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SECTION 12 PARKING, LOADING AND LIGHTING

12.1 PURPOSE

In order to relieve traffic congestion in the streets, to minimize any detrimental effects of off-street parking areas on adjacent properties, to provide for safe and adequate space for the temporary storage of vehicles, to promote the efficient use of parking areas, to ensure the safe ingress and egress of vehicles entering and exiting the public street system, to provide for immediate access for fire and emergency services, to minimize storm water run off, and to ensure the proper and uniform development of parking areas throughout the Town of Waxhaw, off-street parking and loading spaces for every use shall be provided in accordance with the standards established in this section.

12.2 APPLICABILITY

Each use or establishment within the Town shall initially and continually provide sufficient off-street parking spaces, in compliance with the requirements of this section, for all residents, employees, customers, visitors, and others who may spend time at the use or establishment. The Zoning Administrator may waive these requirements for uses in the C-4 zoning district.

12.3 OFF-STREET PARKING REQUIREMENTS

1. Certification of Minimum Parking Requirements

Each application for a Zoning Permit submitted to the Zoning Administrator as provided for in this Ordinance shall include information as to the location and dimensions of off-street parking and the means of entrance and exit to such space. This information shall be submitted to the Administrator as provided in this Ordinance shall include but not limited to:

For any parking lot, garage, vehicle storage area operated on a commercial basis, reconfiguration of an existing parking lot or any other off-street parking area required under this Part (but excluding off-street parking for detached, duplex, triplex and quadraplex dwellings on a single lot), a plan shall be submitted to Planning, Zoning, and Engineering Department to review for compliance with these regulations and any other applicable ordinances. Any such parking plan shall show the number of motor vehicle parking spaces, the percentage of spaces to be designated for use only by compact cars, the number of existing spaces for bicycle parking and the location of bike parking

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facilities, the arrangement of parking aisles, the location of driveway entrances, provisions for vehicular and pedestrian circulation, the location of sidewalks and curb on or abutting the property, the location of utilities, barriers, shelters, and signs, the location of landscaped areas and the types of vegetation to be located in them, typical cross sections of pavement, storm water drainage facilities, and any other relevant information requested by Planning, Zoning, and Engineering Departments for review and comment, as appropriate.

2. Definition of a Parking Space

- A. The storage space of one (1) automobile. The size of a Parking Space shall be in accordance with generally accepted geometric design principles for the type space and Lot. All off-street parking and loading areas shall be paved. Parking Lot paving shall consist of asphalt, concrete, brick pavers, pervious paving materials, or other paving materials approved by the Zoning Administrator and Town Engineer. In no case shall gravel be a material approved to fulfill the paving requirement. The Zoning Administrator may modify this requirement on developments less than an acre in the OIS zoning district

- B. The storage space of one (1) bicycle. The size of a Bicycle Parking Space shall be in accordance with generally accepted geometric design principles for the type space and Lot as provide in Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines Acceptable rack elements, rack location and access, rack area and site conditions such as protection from the elements and visibility shall conform to the Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines. The guidelines are available at <http://www.apbp.org/pdfsanddocs/Resources/Bicycle%20Parking%20Guidelines.pdf>

3. Effects on New and Existing Use

Permanent off-street parking spaces shall be provided as specified by this section for all uses occupying land or facilities (or portions thereof). Such parking spaces may be provided in a parking garage. The requirements of this section shall be met:

- A. At the time a Certificate of Occupancy is issued for a building or structure in which an approved use takes place;

- B. At the time any principal or ancillary use or building is enlarged or increased in capacity, such as by adding dwelling units, guest rooms, seats, floor area, or other units of measurement deemed appropriate by the Zoning Administrator , which follows; or

- C. Before conversion from one type of use or occupancy to another, or any change In the manner in which the use is constructed that would result in additional

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parking

4. Computation of Off-Street Parking Requirements

A. Calculations

When measurements of the number of required spaces result in fractions, the space requirements shall be rounded upward to the next highest whole number.

B. Different Use Area

Except as provided for in this chapter, parking shall be calculated separately for each different use area in a building or on a site, including all ancillary uses.

C. On-Street Parking

1. On-Street Parking may be utilized to fulfill the parking requirements outlined in this section. However, existing on-street parking may not be used in parking calculations to fulfill the parking requirements outlined in this section. The Zoning Administrator may approve existing on-street parking as a way to fulfill the requirements in this section in the C-4 Zoning District, where applicable.
2. On-Street Parking may be constructed a variety of ways. The applicant may choose to use parallel, back-in/reverse angle parking or drive-in angled parking. Drive-In Angled Parking is only permitted as an intentional design element along the main street(s) of the retail center in a planned development.
3. Parking dimensions are outlined in Section 12.6

