



D E S I G N
GUIDELINES

WOODFIELD REGIONAL
C E N T E R

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T A B L E
OF
C O N T E N T S

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Introduction

The Village of Schaumburg, as a municipality, has a relatively short history of less than 50 years. However, the community has a dynamic history of pressing into action progressive planning and design theories, and the result of those efforts is evident throughout the village.

Beginning with the “**1962 Comprehensive Plan,**” the basic layout of overall land use and surface transportation began to formally take shape. This first planning effort helped transform the tiny village from a crossroads community at Schaumburg and Roselle Roads into a rapid growth bedroom community.

New tollway and expressway construction, along with almost simultaneous development of Motorola and Unocal in the 1960s, sent the community into a construction boom which has not subsided forty years later. As implementation of the comprehensive plan continued into the 1970s, significant developments continued to occur, including Woodfield Mall and the Centex Industrial Parks.

In 1984, “**Observations in Design**” became the newest element of the Comprehensive Plan. Its village-wide purpose was to promote good design for new developments in Schaumburg. At a time when most communities were trying to implement basic land use planning, Schaumburg was already beginning to set goals which gave developers, designers, and village staff a set of guidelines from which quality design could be judged.

Some twenty years before the term “livable communities” became the mantra of the new millennium, Schaumburg had already begun implementing “countless improvements to make it a more livable community.” Integral to that overarching goal, the village has already provided “more trees and open space, better circulation systems, more attractive architecture, and in general, designs with greater attention to human needs and aesthetics.”

To carry this foundation of quality design yet one step further, a second design amendment to the Comprehensive Plan was adopted in 1990. The “**Woodfield Regional Concept Plan Design Guidelines**” was significant because it concentrated entirely on the five square mile Woodfield Regional Center (WRC). As the WRC continued to grow at a furious pace in the 1990s, the village understood quite aptly, that although it was not the spiritual center of the community, nonetheless it was “...the image that arises when one thinks of Schaumburg. As the Village’s flagship, the Woodfield area thus takes on an importance far greater than other areas of the Village.” The WRC had, by this time, essentially become the “city center” for the 500,000 residents of the prosperous northwest suburbs of Chicago.

With full recognition and understanding of the economic positioning of the WRC, critical goals were established to elevate the area to an even higher standard of design. The goals were “intended to ensure responsive design, compatible with and related to, surrounding roadways

and land uses.” Design was emphasized more so than in the 1984 document with the inclusion of specific site planning and layout goals.

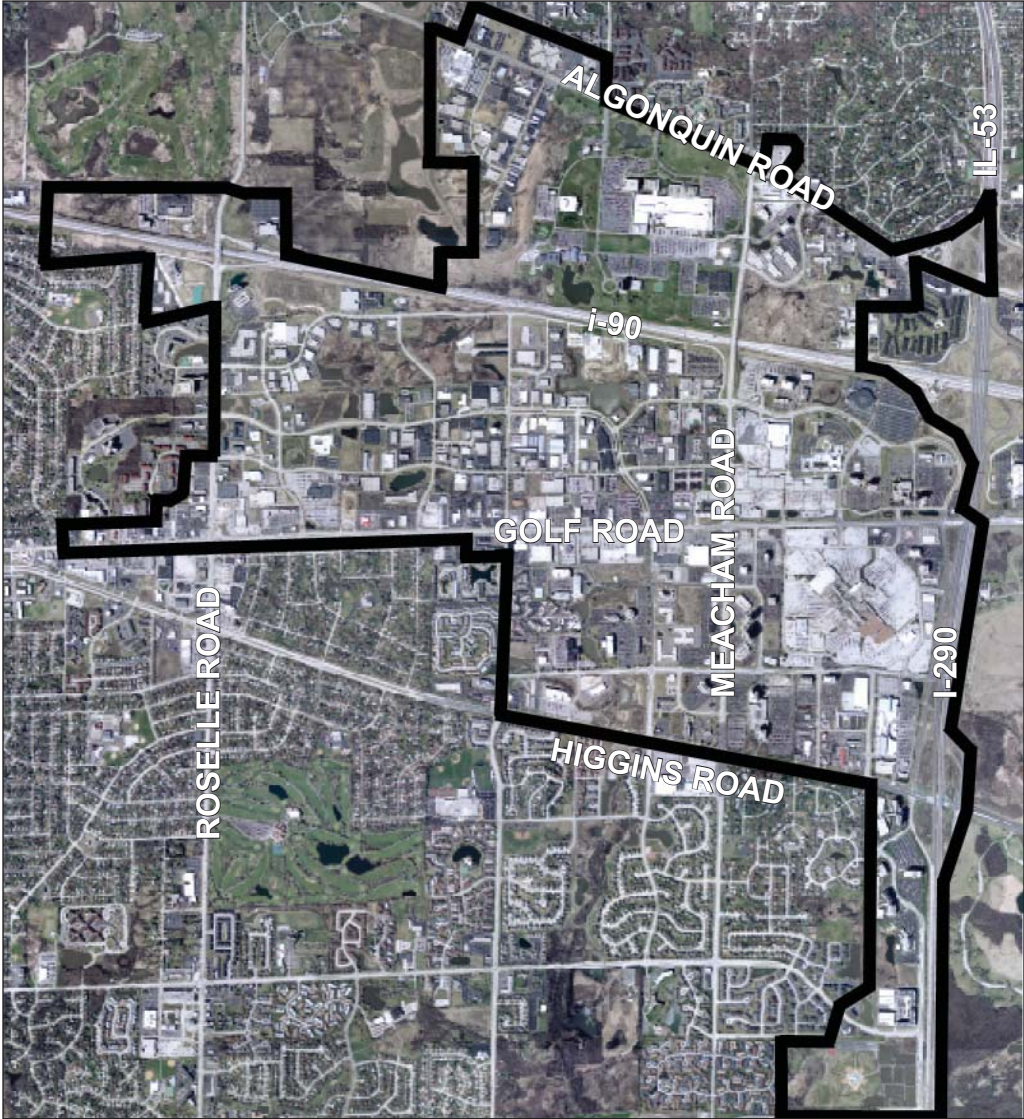
From that planning effort, in concert with tremendous economic development opportunities, the WRC has become an attractive, functional, and economically dynamic place from which to conduct business. The WRC has played an integral role as Schaumburg has developed into one of the world’s most important “edge cities,” as coined by Washington Post journalist and author Joel Garreau in his 1991 book “**Edge City: Life on the New Frontier.**”

That tradition continues with this, the third generation “**Woodfield Design Guidelines.**” Building on the goals and successes of the two previous design documents, it continues with the intent to ensure great development design within the WRC. Each project will continue to be reviewed individually on its own merits, albeit with an increased emphasis on the whole. Projects will continue to be evaluated on the basic appropriateness of use, quality of building and layout design, quality of materials, provision of public amenities, and the relation and connection of the site with surrounding parcels and buildings.

The Woodfield Design Guidelines are not intended to supplant village or all other applicable codes and ordinances. The Guidelines are intended to augment those ordinances and to provide a common platform of

understanding between developers and the village, from which the village can assess the quality of a proposed development plan.

The Woodfield Design Guidelines can guide development efforts to achieve a refined and appropriate solution, thus sustaining the high design threshold which has been achieved during the past forty years.



Aerial image of Woodfield Regional Center



1.0 Site Planning and Layout

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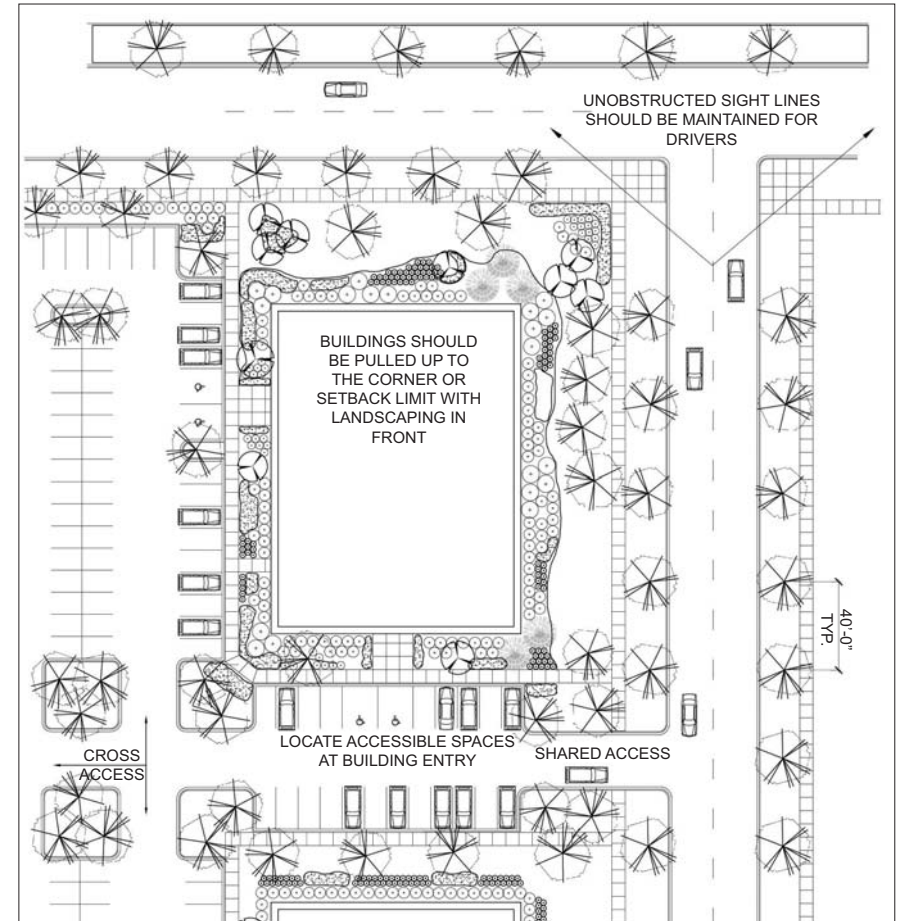
1.1 Orientation

The primary entrance and facade of the building should face the street and be parallel to it. Buildings should be located as close to the street as possible to provide a strong architectural presence and increase their prominence in the streetscape. The street facade at ground level should be primarily of transparent glass and windows. People seeing other people adds interest and gives pedestrians a greater sense of safety.

Buildings within a larger shopping center should be built close to the main circulation drive and emulate a streetfront condition, including streetscape amenities.

Corner sites have special design constraints and attributes. They should be designed with attractive front building facades along both street frontages. Sight lines for drivers should be maintained at the corner. Vehicular access to the site should be located a maximum distance from the corner or shared with an adjoining parcel.

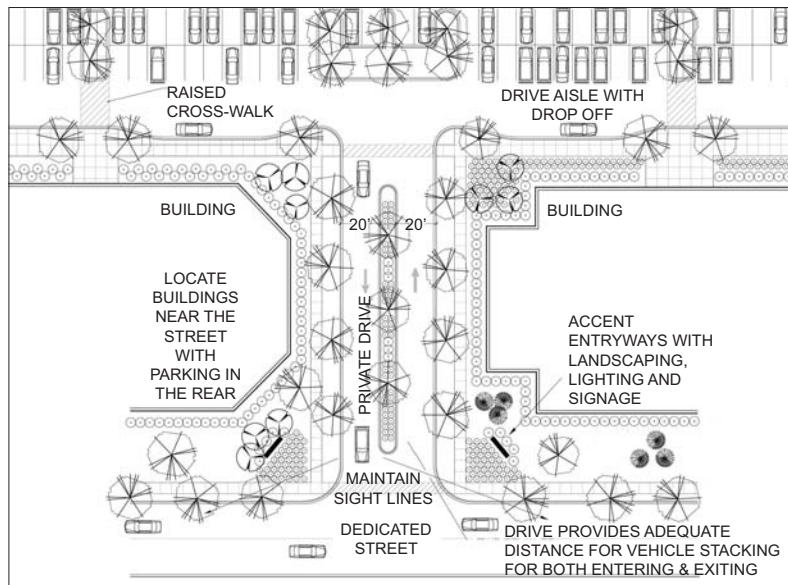
Images: Acceptable building orientation along street or drive.



