Face Brick – Red or Terra Cotta color range, preferably clay masonry from local sources. Modular sizes, in running, common, or Flemish bond coursing.
 - (1) Face Brick for West Campus - Triangle Brick, "Georgian"
- b. Brick Mortar-
- c. Cast Stone – Indiana limestone or precast concrete
 - (1) Cast Stone for West Campus – Edwards Cast Stone Company (563) 556-0535; color - #50-035 Neutral
- d. Window Frames – University of Dayton cream, unless otherwise noted
- e. Roofs –
 - (1) Shingle roofs
 - (2) Flat membrane roofs
- f. Window glazing - Glass will be clear. A slight tint is acceptable if it allows clear views into the building. The intent is for passersby to be able to see activity within the building.
- g. Exterior metal railings and grillwork - Exterior railings at steps and ramps will comply with

campus standard details (Appendix). Railings which are an integral part of the architecture should be similar to campus standard details (Appendix).

h. Sidewalks/hardscape areas- Primary walks will be brick pavers, loose laid to match the campus standard. See Appendix.

i. Pedestrian Lighting –

(1) Main Campus: Light poles will be Holophane with cross finial on top; white lamp for Campus West and River Campus; match yellow lamp for Main Campus.

Standards for other exterior lighting types are available upon request. (See Appendix)

j. Substitute products which have equal attributes to the palette listed above may be used only if approved by the University.

ENTRANCES

Articulation of the main public entry on the façade of a building is crucial for promoting clear visual and intuitive access to campus buildings. The primary building entrance should be articulated through architectural elements that instill a sense of hierarchical importance. Canopies, loggias, change in vertical plane, change in grade, change in material, and placement of signage can all help to highlight and distinguish a building entry. Vestibules, to limit heat and cooling loss, should be predominately glass to provide unobstructed visual access into the interior of buildings.

Secondary entrances should also be clearly defined using a combination of brick and pre-cast stone material. All entrances should be covered to protect building users from inclement weather. Secondary entrances should be recessed from the building face or covered using a canopy.

Building entrances should contribute to the life and activity of the streets and walks surrounding the building. Well-lit and glass entries will enhance security in the areas adjacent to the building. Building entrances are frequently the meeting and gathering places of those using the buildings, and they should be designed to encourage interaction.

Main entrances should be accessible for individuals with disabilities and are to conform with UFAS requirements. Accessible pathways to buildings within the immediate vicinity as well as major walkways to other parts of campus shall be integrated into the design of the building.

Entries should be clear and pronounced.

- Entries should be distinct in massing, scale, and material from other façade elements
- Entries should have exterior and interior spaces that reinforce arrival and interaction

WINDOW EXPRESSION

Window openings should be an individual or punched window unit, account for 15% to 30% of a façade area, be vertically oriented (or articulated as such by use of frames and mullions), and should generally consist of masonry or stone heads and sills. Ample fenestration at the base of a building will maximize visual connections between the building's 'public' ground level and the street or open space on which it is located.

For more contemporary building designs, larger windows and sections of curtainwall are permitted but subject to approval, and must be thoughtfully ordered and located for compatibility with neighboring buildings.

Operable windows are highly encouraged for appropriate building types, such as housing and offices, to promote natural ventilation, in keeping with sustainable practices. Double-hung windows are the preferred operable window type following campus precedents. Sash divisions commonly used are 1/2:1/2, 1/3:2/3, and 2/3:1/3. Larger modules of fixed window walls and curtainwalls may also be used when organized in a façade to denote a special element, such as an entry or a large space, or to break up scale.

Windows may be of painted or anodized aluminum, or clad wood. The window color and mullion pattern should match existing neighboring buildings to help unify the building group into a related whole.

Thermal performance of glazing is to be in compliance with exterior envelope requirements of ASHRAE 90.1. This thermal performance of glazing should be high while maximizing visible daylight. Windows should be a standardized heavy commercial grade throughout future additions, renovations or new construction.

The academic activities of the University, so far as they are compatible, should be visible to passers-by. Windows should be placed to light and provide views to internal spaces, and also to give walks and streets the security and richness that derives from the visibility of adjacent activity.

ROOFSCAPES

Roofs which can be viewed from other buildings become the “fifth” facade. The Campus precedent of pitched roofs is to be respected for buildings of moderate depth. In most cases, the major roof form should be sloped on a 6:12 or 8:12 pitch and must have overhangs proportional to the building’s size and height.

Stacks, exhaust hoods, and vents must be grouped and incorporated into the architectural composition of the building or buildings they serve. Since they are visible from a considerable distance, it is important that they be designed with a high degree of uniformity so that the distant image is harmoniously composed or screened appropriately. They shall be adequately screened with structures integrated into the building design so as not to be visible from the ground level or from windows of adjacent buildings.

Eaves should be sensitive to the context of adjacent structures. Traditional proportions should be used wherever possible to keep within the language of the existing campus. Sloped roofing should be asphalt or composite slate, concrete, or fiber-reinforced shingles. These synthetic materials should be implemented at all opportunities due to their long life and ease of maintenance. Coordinate roof colors with existing context.

PARKING DECKS

New construction for parking decks at University of Dayton will reinforce a cohesive campus environment, by contributing to the operation and connectivity of the campus in a positive, visually appealing manner. The designer should apply the University's architectural guidelines to new decks, specifically those regarding setbacks, massing, façade rhythm, and scale.