D. Off-Street Parking

1. Parking Minimums
The applicant may request a 20% reduction in the parking maximum required per Section 12.4 of this Ordinance. This request may be approved by the Zoning Administrator.
2. Parking Maximums
 - a. No use shall install more than the maximum number of parking spaces allowed per section 12.3 of this Ordinance.
 - b. If additional parking is needed, the property owner/applicant may request a waiver from the Town of Waxhaw Zoning Administrator and must construct all parking that exceeds the maximum out of pervious paving materials approved by the Town of Waxhaw Engineer, not to exceed the maximum allowable lot coverage. Any request for parking above the maximum allowed must also provide an additional 5% of

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internal tree save. Where no internal tree save is required, a minimum of 10% internal tree save must be accomplished in order for the applicant to receive approval for the additional parking. Where no trees exist, the applicant must create (plant) a continuous canopy on a minimum of 5% of the total acreage of the site. An approved North Carolina Registered Urban Forester or ISA Registered Certified Arborist must work with the applicant to determine the best location for all of the above options, in writing.

c. Maximum Parking Requirements

USE	PARKING SPACES REQUIRED	COMMENTS
Residential		
Single Family Dwelling Unit*	2 per dwelling unit	
1. Multi-family Dwelling Unit		
Studio	1.25 per dwelling unit	
One bedroom	1.5 per dwelling unit	
Two or more bedrooms	2 per dwelling unit	
Accessory Dwelling Unit	1 per dwelling unit	
Commercial Lodgings	1.25 per guest room, plus 10 per 1000sf of restaurant/lounge, plus 30 per 1000sf of meeting/banquet room (<50,000sf per guest room) or 20 per 1000sf meeting/banquet room (>50,000sf per guest room)	Peak spaces for each component shown; use shared parking analysis to determine appropriate parking ratio for particular hotel
Elderly Housing, Independent Living	0.6 per dwelling unit	
Elderly Housing, Assisted Living	0.4 per dwelling unit	
Group, Convalescent, and Nursing Home	1 per room	
Day Care Center	0.35 per person (licensed capacity)	
Hospital/Medical Center	0.4 per employee, plus 1 per 3 beds, plus 1 per 5 average daily outpatient treatments, plus 1 per 4 medical staff, plus 1 per student/faculty/staff	It is understood that all of these instances may not exist at every hospital/medical center
Subdivision Sales Office	3.5 per 1,000sf of GFA not to exceed five (5) spaces for a single sales office and ten (10) spaces for multiple sales offices.	Off-site parking allowed in accordance with Sections 11.3.84 and 12.5.2
Retail/Service		
General Retail(not shopping center)	3.5 per 1000sf of GFA**	
Grocery (freestanding)	6.0 per 1000sf of GFA	

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Discount Superstores/Clubs (freestanding)	6.0 per 1000sf of GFA	
Home Improvement Superstores	5.0 per 1000sf of GFA	
USE	PARKING SPACES REQUIRED	COMMENTS
Other Heavy/Hard Goods (Furniture, Appliances, Building Materials, etc.)	3.0 per 1000sf of GFA	
Retail/Service (Continued)		
Shopping Centers	4.0 per 1000sf of GLA up to 400,000sf; 4.0 to 4.5 per 1000sf of GLA sliding scale between 400,000 and 600,000sf; 4.5 per 1000sf GLA over 600,000sf	With up to 10% GLA in dining/entertainment; over 10%, use shared parking analysis.
Personal Care Services	2 per treatment station but not less than 4.3 per 1000sf	
Coin-Operated Laundries	1 per 2 washing and drying machines	
Motor Vehicle Sales and Service	2.7 per 1000sf GFA interior sales area, plus 1.5 per 1000sf GFA interior or storage/display area, plus 2 per service bay	
Motor Vehicle Laundries	2, plus 1 per each 2 peak shift employees	
Food and Beverage		
Fine Dining	21.5 per 1000sf GFA	
Casual Restaurant (with bar)	22.5 per 1000sf GFA	
Family Restaurant (without bar)	16 per 1000sf GFA	
Fast Food	15 per 1000sf GFA	
Office and Business Services		
General Business Offices Suburban/Low-Rise	3.6 per 1000sf GFA< 250,000sf, 3.35 per 1000sf GLA> 250,000sf	
Office Downtown/Mid-high-Rise Business Center	3 per 1000sf GLA	
Consumer Service Offices (freestanding)	4 per 1000sf GFA	
Data Processing/Telemarketing/Operations	6 per 1000sf GFA	
Medical Offices (multitenant)	4.5 per 1000sf GFA	
Clinic (medical offices with outpatient treatment; no overnight stays)	5.5 per 1000sf GFA	
Bank Headquarters (with admin offices, etc.)	4.4 per 1000sf GFA	
Industrial/Storage/Wholesale	2 per 1000sf GFA	Add spaces as required for