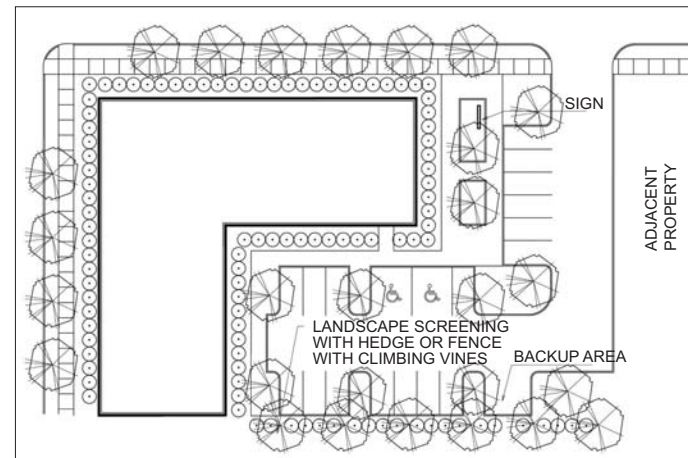
Corner site strategies.

1.2 Approaches to the Site

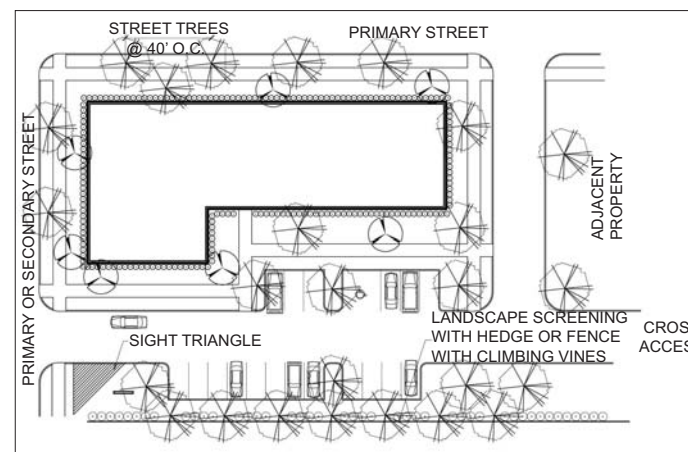
Approaches to a site should be planned to encourage safe movement both on-site and in the roadway. Main entrances should be easily identifiable through the use of architectural elements, landscaping, and signage. Views from all directions should be maintained. Turning radii should be appropriate to the land use - particularly on major roadways - to encourage the safe flow of traffic to and from the site. Once on the site, aisles should be located a reasonable distance from the road so that turning choices can be made without causing a potential back-up of cars into the public right-of-way.



Entry scheme featuring signage and boulevard drive with parking to the rear.



Scheme with parking to side and rear.



Scheme with parking to rear.

Images: Acceptable approaches to sites and buildings.



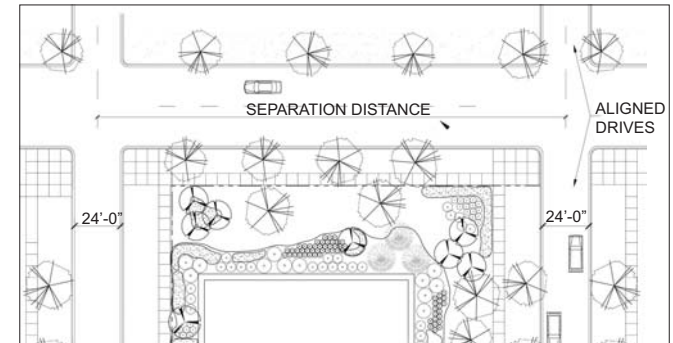
1.3 Driveway Separations, Alignment, and Sharing

All driveways should be located according to the minimum spacing requirements outlined in the Subdivision Control Ordinance, or the appropriate agency depending on the jurisdiction over a roadway.

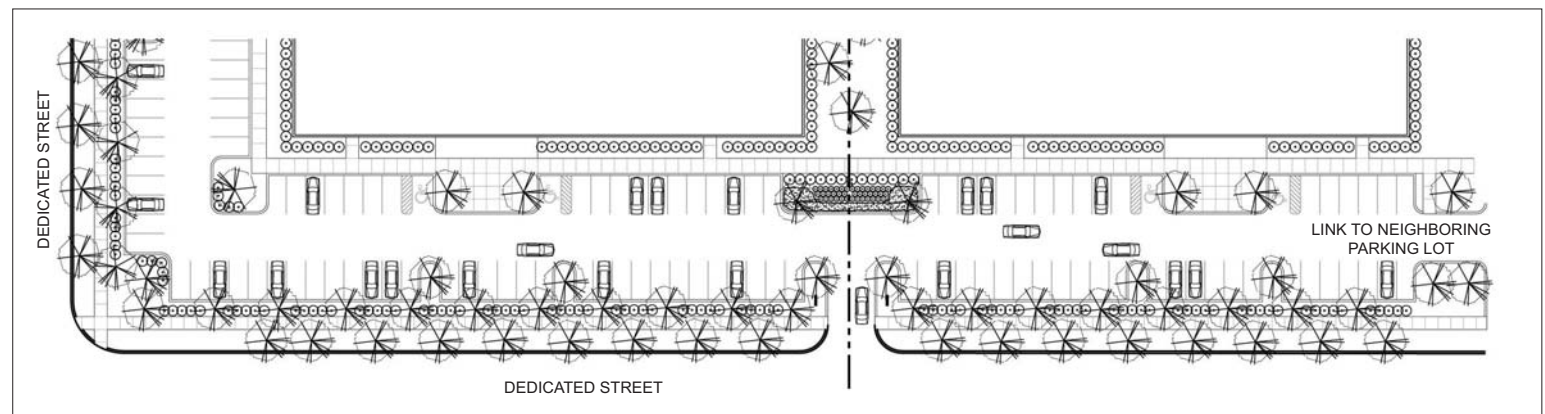
Driveways should align with those across the street and should be located a maximum distance from adjoining curb cuts and intersections.

Driveway locations should be proposed with strong consideration of adjacent or nearby drives.

Shared drives should be built into any project where possible. Shared drives increase the ability to locate building facades along the street, produce fewer conflicts with traffic flow in the roadway, and allow more efficient land use by reducing the amount of pavement provided by duplicate drives. Shared drives will require cross-access easements between adjacent sites.



Entry drive separation distance.



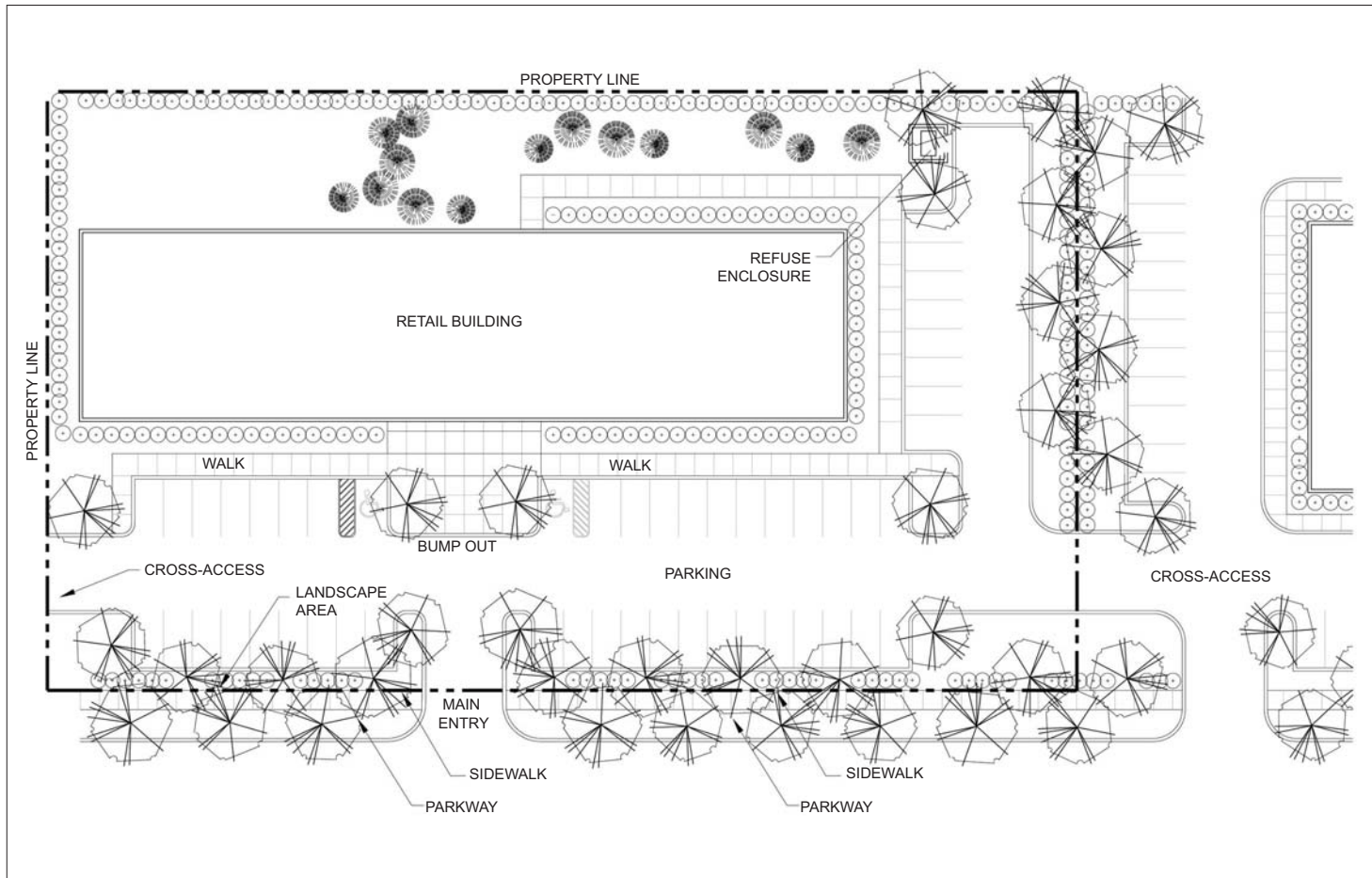
Shared entry drives minimize curb cuts and maximize safety.

Images: Top image shows problematic separation; bottom three show shared driveways.



