



I. SITE PLANNING

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INTRODUCTION

Each property is unique. Plans for development and redevelopment should be based upon a careful understanding of the site and its surroundings in order to meet the requirements of the business while meeting the town's goals for functionality, safety, and visual character.

LUDC Reference. This Handbook is intended to supplement, illustrate, and amplify various sections of the Kittery Land Use and Development Code (LUDC). The provisions of the LUDC vary from district to district. Check the applicable sections of the LUDC for specific requirements.



The preservation of mature trees, combined with masses of plantings and an earth berm, create a distinctive, attractive commercial environment. The landscape buffer helps screen the parking lot from the roadway.

Town-wide Site Planning Goals

- Distinctive, attractive properties that welcome people to Kittery.
- Quality development that respects the uniqueness of each property and reinforces Kittery's sense of place and character.
- Public open space throughout Kittery to enhance its appearance and support pedestrian use.
- An attractive, functional, and safe environment that is conducive to commerce and other permitted activities.
- Quality redevelopment of transitional or substandard properties.
- Protection for abutting residential properties through sensitive site planning, buffering, and architectural design.
- Upgrading visual character and human scale through particular attention to architecture, site planning, signage, landscaping, and lighting.
- Encourage increased walking and bicycling by providing safe, attractive, interconnected facilities.
- Universal accessibility for all that meets the Americans with Disabilities Act (ADA).
- Sound access management to maintain efficient traffic flow and high levels of safety.

OBJECTIVES

Good site planning should result in an attractive, safe, and economically viable relationship between buildings, parking, signage, lighting, landscaping, and the surrounding environment. Site plans should minimize the visual effects of parking, feature high-quality landscaping, accommodate pedestrian movement where possible, and encourage connections to nearby properties.

LUDC Reference. Article XXIV: Retention of Open Spaces and Natural or Historic Features.

TOWNWIDE DESIGN GUIDELINES

Site Analysis. The site plan should be based upon a careful analysis of existing site conditions that considers topography, wetlands, soil conditions, existing vegetation, drainage, abutting land uses, and other factors that will influence the placement of buildings, roads, and parking areas. The Planning Board may require a graphic presentation to demonstrate how knowledge of site conditions has influenced the site plan.



Preservation of the mature pines add visual interest and reduce the impact of the limited front parking.

Preservation of Existing Features. Site development should minimize disruption to natural and cultural features (e.g., mature trees, wetlands, vernal pools, drainageways, rock outcrops, barns, historic buildings, stone walls) in a manner that would change its existing character.

Open Space should be preserved and integrated throughout the development. (See LUDC for Open Space Standards for specific districts.) Where possible, open space should be continuous and be used to preserve significant natural and cultural features. Open space should be coordinated with abutting properties to create continuous open space networks for wildlife corridors, riparian buffers, visual screening, etc.



A careful site analysis will identify critical site features that should be incorporated into the open space plan.

Use of Open Space. Open space should not be used for any type of commercial activity, overflow parking, paved surfaces, constructed stormwater management facilities, or active recreation. Uses may include open vegetated areas, picnic areas, planting beds, bioretention areas, naturalistic water features, and similar features.

Parking Lots. Parking should be located primarily at the side or rear of the building, with minimal parking in front. (See LUDC for Parking Standards for specific districts.) Parking lots must be screened to minimize their appearance in most districts. See Parking on page 6 for further details.

Relationships to Surrounding Properties.

Service areas, parking lots, outdoor storage and sales areas, HVAC equipment, trash containers, and other similar features should not face residential neighborhoods.

Buildings in Existing Parking Lots. The development of smaller commercial buildings on out-parcels is strongly encouraged to break up the scale of large parking areas.



This fast-food restaurant (seen in air photo below) is an outparcel of a larger retail development. Circulation, including drive-through, parking, and pedestrian access, has been carefully integrated into the existing site.



The scale and appearance of an existing un-landscaped parking lot was improved by adding a new restaurant surrounded by landscaped islands. See also photo on page I-1.

Coordinated Future Development. Where site plans are presented for a portion of a property, the applicant should show how the plan has been designed to accommodate future buildings, access roads, sidewalks, esplanades, drainage, utilities, signage, and preserved open space in a coordinated fashion.



Careful attention to proportions and site features give this building a strong sense of human scale. The stone wall, plantings, and walkway lighting create a welcome entrance. The building had been a flat-roofed commercial structure.