At University of Dayton, new decks will define streets and open spaces on campus. They should align with streets, courtyards, and view corridors. Additionally, decks should have at least one façade that addresses the street and respond to the character and organization of the space it faces.

Decks should be designed to have a clear distinction of vehicular and pedestrian entrances. Most visitors to campus go directly to a parking deck, as their first destination on campus. Therefore, the design of should attempt to make the transfer to foot, shuttle, or bike as efficient and safe as possible. Special consideration should be given to pedestrian paths when they intersect with vehicular routes. Using specialized pavers or simply changing the paving material from asphalt will visually enforce pedestrian crossing. The design should also consider opportunities that facilitate bus and bicycle usage, such as sheltered shuttle stops and bicycle storage on site.

The University would like to encourage a mix of functions within its parking decks, when possible. Parking deck 'wrappers' literally wrap around the exterior of decks and house multiple uses such as commercial, residential, office, or a combination of the three. This creates a true mixed-use space that enhances pedestrian movements and encourages activity on the street well beyond parking hours.

The University expects that new parking decks will respect the University of Dayton's commitment to environmental sustainability. Although LEED certification for parking garages is not applicable, the garages shall be designed to minimize impact on the ecology and environment of the campus.

CAMPUS SIGNAGE

With these design guidelines, the University strives to strengthen its identity and brand. This is accomplished through many means, from the cohesiveness of the campus's architectural character to the scale and intimacy of its open spaces, from its presence on abutting city roadways to the use of native, regional plant species. The most obvious, and perhaps basic, means of accomplishing a strong campus identity is through campus signage, particularly signage that appears on campus buildings. The University has created and adopted Campus Signage Standards that should be followed by all construction projects.

Specifically, the name of all buildings must be permanently attached to, or architecturally integrated into, the facade of the building. As a general guide, the building name should be integrated in the design of the primary entrances. The font and size shall conform to the Campus Signage Standards (Appendix). If a formal name has not been designated, the design should include an integrated position of pre-cast stone for future building name signage. Such position should be designated in the construction documents for future installation.

All signage must conform with the zoning restrictions of the City of Dayton.

Signs visible from the exterior of any building may be lighted, but no signs shall be devised or constructed so as to rotate, blink or move in any animated fashion. All lighted signs shall be supplied by underground power or by a means otherwise not visible and shall be externally illuminated or back-lit in a manner permitted by the University of Dayton. Signs shall be restricted to advertising only the party operating the use conducted on the premises or the products produced or sold therein.

One (1) construction sign denoting the architects, engineers, contractor, and other related subjects, shall be permitted upon the commencement of construction on any lot. Subject to compliance with applicable University Design Standards, special purpose signs may be used to give directions to traffic or pedestrians or to give instructions as to special conditions, and community directional and/or identification signs may be used to give directions to and identify areas within the campus.

STEWARDSHIP AND SUSTAINABILITY

As an institution of higher education, University of Dayton's leadership recognizes its voice in the emerging dialogue concerning global climate change. It is expected that future campus projects will be completed with the stewardship and sustainability of campus in mind. The guidelines set forth in this section are intended to reinforce design treatments specified elsewhere in this document.

To create a campus that improves the quality of life and environment for its students, faculty, and staff, the University addresses issues of sustainability as a continuous process affecting environmental, social, and fiscal concerns. Sustainable practices occur at all scales -- from the city and campus, to buildings and landscapes, to products used within those buildings and landscapes. The design guidelines encourage sustainability at the "campus scale" by addressing goals within four broad categories: ecology, energy, built environments, and public education through learning landscapes.

ECOLOGY

The University of Dayton campus is a dynamic area that plays hosts to smaller eco-systems while also being connected to the wider ecology of the Dayton region. In this dual role, UD will act to honor and connect habitat, stream, and river corridors within its campus grounds. Habitat fragmentation, which limits biodiversity and jeopardizes the overall health of an area, will be evaluated by the University during new construction projects to ensure that the campus does not further fragment important bio-corridors.

The massing of new buildings will allow daylight to reach active outdoor spaces, as well as natural daylight into indoor areas to the extent possible. New landscape projects on campus will work with a palette of native species to the greatest extent possible.

BUILT ENVIRONMENT

A University is a collection of built and natural environments, both having equal impact on the environmental health of a campus. New buildings and renovations to existing buildings will lessen their environmental impacts by following LEED guidelines.

Decisions about how campus land is used will have direct implications for the University's transportation networks. Access to a site, via road, foot, or bike will be considered when determining a building site. New construction will include improvements to the sidewalks surrounding the building. As well, buildings will connect to the existing circulation network of paths, bike lanes, and roads. Appropriate bicycle parking, as outlined by LEED, will be provided in new projects. New buildings will also be mindful of orientation, shading, and the effect on adjacent buildings and spaces.

ENERGY

Energy can be the single greatest operating expense for a university and the single greatest source of carbon emissions. Reducing energy consumption provides benefits on both fronts. University of Dayton will explore the use of natural resources such as solar (for heating and hot water), and geothermal (for heating and cooling), and will not prohibit the incorporation of these features into a building's design. However, the University retains final approval.

