Town of Cornelius
Land Development Code Advisory Board

Agenda
September 24, 2018
5:30 PM
Town Hall - Room 204

Call To Order

Determination of Quorum

Presentations

1. 2018 Transportation Bond Referendum

Approval of Minutes

1. July 23, 2018

Review And Recommendation On Agenda Items

1. Automotive Service Uses Prohibition - Mr. Evan Miller
2. TA 09-17 Small Cell Wireless
3. TA 02-18 Watershed Built Upon Area Averaging

Old Business

New Business

Next Meeting

Adjournment

REQUEST FOR BOARD ACTION

Print

Date of Meeting: September 24, 2018

To: LDCAB

From: Wayne Herron, AICP

Deputy Town Manager

Action Requested:

Staff will provide a brief overview of the 2018 Transportation Bond Referendum.

Manager's Recommendation:

Hear Presentation.

ATTACHMENTS:		
Name:	Description:	Type:
No Attachments Available		

REQUEST FOR BOARD ACTION

Print

Date of Meeting: September 24, 2018

To: Chair and LDCAB Members

From: Summer Smigelski, Planning Admin.

Action Requested:

Approval of Minutes

Manager's Recommendation:

Approval

ATTACHMENTS:		
Name:	Description:	Type:
07232018MinutesLDCAB.docx	July 23, 2018 LDCAB Minutes	Backup Material

Minutes

TOWN OF CORNELIUS LDCAB

July 23rd, 2018

5:30 PM

Members Present	**Members Absent**	**Staff Present**
Cheryl Crawford, Chair	David Dunn	Wayne Herron, Planning Director
Norris Woody, Vice Chair	David Gilroy	Becky Partin, Senior Planner
Keith Eicher	John Hettwer	Summer Smigelski, Admin.
Bob Bruton		
Chaz Churchwell		
Joe Dean		
Laura Pegram		
Karen Tovar		
Michael Miltich		

VISITORS

See Sign In Sheet.

DETERMINATION OF QUORUM

Chairman Crawford called the meeting to order at 5:32 PM and determined a quorum was present.

Automotive Service Uses Prohibition-Mr. Evan Miller

Mr. Evan Miller addressed the Board. Mr. Miller owns property at 20306 Sefton Park Road. He was recently approached by and auto body use and just found out the use was prohibited. Mr. Miller would like the use added back in the code in some manner.

Mr. Herron reviewed the following:

- Proliferation of automotive sales & service at Exit 28 initiated discussions 2006/2007.
- Desire for Cornelius to be a walkable, bike-able community.
- May 5, 2008 - limited the amount of Automotive Sales, Leasing and/or Service uses within the Town. Only existing automotive sales, leasing and/or service could expand subject to a Conditional Use Permit; no new uses allowed.
- September 21, 2015 – added Automotive Sales District Overlay along US 21.
- Discussed by LDCAB, PB, and TB several times since 2015 – including Code update adopted on March 19, 2018.
- With CZ automobile, truck, motorcycle, boat, RV sales allowed in specific area.
- Minimum 3 acres required.
- Principal buildings must front a public street & meet architectural requirements.
- Additional conditions for parking lots, landscaping, display, storage, PA systems.
- Service is only allowed as ancillary use.
- Automobile rentals allowed by right in ASD-O.

Mr. Miller is requesting that the prohibition on automotive repair and service uses be reconsidered.

After discussion the board agreed to have staff bring back draft alternatives.

APPROVAL OF MINUTES

DRAFT

TOWN OF CORNELIUS LDCAB
July 23rd, 2018

The Board unanimously approved the April 30th, 2018 minutes.

Motion made by Mr. Eicher. Seconded by Commissioner Miltich. All in favor, motion approved.

In Favor: Chairwoman Crawford, Mr. Dean, Mr. Eicher, Ms. Pegram, Vice Chair Woody, Mr. Bruton, Mr. Churchwell, Ms. Tovar, Commissioner Miltich

Opposed: None

Parking Oversize Vehicles on Public Streets
Standing or Parking for Certain Proposes Prohibited (Current)

A. It shall be unlawful to stand or park a vehicle upon any street, road or highway right-of-way for the purpose of:
    - Displaying it for sale;
    - Washing, greasing or repairing such vehicle except repairs necessary by emergency;
    - Storage of such vehicle; or
    - Advertising a business, product, service, event, organization or merchandise of any type.
B. A vehicle shall be deemed to have been left on the street, road or highway right-of-way for the purposes in division (A) above, when that vehicle has been standing in one place on a street, road or highway right-of-way of the town for a period longer than 24 hours. The provisions of this division shall apply to a vehicle which is left standing in front of its owner's residence only when the vehicle has no license plates or expired license plates.