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Utility		office, sales, or similar use where more than 10% GFA
Manufacturing/Light Industrial (single-use)	1.5 per 1000sf	Add spaces as required for office, sales, or similar use where more than 10% GFA
USE	PARKING SPACES REQUIRED	COMMENTS
Industrial Park (multitenant or mix of service, warehouse)	2 per 1000sf	
Office and Business Services (Continued)		
Warehouse	0.7 per 1000sf GFA	
Mini-Warehouse	0.25 per 1000sf	
Governmental	As determined by the zoning administrator	
Educational		
Elementary and Secondary Schools	0.35 per student	
College and University	Determined by parking study specific to subject institution	
Cultural/Recreational/Entertainment		
Public Assembly	0.25 per person in permitted capacity	
Museum	1.5 per 1,000 annual visitors	
Library	4.5 per 1000sf GFA	
Religious Centers	0.6 per seat	
Cinemas	Single-Screen: 0.5 per seat; Up to 5 screens: 0.33 per seat; 5 to 10 screens: 0.3 per seat; Over 10 screens: 0.27 per seat	
Theaters (live performance)	0.4 per seat	
Arenas and Stadiums	0.33 per seat	
Health Clubs and Recreational Facilities	2 per player or 1 per 3 persons permitted capacity	

(Planning and Urban Design Standards, American Planning Association 2006)

*Single Family Dwelling Units are exempt from Section 12.3.4 (d) (2).

3. Parking Based on Seating

When requirements use seating as a unit of measurement, all calculations shall be based on the design capacity of the areas used for seating.

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4. Parking Based on Floor Area

Except as provided for in this Section, when requirements use amount of square footage in buildings as a unit of measurement, all calculations shall be based on gross floor area or gross leasable area.

5. Parking Based on Students, Staff, and Occupants

Except as provided for in this chapter, when requirements use number of students, staff, or occupants as a unit of measurement, all calculations shall be based on the maximum enrollment, the largest number of persons working on any single shift, or the maximum fire-rated capacity, whichever is applicable and results in the greater number of required spaces.

6. Single-Family Residence Parking

For single-family residences only, driveways may be used to satisfy minimum on-site parking requirements, provided that sufficient space is available to satisfy the minimum design standards.

7. Parking for Unlisted Uses

Parking maximums are listed for a wide variety of uses. Parking requirements for uses not specifically listed in Section 12.3 of this Ordinance shall be determined by the Zoning Administrator based on the requirements for the closest comparable use, as well as on the particular parking demand and trip generation characteristics of the proposed use. The Zoning Administrator may alternately require the submittal of a parking demand study that justifies estimates of parking demand based on the recommendations of a licensed Professional Engineer and includes relevant data collected from uses or combinations of uses that are the same or comparable to the proposed use in terms of density, scale, bulk, area, type of activity, and location.

8. Unimpeded Parking.

Generally, no parking spaces shall be located so as to require the moving of any vehicle on the premises in order to enter or leave any other space. Notwithstanding the above, the Zoning Administrator may, on a case-by-case basis, allow stacking spaces provided for auto-related uses to count toward the minimum required parking, as long as such spaces are not part of areas required for site ingress or egress, or areas intended for fueling.

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12.4 DESIGN AND LOCATION OF PARKING AREAS/STACKING SPACES

1. All parking areas shall be located and designed so as to avoid undue interference with the use of public streets and alleys. Parking areas shall provide suitable maneuvering room so that all vehicles may enter an abutting street in a forward direction. The backing of a motor vehicle onto a public street from a parking area shall be prohibited, except for residential parking not exceeding two spaces per dwelling unit and as part of a planned development on a main street(s). Pedestrian pathways shall be provided within parking areas in accordance with Section 12.11.

2. **Parking Lot Landscaping**

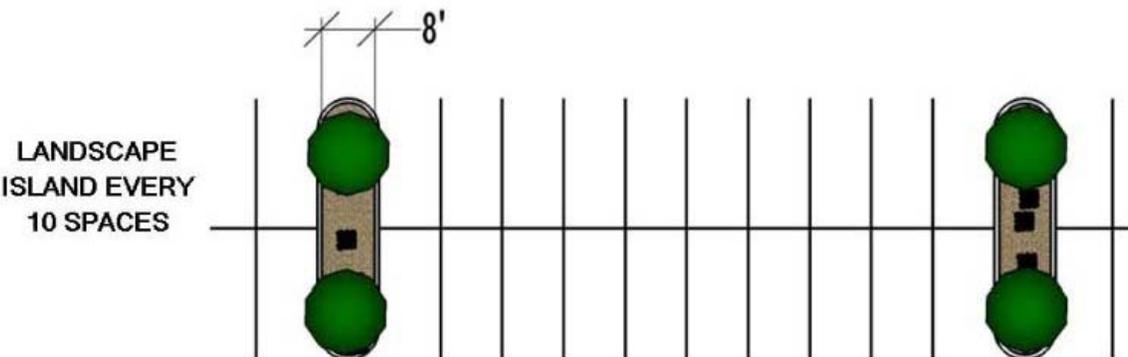
A. Applicability

Landscaping in and around parking lots is meant to provide a visual buffer between the vehicular use area, public streets, and surrounding land uses. The intent is to attempt to recapture some of the lost canopy that is a result of development. Parking lot landscaping requirements only apply to those parking areas with five (5) or more spaces.