The University will also reduce energy requirements of buildings through design, equipment selection, and use/operations guidelines. Building systems will strive to be closed loop, so that waste heat and other process byproducts can be recycled for other building functions. As new technologies become available and affordable, the University will evaluate and, as appropriate, implement these practices. Building design will minimize maintenance and operating costs by employing whole-systems lifecycle evaluation and by integrating innovative building engineering solutions at project inception. Building design should also adopt monitoring, measuring, and feedback systems to establish baselines of energy usage and building performance, against which the University can evaluate improvements and set goals for future projects.

PUBLIC EDUCATION

The faculty, staff, and students of a university represent its single greatest resource. Students of all disciplines will learn the roles essential to operating as a local and global citizen in a sustainable world: designer, critic, organizer, mediator, and visionary. University of Dayton will provide a physical environment that nurtures these roles by encouraging curiosity and exploration. By making features of green infrastructure (e.g. rain gardens, solar panels, etc.) visible and integrated components of the campus landscape and individual building design, the University can inspire intellectual inquiry, conversation, and action around the issue of sustainability.

ADDITIONAL CAMPUS WEST AND RIVER CAMPUS DESIGN REQUIREMENTS

CAMPUS WEST AND RIVER CAMPUS PLANNED DEVELOPMENT

The intent of the following development standards is to meet the goals and objectives of the University of Dayton with the facilities that are required, while insuring the development is compatible with the characteristics of the surrounding neighborhood.

PERMITTED USES

The following uses shall be permitted by this Planned Development:

- Dormitory, fraternity, sorority
- Drive-thru facility* (See below)
- Dwelling unit(s) above the first floor of a building
- Financial institution/bank
- Hotel/motel
- Multi-family dwelling
- Parking structure
- Recreation Facility, Outdoor
- Retail establishment
- Restaurant, indoor dining
- Restaurant, outdoor dining
- School (public/private), college/university
- Service establishment, business
- Service establishment, personal

All other uses not permitted by right by this Planned Development shall be permitted by right, permitted by right with supplementary regulations, conditional, or accessory in accordance with R.C.G.O. Section 150.340.2 (B) – Industrial Districts, Permitted Uses, Schedule 150.340.2 of Permitted Uses, BP Business Park subcategory.

Drive-thru facilities shall be prohibited unless established with, and located on the same building lot as, a financial institution/bank use.

BUILDING BULK REGULATIONS

Minimum Lot Size – None

Minimum Lot Width – None

Maximum Building Height: 75 feet

Building Setback Requirements:

- From the public street right-of-way:

- Minimum – 20 feet
- Maximum – None
- From side or rear lot lines:
 - Minimum – 10 feet
 - Maximum – None
- Maximum Lot Coverage: 90%

OFF-STREET VEHICLE PARKING REGULATIONS

Parking Setback Requirements:

- From the public street right-of-way
 - Minimum – 10 feet
 - Maximum – None
- From side or rear lot lines
 - Minimum – 10 feet
 - Maximum – None

Parking Location Requirements:

- No more than 50% of the required number of off-street parking spaces shall be located between the principal building and public right-of-way.
- An exception to this requirement may be granted where necessary due to the shallow depth of the parcel, the location of mature trees or other significant environmental features, the location of historical buildings/structures/sites, the proximity of residential uses, or other similar circumstances.

Off-Street Parking Requirements: Subject to R.C.G.O. Section 150.700.10 – Off-Street Parking & Loading Regulations, Parking in Industrial Districts unless specified in Schedule A below. All other relevant sections of R.C.G.O. Section 150.700, Off-Street Parking & Loading Regulations, shall apply.

Schedule A, Off-Street Parking Requirements		
Land Use	Minimum Requirement	Maximum Requirement
Dormitory, fraternity/sorority	0.25 per occupant	1 per occupant
Dwelling unit(s) above the first floor of a building	0.5 per dwelling unit	1 per dwelling unit
Financial institution/bank	1 per 1,000 sf of floor area	4 per 1,000 sf of floor area
Hotel/motel	1 per room/suite	1.25 per room/suite

Schedule A. Off-Street Parking Requirement		
Land Use	Minimum Requirement	Maximum Requirement
Multi-family dwelling	1 per dwelling unit + 1 space per 10 dwelling units for visitors	None
Office-administrative/professional	2.5 per 1,000 sf of floor area	5 per 1,000 sf of floor area
Recreation Facility, Outdoor	None	None
Research/Development Facility, Laboratory	1 per 1,000 sf of floor area	4 per 1,000 sf of floor area
Restaurant, indoor dining	7.5 per 1,000 sf of floor area	15 per 1,000 sf of floor area
Restaurant, outdoor dining	7.5 per 1,000 sf of floor area	15 per 1,000 sf of floor area
Retail establishment	2 per 1,000 sf of floor area	4 per 1,000 sf of floor area
School (public/private), college/university	1 space per 4 students (based on the max. number of students at design capacity) + 2 spaces for each 3 employees	None
Service establishment, business	2 per 1,000 sf of floor area	4 per 1,000 sf of floor area
Service establishment, personal	2.5 per 1,000 sf of floor area	5 per 1,000 sf of floor area

LANDSCAPING AND SCREENING OF PARKING LOTS:

Landscaping on the interior of parking lots shall be subject to R.C.G.O. Section 150.800.9 (A) – Landscaping & Screening, Screening and Landscaping of Parking Lots, Landscaping on the Interior of Parking Lots.