1.4 Cross-Access

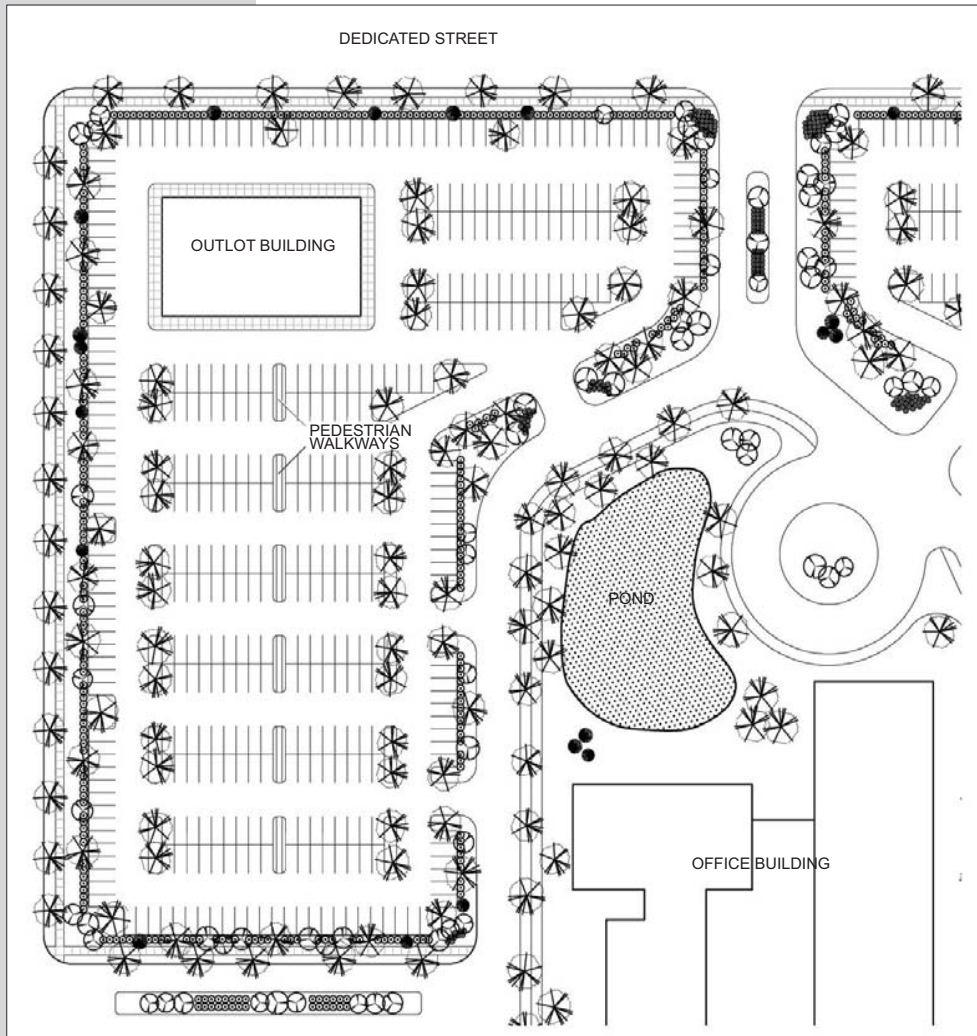
Cross-access should be provided between all adjacent sites, especially where patrons, employees, or other persons may visit both sites in the same trip. Cross-access greatly enhances site accessibility and promotes trips to adjoining sites that may otherwise not be made. Cross-access reduces conflict on the main thoroughfares which, in turn, lessens traffic congestion and increases the functional capacity of the roadway.



Cross-access linking sites.



Images: Examples of cross-access connection to adjacent properties.



Parking is shared between users of office building and business located on outlot.

1.5 Shared Parking

Shared parking opportunities exist when adjacent uses are complimentary or are likely to experience peak uses at different periods during the day. One example of this condition might include a hospitality/entertainment establishment adjacent to a bank or office building. Another example might be a restaurant adjacent to a large office building or within a shopping center that is likely to draw a large share of its patrons from the adjacent uses.

The benefit of shared parking is a reduction in the amount of pavement needed to accommodate both uses. In some instances, land banking of the reduced parking spaces may be a sound strategy, allowing for flexibility in the future. In either instance, Village approval for the reduction in required spaces will be necessary.

The layout of the parking lot should consider pedestrian and vehicular circulation for both uses rather than orientation towards a single use.

1.6 Parking Lot Vehicular Circulation

For proper circulation in a parking lot, avoid dead-end and single-loaded aisles. Eliminate jogs in aisle alignment to provide for safe vehicular circulation. Curbed landscaped islands should be provided at the end of all parking rows to protect the parked vehicles from passing cars, to provide areas for shade trees, and to facilitate safe maneuvering into and out of parking spaces. Refer to the Zoning Ordinance for placement and dimensions of landscaped islands.

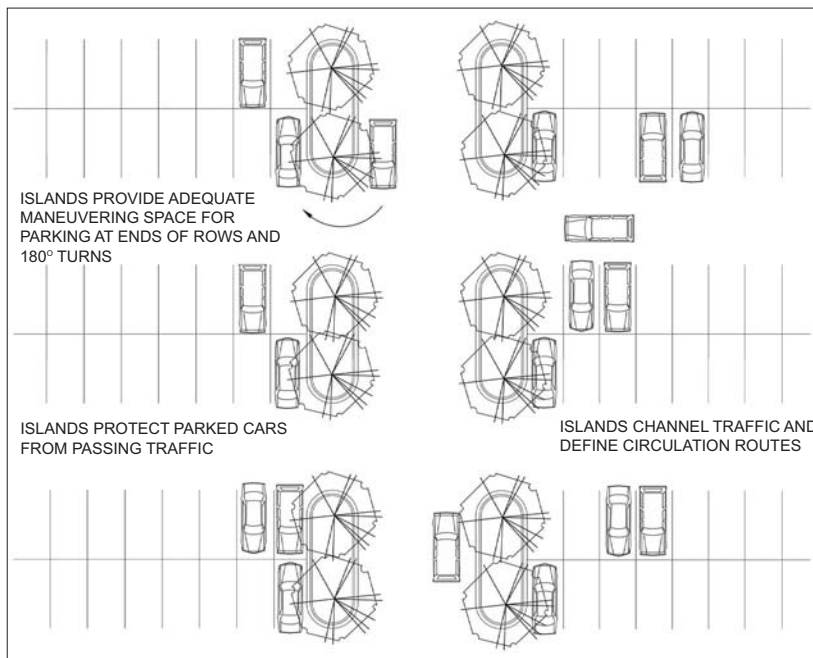
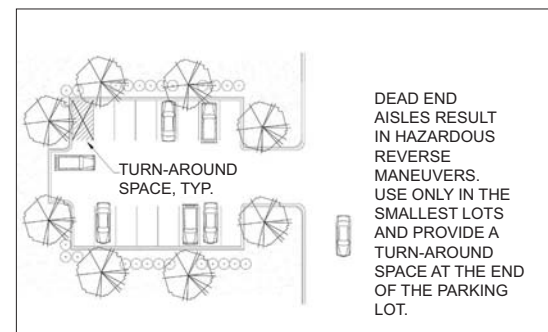
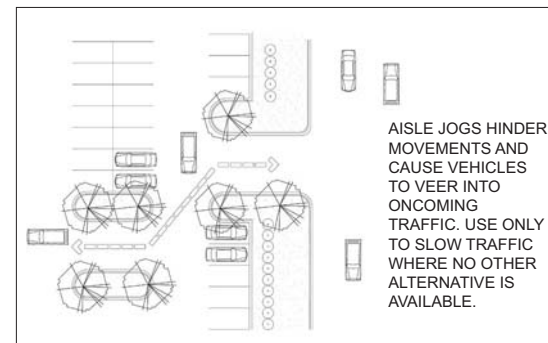
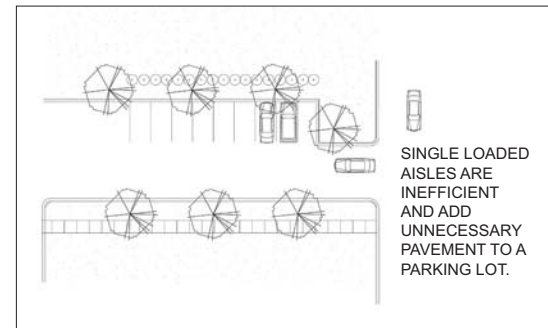


Diagram of recommended parking lot.

Poor Layout Strategies

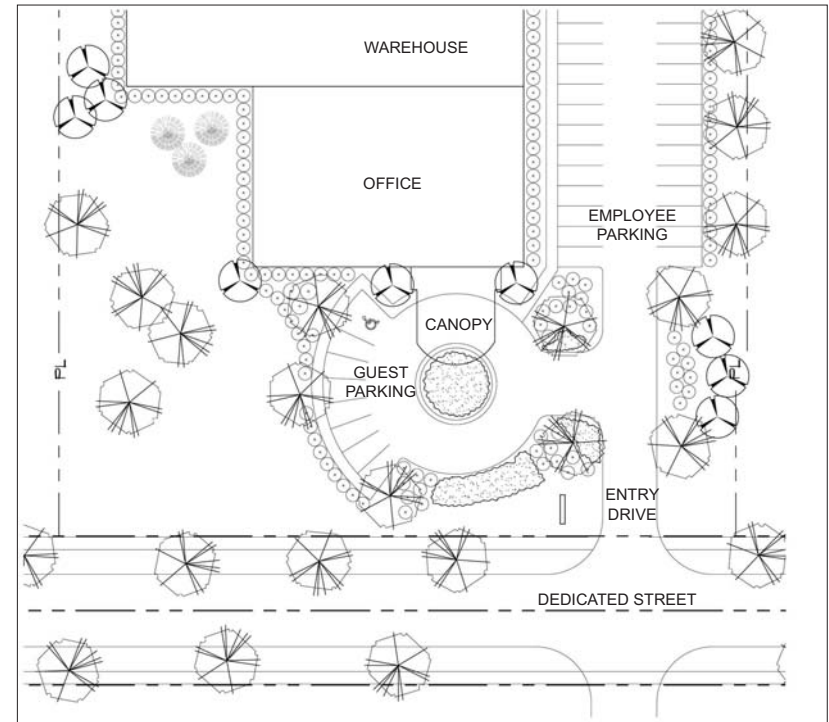


Images: Examples of successful parking lot vehicular circulation.

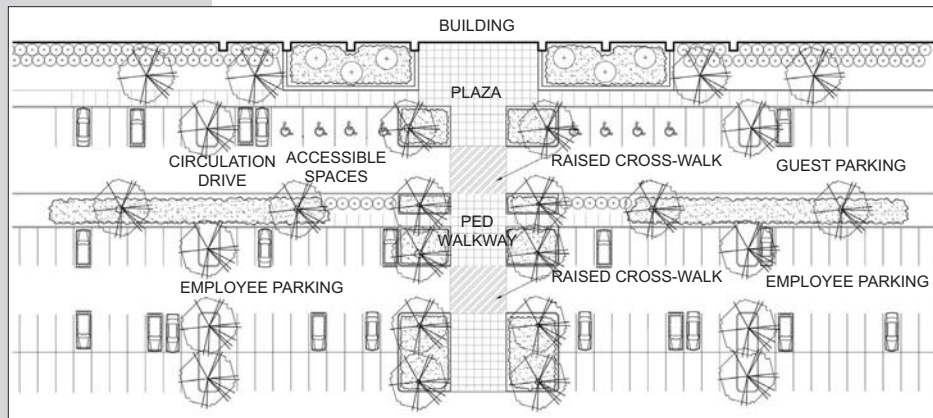


1.7 Location of Parking

Convenient parking for guests or visitors (pertinent mostly at office buildings and office/warehouse uses) should be located near the main entry of buildings. Guest and visitor parking areas should be easily visible from the dedicated roadway or from the internal vehicular circulation route. All other parking areas, typically for employees, should be screened or placed on the sides and rear of the site with treatments as prescribed by Village Ordinances.