Certain Vehicles Parked only for Loading and Unloading (Current)

(A) It shall be unlawful for any person to park any of the following vehicles on streets or roads within the corporate limits of the town at any time, except when engaged in loading and unloading or otherwise lawfully and actively engaged in conducting the business for which they are intended and only for the duration of such activities:

(2) Private vehicles whose overall dimensions, including any trailer attached thereto, are more than 80 inches in width or 30 feet in length.

Regulating Parking:

1. On any public street, parking vs. no parking can be regulated. Normally, a request comes from an HOA and Town may consider the request.
2. If parking is allowed, Town cannot discriminate or regulate based on simply commercial versus noncommercial, but may do so based on a defined characteristic of a vehicle, such as size, number of axles, etc.

Mr. Herron presented the proposed change to the Code of Ordinances

71.09 Certain Vehicles Parked Only For Loading and Unloading

(A) It shall be unlawful for any person to park any of the following vehicles on streets or roads within the corporate limits of the town at any time, except when engaged in loading and unloading or otherwise lawfully and actively engaged in conducting the business for which they are intended and only for the duration of such activities:

(2) Private vehicles whose overall dimensions, including any trailer attached thereto, are more than ~~80 inches~~ 6 ½ feet in width or ~~30~~ 20 feet in length or 8 feet in height.

DRAFT

Vehicle Definitions- Every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, excepting devices moved by human power or used exclusively upon fixed rails or tracks

After discussion the board approved Parking Oversize Vehicles on Public Streets as presented.

Motion made by Mr. Woody. Seconded by Ms. Tovar. All in favor, motion approved.

In Favor: Chairwoman Crawford, Mr. Dean, Mr. Eicher, Ms. Pegram, Vice Chair Woody, Mr. Bruton, Mr. Churchwell, Ms. Tovar, Commissioner Miltich **Opposed:** None

TA 04-18 Ch. 3 Commercial Vehicles
Section 3.1.2, Commercial Vehicles

COMMERCIAL VEHICLES

Commercial vehicles used primarily for commercial purposes and with more than two axles are prohibited from parking in residential districts and commercial districts, unless in a designated loading area or approved storage area. This shall not be construed as to prevent the temporary parking of delivery trucks, moving vans, and similar vehicles, which deliver goods and services.

After discussion the board approved TA 04-18 as presented.

Motion made by Mr. Woody. Seconded by Mr. Bruton. All in favor, motion approved.

In Favor: Chairwoman Crawford, Mr. Dean, Mr. Eicher, Ms. Pegram, Vice Chair Woody, Mr. Bruton, Mr. Churchwell, Ms. Tovar, Commissioner Miltich **Opposed:** None

TA 06-18 Murals
Ms. Partin presented Chapter 10 signs

Section 10.5, Building Mounted Sign Descriptions

Murals
- Allowed in HC, IC, NMX, VC, TC, TN, WMX, CO, BC
- Currently allowed on non-street fronting walls
- Requires review & recommendation of ARB, then approval by Zoning Administrator
- May not be painted around or over any windows, awnings, or doors

Proposed Change

- Painted mural display applications may be allowed along an ~~available~~ exterior ~~non-street fronting~~ wall ~~spaces only~~, pending approval by the Zoning Administrator after review and recommendation by the ~~Architectural Review~~ Parks, Arts, Recreation and Culture (PARC) Board.

- Murals must be painted to suitable portions of ~~non-street fronting~~ wall surfaces and may not be painted around or over any windows, awnings or glass doors.

- Murals may be externally lighted with building proportionate spotlighting, gooseneck or similar. Fixtures should be adequately spaced, four (4) to six (6) feet apart. No ground mounted up lighting is allowed.

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TOWN OF CORNELIUS LDCAB
July 23rd, 2018

After discussion the board approved TA 06-18 as presented.

Motion made by Commissioner Miltich. Seconded by Ms. Tovar. Motion approved eight to one.

In Favor: Chairwoman Crawford, Mr. Dean, Mr. Eicher, Ms. Tovar, Ms. Pegram, Vice Chair Woody, Mr. Churchwell, Commissioner Miltich **Opposed:** Mr.Bruton

70% Window/Doorway Coverage

Ms. Partin asked the board to discuss the minimum 70% of street level frontages to be windows or doorways and whether this is a linear or area requirement.

After discussion the board recommended 70% area of the first floor.

Motion made by Commissioner Miltich. Seconded by Mr. Bruton. All in favor, motion approved.