Landscaping and screening along the perimeter of parking areas adjacent to the public right-of-way shall be subject to the following regulations:

- Landscaping shall be located parallel to and within five (5) feet of the edge of the parking lot.
- One evergreen shrub shall be provided for every five (5) linear feet, or fraction thereof, not including drive entrances.

- The landscaping may be flexible in its arrangement by appropriately aggregating the required plant materials.
- All shrubs shall be at least three (3) feet in height within two (2) years after the initial installation.
- All landscaping and screening materials shall be maintained in a good condition and kept neat and orderly in appearance and free from refuse and debris. All damaged landscaping and screening materials shall be removed and or replaced within thirty (30) days or in an acceptable timeframe as determined by the Zoning Administrator.
- R.C.G.O. Section 150.800.9 (B) – Landscaping & Screening, Screening and Landscaping of Parking Lots, Screening Along Public Streets and Perimeter of Parking Areas shall not apply to this Planned Development.

All or a portion of the required parking for dormitory, fraternity/sorority and school (public/private) college/university uses shall be located within this Planned Development or on property owned by the University of Dayton. If located outside this Planned Development, such parking shall conform to the setbacks, landscaping, screening, and other applicable regulations for parking lots as required by the zoning district in which it is located.

OFF-STREET BICYCLE PARKING REGULATIONS

Parking Requirements: Lesser of one (1) bicycle parking space per ten (10) vehicle parking spaces or ten (10) total bicycle parking spaces.

Design and Location Requirements: Subject to R.C.G.O. Section 150.700.13 (B) – Off-Street Parking & Loading Regulations, Bicycle Parking Requirements.

End-of-Trip Bicycle Facilities: For all non-residential uses, end-of-trip bicycle facilities that help employees, customers, and visitors choose cycling as an easy and convenient mode of transportation, such as indoor bike storage, clothes lockers, changing rooms, and showers, are encouraged, but not required.

LANDSCAPING REQUIREMENTS ALONG STREET FRONTAGES

Street trees shall be provided in accordance with the following:

The planting of street trees shall be subject to R.C.G.O. Section 150.800.5 – Landscaping & Screening, Street Tree Planting Requirements. The spacing and placement of street trees may be amended to match existing conditions.

Existing major street trees shall remain.

All street trees shall be maintained in a good condition and kept neat and orderly in appearance and free from refuse and debris. All damaged street trees shall be removed and or replaced within thirty (30) days or in an acceptable timeframe as determined by the Zoning Administrator.

R.C.G.O. Section 150.800.6 – Landscaping & Screening, Landscaping Requirements along Street Frontages, shall not apply to this Planned Development.

TRAFFIC AND PEDESTRIAN ACCESS REGULATIONS

All points of vehicular ingress and egress shall be provided in accordance with City standards.

Sidewalks shall be constructed in accordance with City standards along all public rights-of-way.

Safe and convenient pedestrian connections shall be provided between all principal structures and the public right-of-way in accordance with City standards.

OFF-STREET LOADING AND SERVICE

Off-street loading and service areas shall be subject to R.C.G.O. Section 150.700.12 – Off-Street Parking & Loading Regulations, Off-Street Loading Requirements.

All off-street loading and service areas shall be located in a side or rear yard as approved by the University of Dayton. No such areas shall encroach into any set-back area shown on the plat for the property or shall face any street.

Off-street loading and service areas shall be subject to the applicable parking setbacks as defined by this Planned Development.

OUTDOOR STORAGE REGULATIONS

All outdoor storage shall be subject to R.C.G.O. Section 150.340.6 – Industrial Districts, Outdoor Storage Regulations.

SIGN REGULATIONS

All signs shall be subject to the regulations for signs in Industrial Districts as specified in R.C.G.O. Section 150.900 – Sign Regulations, unless specified in Schedule B below.

Schedule B, Supplemental Sign Regulations	
Land Use	Sign Requirements
Dwelling unit(s) above the first floor of a building	Signs are not permitted
Multi-family dwelling	Schedule 150.900.5 – Signs in Multi-Family Residential Districts, Residential Uses Category
Dormitory, fraternity/sorority	Schedule 150.900.7 – Signs in Commercial Districts, Mature Category
Drive-thru facility	

Schedule B, Supplemental Sign Regulation	
Land Use	Sign Requirements
Financial institution/bank	
Hotel/motel	
Restaurant, indoor dining	
Restaurant, outdoor dining	
Retail establishment	
School (public/private), college/university	
Service establishment, business	
Service establishment, personal	

DESIGN STANDARDS

The look and form of buildings and structures is of public concern because it is in the public’s interest to ensure that new developments and alterations to existing ones are reflective of the policies in the City of Dayton’s Comprehensive Plan. The purpose of the following regulations is to provide standards by which the Plan Board, the Board of Zoning Appeals, or the Zoning Administrator can assess the appropriateness of proposed development based upon the goals in the City’s Comprehensive Plan. All development within this Planned Development shall be subject to the following design standards:

Buildings, structures, and landscaping shall be designed and located on the site and be of a scale to complement adjacent buildings and enhance the character of the surrounding area by having features that are appropriate and compatible with the existing buildings and structures. In making this determination, the Plan Board, Board of Zoning Appeals, or Zoning Administrator shall consider:

- Building height, width, and general proportions; and,
- Architectural features, including the pattern of windows and doors, roof pitch, cornice lines, and other decorative detail.