Guest parking for office warehouse.



Guest parking for office tower.

1.8 Location of Loading Areas

All loading areas should be hidden from street view by the building and/or extensive landscaping. Berming and site walls can be used in conjunction with landscaping. Loading areas should be located at the side or rear of the building, separate from employee and visitor traffic.

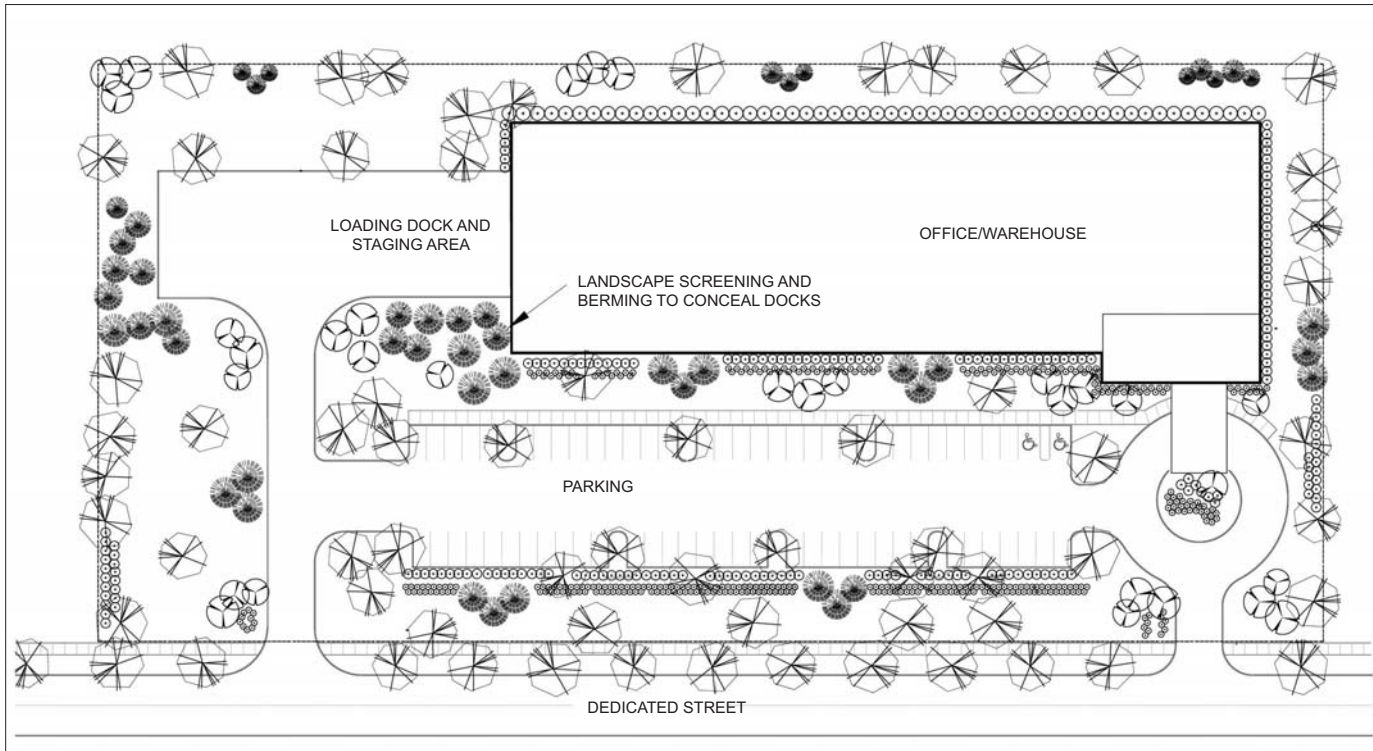


Diagram indicating optimum location for loading area.

Images: Examples of well placed and screened loaded areas.



1.9 Main Circulation Aisles and Pedestrian Safety

Circulation routes should be designed for efficient vehicular circulation and to ensure the safety of pedestrians who would otherwise be hidden by parked cars. On commercial sites, the main circulation aisle in front of the building can mimic a “streetfront” condition, increasing shopkeeper visibility.

During winter, snow storage can obstruct pedestrian circulation. Clearly defined pedestrian ways allow safe and efficient movement of pedestrians through the site.



Site lacking clear pedestrian route from parking.



Pedestrian path in parking areas.



Pedestrian path in parking areas.

Images: Acceptable vehicular circulation examples where pedestrian crossings have been provided.



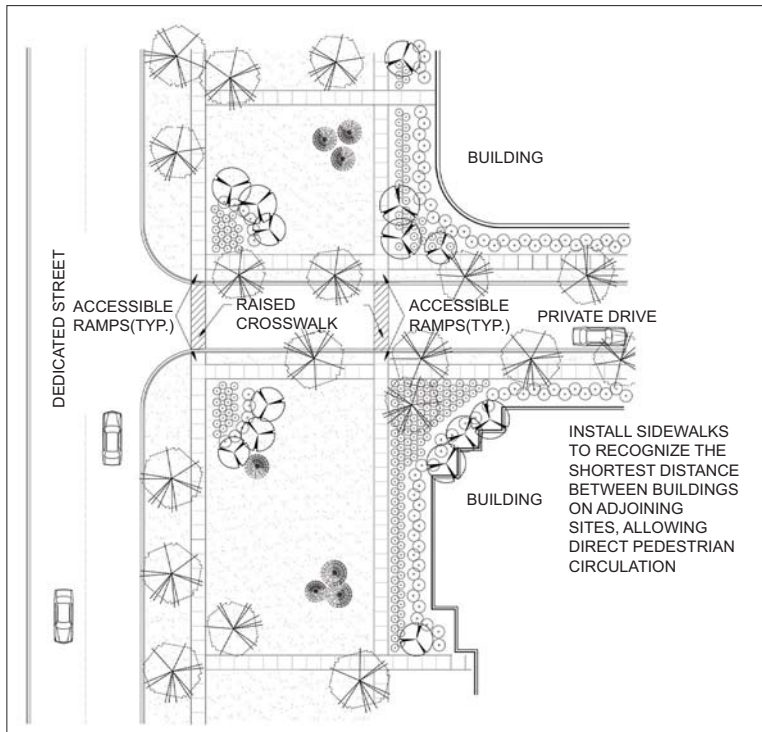
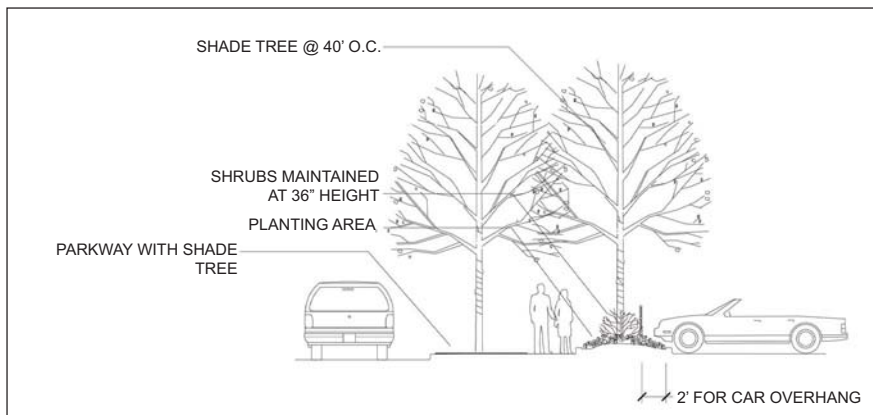


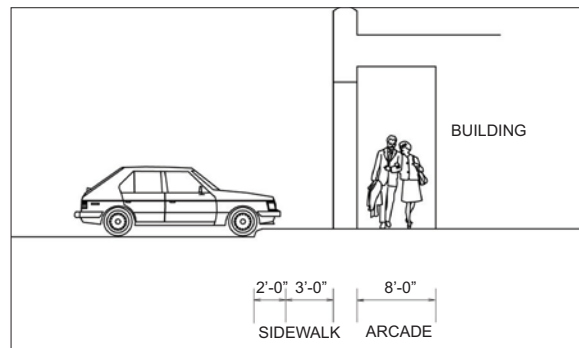
Diagram of walks in parkway and on-site.

1.10 Pedestrian Walkways

Emphasis should be placed on providing safe, comfortable pedestrian access to and among buildings. Projects should be designed to recognize the shortest routes between buildings, including those on adjoining parcels. Direct pedestrian routes should be installed in these areas. Pedestrian ways should be clearly delineated and physically separated, where possible, through the use of landscaping, grade separation, tabling at intersections and crosswalks, or the use of specialty pavement to differentiate pedestrian routes from areas of vehicular traffic circulation or other activities, particularly in extensive surface parking lots. Pedestrian bridges, elevated walkways, skywalks, and covered or enclosed walkways should be provided where necessary. Pedestrian walkways are required along all adjoining streets to, from, and within the property.



Cross section of public way and surface lot.



Arcade at buildings.



Images of pedestrian walkways.



1.11 Drop Off Areas

Allowing vehicular users to have an area to drop off and pick up passengers safely and efficiently is necessary, particularly in the retail and commercial areas of Woodfield Regional Center. The need is often most apparent at hospitality establishments, such as restaurants and hotels.

The most effective method allows vehicles to pull out of the main circulation drive while dropping off or picking up, minimizing disruption to overall vehicular circulation. Pavement striping and curb painting should accompany signage identifying the area as a no parking zone (and often the location of a fire lane). When a drop off area is in the location of a pedestrian access way (allowing safe passage for pedestrians from the parking area to the buildings), specialty paving or other method of traffic calming is advisable in order to minimize conflicts resulting from the variety of activities occurring in such an area.

Planning for the number of vehicles allowed to drop off or pick up passengers should be determined as a percentage of the total of anticipated users as well as typical user behavior. For instance, businesses providing valet service will require more space for pull-out than smaller, stand alone retail establishments.

Images: Drop off areas for a variety of building use.



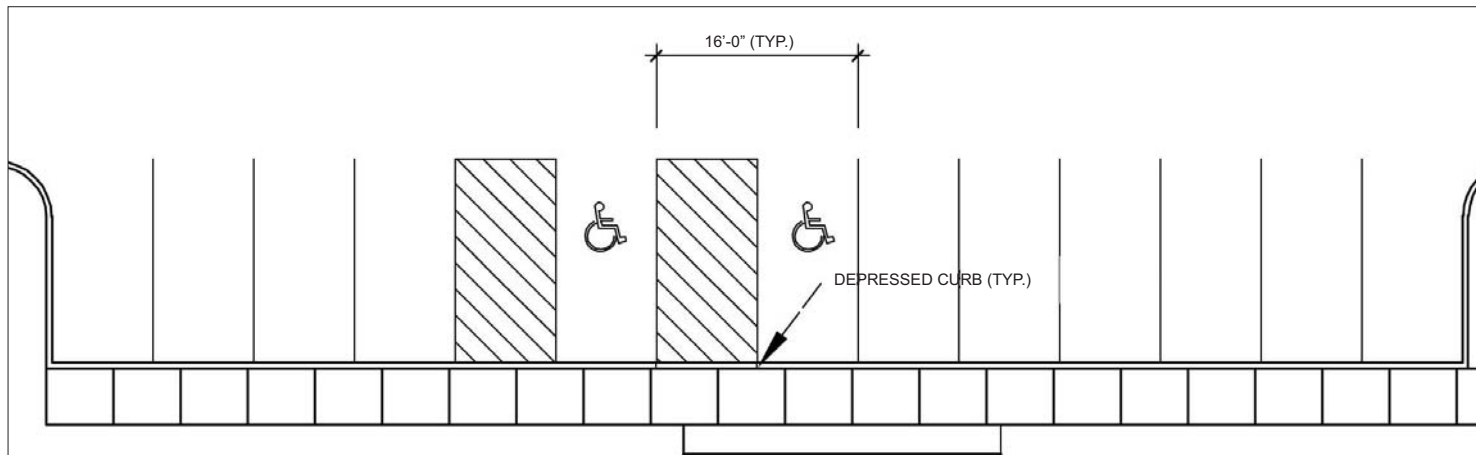
The drop off area has pavement marking and signage, and vehicles are protected by the adjacent bumpout.