In Favor: Chairwoman Crawford, Mr. Dean, Mr. Eicher, Ms. Pegram, Vice Chair Woody, Mr. Bruton, Mr. Churchwell, Ms. Tovar, Commissioner Miltich **Opposed:** None

Building Height in Village Center

Ms. Partin presented the difference in language between the Land Development Code versus the Land Use Plan.

Land Development Code Description

The Village Center district is coded to encourage the development of large-scale mixed-use districts that compliment and serve the daily needs of adjoining neighborhoods and are supported by existing and planned transportation networks constructed to support the traffic demands of both the auto and the pedestrian. Building heights ensure proper spatial definition, encourage strong pedestrian spaces and promote mixed use within buildings. Parking requirements may be satisfied using on-street parking, shared rear-lot parking areas or small scale parking lots adjacent to buildings. Buildings in the village center should have similar massing, volume, frontage, scale, and architectural features. Transitions from residential areas should be accomplished through proper street design.

TOWN OF CORNELIUS LDCAB
July 23rd, 2018

LDC Dimensional Requirements:
- Minimum height = 26'
- Max height (stories) = 3 by right; up to 6 with CZ

Land Use Plan Category

VILLAGE CENTER

Village centers serve local economic, entertainment, and community activities. Uses and buildings are located on small blocks with streets designed to encourage pedestrian activity. Buildings in the core of the village center may stand two or more stories. Residential units may be found above storefronts. Parking is satisfied using on-street parking and shared rear-lot parking strategies. A large-scale village center is typically surrounded by one or more medium-density residential or urban mixed use neighborhoods that encourage active living, with a comprehensive and interconnected network of walkable streets. Non-residential development in these areas should focus on providing service to residents of the Town and visitors. Village center areas should provide an appropriate pedestrian experience, with bicycle amenities, ample sidewalks with appropriate lighting, and wayfinding signage to orient visitors to points of interests.

Primary Land Uses:
- Townhome
- Condominium / apartment
- Restaurant
- Community-serving commercial uses
- Professional office
- Live/work/shop units
- Public plaza

Secondary Land Uses:
- Daycare
- Farmers market
- Pocket park

Typical Development Characteristics:
- Prevailing Building Heights: 1 - 2 Stories
- Range of Residential Densities: Average 4 Dwelling Units / Acre
- Range of Non-Residential Intensities: Typical: .75 FAR

Staff is asking for the board to discuss the Land Development Code building height requirement in the Village Center zoning district and the Village Center Land Use Plan category.

After discussion the board recommended to change the Land Use Plan to say 26 feet with Conditional Zoning.

Motion made by Mr. Eicher. Seconded by Mr. Bruton. All in favor, motion approved.

After discussion the board recommended 70% area of the first floor.

Motion made by Commissioner Miltich. Seconded by Mr. Bruton. All in favor, motion approved.

In Favor: Chairwoman Crawford, Mr. Dean, Mr. Eicher, Ms. Pegram, Vice Chair Woody, Mr. Bruton, Mr. Churchwell, Ms. Tovar, Commissioner Miltich

Opposed: None

Next Meeting
September 24th, 2018

Adjournment
Commissioner Miltich made a motion to adjourn the meeting at 6:56pm. Mr. Eicher seconded. All in favor and motion approved.

After discussion the board recommended 70% area of the first floor.

Motion made by Commissioner Miltich. Seconded by Mr. Bruton. All in favor, motion approved.

In Favor: Chairwoman Crawford, Mr. Dean, Mr. Eicher, Ms. Pegram, Vice Chair Woody, Mr. Bruton, Mr. Churchwell, Ms. Tovar, Commissioner Miltich

Opposed: None

DRAFT

REQUEST FOR BOARD ACTION

Print

Date of Meeting: September 24, 2018

To: LDCAB

From: Wayne Herron, AICP

Deputy Manager/Director of Planning

Action Requested:

Mr. Evan Miller appeared before the LDCAB at the July meeting to express his desire that the prohibition on automotive repair and service uses be reconsidered.

LDCAB requested Staff prepare options for consideration. Staff has prepared options which are attached.

Manager's Recommendation:

Provide Direction Regarding Auto Body Uses.