B. Requirements

1. For every 1,000 square feet of vehicular use area, one (1) tree and four shrubs must be planted. At least seventy-five (75) percent of the required trees must large-maturing, deciduous trees. The species must be from the approved species list in Section 9.21.15 of this Ordinance. Trees and shrubs must be planted within fifteen (15) feet of the vehicular use area to count as parking lot landscaping.
2. When a development contains more than twenty (20) or more parking spaces, fifty (50) percent of the trees and shrubs required by 12.4.2(B)(1) must be planted in islands or medians located within the parking lot. Tree islands shall be evenly distributed throughout the parking lot in order to provide an even tree canopy throughout the lot. At a minimum, such tree islands shall consist of an area equal in size to two (2) parking spaces (324 square feet) with a minimum width of eight (8) feet from inside of curb to inside of curb. Parking bays shall be broken up with landscaped islands or medians to avoid long monotonous rows of parking. Planting trees in groups is encouraged to increase the total amount of planting area for roots to grow.

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3. Each parking space must be located within sixty (60) feet of a tree measured from the closest point of the parking space to the tree trunk.
4. Small maturing trees shall be planted where overhead electric lines would interfere with normal growth.
5. Structured parking facilities, or parking decks, shall be excused from the parking lot landscaping requirements contained in this section but shall comply with the provisions of this paragraph. In the event that any openings for ventilation, service or emergency access are located at the first floor level in the building façade, then they shall be an integral part of the overall building design. These openings as well as pedestrian and vehicular entrances shall be designed to minimize visibility of parked cars. All levels of a structured parking facility shall be designed and screened in such a way as to minimize visibility of parked cars. In no instance will rails or cabling alone be sufficient to meet this screening requirement.
6. Small lots, defined as lots with less than one-hundred (100) feet of frontage on a roadway or with less than one-hundred (100) feet of depth, may have site constraints which make strict compliance with the regulations contained in this section a hardship. In such cases, the Zoning Administrator may approve deviations from such regulations so long as the plans of development are consistent with the goals stated herein.
7. The plantings that constitute a landscaped area must be properly maintained in order for the landscaped area to fulfill the purposes for which it is established. The owner of the property shall be responsible for the maintenance of all plant material within the landscaped area. Such maintenance shall include all actions necessary to keep the landscaped areas free of litter and debris and to keep plantings healthy and orderly in appearance. Any required vegetation that constitutes part of a landscaped area shall be replaced in the event that it dies.
8. This section is replicated in Section 9.8.2 D of this Ordinance.
9. All plantings shall meet the requirements in Section 9.21 set forth in this Ordinance.

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- 3. Parking facilities shall be continually maintained in compliance with the approved site and/or subdivision plan and shall be free of litter and debris at all times.
- 4. Each parking area shall meet all applicable landscaping, screening, and buffering requirements set forth in Section 9 of this Ordinance.
- 5. All parking areas shall be separated at least ten feet from buildings, in order to allow room for sidewalks, landscaping, and other plantings between the building and the parking area. This separation may be eliminated in the rear of buildings in areas designed for unloading and loading of materials; this applies primarily to industrial and warehousing buildings.
- 6. The visibility of parking areas shall be reduced by placing parking to the rear or side of buildings facing public streets.
- 7. All stacking lanes for day care centers shall be located at least ten feet from the principal building with either an on-site turnaround or separate points for ingress and egress
- 8. **Reduction in Number of Required Off-Street Parking Spaces**
 - A. As part of its review and approval of a site plan for a development, the Board of Commissioners may allow a reduction of up to 10 percent in the number of designated parking spaces from the allowed parking minimum (Section 12.3.4 (d)(1)) upon finding that such a reduced number will be sufficient to satisfy the demand for parking expected for the use during the normal shopping season, i.e. times other than November, December, and January, based on the nature of the use, the number of trips generated, the times of day when the use generates the most trips, and the extent to which other establishments are located on the same property and may reduce the number of vehicle trips required between different establishments. A parking study must be submitted to the Board of Commissioners to determine if a reduction in parking is allowable.
- 9. **Handicapped Parking Requirements**
 - A. Residential Uses Handicapped
Accessible parking for residential uses shall be provided at the rate of one space per each dwelling unit that is designed for occupancy by the handicapped.
 - B. Non-Residential Uses Handicapped
Accessible parking spaces shall be provided for uses other than residential, at the rate shown in Table 12.3.H.b below:

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TABLE 12.3.H.b: HANDICAPPED PARKING FOR NON-RESIDENTIAL USES	
Total Number of Required Parking Spaces	Number of Required Handicapped Spaces
0-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1,000	2 percent of total spaces
Above 1,000	20 spaces, plus one space for each 100 over 1,000 spaces or fraction thereof.

- C. Relationship to General Off-Street Parking Requirements
Handicapped parking required by this section shall count towards the fulfillment of the general off-street parking requirements of this section.

- D. Compliance with North Carolina Building Code
In addition to meeting the requirements of this Section, all handicapped parking shall comply with the NC State Building Code Volume 1C (as amended); but the more restrictive of the two shall apply.