An example of a drop off area that allows the vehicle to stay out of the circulation aisle.

1.12 Accessibility

Facilities to accommodate access to buildings and sites by persons of various ability should be furnished. Parking spaces should be located in close proximity to the main entrance, signage should be used to identify the spaces, curb depressions should be installed to permit access to and from parking areas, and ramps to the ground floor of the building should be provided. Tactile services should be installed wherever pedestrian walkways intersect with vehicular circulation routes.



Locate accessible spaces at building entry.



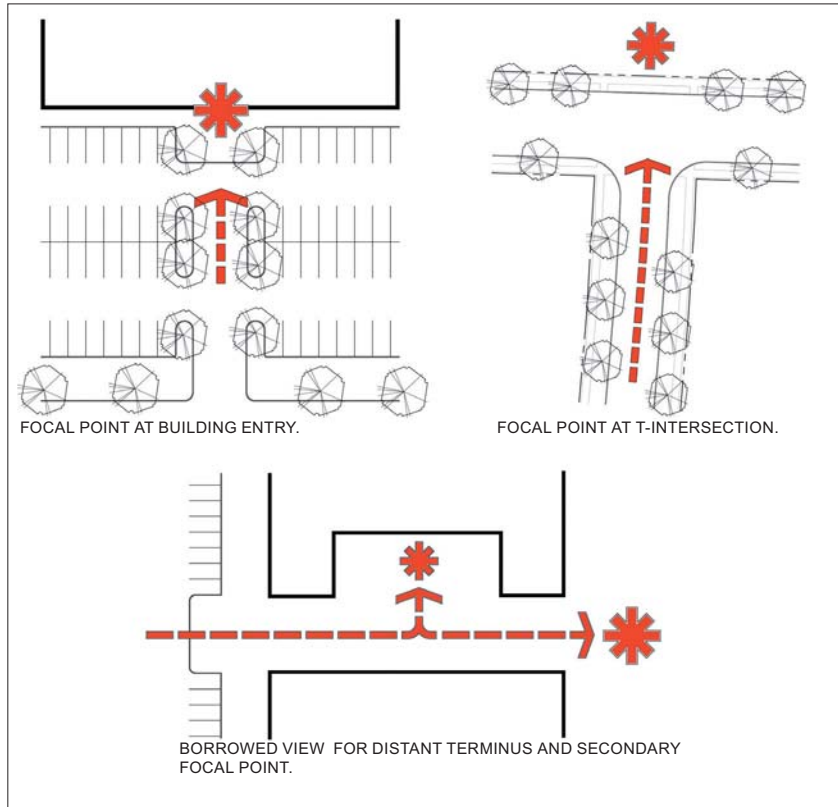
Tactile strip.



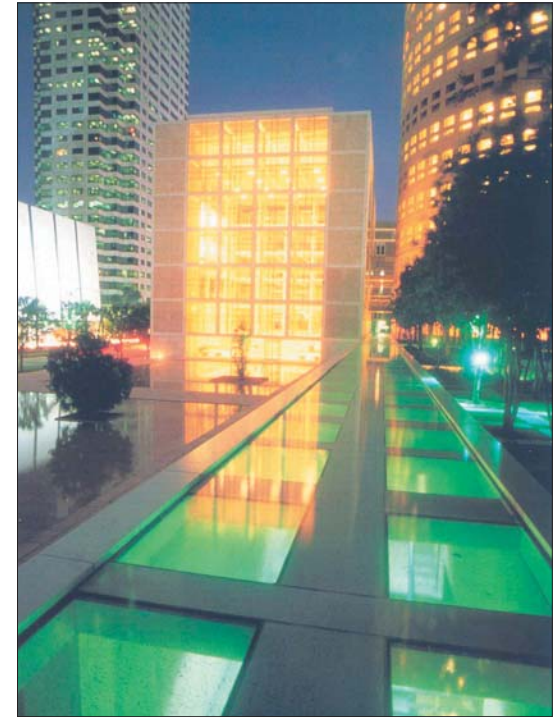
Images: Acceptable locations of accessible spaces.

1.13 Focal Points

Focal points such as buildings, building features, landscaping, or fountains should be provided at all T-intersections of both private and public roads to identify the end of the road and create a visual attraction.



Examples of use of focal points.



Example of pulling views through the site.



Borrowed view is a mix of desirable wetland view and less desirable interstate with power pole.

Images: Examples of the use of focal point as a terminus of a view.





Hardscape and landscape combine for a pleasant pedestrian environment.



Well designed landscape, once established, provides a strong setting for the building.

1.14 Landscape

The landscape program must be an integral part of every development. A portion of the plant palette should be composed of native species, and all nursery stock should be grown within the region. Ongoing landscape maintenance should let the plantings achieve a natural shape and appearance, unless a formal and controlled look for the landscape is the more appropriate design response.

- The front yard between the buildings and the public sidewalk should be designed with pedestrian activity in mind. Hardscape elements such as walks, walls, and plazas need to be incorporated with plant materials, including shade trees and understory plantings. The use of site furnishings and amenities, including fountains, benches, containers, and planters can enliven an outdoor space.
- Side yards between buildings should feature landscape treatments that visually tie adjacent buildings together and establish a continuity along the street frontage. Corner side yard situations deserve attention due to their visibility.
- Foundation landscaping should include a mixture of deciduous and evergreen trees and shrubs designed in a manner to accent architectural features and soften walls. Long stretches of walls or portions of walls devoid of articulation can be softened or screened with trees, shrubs, and vines, thereby calling attention to the more significant portion of the building's overall design.



Images: Acceptable landscape treatments for buildings, parking lots, and open spaces.



- Provide landscape screening for parking lots adjacent to rights-of-way to enhance the streetscape. The ordinance also requires the use of landscape islands with shade trees to minimize heat gain experienced in urbanized conditions.
- Landscape treatments for parking deck structures are critical and should be prescribed in a manner to conceal glare and objectionable views as well as to enhance the stronger design features of the building.
- Existing trees and other natural features should be given high priority in site development, and creative building design should be used to preserve existing vegetation, waterways, slopes, wetlands, and similar features wherever present. In particular, preserved existing trees provide landscaping which is instantly more in scale with a proposed building and promotes a sense of place.



Use of vines and landscape minimizes blandness of facade.



Existing tree has been preserved despite extensive regrading.



Expanse of hard surface and lack of trees make the space appear uninviting.

Images: Acceptable landscape treatments for buildings, parking structures and open space that create an inviting and attractive outdoor space.

1.15 Stormwater Management

Stormwater management facilities, including detention and retention ponds, gather the runoff from sites during storm events. Stormwater is held in these facilities and slowly released, minimizing burden to the carrying capacity of storm sewers and area streams. Often when a site is being redeveloped, opportunities for open basins do not exist. Runoff is then conveyed to underground storage pipes, which will release slowly to the storm sewer system. Stormwater management facilities are required by ordinance.

Ponds can be sized for individual sites, or if properly located and sized, they can handle the runoff from numerous sites. Larger facilities are more efficient and better serve associated objectives of provision of open space and wildlife habitat. Basins can be either dry bottom or wet bottom and typically maintained as mown turf or, to varying degrees, planted in native wetland species. Stormwater management facilities that are larger and incorporate wet-bottoms with native species are encouraged, for they result in less maintenance, are more efficient than single site basins, offer better opportunities for cleansing runoff, reduce overall runoff, and often offer enhanced recreation and wildlife value.



Larger detention; also provides recreation space.

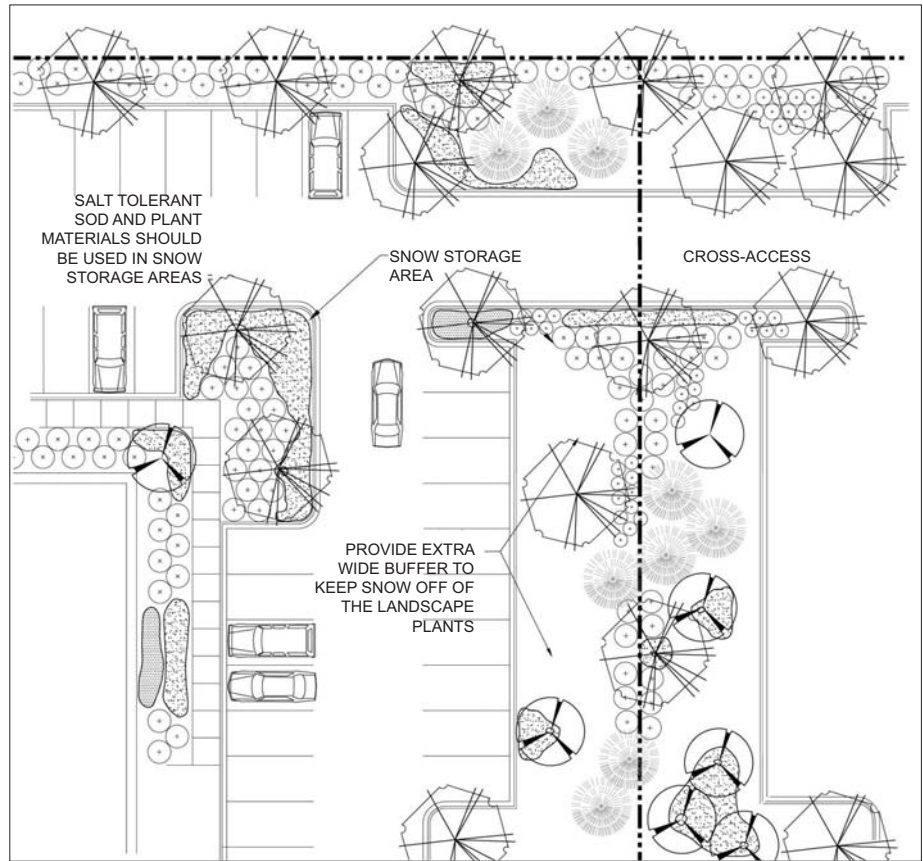


Single size, smaller detention basin.

Images: Detention areas of various size with acceptable landscape treatment.

1.16 Snow Storage

Areas should be provided for snow storage that do not interfere with pedestrian or vehicular movement. The storage areas should not be located along a common property line.



Locations for snow storage on a site.



Refuse enclosure augmented with plantings.

1.17 Refuse Enclosures and Cart Corrals

Refuse enclosures are to be built of masonry or a material consistent with the main building, and where possible and appropriate, should be designed to appear part of the building. Where appropriate, landscaping shall also be provided.