Accessibility. All new and renovated facilities should be located, designed, and detailed in full compliance with the Americans with Disabilities Act (ADA), as revised.



Accessibility was not considered in the design of this courtyard. The steps are a barrier to wheelchair users and the cobblestone walk is very difficult surface to walk on.

OBJECTIVES

Development activities throughout Kittery should be characterized by safe, user-friendly, and efficient traffic flow. Access management principles should be followed to reduce the number of curb cuts, provide a safe vehicular and pedestrian environment, encourage intra-parcel travel, and minimize the number of trips on roadways.

LUDC Reference: Chapter 16.32.120

DESIGN GUIDELINES

Access Management. Site plans involving curb cuts onto major roadways should demonstrate an adherence to sound access management principles to promote efficient traffic flow and maintain a high level of safety for pedestrians and motorists.

Curb Cuts on Major Roads. Site plans should minimize the number of curb cuts on major roadways to increase vehicular and pedestrian safety.



The predominance of curb cuts along this roadway creates an unsafe/uninviting environment for the pedestrian.

Shared Access. Entrances to abutting commercial properties should be combined wherever feasible to minimize curb cuts and provide for more efficient traffic flow.

Internal Traffic Flow. To ensure the safety of motorists, delivery trucks, and pedestrians, the



Adjacent properties should be interconnected to reduce the number of turning movements on busy roadways. This connection should be better marked and landscaped.

development plan should clearly delineate internal traffic patterns for both vehicles and pedestrians. Development plans should be designed by a professional engineer familiar with the Kittery LUDC. Parking space, directional arrows, crosswalks, and other markings on the ground should be delineated with pavement paint or other suitable material to ensure safe circulation. Appropriate signage must also be provided.

Connections with Adjacent Properties.

Pedestrian and vehicular connections between parking lots and driveways on adjacent parcels should be provided wherever feasible to facilitate deliveries, minimize turning movements onto major roadways, and encourage foot traffic. Internal connections should provide safe, direct access while discouraging vehicular shortcuts. Cross easements should be provided as required to facilitate circulation. Site planning should anticipate future connections to any abutting undeveloped property. (See Traffic and Circulation Standards for specific zoning districts.)



These two properties feature both vehicle and pedestrian interconnections.

Refuge Zones. Pedestrian islands (five feet minimum width) should be installed in driveways and streets where the crossing distance is greater than 32 ft.



An island provides a refuge zone for pedestrians crossing this wide driveway. Permanent crosswalks should have minimized annual maintenance costs.

Traffic Calming. Traffic calming measures should be included where appropriate to discourage speeding within the site and between abutting properties. Measures may include speed tables, on-street parking, raised crosswalks, vertical curbing, curvilinear road alignment, roadside plantings, neck-downs, curbed islands, and signage. Traffic calming measures should be designed by a traffic engineer experienced in the development of commercial properties and traffic management.

Drive-Throughs. Where such uses are allowable by the LUDC, access routes leading to or from takeout windows or other drive-throughs should minimize conflicts with pedestrian circulation routes. Motorists should be made aware of pedestrians through signage, lighting, raised crosswalks, changes in paving, or other devices. The site plan should be designed to prevent queuing in parking lots or other areas which would cause congestion or unsafe conditions.

Pedestrian and Bicycle Movement. The development plan must provide safe pedestrian and bicycle movement within the site. Pedestrian and bicycle connections between abutting properties should be coordinated with vehicular routes to encourage foot traffic and minimize vehicular movement. (See Traffic and Circulation Standards for specific zoning districts.)

Service Drives. Service drives should be separated from internal walkways, parking areas, or pedestrian use areas by landscaped islands, grade changes, or other devices to minimize pedestrian contact.

Maintenance. All painted crosswalks should be repainted on an annual or biannual basis to maintain their effectiveness.



This planted bed is an attractive way to separate entering and exiting traffic.



This curbed, landscaped island divides entering and exiting traffic. The identification sign is located away from the intersection to avoid interfering with the motorists' line of sight.

OBJECTIVES

Parking lots should be designed to complement adjacent buildings, the site, and the commercial district without becoming a dominant visual element. Every effort should be made to reduce the scale of parking lots by minimizing the total amount of paved surface visible from the road.