10. Stacking Spaces for Drive-Through Uses

In addition to meeting the off-street parking requirements of this section, drive-through facilities specified in Table shall comply with the following minimum stacking space standards:

TABLE 12.4 SCHEDULE OF STACKING SPACES		
Type of Use	Minimum Stacking Spaces	Measured From
Bank, teller lane	4	Teller window
Bank, ATM	3	Teller machine
Restaurant, with drive through	8	Order box *
Car Wash, automatic	6	Bay entrance
Car Wash, self-service	3	Bay entrance
Car Wash, full service	4	Bay entrance
Auto Service Station, gas pump island	30 feet from each end of island	

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Unlisted	**
<p>*A minimum 4-vehicle queue shall be provided from the order box to the pick-up window.</p> <p>** Requirements for uses not specifically listed may be determined by the Zoning Administrator based upon the requirements for comparable uses and upon the particular characteristics of the use. Alternately, the applicant may submit a parking demand study.</p>	

12.5 | PARKING ALTERNATIVES

The Zoning Administrator shall be authorized to approve alternatives to providing the number of off-street parking spaces recommended by section 12.3 of this Ordinance in accordance with the following standards:

- 1. **Shared Parking**

The Zoning Administrator may approve shared parking facilities for developments or uses with different operating hours or different peak business periods if the shared parking complies with all of the following standards:

 - A. Location

Shared parking spaces must be located within 1000 feet of any entrance of all uses served, unless remote parking shuttle bus service is provided. Shared parking spaces must not be separated from the use they serve by a thoroughfare or collector roadway. In addition, adequate and safe pedestrian access must be provided from and to the shared parking areas.
 - B. Zoning Classification

Shared parking areas must be located on a site with the same or a more intensive zoning classification than required for the primary uses served.
 - C. Shared Parking Study

Those wishing to use shared parking as a means of satisfying off-street parking requirements must submit a shared parking request to staff that justifies the feasibility of shared parking. Justification should include information on the size and type of the proposed development, the composition of tenants, the anticipated rate of parking turnover, and the anticipated peak parking and traffic loads for all uses that will be sharing off-street parking spaces.

 - 1. The maximum reduction in the number of parking spaces required for the parking area shall be 25 percent.

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2. Directional signage which meets the requirements of this Ordinance must be added to direct the public to the shared parking spaces. It is preferable for the employees of an establishment to utilize these spaces.

D. Agreement for Shared Parking

A shared parking plan will be enforced through written agreement among all owners of record. An attested copy of the agreement between the owners of record must be submitted to the Zoning Administrator for recordation. Recordation of the agreement must take place before issuance of a building permit for any use to be served by the shared parking area. A shared parking agreement may be revoked only if all required off-street parking spaces will be provided in accordance with the requirements of this ordinance

2. **Off-Site Parking**

If some or all of the off-street parking spaces required by this section cannot reasonably be located on the same lot as the principal use, then such spaces may be provided on land located within 1000 feet of any entrance to such principal use (the required maximum 1000-foot separation of the use from the parking shall be measured from any entrance to the nearest parking lot space following a reasonable and safe walking route), provided that:

- A. The land on which the parking facilities are provided is owned by the same person or persons as the principal use.
- B. Such land is not separated from the principal use by a thoroughfare or collector street, unless both the use and the parking area are located within the C- 4 district or are specifically approved by Council based on safe pedestrian crosswalks linking the parking with the principal use.
- C. Such land is located in a zoning district within which the principal use would be allowed as a permitted or conditional use.
- D. Such land shall be used for no other purpose than to provide parking for the principal use.
- E. There is a pedestrian walkway or sidewalk connecting the parking area to the use it serves.
- F. The provision of off-site parking, whether the spaces are new or existing, shall be indicated and reviewed as part of the site plan approval process.

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G. The restrictions of this subsection shall not apply to those uses that share parking spaces pursuant to subsection above.

3. Parking Structures

The off-street parking required by or provided under this section may be located in a parking structure, whether on the same or on a different lot than the uses which it serves. Ground floor parking provided in a parking structure shall be screened, insofar as practicable, from surrounding uses and from public view. In addition, for uses located on the same lot as the structure, the conditions required under this ordinance shall apply.

4. Valet and Tandem Parking

The Zoning Administrator may approve an off-street parking program utilizing limited tandem parking for commercial and industrial uses provided that the development requires 75 or more parking spaces. No more than 30 percent of the total number of spaces shall be designated as tandem. In addition, a valet parking attendant must be on duty during business hours.

5. Other Eligible Alternatives

The Zoning Administrator may approve any other alternative to providing off-street parking spaces on the site of the subject development if the applicant demonstrates to the satisfaction of the Zoning Administrator that the proposed plan will protect surrounding neighborhoods, maintain traffic circulation patterns, and promote quality urban design to at least the same extent as would strict compliance with otherwise applicable off-street parking standards.