Businesses that use shopping carts often have an excess quantity of carts that cannot be kept within the building during business hours. In those instances, the Village strongly encourages the development of a corral that minimizes views of cart storage.



Corral for shopping carts.



Open refuse enclosures are not permitted.



Images: Acceptable examples of well designed refuse enclosures and gates.



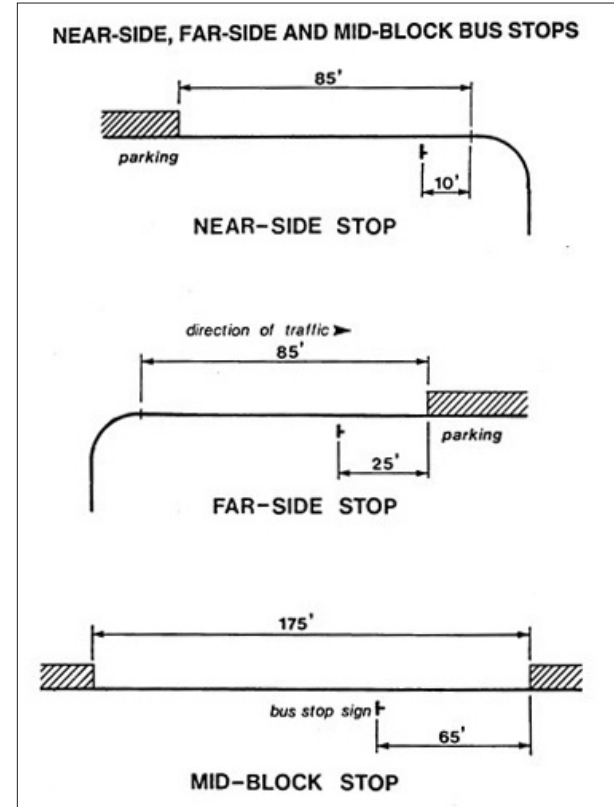
1.18 Transit Stops

All developments should provide a public area to accommodate any future transit stops that may be required. Transit stops serve as major pedestrian gathering areas. Safety and aesthetics should be promoted to further encourage use of transit in the WRC. Decorative paved areas, windbreaks, lighting, glazed enclosures, landscaping, and trash receptacles all increase the comfort of transit users.



Village Transit Center.

Images: Acceptable transit shelters.



Pace bus shelter siting template.



Site furnishings enliven facade.



Outdoor gathering area offers amenities for employees.

1.19 Site Furnishings

Site furnishings typically include benches, trash and ash receptacles, containers and planters, bicycle racks, and other elements that enliven the outdoor spaces. Designers often must assemble an array of site furnishings from disparate manufacturers. The visual success of this assemblage relies on how well the individual elements perform as an ensemble and how compatible they are with the design of the building. Site furnishings must also be chosen with an eye toward durability, vandal resistance, comfort, and sustainability.

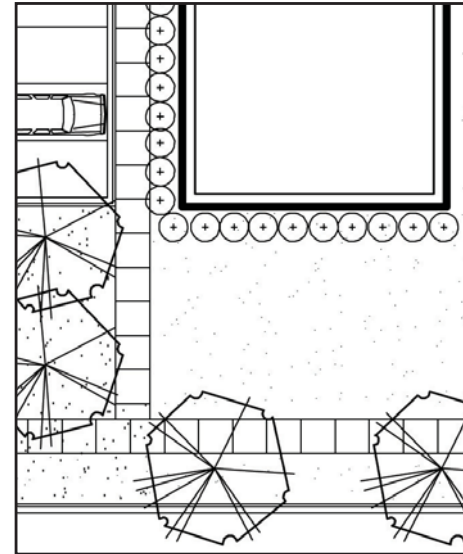
- Choose lighting fixtures, signage, and other site furniture that compliment the architecture of the building and carry the same design scheme throughout the site or development. Directional signage with a similar design, for example, used throughout an area enables users to readily become acquainted and comfortable moving about the site.
- Provide bike racks in a convenient location near the entrance to buildings to which employees, visitors, or patrons may eventually bike. Sites located along a bikeway should consider the installation of rest stops with seating areas, refuse receptacles, drinking fountains, and similar amenities for the cyclist.
- All satellite dishes and antennas should be located in the most inconspicuous place on the site. Satellite dishes should not be visible from the roadway. Dishes should be screened to the maximum extent feasible and be painted a natural or earth-tone color to blend into the surrounding landscape.



Images: Streetscape kit of parts with elements from different manufacturers, yet sharing consistent design vocabulary.

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Individually admirable buildings may clash when viewed together.

2.1 Context

Throughout WRC, buildings with a certain use are adjacent to buildings of different or dissimilar uses. The design of a given building, even if proper for its type, may have its appearance compromised by that of its neighbor, particularly if the neighboring structure is larger, or more imposing.

New buildings should take into account, respect, and improve on the architecture of adjacent buildings in height, massing, style, composition, color, and materials. The materials should be compatible with the neighboring buildings in general character, color, and texture.

The site plan should respect the general site characteristics associated with the neighboring buildings, except in instances of older parts of the WRC where these *Guidelines* propose a different approach, such as building placement or orientation.

Within the WRC, shaping the streetscape is as important as shaping an individual building. The emphasis should focus on ensembles of buildings creating edges of streets as much as on the building architecture.

Landscape design for new buildings and sites within the WRC should, in a similar fashion, take into account the existing landscape treatments on neighboring parcels. Buildings and landscapes should harmonize to create an attractive walkable environment on each site and between neighboring buildings.

Petitioners are encouraged to provide picture boards of adjacent parcels during dialog with Village Staff at the onset of a proposed development to illustrate how the design will respond contextually.



Images: Examples of buildings appropriated in context with neighboring buildings.



2.2 Branding

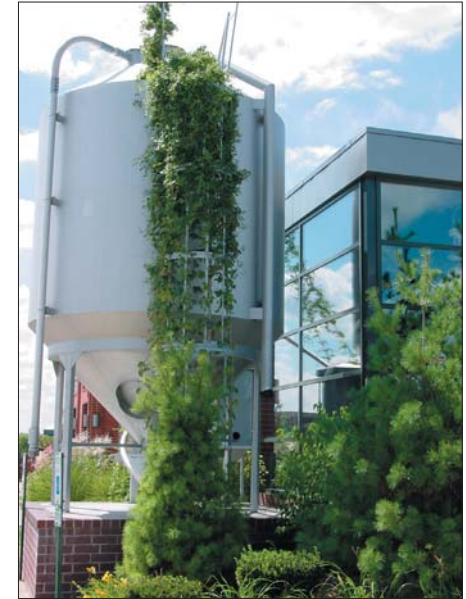
Most businesses are concerned about how they are perceived by the public. The incorporation of branding has become part of the design process to the point where the entire building becomes, in essence, the message.

Within the WRC, the limits and extent of branding need to be carefully controlled. There will always be opportunities to allow branding within the building design; however, it must be incorporated in concert with sound design and quality materials.



Building shape and color allude to the business name.

Images: Acceptable use of logo and branding on building facade.



The use of the brewing vat with hops vine is a unique approach to branding.



Logo and alignment are key design elements.



Building with a defined base, middle, and top.



Building lacking a defined corner, middle, and top.

2.3 Design Expression

The design of the building should be an expression of its use. Building design should emphasize the distinction between front, sides, and back of buildings. Generally, buildings should have a base, middle, and a top. This is especially critical in taller buildings of five stories or more. Similarly, a building should feature a distinct and defined corner, middle, and top.

If the design is meant to pursue a response based on a certain architectural style, the use of proportion and scale, as well as the use of materials consistent with the original architectural style that is being emulated, is of critical importance. The design will be successful if a disciplined approach to order and proportion is followed. In this manner, an “honest” building can be achieved.

Although contemporary shapes and materials are encouraged for buildings within the Woodfield Regional Center, garish and flashy design is to be avoided.



Images: Acceptable examples of buildings where design expresses use.



2.4 Entry

The building entry is, perhaps, one of the most important aspects of the building design, and plays an integral role in how it is perceived. When users enter the site and approach a building, the location of the entry should be obvious.

The entry should be articulated in such a way that it sends a message to users and viewers about the mission and function of the building, its proprietors, and its services. The entry is often enhanced when designed to be part of a horizontal and/or vertical projection on buildings of one to three stories. Taller buildings should articulate the entry as part of the base portion of the structure (see 2.3 *Design Expression*.)



Entry feature is an attractive part of the building.



Entry is unattractive and difficult to find.

Images: Acceptable examples of prominent building entries.



Depth and shadow enrich the facade.



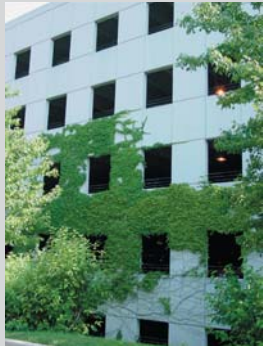
Articulation is too flat to create depth and shadow.

2.5 Facade

The articulation of the building facade and its ability to create visually interesting forms is highly important. As discussed within the sections on walls and windows, the rhythms and dynamics that become evident by design are very important for buildings within the WRC. Walls need variation in height and alignment. Windows allow users to understand the message of the building, its use, and to establish a visual order in the façade. Viewers and users respond well to a building that has an articulated façade as it sends a strong message of quality. The depth of façade projections and recesses, as well as fenestration openings need not be overly large, however they do need to be substantial enough to allow for the play of shadow and light.



Images: Acceptable examples of well articulated facades.



2.6 Walls

Supplementing the section of the *Design Guidelines* addressing materials, this section on walls looks at the composition of the fabric, or skin, of a building.

The use of hard, durable materials at the first floor is encouraged as a reinforcement to the objective of using quality materials. This accomplishment sends a message to viewers about the building and the business venture housed within.

As a design technique, it is effective to break up walls between the first and third stories, using windows, articulations, pilasters, reveals, or other details to create light and shadow and to enliven the building appearance where most people view a structure.

On larger buildings, walls should be stepped in and out along their length to minimize a monolithic appearance of the walls. In the recesses established by the stepped-in portions, plant materials may be clustered to soften long expanses of walls and to reinforce the change in position. In concert with articulation, this treatment can enliven long walls.

This treatment is especially necessary on big box commercial structures and larger commercial and strip retail.

Images: Acceptable building wall examples showing variety in color, material, and fenestration.



Curtain wall system employing rhythm, color, repetition, and proportion.



Building wall lacking articulation.



Exterior shapes add visual interest to precast wall.



Wall lacking sufficient articulation.

2.6 Walls (cont'd.)

Within the office/warehouse category, most, if not all, of the warehouse portion is often hidden from view, or the emphasis is centered on the office portion of the building. In these cases, less detailing is permitted if the walls are not visible from the street or from public parking.

Blank or non-articulated walls are discouraged. All walls must have fenestrations, and the liberal and ordered use of windows. The depth of the window opening allows shadows to enliven exterior appearance.

For curtain walls, mullion projections (2"-2 1/2") are an effective way to reduce the flat appearance of, and give definition to, many curtain wall applications. This is also appropriate for window, wall, and storefront applications.

Trees, shrubs, vines, flower boxes, and planters should be key design elements, and thoughtfully placed with the overall building appearance in mind. Landscape treatments should frame the more richly detailed portions of the building and, conversely, act to screen or reduce views on more functional portions of the facade.