Parking lots should be designed as inviting, pedestrian-friendly places by careful attention to landscaping, lighting, and internal walkways. With proper planning, parking lots can balance the needs of both the vehicle and the pedestrian.

LUDC Reference: Chapter 16.32.560.C.

TOWNWIDE DESIGN GUIDELINES

Siting. Parking lots for commercial development should avoid locations next to residential properties, churches, schools, and similar uses. Where such land use conflicts are unavoidable the lot should be screened with evergreen trees, earth berms, fences, or shrubs. (See LUDC for Parking Standards for specific districts.)

Orientation. Parking lots should be designed as part of the overall plan for the site, and coordinated with the circulation plan, building entrances, lighting, landscaping, snow storage, and service areas. (See page I-15.)



An attractively landscaped parking lot that is a positive asset to the surrounding commercial area. Bike racks are conveniently situated near surrounding shops.

Scale. Parking areas with more than 10 spaces should be broken up with trees, landscaped islands, grade changes, low walls, or other appropriate features. See **Landscaping** for specific guidelines regarding parking areas.

Landscaping is required in any parking lot with ten or more spaces. (See page III--8.) A minimum of 10% of the interior of any parking lot with 25 or more spaces must be maintained with landscaping. The Planning Board may require a higher percentage (up to 15% of the interior of the lot) in lots of more than 40 cars and those that are in public view. Planting islands should be at least 9 feet in width, but may be reduced for good cause.

All parking lot landscaping should be appropriate for parking lot conditions. Natural groupings or clusters of trees are also encouraged. See **Landscaping** for further guidelines.



Wide parking lot islands provide ample room for tree growth and snow storage.

Relationship to Buildings. Paved surfaces of parking lots should be separated from buildings by a minimum of five feet of landscaping and/or a paved walkway. The width of the landscaping should be proportional to the height of the building.

Dead End Circulation. Parking lots with a single point of access are strongly discouraged. Dead-end parking lots should not contain more than ten spaces. Where dead-end lots are unavoidable, space should be provided to safely turn a vehicle around without having to back out.

Shared Parking. Shared parking is strongly encouraged where appropriate, particularly where abutting land uses have differing hours of peak parking demand. Cross easements may be required to allow shared parking.

Safety. Crosswalks should be marked by a change in pavement texture, pattern, or color to maximize pedestrian safety in parking areas and other potentially hazardous areas. Care should be taken in the selection of shrubs, ornamental grasses, walls, or other landscape elements to maintain visibility.

Snow Storage. Provisions should be made for snow storage in the design of all parking areas. The areas should be shown on the Site Plan to avoid conflicts with landscaping, visibility, drainage, or icing during winter months.

Materials. Parking areas should be constructed of high quality materials designed to withstand the rigors of Maine winters and minimize long-term maintenance. Where curbing is required for stormwater management, granite is strongly recommended, especially in highly visible areas.



Parking lot islands should be defined by durable curbing materials to protect trees and minimize maintenance.

DISTRICT PARKING STANDARDS

Siting: MU and LB Districts. All new parking areas must be located at the side or rear of the principal building. In the MU District ten or fewer spaces may be located closer to the front lot line than the principal building. In the LB District limited parking and its access drive may be located across the front of the lot between the property line and the front of the building.

Screening: MU, LB, and C Districts. All new or revised parking lots must be visually screened to minimize the view of parked vehicles. Where front parking is permitted between the building and the road, it should be screened by berms, fencing, low walls, trees, shrubs, perennial masses, or a combination of elements. The minimum height of the screen should be 3.5 feet to minimize the view of the vehicle while still providing a clear view of the building and signage. See pp. I-17 & 18 for additional information on screening parking lots. See LUDC for Parking Standards for specific districts.



While asphalt curbing is inexpensive to install, it is very vulnerable to snowplow damage.



A low wall and ornamental plantings effectively screen this parking lot from view.

OBJECTIVES

Commercial buildings should provide outdoor spaces for a variety of uses – seating/resting, dining, displays, and aesthetic enhancement – to create a pedestrian-friendly environment.

DESIGN GUIDELINES

Outdoor Spaces. Development plans should include outdoor use areas such as greens, plazas, and courtyards. Buildings should be oriented toward open spaces rather than roadways. In these situations buildings should have a major access on the space as well as a secondary access point(s) oriented to parking areas. Outdoor spaces should be coordinated with the pedestrian circulation plan to encourage pedestrian use, with provisions for seating and outdoor activities. Outdoor spaces should be designed to separate pedestrian and vehicular traffic with landscaping, grade changes, and other site features.