Window air-conditioning units, condenser elements, antennas, satellite dishes, and other mechanical equipment shall not be located on the front of a building.

Signs shall be designed to reflect the scale of the building, site, and surrounding characteristics. Buildings shall be designed for the appropriate placement of signage in a manner that compliments the building.

Exterior security and ornamental lighting, when utilized, shall enhance building design and the adjoining landscape. Lighting standards and fixtures shall be of a design and size compatible with the building and adjacent areas.

A primary public entrance to the principal structure shall be oriented toward the public street to allow pedestrian access from the public right-of-way.

All roof top equipment shall be screened using building materials that match the structure or which are visually compatible with the structure.

Though not required, the design standards set forth in R.C.G.O. Section 150.325.6 – Commercial Districts, Design Standards, shall be considered for all principal uses defined as a Hotel/motel; Retail establishment; Service establishment, business; Service establishment, personal; Restaurant, indoor dining; and Restaurant, outdoor dining.

ADDITIONAL REGULATIONS

Accessory Building Regulations: Accessory buildings – regardless of size – are prohibited between the principal building and the public right-of-way. All accessory buildings shall comply with the building setback requirements as defined by this Planned Development.

Fence Regulations: All fences shall conform to R.C.G.O. Section 150.340.7 (B) – Industrial Districts, Accessory Use Regulations, Fences.

Waste Receptacle Regulations: All waste receptacles shall be located in a side or rear yard, comply with the building setback requirements as defined by this Planned Development, and be screened in accordance with R.C.G.O. Section 150.800.10 – Landscaping & Screening Regulations, Screening of Accessory Uses.

Trash and Refuse Collection: All trash, garbage, refuse or other rubbish shall be deposited only in covered sanitary containers screened from the view of the nearest street and from any adjacent lot. No garbage or refuse collection area or containers shall be permitted between the adjacent street and the building set-back line on any lot.

Lighting Regulations: The placement, orientation, distribution patterns and fixture types of outdoor lighting shall be subject to R.C.G.O. Section 150.420.3 – Supplemental District Regulations, Design Criteria and Performance Standards, Exterior Lighting Standards.

Outdoor Vending Machine Regulations: No outdoor vending machines shall be visible from the public right-of-way.

Performance Standards Regulations: All permitted Office/Professional Services and Industrial uses shall be subject to R.C.G.O. Section 150.340.9 – Industrial Districts, Performance Standards.

UTILITY REGULATIONS

A site drainage plan shall be submitted to the Divisions of Water Engineering and Civil Engineering for approval.

All proposed utilities shall comply with City standards as determined by the Divisions of Water Engineering and Civil Engineering.

All future utilities including service feeds to the building shall be placed underground.

Utility placement may be modified by the Plan Board with due consideration to environmental concerns.

DEVELOPMENT PLAN APPROVAL

A Development Plan for each building lot shall be prepared by the developer and submitted to the Plan Board for approval prior to construction. The Development Plan shall comply with the intent of this Planned Development and be subject to R.C.G.O. Section 150.350.10 – Development Plan Review Criteria.

All buildings, signs, vehicular and pedestrian access points, parking lots, sidewalks, fencing, loading and service areas, and landscaping shall be constructed in the locations as submitted and approved per the Development Plan for each building lot, or as stipulated herein. The procedures for adjusting the site design and layout are outlined in the “Plan Adjustments and Interpretations” section of these development standards.

PLAN ADJUSTMENTS AND INTERPRETATION

After the Commission has approved a Planned Development, it may be amended only by the use of the same procedures as are applicable for the original adoption of a Planned Development. However, minor adjustments in the final plan, resulting from field conditions, detailed engineering data, topography, or critical design criteria pertaining to drives, curb data, retaining walls, swimming pools, tennis courts, fences, building locations, and building configuration, parking area locations, or other similar project particulars, may be authorized in writing with the concurrence of the Planning Director and the City Chief Building Official. These minor adjustments may be permitted provided they do not increase density, decrease the number of parking spaces, or allow buildings closer to perimeter property lines. Further, such adjustment requests shall be supported by documentation, reviewed by the Planning Director and the City Chief Building Official and determined by them to conform to the original purpose and intent of the Planned Development approval. If both the Planning Director and the City Chief Building Official do not agree, such adjustments shall not be allowed except by amendment. The Plan Board shall be advised of all minor adjustments authorized.

University of Dayton

**Campus Design Standards
Appendix**

**EXTERIOR METAL RAILINGS AND
GRILLWORK:**

CLAY BRICK PAVERS

PART 1 GENERAL

1.01 DESCRIPTION:

- A. The requirements for brick pavers that may be set in sand, bituminous setting bed, or rigid concrete are specified in this section

1.02 SUBMITTALS:

- A. **SAMPLES:** Five individual samples of each brick color and/or texture showing normal and extreme variations in color or texture.
- B. **CERTIFICATIONS:** Submit certifications that all brick pavers will meet or exceed designated specifications.
- C. **QUALIFICATIONS OF INSTALLER:**
 - 1. Shall have a minimum of five years experience installing clay pavers.
 - 2. Installer shall submit for approval, a list of projects similar in nature and size that establishes his/her ability to complete this project. A resume for the project superintendent should be submitted to establish his/her ability to complete the project. If for any reason, the qualifications are not acceptable, work shall not commence until an acceptable installer is found.