12.6 DIMENSIONAL REQUIREMENTS FOR PARKING SPACES, AISLES & DRIVEWAYS

- 1. All parking spaces, aisles between parking spaces, and parking space modules shall meet the minimum dimensional requirements set forth in this ordinance.
 - A. On-street parallel parking spaces must be a minimum of eight (8) feet wide by twenty-one (21) feet long.
 - B. Back-In Reverse-Angled Parking must be a minimum of nine (9) feet wide by thirteen (13) feet long.
 - C. Drive-In Angled Parking
 - 1. 45° parking spaces must be a minimum of nine (9) feet wide by seventeen (17) feet long.

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- 2. 60° parking spaces must be a minimum of nine (9) feet wide by eighteen (18) feet long.
 - D. 90° parking spaces within a parking lot must be a minimum of nine (9) feet wide by eighteen (18) feet long.
2. Compact parking spaces may be provided in addition to the required minimum number of spaces on a case-by-case basis. Compact parking spaces must be no less than 8 feet wide and 16 feet long.

To exceed the maximum number of parking spaces allowed per Section 12.4 the applicant must get approval from the Zoning Administrator prior to installation and must construct all parking that exceeding the maximum out of pervious paving materials approved by the Town of Waxhaw Engineer. Any request for parking above the maximum allowed must also provide an additional 5% of internal tree save. Where no internal tree save is required, a minimum of 10% internal tree save must be accomplished in order for the applicant to receive approval for the additional parking. Where no trees exist, the applicant must create (plant) a continuous canopy on a minimum of 5% of the total acreage of the site. An approved North Carolina Registered Urban Forester or ISA Registered Certified Arborist must work with the applicant to determine the best location for all of the above options.

- 3. Parking structures may be subject to dimensional adjustments based on utilization, but in no case shall the standard space width be less than nine feet, unless providing additional parking under Section 12.6.2 of this Ordinance. Reduction in design standards shall be subject to approval by the Zoning Administrator.
- 4. Driveways for all uses, except single-family residential, shall maintain a minimum of 20 feet in width along the length of the driveway.

12.7 USE AND IDENTIFICATION OF PARKING AREAS

- 1. Where parking lots for more than five (5) cars are permitted or required under this Ordinance, the following requirements shall apply:
 - A. The parking lot may be used only for parking and not for any type of loading, sales, dead storage, repair work, dismantling, or service of vehicles. Notwithstanding the above, the Zoning Administrator may allow the use of a portion or portions of a parking lot for such uses on a case-by-case basis, provided that such spaces are not part of areas required for site ingress or egress.

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12.8 | LOADING SPACE REQUIREMENTS

1. Number of Required Off-Street Loading Berth

At least the number of berths specified in Table 12.9 below, depending on the gross floor area of the land use, shall be provided on the property. The developer shall evaluate his or her own needs to determine if the use requires a greater number of spaces than those required by this section.

2. Minimum Dimensions

Each loading berth required by this section shall be at least 12 feet wide by 25 feet long, with at least 14 feet of overhead clearance. Each required loading berth shall have adequate, unobstructed means for the ingress and egress of vehicles.

Gross Floor Area (in square feet)	Minimum Number of Berths
Less than 40,000	1
40,000-100,000	2
100,000-160,000	3
160,000-240,000	4
240,000-320,000	5
320,000-400,000	6
Above 400,000	1 per each 90,000 above 400,000 gsf of area

3. Waiver or Modification of Requirements

As part of the review and approval of a site plan, the Zoning Administrator may waive or modify the requirements of this section upon finding that the use does not require loading spaces of a number or size required by this section, given the particular operational characteristics of the use and its need or lack thereof for the delivery or shipments of goods to and from the site.

4. Location and Screening of Loading Areas

To the maximum extent possible, all loading berths shall be located between the building and the rear lot line of the property, and/or shall be screened from the view of the street and adjacent properties. All loading areas shall meet the applicable landscaping, screening, and buffering requirements set forth in Section 9.8 The details of such location and screening shall be reviewed and approved as part of the site and/or subdivision plan.

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12.9 CONNECTIVITY

1. Purpose and Scope

The purpose of this section is to support the creation of a highly connected transportation system within the town in order to provide choices for drivers, bicyclists, and pedestrians; promote walking and bicycling; connect neighborhoods to each other and to local destinations such as schools, parks, and shopping centers; reduce vehicle miles of travel and travel times; improve air quality; reduce emergency response times; increase effectiveness of municipal service delivery; and free up arterial capacity to better serve regional long distance travel needs. Any additional pedestrian connections required under this Section do not have to address handicap accessibility standards.

2. Consistency with Other Documents

The design and evaluation of vehicular, bicycle, and pedestrian circulation systems built in conjunction with new residential and non-residential development shall adhere to the requirements of this section.

12.10 BICYCLE PARKING STANDARDS

1. Bicycle parking shall meet the following standards:

- A. Location.
Bicycle parking should be located along a major building approach line and clearly visible from the approach. The rack area should be no more than a 30-second walk (120 feet) from the entrance it serves and should preferably be within 50 feet. A rack area should be as close, or closer than the nearest non-handicap car parking space. A rack area should be clearly visible from the entrance it serves. A rack area should be provided near each actively used entrance. In general, multiple buildings should not be served with a combined, distant rack area. It is preferred to place smaller rack areas in locations that are more convenient.