LB-1 Outdoor Space Requirement. Outdoor spaces must be created in the LB-1 District. See Landscaping / Site Improvement provisions of the LUDC for the LB-1 District.

Planning. Where outdoor use areas are provided, they should be located in sunny, highly visible locations and sized to fit the anticipated uses. The design should be a collaborative effort between architect, landscape architect, engineers, artists, and other design professionals.



An informal dining area in front of a deli provides an attractive setting for customers. Parking is screened by an attractive wooden fence.



When this existing home was converted into a bakery the front porch was retained as a pleasant outdoor cafe.



An informal lawn area provides welcome visual relief and an opportunity for programmed activities.



Outdoor use areas should be designed as rooms, with consideration given to the floor, walls, ceiling, and furnishings.

Materials. Outdoor use areas should be constructed of high quality, easily maintained materials. All elements within the space should be coordinated with the architecture and site elements to achieve a unified look. The use of decorative paving is encouraged for sitting areas, pedestrian plazas, building entrances, or other designed open spaces. See **Landscaping** for plantings and street furniture guidelines.

Entrances. Major entrances to new or renovated buildings should be emphasized through the use of canopies, recessed entries, seating areas, decorative plantings and lighting, sculpture, or other elements.



A simple outdoor space can add vitality and interest to the streetscape.



This pedestrian passageway from the parking lot to the main entrance should have been designed as an inviting leafy space.



This multi-building development is unified by a common architectural style and coordinated landscaping, lighting, and outdoor spaces.



A bench along a narrow sidewalk facing a paved parking lot makes for a very uninviting pedestrian space.



This well-detailed outdoor space in a downtown environment provides an attractive opportunity for pedestrians. The wooden trellis and landscaping complement the building and add human scale.

OBJECTIVES

Public sidewalks and planted esplanades can be a highly desirable part of the streetscape, adding scale in a commercial landscape and creating a safe place for pedestrian movement.

There are many areas in Kittery's commercial areas which are currently not pedestrian or bicycle friendly. The long term objective is to encourage an interconnected network of sidewalks that provide an alternative to the automobile and encourage exercise for the general population.

LUDC Reference: See Chapter 16.32 Street and Sidewalk Site Design Standards and Traffic and Circulation Standards for specific zoning districts.

DESIGN GUIDELINES

Public Sidewalks. Where sidewalks and planted esplanades are required by the town, they should be constructed within or near the right-of-way on both sides of all streets to encourage safe pedestrian movement. Facilities should be coordinated with abutting land uses to create interconnections throughout the commercial area and linkages to surrounding residential neighborhoods. Lighting and other amenities abutting walkways should be at human scale.

Coordination with Site Plan. All new sidewalks should be coordinated with the Site Plan to avoid conflicts with landscaping, utilities, grading, drainage structures, signs, and other elements. Walks should be designed to facilitate snow removal for year-round use. Sheet flow of stormwater across sidewalks should be avoided. Underground storm drainage systems are strongly encouraged.

Material Selection. Materials selected for curbing and sidewalks should be durable, long-lasting, and resistant to Maine winters and local maintenance policies. Developers should coordinate their choice of materials with the Public Works Department for suitability.

Crosswalks. Where sidewalks intersect with commercial drives or roads, crosswalks should be installed to alert the motorist and improve visibility. Crosswalks should offer a noticeable change in texture and color. Materials for crosswalks should be highly durable and slip resistant.

Lighting. Sidewalks should be lit to the minimum standards recommended by the Illuminating Engineering Society of North America (IESNA) to promote safe use during evening hours. See **Lighting** for specific guidelines regarding lighting sidewalks and other public use areas.



A well-built concrete sidewalk with granite curbing and a landscaped planter strip creates an inviting pedestrian space.



Private development should be connected with public sidewalks wherever possible. This sidewalk should have wrapped around the corner.

OBJECTIVES

Site development should consider the needs of the pedestrian for safe, functional, attractive walkways throughout the property.