Parking garages should be clad in the primary materials of the main building in order to reinforce the relationship between the two types of structures. The arrangement of the fenestration of the parking garage walls should complement the patterning and order of the main building.



Images: Building wall examples showing variety in color, material, and fenestration.



2.7 Windows and Openings

Windows are essential elements of buildings, allowing light and ventilation to occur as well as providing exit opportunities in emergencies. The Design Guidelines address the role of windows from the standpoint of their contribution to building design. Design and placement of windows on buildings within the Woodfield Regional Center should consider the following goals:

- Fenestration should be appropriate in size and placement to the style of architecture.
- Operable windows are encouraged where appropriate.
- Windows at the first two floors should be clear, no matter the building use, particularly if pedestrian traffic can occur within close proximity. The use of reflective glass windows is strongly discouraged unless appropriate for the architectural design.
- Properly positioned awnings can enliven the usage of windows and is appropriate for certain building types. Awnings can also provide signage and identity for retailers.
- Sunshade devices are effective and a component of many green design strategies. Consideration of scale, proportion, and material are important so that the design integrity is maintained.
- Decorative grills are often most effective for use in the punched openings in non-conditioned parking structures, effectively reducing ceiling light glare.

Images: Acceptable examples of windows that enliven a building facade.



Punched windows provide visual contrast to full size windows below.



Reflective glass is discouraged.



Hipped roof sends a message of quality.



False facades are discouraged.

2.8 Roofs and Rooflines

Roofs and rooflines within the WRC are perceived from two different viewpoints – up close and far away. Viewed from close-up, the materials and the color of the roof are readily apparent, as is the integration of the building and roof. Viewed from further away, on arterial roads and highways, the individual roofs blend into an overall view that affects the perception of the building and the WRC as a whole. Proposed development projects within the WRC should keep the following objectives in mind:

- The tops of taller buildings (those over five stories) should terminate in a manner which contributes to an attractive skyline. Angled, peaked, or varied rooflines rather than flat roofs should be used.
- No mansard roofs should be used except on residential buildings, and even then the design effort should be particularly sensitive to their use, materials, and proportion.
- Dormers, skylights, and clerestories enliven a roof's appearance and are encouraged.
- False facades and rooflines are discouraged.
- Cornices should be emphasized.



Images: Acceptable roof design examples.



Multiple levels enliven appearance of a flat roof building.



Office section of office/warehouse often provides opportunity for unique roof element and treatment.

Images: Acceptable roof design examples so that it blends with the overall building design.

- Flat and gently sloped roofs are appropriate on offices/warehouses, commercial/strip, and big box buildings. In the case of taller office buildings, the roof design is a critical design issue (see 2.3 *Design Expression*).
- Overhanging roofs are encouraged as they create shadow patterns on buildings and, in many instances, improve a building's thermal performance.
- Weather protective overhangs, such as canopies, awnings, and arcades, should be used for building entrances, waiting areas, transit stops, main pedestrian routes or activity areas. These overhangs should be designed for compatibility with the building's design.
- Mechanical systems should be integrated into the roof design. If a penthouse design to house a mechanical system is pursued, the mechanical screen should be clad with primary materials from building palette.
- Green roofs as discussed in *Section 3.0 Green Building Directions* are encouraged.



Clocks enliven a space; however, they must always show correct time.

2.9 Ornamentation

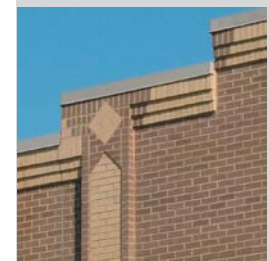
Ornamentation on buildings is a design aspect that must be applied sensibly, with an eye towards the mission of the business enterprise. It should be applied judiciously, for there can be too much ornament, or ornament that is out of scale or irrelevant. Finally, ornament is most effective when it references the mission of the business enterprise. The use of ornamentation on buildings within the Woodfield Regional Center may be encouraged, provided that it is used with an eye towards scale, proper use of materials, and thematic relevance.

As an architectural element, ornamentation may take several forms. Typically, they are permanent, although ornamentation may be temporary or perhaps seasonal. Some of the ways in which ornamentation may be used in building design include:

- Finials, dentils and other appurtenances.
- Medallions placed in walls, columns, lintels, and the like can add liveliness to a building façade.
- As an integral part of building elements such as structural elements, lighting, signage, and the like.
- Murals, or painted, textured facades.



Articulated doors and transom are inviting.



Images: Acceptable examples of ornamentation incorporated into the building facade.

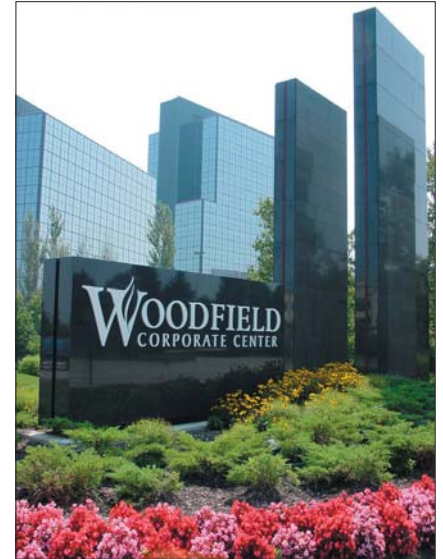


2.10 Signage

The Village of Schaumburg has a Sign Ordinance that regulates the type of activity displaying the sign and its type, area, height, location, and design. These regulations are necessary to enable the public to locate goods, services, and facilities without difficulty and confusion, while maintaining a high level of attractiveness and protection of property values. The ordinance seeks to promote the reasonable, orderly, and effective display of signs, thereby encouraging increased communication with the public. The ordinance also seeks to restrict the display of signs and lights which overload the public's capacity to receive information, or which increase the probability of traffic congestion or accidents, and to reduce conflicts among signs and light, especially between public and private environmental information systems. More restrictive covenants and restrictions of a shopping center or business park may supersede village ordinance.

- Use low-profile signs, which are compatible with the design of the building and the site for all office and industrial uses.
- Design freestanding retail, hotel, office, service, and entertainment signage as monument type signs. The signs should compliment the architecture of the building and be located a maximum distance from adjoining signs.
- Wall signs should be integrated into the façade design and/or landscape design to contribute to the site's attractiveness.
- Shopping center outlots will obtain better visibility and identification from the signs on buildings rather than freestanding signs. Covenants restricting freestanding signs on these lots should be recorded when the shopping center site plan or amendment is approved.
- Signs should be designed and placed to avoid conflicts with existing and proposed trees within the parkway or on-site in order to maximize visibility.

Images: Signage and monumentation.



Signage reflecting building design.



Cluttered signage readability is difficult.



Unique materials send a handcrafted message.



Multiple materials working in concert.

2.11 Materials

The Village has consistently encouraged buildings in the WRC to use high quality materials. Desirable materials have typically included stone, masonry, articulated and stained precast concrete panels, glass, and metal panels. Certain materials are appropriate to certain design styles and the Village encourages design processes to be cognizant and respectful of this aspect.

Materials that are encouraged for use in lesser amounts (as trim or infill panels), or perhaps at higher elevations on a building façade, could include cast stone, wood, terra cotta, porcelain tile, metal panels, and exterior insulation foam system (EIFS). The use of EIFS on the first story or on the building's base is strongly discouraged. EIFS should be used only in limited amounts as an accent material and where appropriate architecturally. For example, EIFS could be used to accentuate bump outs or recessed areas along a building wall. Large expanses of EIFS are strongly discouraged.



Images: Acceptable examples of the combination of materials enriching a building facade.



2.12 Colors

Generally, neutral colors on building exteriors are favored, although portions of the building providing splashes of color are sometimes necessary. It is understood that color by itself, or in conjunction with form or texture, may be part of branding. However, the use of solid colors should be broken up with the use of neutral colors. These neutral colors should be the softer colors of the preferred building materials. The color contrast between materials (glass, frames, doors, walls, and surfaces) should generally be minimized. The use of glass on buildings should tend towards clear or lightly tinted glass. The use of reflective glass is strongly discouraged.



Primary colors against the background pulls in the viewers' eye.

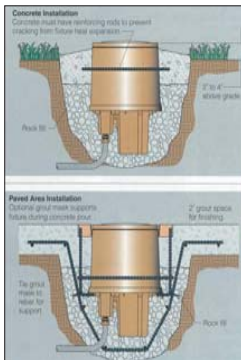


Stripe references a corporate logo.

Images: Use of color on buildings.



Steplighting.



Uplighting.



Floodlight.



Bollards along drive.

2.13 Lighting

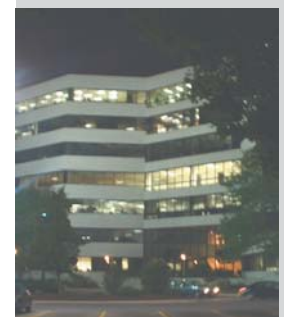
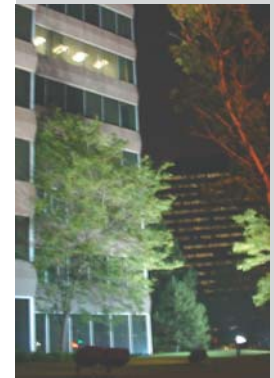
The design process should consider the appearance of the building after dusk.

Skyline lighting should be provided on all buildings over one hundred feet or ten stories in height. Lighting will tie the WRC together in the evening, helping to create a sense of place, and adding excitement to the area.

Facades should be illuminated with accent lighting. Accent lighting on buildings can be accomplished through flood lighting and spot lighting. Accent lighting should highlight the key design aspects of a building and should be restrained in its application.

Bollards and other types of fixtures are commonly associated with landscape lighting, however they can be effectively teamed with accent lighting to help users navigate a site during darkness.

Metal halide typically provides a broader spectrum of light than sodium vapor and both are more efficient than incandescent fixtures. Fiber optic systems do not provide significant measurable amounts of light, however they allow creative solutions, are long lasting and economical. Low voltage systems should be only used in landscaping situations.



Images: Acceptable examples of exterior lighting of buildings.

2.14 Drop Boxes and Newspaper Vending

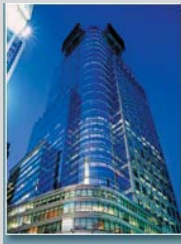
Where necessary, provide a corral for newspaper stands, mailboxes, and private letter carrier boxes. These should be located near the main entrances of a building, in places where people gather, or adjoining a drop-off or pull-off lane.



Vending racks organize newspaper sales and allow for advertising. They are preferable over the clutter of individual vending boxes.