- B. Minimum Number
All nonresidential developments must install and maintain at least one bike rack per building. The Planning Board may recommend that this number be increased based on the size, type, intensity, and location of the development.

- C. Exception
The bicycle parking requirements shall not apply to businesses located in the C-4 district.

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2. General standards for all bicycle parking areas:

A. Secured.

Bike lockers and racks shall be securely anchored to the ground and on a hard surface.

B. Maneuvering areas.

Each required bicycle parking space shall be accessible without moving another bicycle. An aisle at least five (5) feet wide is required between the building wall and the bicycle parking rack to allow room for bicycle maneuvering. Bicycle parking spaces should provide a clearance of at least four (4) feet on adjacent sidewalks. Bicycle lockers should be situated so there are no obstructions within 5 feet of the entry door(s) of the locker.

C. Signs.

If required bicycle parking is not clearly visible from the entrance to the building, parking structure, transit station, or lot, a sign shall be posted at the primary entrances indicating the location of the parking.

12.11 STANDARDS FOR PEDESTRIAN FACILITIES

1. In addition to the general provisions of Section 12 above, the following specific standards shall be met in designing and achieving a pedestrian circulation system in new residential and non-residential development:

A. Sidewalks

1. Sidewalks shall be installed on both sides of all arterials, collector streets, and nonresidential cul-de-sacs, and within and along the frontage of all new development or redevelopment. Sidewalks should be located within the street right-of-way. In order for a sidewalk to be located outside the public right-of-way, the Zoning Administrator must approve the location and an approved sidewalk easement must be recorded with the Union County Register of Deeds prior to issuance of final Zoning Compliance.
2. Pedestrian crossings shall be made safer for pedestrians whenever possible by shortening crosswalk distance with curb extensions, reducing sidewalk curb radii, and eliminating free right-turn lanes. Signals that allow longer crossing times in shopping districts, mid-block crossings in high-pedestrians use areas (if well marked and traffic speeds are low), and raised crosswalks and medians shall be provided as appropriate.
3. Within residential and/or non-residential developments, pedestrian ways, crosswalks, or multi-purpose trails no less than five feet in width, shall be constructed near the center and entirely through any block which is 900 feet or more in length where necessary to provide adequate

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pedestrian circulation or access to schools, churches, retail stores, personal service establishments, recreational areas, or transportation facilities.

- 4. Pedestrian walkways shall form an on-site circulation system that minimizes conflict between pedestrians and traffic at all points of pedestrian access to on-site parking and building entrances. Pedestrian walkways shall connect building entrances to one another and from building entrances to public sidewalk connections and existing or planned transit stops. Pedestrian walkways shall be provided to any pedestrian access point or any parking space that is more than 50 feet from the building entrance or principal on-site destination. All developments that contain more than one building shall provide walkways between the principal entrances of the buildings. All non-residential buildings set back more than 100 feet from the public right-of-way shall provide for direct pedestrian access from the building to buildings on adjacent lots.
- 5. Where residential developments have cul-de-sacs or dead-end streets, such streets shall be connected to the closest local or collector street or to cul-de-sacs in adjoining subdivisions via a sidewalk or multi-use path, except where deemed impractical by the Zoning Administrator.

12.12 EXTERIOR LIGHTING

1. General Requirement

All exterior lighting, such as that used in and around buildings, recreation areas, parking lots, and signs, shall be designed to meet the following general requirements:

- A. Protect against the spillover of light to adjacent properties;
- B. Protect against glare onto public rights-of-way thereby impairing the vision of motorists and adjoining properties;
- C. Shield adjacent properties by thick evergreen vegetated buffers, berms, walls, or fences, and/or the use of directional lighting, lighting shields, special fixtures, timing devices, appropriate light intensities, luminaries, and mountings at appropriate heights.

2. Lighting Plan Required

- A. A point-by-point lighting plan is required for site plan approval that indicates the foot-candles at grade grid points that cover the site. The Zoning Administrator can waive this requirement for small independent projects on less than an acre if the fixture types are specified on the plan.

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B. Any changes to the lighting plan must be approved by Zoning Administrator through a site and/or subdivision plan revision.

3. Standards

All outdoor lighting shall conform to the standards and provisions found in the standards listed below:

A. Maximum Lighting Height

Outdoor lighting, except Outdoor Sports Fields and Performance Areas (see Section 12.12.3.H), shall be designed, located and mounted at heights no greater than:

1. Eighteen feet above grade for non-cut-off lights;
2. Thirty-five feet above grade for cut-off lights, unless a raised foundation is required to protect the poles, in which case the maximum height shall not exceed thirty-seven feet above grade.

B. Maximum Light Levels at the Property Line

All outdoor lighting and/or indoor lighting visible from outside shall be designed and located such that the maximum illumination measured in foot-candles at a property line shall not exceed the standards in the following table, except Outdoor Sports Fields and Performance Areas as specified in Section 12.12.3.H. Cut-off lighting shall be designed to direct light downward (e.g., shoe box style).