DESIGN GUIDELINES

Internal Walkways in the MU, LB, C-1, and C-3 Districts. In new development continuous internal walkways must be provided from parking lots to the main customer entrance(s). Where the property abuts roads with public sidewalks the internal walkways must also connect with the sidewalk. (See LUDC Traffic and Circulation Standards for specific zoning districts.)

Location. Internal walkways should be located where motorists can anticipate pedestrians and react accordingly. Walkways should be designed to give the pedestrian a full view of oncoming vehicles, with minimal interference from trees, shrubs, and parked cars. Walkways should avoid drive-through lanes, access and service drives, and other high-traffic routes. Traffic control signs, light fixtures, trees, or other potential obstacles should be located far enough from walkways to prevent interference with pedestrian movement.



A well-landscape walkway becomes an integral part of the site plan.

Orientation. Walkways in parking lots should be aligned with the main entry or a focal point on the building to assist in wayfinding.

Width. Internal walkways should be a minimum of five feet wide to allow two people to pass comfortably. Additional width may be necessary in certain conditions, e.g., where shopping carts may be used, where heavy pedestrian traffic is anticipated, or where cars overhang the walkway.

Coordination with Landscaping. Areas adjacent to walkways should be landscaped with trees, shrubs, flower beds, ground covers, or other such materials for year-round interest. Walkways in parking lots should be coordinated with landscaped islands to provide visual relief, shade, and scale to the pedestrian. Shrubs should



This circulation system results in excessive width in front of the storefronts and creates an auto-oriented environment. The painted walkway offers little contrast and leads to the parking aisle.



This raised walkway provides a high level of contrast with the surrounding parking lot. However, the width is compromised by the overhang of cars, making pedestrian movement difficult.

be used with care to avoid blind spots. Special features, such as benches, flower beds, planters, and artwork can be used to enhance the walkway. Trees along all walkways should be trimmed to provide adequate sight distance and to remove potential obstacles. Vertical clearances of at least eight feet should be maintained.

Crosswalks. Internal crosswalks should be marked by a change in pavement texture, pattern, or color to maximize pedestrian safety in parking areas and other potentially hazardous areas. The materials selected for road crossings should be highly durable and low maintenance. Raised crosswalks should be considered at key locations as a traffic calming device to make crosswalks more visible. Signs may be warranted in certain situations as determined by the Institute for Traffic Engineers (ITE). Materials selected for crosswalks should allow safe bicycle movement across the surface.



The crosswalk leading from a rear parking lot is constructed of concrete pavers that provide a high level of contrast and visibility.

Drainage. Sheet flow of stormwater across walkways should be avoided. Culverts should be sized to prevent ponding and provide uninterrupted use of the walkway.

Maintenance. All internal walkways should be designed to facilitate maintenance by the property owner. The site plan should coordinate the location of walkways with utilities, plantings, drainage, and other site elements that could affect long-term maintenance.

Snow Storage. All walkways should be designed for ease of snow removal to encourage year-round use. Site plans should indicate locations for snow storage in areas where they will not interfere with pedestrian movement, block visibility, or cause dangerous conditions from freezing water.



An internal walkway oriented toward the main entry of a restaurant. The planting strips with ornamental grasses and perennials separate the pathway from vehicles.



A dedicated walkway that provides a safe, well marked pathway to the main entrance while minimizing conflicts with vehicles.



Textured pavement alerts motorists to the presence of pedestrians in front of this grocery store.



The walkway in the parking lot leads to a well-defined crosswalk to maintain continuity.



Concrete pavement provide an effective way to set the internal walkway apart from the surrounding parking lot.



The pedestrian circulation system in this shopping center includes well marked crosswalks and sidewalks.



This internal walkway crosses over a curb, making access difficult for people with disabilities.



A highly visible internal crosswalk that effectively connects the parking lot to the storefronts.

OBJECTIVES

Developments consisting of more than one structure should exhibit a high degree of coordination in site planning, architectural design, site design, and site detailing. All physical components should be designed to complement an overall plan.

DESIGN GUIDELINES

Master Plan Where multiple building are proposed, a master plan should be prepared to show the general location of future buildings, parking lots, roads and driveways, walkways, utilities, service areas, stormwater management, and other components of site development. The Planning Board may require the submission of plans for lighting, signage, and landscaping to show how these elements will be coordinated throughout the development. The master plan should also show how traffic, stormwater, and utilities will be coordinated with adjacent properties. The plan should also illustrate the measures that will be taken to retain significant natural or cultural features and integrate open space as required by the LUDC.