PART 2 PRODUCTS

2.01 MATERIALS:

- A. Clay brick pavers to be manufactured by Whitacre-Greer, 1400 S. Mahoning Ave., Alliance, OH 44601. Phone: 330-823-1610, Fax: 330-823-5502, email: info@wgpaver.com.
- B. Pavers may be chamfered and lugged or square edge without lugs. Finish may be smooth or textured.
- C. **PAVING BRICK IN PEDESTRIAN/LIGHT TRAFFIC AREAS:**
 - 1. True 4" x 8" x 2-1/4" as per ASTM C 902 Class SX, Type 1, Application PS.
 - 2. Slip resistance shall be tested in general accordance with ASTM C 1028-96, standard test method for determining the static coefficient of friction of

ceramic tile and other like surfaces by the horizontal dynamometer pull-meter test. Minimum static coefficient of friction shall be .60 for wet and .70 for dry.

D. PAVING BRICK FOR HEAVY VEHICULAR TRAFFIC:

1. True 4" x 8" x 2-3/4" as per ASTM C 1272, Type R, Application PX.
2. Slip resistance same as LIGHT TRAFFIC.

E. PAVER COLOR:

1. UD Blend

PART 3 EXECUTION

3.01 ALLOWABLE TOLERANCES:

- A. Joint widths to be no greater than 5/32 of an inch and not less than 1/16 of an inch.
- B. Pavers shall not be directly touching each other unless they have spacing bars.

3.02 JOINT TREATMENT:

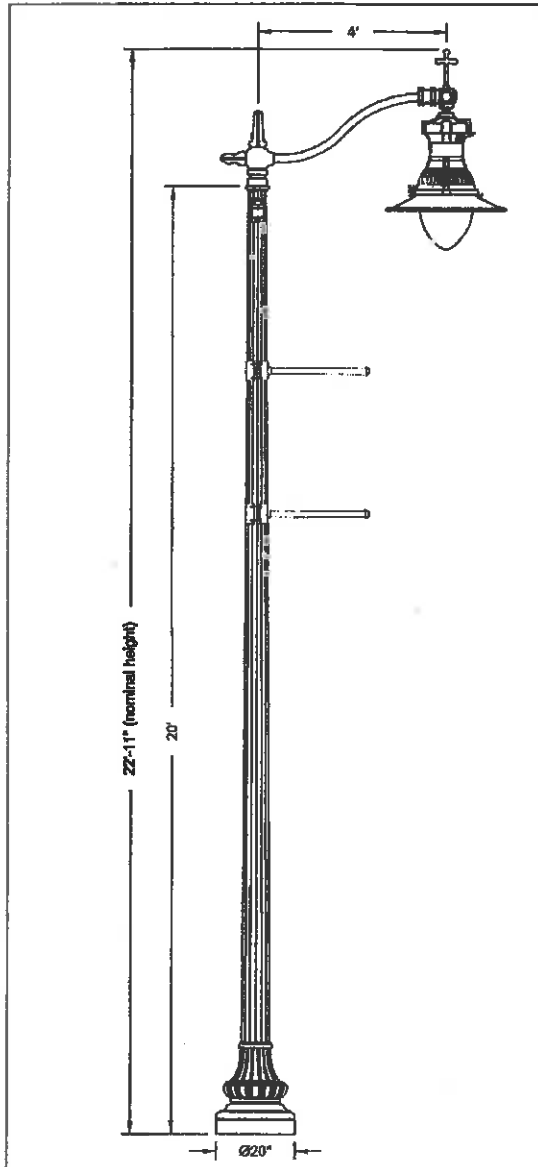
- A. Sweep dry sand or dry sand and cement into the joints after the pavers have been set in place until joints are flush with top surface. Fog lightly with water. Repeat process until joints are full.

3.03 LEVELING:

- A. Protect newly laid pavers with plywood or carpeting as the work progresses. If additional leveling is required, you must protect the surface to avoid chipping.

END OF SECTION

PEDESTRIAN, ROADWAY, AND PARKING LOT LIGHTING:



Specifications

DESCRIPTION The lighting post shall be cast iron and steel construction, massively tapered with a deep, 16-flute steel shaft and a classic 16-flute cast iron base.

MATERIALS The post base material shall be ASTM A48 Class 30 cast iron, formed true to the pattern with complete detail. The shaft shall be tapered and fluted steel with an integral steel tenon and steel bottom cap. All exposed hardware shall be lamper resistant stainless steel. Anchor bolts to be completely hot dip galvanized. Partially galvanized bolts are not acceptable.

CONSTRUCTION The cast shaft shall be circumferentially welded to the base casting and shipped as one piece for maximum structural integrity. All exposed welds below 8' shall be ground smooth. All welding shall be per ANSIAAWS D1.2-90. All welders shall be certified per Section 5 of ANSIAAWS D1.2-90.

DIMENSIONS The post shall be 12'-0" in height with a 20" diameter base. The post shall taper from a 7" at the top of the base to a 4.5" diameter at the post top. An integral tenon shall be provided at the top for arm mounting. The post top shall include a transitional dovetail between the fluted shaft and the tenon.