3.0 Green Building Directions
3.1 Green and Sustainable Design





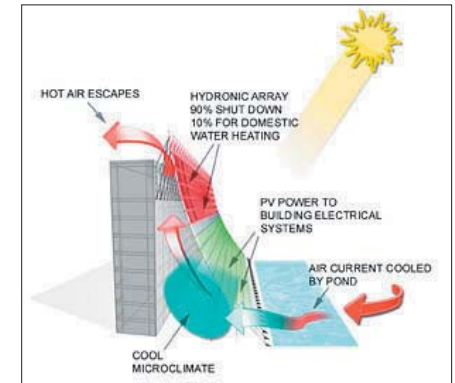
3.1 Green and Sustainable Design

During the 1990s and the early part of this century, a new way of thinking about building design and construction has been developing. This trend is often referred to as “green building design.” Essentially, it is the incorporation of design principles and strategies that limit energy demands of buildings and establish a healthier environment within. Further, this strategy mandates the use of recycled materials or materials that require the least amount of energy to produce. Currently, Department of Defense agencies, as well as many municipalities require developers to follow an approach that demonstrates adherence to the standards of green building design. The LEED (Leadership in Energy and Environmental Design) Green Building Rating System™ qualifies and quantifies these standards. LEED is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council representing all segments of the building industry developed LEED and continue to contribute to its evolution. LEED standards are currently available for:

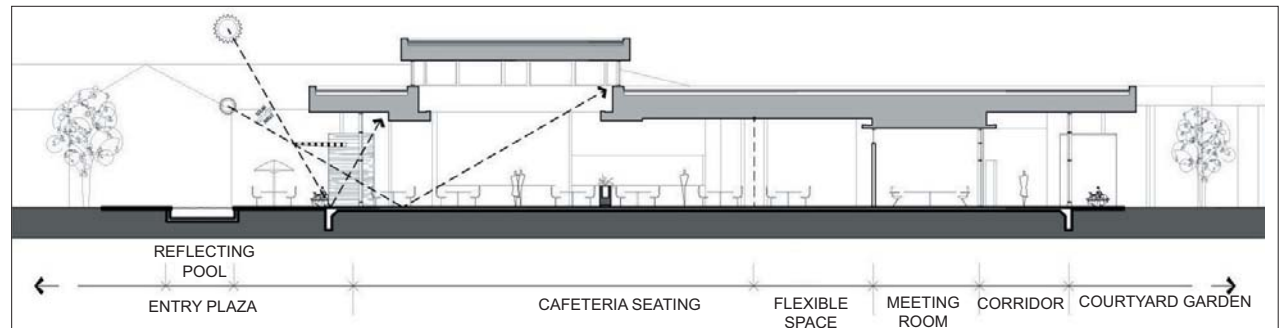
- New construction and major renovation projects (LEED-NC)
- Existing building operations (LEED-EB, Pilot version)
- Commercial interiors projects (LEED-CI, Pilot version)
- Core and shell projects (LEED-CS, Pilot version)



Photovoltaic array on walls.

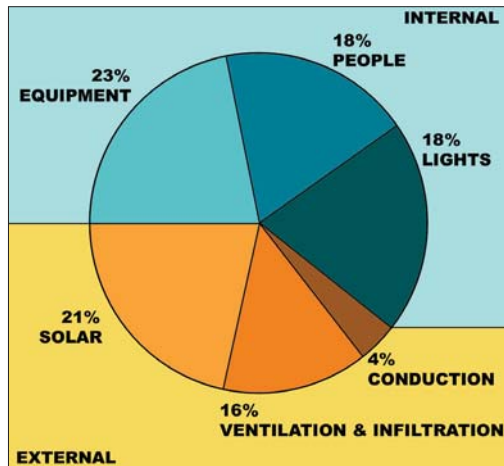


Cooling and heating schematic diagram.



Cross section showing daylighting strategy.

Images: Examples of green building daylighting, green roofs, and energy generation.



Representative peak cooling loads for an office.

LEED provides a complete framework for assessing building performance and meeting sustainability goals. Based on well-founded scientific standards, LEED emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. LEED recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources. Some of the more common green building design elements currently being employed would include:

- Green roofs
- Reflective white foofs
- Using locally fabricated material
- Interior air circulation quality
- Permeable paving
- Construction waste reduction
- Maximizing daylighting
- Use/reuse of recycled materials
- Passive heating and cooling
- Stormwater harvesting
- Landscape to reduce thermal demand
- Energy use assessment/documentation

Currently, the Village of Schaumburg does not have standards relating to green building design, nor has LEED certification been proposed as a requirement for developers. However, the Village of Schaumburg does encourage these strategies to be pursued for, at the very least, this practice can reduce building costs and ongoing maintenance costs as well as maximize the quality of conditions experienced within buildings. Developers, builders, and design professionals are encouraged to become thoroughly familiar with the green building discipline and can begin by investigating the following websites:

- <http://www.usgbc.org/>
- <http://www.sustainable.doe.gov/>
- <http://www.sustainable.doe.gov/>
- <http://www.energystar.gov/businessimprovement>



Reflective white roof.



Images: Shading devices, daylighting, and solar panel development.

Low-energy design and renewable energy at the Cambria Office Building

Site Selection & Orientation

The building is oriented on an east-west axis to take advantage of north-south solar exposures and minimize east-west windows. Small deciduous trees planted along the south side of the building help reduce a potential heat island effect, as heat emanating from the buildings and pavement can change the temperature in the surrounding area. To further protect the surroundings, the design limited the clearing of vegetation to minimal distances from the building perimeter. The designer also used pervious paving, which allows water to permeate it in order to recharge ground water and reduce storm water runoff. Building designers chose cut-off fixtures to cast light downwards and low wattage lamps for parking areas. This reduces power usage and reduces light pollution.

Daylighting & Lighting

Innovative light shelves on south-facing windows reflect natural light deep into interior spaces while at the same time shading lower windows from direct sun, reducing cooling loads and glare. Integral roof overhangs shade second floor south-facing windows. Reflective ceiling tiles—made from mostly recycled material—increase lighting levels. Daylighting is combined with overhead dimming light fixtures for ambient lighting. Occupants have access to task lighting in work areas. The lighting scheme reduces electrical energy use and cooling loads.

Energy

The building's utility bills are predicted to be low in part because it was designed with a highly efficient thermal envelope. Exterior walls are made from R-30 insulated concrete forms. High-density fiberboard roof decking laminated with an interior reflective surface and four inches of rigid insulation provide a composite roof insulation of R-33.

Premanufactured aluminum-clad wood, triple-paned windows filled with argon gas and coated by a low-emissivity (low-e) coating provide a full-unit U-value of 0.29. Low-e coatings are thin transparent layers of metal oxide that cover glass to suppress

radiative heat flow. Raised access flooring provides an under-floor supply air plenum for displacement heating and cooling through floor-mounted diffusers.

A ground source heat pump (GSHP) provides heating and cooling as well as domestic hot water. A GSHP was selected based on simulations and evaluating criteria, such as lowest operation cost and net present value.

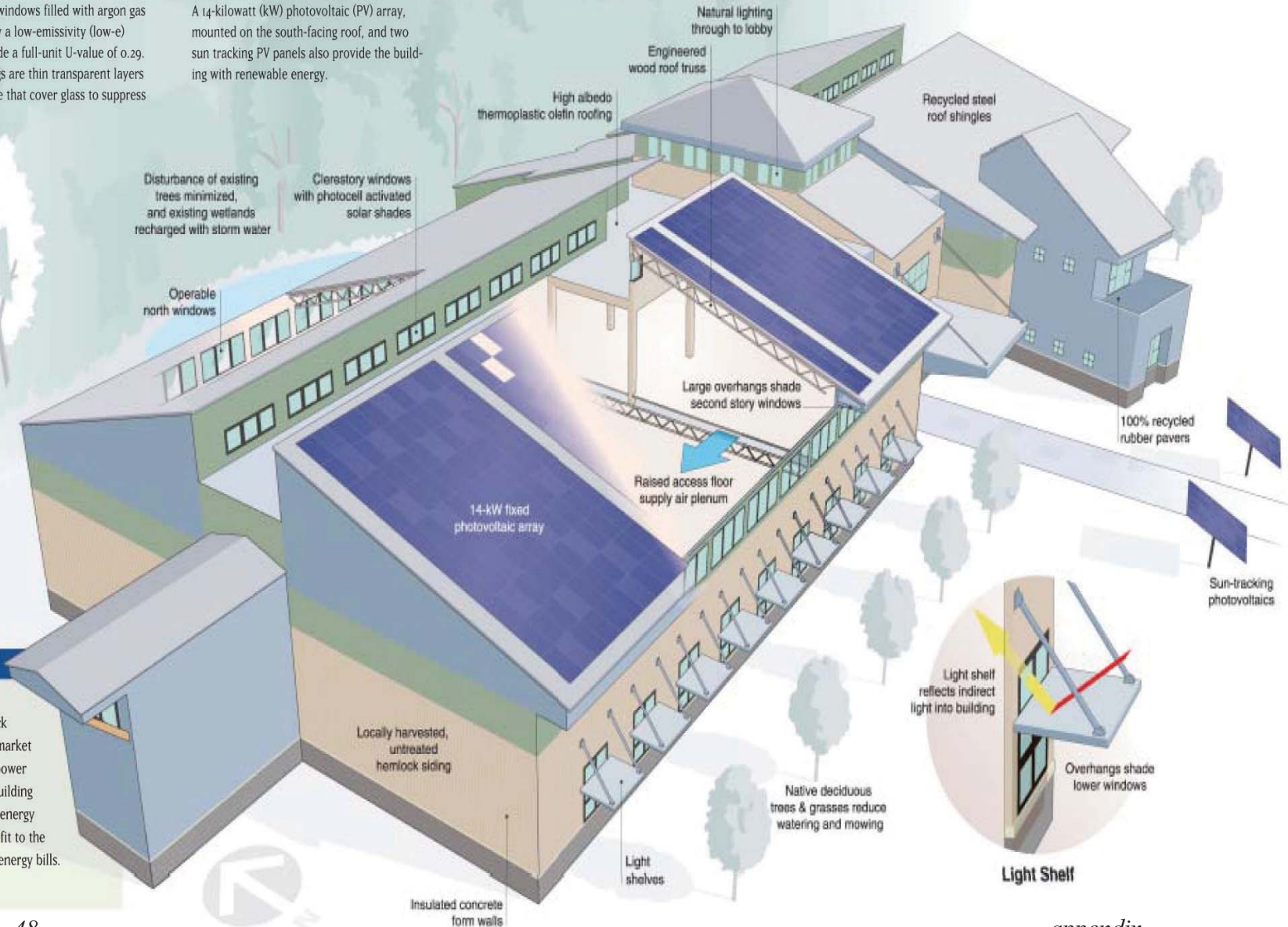
A 14-kilowatt (kW) photovoltaic (PV) array, mounted on the south-facing roof, and two sun tracking PV panels also provide the building with renewable energy.

Materials

The architects selected building materials based on several criteria: environmental impact and energy consumption of the product's production process; percentage of substantial recycled content or recyclability of material in each product; and whether the product came from a renewable resource.

Material systems use modular dimensioning—standard dimensions for flexibility and variety—which minimized construction waste. Some examples of materials selected for this building include recycled structural steel, fly ash content concrete, high density fiberboard roof decking made from 100% post-consumer recycled waste paper, a heat-welded thermoplastic olefin (TPO) roofing system fastened

mechanically to reduce the use of solvent-based adhesives, recyclable nylon carpet tiles, recycled rubber floor tiles, sustainably harvested maple flooring, and solvent free paints. Rough sawn hemlock wood siding on the exterior was harvested sustainably and milled locally. It will be left unpainted and allowed to weather, eventually coming to resemble some of Pennsylvania's century-old barns.



Green Power Arrangement

Green Mountain Energy (GME) purchases all the solar power Cambria produces at a premium price, and then sells DEP back whatever portion of energy the building consumes at GME's market price. In this kind of power brokering arrangement, a green power company not only benefits from selling the excess power a building produces to another customer, but also benefits from selling energy back to its original producer. This arrangement is a cost benefit to the power company, the building owner, and DEP, who pays the energy bills. The building owner receives a tax credit.