Phasing Plan. As part of the Development Plan application, the applicant should provide a phasing plan that illustrates the sequence of development and what steps will be taken to ensure compatibility between current and future activities.



These buildings have been sited to reinforce pedestrian circulation patterns and reduce the scale of the overall development.

Building Orientation. All buildings should be oriented to create usable, safe and attractive pedestrian spaces, preserve significant site features, and minimize the appearance of parking areas.

Focal Points. A limited number of buildings or other elements should be designed as focal points. These structures should be visually more prominent, enhanced by height, massing, distinctive architectural treatment, lighting, landscaping, or other distinguishing features.



Similar roof pitches, pedestrian use areas, and traditional building materials help unify this multi-building development.

OBJECTIVES

Outdoor service and storage areas should be integrated into the overall site plan. They should be designed to meet the functional needs of the facility while minimizing any traffic or visual conflicts, audible noise, or smells.

DESIGN GUIDELINES

Locations. All facilities for service, including waste collection and storage facilities, off-street loading and unloading areas, loading docks, storage facilities, dumpsters, fueling areas, and vehicle service and maintenance areas must be located at the side or rear of the principal building. Locations that face public roadways or abutting residential properties should be avoided. Overhead doors or other vehicle entrances or exits should not be located on any façade that faces a public street or residential neighborhood. (See LUDC requirements for Outdoor Service and Storage Areas.)



Storage areas should be located at the rear or side yards, away from public view.

Design. Outdoor service and storage areas should be sized to fit the specific needs of the building and its intended operations. The smallest size needed to meet the building's requirements is encouraged.

Screening. Service areas must be screened to minimize visibility from sensitive viewpoints such as public and private roadways, main entrances, abutting neighborhoods, public open spaces, and pathways in these situations. Service areas should be screened with architectural elements such as walls or fences. Screening may be further enhanced with evergreen trees, shrubs, and earth berms.

Screening Design. Structural screens and fencing should complement the design of the main structure by repetition of materials, detailing, scale, and color. Where chain link fencing is required for safety, it should be landscaped and painted black or a similar dark color, or coated with dark vinyl. Plastic slats in chain link fencing are not permitted. Gates should be designed to prevent sagging.



This service area is effectively screened by fencing that repeats the color, materials, and forms of the building.

Service Access. Service areas should be sited to accommodate the turning movements of vehicles used for trash pickup, deliveries, and similar functions without conflicting with other vehicles.

Coordination. Prior to Town submittal, the applicant should contact the representatives of utility companies, fuel suppliers, trash haulers, the fire department, and others who may have input into the design and siting of service areas and facilities.

Protection. Where walls or freestanding fencing is used for screening, it should be protected with granite posts or concrete filled steel bollards, or reinforced in a manner that will prevent damage from service vehicles.

Recycling Facilities. The installation and use of recycling bins is encouraged. All recycling facilities should be screened in a manner similar to other service areas. Dumpsters and recycling areas should be consolidated where possible.



Service areas, loading docks, and dumpsters should be considered an integral part of the site development, sited to avoid visual and functional conflicts.



This service area is effectively integrated into the side of the building. The evergreen buffer acts as an appropriate and attractive screen.



A typical trash enclosure that could be improved by plantings shade trees to help minimize odors, reinforcing the gates, and staining a dark color.



This service area is screened by a solid wall topped by a trellis structure that repeats design elements used elsewhere on the site.



This trash enclosure was not properly sized to handle the dumpster needed for the facility.



This service area is effectively buffered by grade changes and evergreen trees.

OBJECTIVES

Buffering or screening will be required in certain areas to ensure compatibility between inharmonious land uses, particularly between commercial and residential properties. Plantings, earth berms, stone walls, grade changes, fences, distance, and other means can be used effectively to create the necessary visual and psychological separation.

DESIGN GUIDELINES

Appropriateness. The selection of the proper type of buffer should result from a thorough understanding of existing site conditions, distances to property lines, the intensity of the proposed land use, and the degree of concern expressed by the Planning Department, Planning Board, and abutting landowners. Discussions regarding the need for buffers and appropriate sizes and types should begin at the sketch plan review. In most instances the buffer should provide a year-round opaque screen within three years of its construction.