INSTALLATION The one-piece post shall use four 3/4" diameter, hot dip galvanized L-type anchor bolts to be installed on a 16" bolt circle. A door shall be provided in the base for anchorage and wiring access. A grounding screw shall be provided inside the base opposite the door.

LUMINAIRE DESCRIPTION

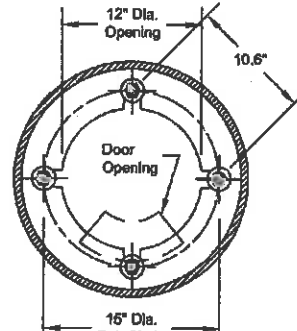
- Exploded LED Teardrop
- 110W System, 0K
- AutoSensing
- Asymmetric Type IV Teardrop
- Extended Life, Shallow Skirt

For full specifications see LUM_ESL.

Accessory Mounting Detail

	Orientation	Height
FGIUS		

ANCHORAGE GUIDE



DO NOT USE TO SET ANCHOR BOLTS
CONTACT CUSTOMER SERVICE FOR TEMPLATE

Catalog

ESL1105KASBAELSS - BHC48\"/>

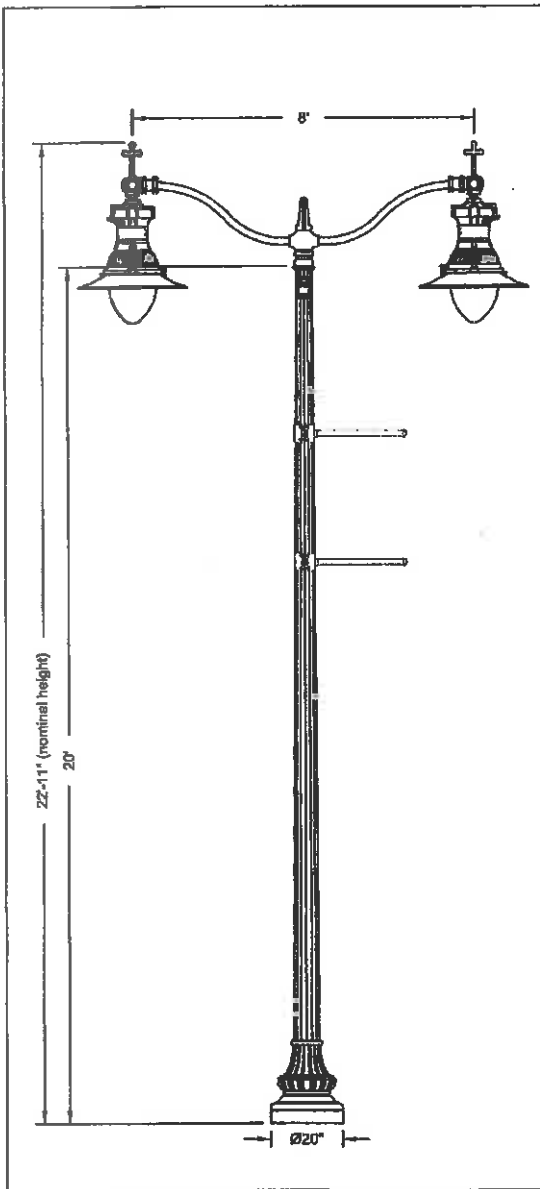
Customer Signature

Date



University of Dayton
Dayton, OH

ORDER #:	TYPE:	DRAWING #:
REVISION:	REVISION DATE:	
DRAWN:	ORIGIN DATE:	PAGE:



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DIMENSIONS The post shall be 12'-0" in height with a 20" diameter base. The post shall taper from a 7" at the top of the base to a 4.5" diameter at the post top. An integral tenon shall be provided at the top for arm mounting. The post top shall include a transitional dovetail between the fluted shaft and the tenon.

INSTALLATION The one-piece post shall use four 3/4" diameter, hot dip galvanized L-type anchor bolts to be installed on a 15" bolt circle. A door shall be provided in the base for anchorage and wiring access. A grounding screw shall be provided inside the base opposite the door.

LUMINAIRE DESCRIPTION

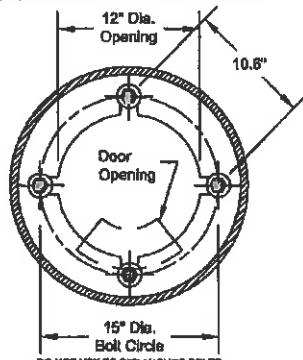
- Esplanade LED Teardrop
- 150W System, 8k
- AutoSensing
- Asymmetric Type IV Teardrop
- Extended Life, Shelfow Skirt

For full specifications see LUM_ESL

Accessory Mounting Detail

	Orientation	Height
FGIUS		

FILL OUT CHART DURING APPROVAL PROCESS
ANCHORAGE GUIDE



DO NOT USE TO SET ANCHOR BOLTS
CONTACT CUSTOMER SERVICE FOR TEMPLATE

Catalog #
 ESL1505KASB4ELSS - BHCWZ(LESS SCROLL) -
 WLLF200SCZBK(WITH ROMAN CROSS) - CL820FTB20P0B80BK
 R2BA S168A 5132A - FGIUSSBKH - (2)BAC19BACD524H3BK -
 RFD95078

Customer Signature _____ Date _____



University of Dayton
Dayton, OH

ORDER #:	TYPE:	DRAWING:
REVISION:	REVISION DATE:	
DRAWN:	ORIGIN DATE:	PAGE:



EMERGENCY BLUE LIGHT/PHONE:

RED ALERT by GAI-Tronics	UD BLUE LIGHT 234/530-001 84503-201/84502-201/84503-301/1 20 VAC LED STROBE	Model 234 Free-Standing Stanchion
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Features


- Architectural Bronze color is pleasing in all settings
- UL 1598 Listed for Outdoor Installations
- ADA compliant
- Durable powder-coated epoxy finish to withstand the harshest environments
- Custom colors and graphics are available

GAI-Tronics' 234 series stanchion is part of a completely integrated emergency communications station. Designed for remote or high-risk areas, the stanchion provides solutions to security concerns at:

- College campuses
- Parking garages
- Sports arenas
- Transit platforms
- Shopping malls

The stanchion is designed to accommodate GAI-Tronics' RED ALERT™ flush-mount telephones. The stanchion is easily located by potential users because it stands over nine feet tall, with large EMERGENCY graphics on all four sides. The highly visible model 530-001 L.E.D. Strobe, with "constant on" light, mounts on top of the stanchion for quick identification of stanchion location. Additionally, an L.E.D. panel light illuminates the surface of the telephone for nighttime use.

Note: The Model 234 Stanchion is not compatible with RED ALERT™ surface-mount or retrofit telephones.



SIGNAGE STANDARDS:

EXTERIOR BUILDING MOUNTED:

Cast Bronze

ASI CP Series, double lined border, leatherette background, dark oxide stain and matte clear coat finish.

Clarendon Uppercase letters



EXTERIOR PEDESTRIAN DIRECTIONAL:

ASI Compass Series post and panel sign

Two 72" x 2-3/4" posts and ground sleeves

One 12" x 32" x 1" header panel

Sign inserts of 4-3/4" x 32" panels

Color to be 28-0036 UD

Matte white vinyl graphics

UD logo is 6-1/2" high

Copy is 2" high Times New Roman



EXTERIOR MONUNMENTAL SIGNS:



EXTERIOR DONOR RECOGNITION SIGNS:

ASI CP Series Cast Bronze

4" h x 8" w

¼" single line border

Leatherette Texture background, dark oxide stain background color

Bronze color copy

Clarendon font

Name to be 5/16" h, remainder of text to be ¼" h

Concealed studs mounting



TEMPORARY EVENT SIGNAGE

Please refer to the University's permanent signage guidelines that can be accessed at:
<http://campus.udayton.edu/~facman/planning/signage>

Temporary Exterior Signage

Temporary exterior signage is employed by various groups on campus throughout the year as informational, directional, and special event signage. Please note the following requirements for such signage:

Any signs that are staked into the ground, whether utilizing metal or wood stakes are not permitted:



Installation of these types of signs damage the landscaping, the underground irrigation, and blow over and become unsightly.

Signs that are on weighted bases or 'easel' type are permitted.



FM sign holders



Parking Services signs

Reserving signs for your event:

Please go to:

<http://campus.udayton.edu/~facman/workrequests/>

and click the link for:

“Faculty and Staff (Campus Buildings)

Submit New Academic Request

Then please complete the work order information including the location of your event, the location where you will receive the sign holders, timeframe you will need the sign holders, contact name and phone number, account number, and how many sign holders you will require.

FM will contact you to confirm your request. Please note that your function is responsible for providing the inserts that must be professional printed, hand lettered inserts are not acceptable. Please do not write or print to the backer boards that are provided with the signs. FM provided sign holders require an insert 24” wide by 18” tall. You will also be responsible for inserting the professionally printed inserts into the sign holder frame. An account number must be provided in the event that sign holders are damaged or not returned, at which time the account number will be charged.

FM Grounds will deliver all of the requested sign holders to the drop-off site. You will be responsible for any necessary distribution of the signs around campus. You will need to gather

the sign holders and return them to the drop-off site after the event. FM Grounds will arrange to pick up all of the sign holders from the same drop-off site once your event is concluded.

PLEASE NOTE: Drop-off and pick-up of the sign holders by FM Grounds must be within the following hours: M-F 7:00 AM – 3:30 PM or Sat/Sun 7:00 AM – 2:30 PM.

Temporary Interior Signage

Please note that temporary interior event or directional signage is not permitted to be taped on walls, doors, door frames, glass, or any other object.

If you require long-term directional signage, please submit a work order at:

<http://campus.udayton.edu/~facman/workrequests/>

and click the link for:

“Faculty and Staff (Campus Buildings)

Submit New Academic Request

The University stocks a limited number of movable interior sign holders for use for special events.



To reserve interior sign holders for special events, please submit a work order:

<http://campus.udayton.edu/~facman/workrequests/>

and click the link for:

“Faculty and Staff (Campus Buildings)

Submit New Academic Request

Then please complete the work order information including the location of your event, timeframe, contact name and phone number, account number, and how many sign holders you will require.

FM will contact you to confirm your request, and at that time information will be provided on the size of the sign inserts for the holders that are reserved for your function. Please note that your function is responsible for providing the inserts that must be professional printed, hand lettered inserts are not acceptable. You will also be responsible for inserting the professionally printed inserts into the sign holder frame. An account number must be provided in the event that sign holders are damaged or not returned, at which time the account number will be charged.