TABLE 12.10.b: MAXIMUM ILLUMINATION VALUES* (REGARDLESS OF LIGHT TYPE)	
Property Line	Maximum Illumination (in Foot-Candles)
Residential	0.5
Commercial	2.5
Industrial/Edge of right-of-way	2.5
*These standards may be modified by the zoning administrator	

C. Parking Lot Lighting Standard

For parking lots the minimum light level shall be no less than 0.2 foot-candles. The average foot-candle maintained to the minimum foot-candles ratio shall be no greater than 4:1 (upper to lower limits). All foot-candles are to be measured at ground level.

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D. Distance from Property Line

All outdoor lighting fixtures shall be located a minimum of ten feet from a property or five feet from a right-of-way line and should not be located within a required perimeter buffer or streetscape unless it is located at the interior edge.

E. Lighting for Canopies

1. Lighting for canopies shall be restricted to lighting fixtures (including lenses) that do not project below the bottom of the canopy. Lighting for canopies for service stations and other similar uses shall not exceed an average of 12 foot-candles as measured at ground level at the inside of the outside edge of the canopy.
2. Canopies used for building accents over doors, windows, etc. shall not be internally lit (i.e., from underneath or behind the canopy).

F. Floodlights and Spotlights

Lighting fixtures shall be selected, located, aimed, and shielded so that direct illumination is focused exclusively on a portion of the building façade or other intended site feature and away from adjoining properties or the right-of-way. On-site lighting may be used to accent architectural elements but shall not be used to illuminate entire portions of building(s). Such lighting shall be installed in a fixture that is shielded such that no portion of the light bulb extends below the bottom edge of the shield, and that the main beam from the light source is not visible from adjacent properties or the adjacent right-of-way. Floodlights or other type of lighting attached to light poles that illuminate the site and/or building(s) are prohibited.

G. Wall Pack Lights

Wall packs on buildings may be used at entrances to a building to light unsafe areas. They are not intended to draw attention to the building or provide general building or site lighting. "Wall Packs" on the exterior of the building shall be fully shielded (true cut-off type--bulb or light source not visible from off-site) to direct the light vertically downward and be of low wattage (preferably 100 watts or lower).

H. Illumination of Outdoor Sports Fields and Performance Areas

Lighting of outdoor sports fields and performance areas shall be installed in accordance with the following requirements:

The mounting height of outdoor sports field and outdoor performance area lighting fixtures shall not exceed eighty (80) feet from finished grade, including any foundations, etc.

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All outdoor sports field and outdoor performance area lighting fixtures shall be equipped with the manufacturer's maximum glare control package (louvers, shields, visors or similar devices). The fixtures must be aimed so that their beams are directed and fall within the primary playing field or performance area.

Events shall be scheduled so that the normal hours of operation for the sports field lighting system for any game or event shall not exceed 8:00AM to 11:00PM. An exception to this time limit may be granted for completion of unusually long games, a performance which has been weather-delayed, or when a tournament or performance is scheduled in advance with a final game or performance to occur beyond 11:00PM. The facility's property owner and management/production authority for the tournament or performance are jointly responsible for providing notice of potential time extension for tournament play to the Town Manager and adjacent property owners/occupants. Written notice may be distributed to adjacent property owners/occupants by first class mail postmarked 48 hours in advance or door hang tags at least 24 hours in advance of the event. Written notice shall be provided to the Town Manager by e-mail and first class mail postmarked 48 hours in advance of the event.

Lighting of playing fields or performance areas shall only be turned on when activity is scheduled and occurring. When scheduled activities are completed prior to 11:00PM, the field or performance area lights shall be turned off (when egress lighting is separate) or reduced in light level by at least fifty percent (50%) within one hour after conclusion of play or other activity. When there are no scheduled activities at a sports field or performance area, the lighting shall not be turned on.

Security and egress illumination lighting systems may remain turned on for any amount of time deemed necessary to remove people safely.

Light levels for outdoor sports field and performance area illumination shall be equal to, but not exceed, the following:

Where new outdoor sports field and performance area lighting is installed adjacent to an existing residentially developed or zoned property, light levels shall not exceed a maximum level of one-half (.5) foot candles at the property line. When not installed adjacent to a residentially developed or zoned parcel, light levels shall not exceed a maximum level of two and one-half (2.5) foot candles at the property line. When installed adjacent to any right-of-way, light levels shall not exceed two and one-half (2.5) foot candles at the property/right-of-way line, except adjacent to rights-of-way that exist interior to the sports field

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or performance area. In addition, sports field events shall not exceed the tournament play lighting standards of fifty (50) foot candles in the infield and thirty (30) foot candles in the outfield.

I. Sign Lighting

Lighting fixtures illuminating signs shall comply with the requirements of section 13 of this Ordinance, and such fixtures shall be aimed and shielded so that direct illumination is focused exclusively on the sign face.

J. Location

Light pole/stands shall not be located in planting bed(s) with trees and other vegetation.