Design. Buffers and screens should be considered an integral part of the Site Plan. Stone walls, plantings, fencing, landforms, etc. used for buffers should be similar in form, texture, scale, and appearance to other landscape elements. Structural measures (e.g., screening walls) should likewise be related to the architecture in terms of scale, materials, forms, and surface treatment. (See LUDC for specific requirements for buffers and screening.)

Maintenance. Buffers should be maintained throughout the life of the project in a condition that assures continual year-round effectiveness. Where plantings do not survive, or grow to a point where they no longer serve as effective buffers, they should be replaced to meet the intent of the approved plan. Walls, fencing, or other forms of screening likewise should be maintained in good condition.



A variable height fence provides good visual separation between a convenience store and a residential neighborhood. The fence is attractive on both sides.



Landscape buffers can separate land uses and soften the presence of buildings.



This stand of trees creates an effective visual buffer between the road and the plaza parking lot.

Earth Berms used to screen parking lots and add visual interest to the planter strip should be designed as an integral part of the grading plan. Side slopes should not exceed 3:1 slope (one foot of grade change over a distance of three feet). Transitional grading should be used to avoid abrupt changes in grade.

Fencing. Where fencing or other architectural elements (e.g., screening walls) is installed in a highly visible location, it should be treated as an architectural element, matching the form, style, color, or detailing of the adjacent building.

Stone walls should be constructed by experienced masons using native stone. Walls should be an integral part of the landscape design and should relate to the form, texture, and style of the building.

Combinations. Combining plantings, berms, fencing, and walls will often result in an economical, attractive way to meet the buffer requirements and create a distinctive landscape. Where combination buffers are proposed, they should be shown on the Landscape Plan with spot elevations and enough detail to allow the Planning Board to assess their appearance and effectiveness.



While these evergreens partially screen the dumpster, it still protrudes into view. The plantings should have been combined with a fence for more effective screening.



A low earth berm screens a parking lot. Ornamental trees or plantings added to the berm would make it more effective and increase its aesthetic value.



This parking lot was screened by a combination of dropping the grade and dense plantings.



A classic stone wall that complements the contemporary bank building.



This shrub screen would be more effective if the plants were larger or if they had been planted on a low berm.



Plantings can provide effective screening if they are properly designed and maintained. Planting should have been of a consistent height to provide uniform screening.

OBJECTIVES

To comply with Town requirements and MeDEP Stormwater Management law, treatment basins, infiltration basins, rain ponds, or other measures might be required to maintain the quality of stormwater runoff. All stormwater management areas should be treated as integral and attractive parts of the landscape.

DESIGN GUIDELINES

Location. Where stormwater treatment basins or other related facilities are required, they should be located in the least visible portion of the site. Where visible, they should be graded to conform to natural contours and planted to integrate them into the natural landscape.

Design. Stormwater treatment basins should be patterned after naturalistic landforms, avoiding hard geometric shapes. Side slopes should be landscaped with appropriate plantings to reduce erosion and screen the basin. Landscaped islands can be effective in breaking up the mass of a treatment pond while increasing habitat opportunities.

Grading. Abrupt changes in grades and steep side slopes (steeper than 3:1) should be avoided. Transitional grading should be used to blend all earthworks into the natural contours of the land where possible.

Structures. Man-made drainage structures (e.g., culverts, manholes, and outfalls) that are visible from roadways or residential neighborhoods should be screened with vegetation or treated to reduce their visibility and integrate them into the landscape.

Planting Design. Plantings used in stormwater treatment ponds should be designed by a qualified professional familiar with the growing requirements of wetland species.

Shared Basins. Wherever appropriate, treatment basins should be designed to be shared by abutting properties to minimize the amount of land area devoted to stormwater management.

Rip-Rap. Where ground protection is necessary in highly visible locations (e.g., at spillways and culverts), it should be constructed of hand-placed rock or geo-grid, rather than coarse rip-rap. The use of coarse crushed rock in visible roadside ditches is discouraged. The use of Permeon (Desert Varnish) is encouraged to hasten the weathering process on rip-rap and other stone surfaces.



Stormwater treatment ponds can be designed to create attractive focal points in the landscape.



Rip-rap is often necessary to control erosion and stabilize slopes. Hand placed stone or natural landscaping would have improved the appearance of this treatment pond.



A stormwater treatment facility that is contoured to blend into the surrounding landscape.