ATTACHMENTS:		
Name:	Description:	Type:
LAND_USE_OPTIONS_FOR_SEFTON_ROAD_AREA.docx	Auto Body Use Options	Backup Material

LAND USE OPTIONS FOR SEFTON ROAD AREA

Summary for considering land use change – Mr. Evan Miller approached the LDCAB in July with request to specifically allow "auto body shop" uses. The Town prohibited all automotive uses in the Town in the 2006/2007 time frame. The prohibition of auto oriented uses was based on citizen feedback regarding expansion of auto related uses around exit 28 and then further bolstered during the development of the Comprehensive Master Plan (CMP) in 2009/2010. Citizen feedback has supported the prohibition over the years due to the proliferation of auto oriented uses taking away from our desire to create a walkable environment with land uses that create synergy with people and not the automobile. LDCAB asked Staff to present options for consideration:

1. NO CHANGE
   Continue to support the prohibition of auto oriented uses. It has been suggested that without the prohibition, Exit 28 and US 21 would be over run with new and used car sales along with small service centers. Is this what the Town wants in the gateway areas around Exit 28 and US 21? One other issue noted by Board members is that if one body shop goes in on Sefton, how difficult does that make it to recruit other retail and possibly 2nd and 3rd floor residential, if the Town decides to move in that direction. Allowing one auto business will attract other auto uses and detract from the recruitment of other more desirable/walkable uses.

2. SEFTON AREA OVERLAY FOR AUTO BODY
   Define a small area along Sefton to only allow auto body repair uses. These uses could be concentrated in this small geographic area around the CATS Park and Ride Lot. Staff has floated this idea to other property owners in the area and received luke warm reception. One auto body shop would eliminate the development of higher end commercial, retail and mixed use on any adjoining property and would only lead to requests for additional auto oriented uses on adjoining properties.

3. ALLOW AUTO BODY USES WITH CZ IN ALL HIGHWAY COMMERCIAL ZONING
   This would provide the option for the Town Board to consider these uses anywhere around Exit 28 or US 21.

4. ALLOW AUTO ORIENTED USES IN THE INDUSTRIAL DISTRICT
   There are some storage uses and auto type uses in the Industrial District. Staff also floated this idea to some property owners along Bailey and received luke warm reception here as well. With the recruitment of Yokohama and other high end uses along with micro breweries, auto uses simply don't fit for the future of what the vision of Bailey Road and our unique characteristics of industrial uses could be.

REQUEST FOR BOARD ACTION

Print

Date of Meeting: September 24, 2018

To: Land Development Code Advisory Board Members

From: Becky Partin

Senior Planner

Action Requested:

In 2017, the General Assembly of North Carolina adopted House Bill 310 into law. This bill was an "act to reform collocation of small wireless communications infrastructure to aid in deployment of new technologies". The bill facilitates the deployment of such structures with expeditious processes and reasonable and nondiscriminatory rates, fee, and terms. The following changes to the Land Development Code are necessary to be in compliance with this law:

Chapter 2, Definitions.

- Delete Antenna Systems
- Add Wireless Facility
- Add Wireless Facility, Small Cell

Chapter 4, Building Design. Add Section 4.2.4, Small Cell Wireless Facilities

- Add design criteria for small cell wireless facilities

Chapter 5, Zoning & Use Regulations

Modify the Use Table

- Delete Antenna Systems
- Add Small Cell Wireless Facility, requiring a Special Use Permit

Chapter 6, Uses Permitted With Conditions.

- Delete Antenna Systems
- Add Small Cell Wireless Facility conditions

Manager's Recommendation:

Recommend approval.

ATTACHMENTS:		
Name:	Description:	Type:
CH_02_Definitions-pages_changed.pdf	Chapter 2 - Definitions	Backup Material

CH_04_Building_Design_Specifications-marked.pdf	Chapter 4 - Building Desing	Backup Material
CH_05_Zoning___Use_Regulations-Use_Table.pdf	Chapter 5 - Zoning & Use Regulations, Use Table	Backup Material
CH_06_Uses_Permitted_With_Conditions-Conditions_Changed.pdf	Chapter 6 - Uses Permitted with Conditions	Backup Material

SECTION 2.6: DEFINITIONS

A

~~**Antenna Systems**~~

~~A network of spatially separated antenna nodes or similar technology connected to a common source via a transport medium that provides or enhances wireless service within a geographic area or structure(s). Antenna or similar technology elevations are generally at or below 30 feet high and node installations are compact. This definition does not include cell towers, other essential services as defined within this chapter or similar transmission devices. Antenna systems may be within public or private street right-of-way or on private property and may be owned by public and/or private entities. Nothing in this definition shall limit its applicability to future antenna or transmission technology that performs functionally in the same or similar manner.~~

Wireless Facility

Equipment at a fixed location that enables wireless communications between user equipment and a communications network, including: (1) equipment associated with wireless communications; and (2) radio transceivers, antennas, wires, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration. The term includes small cell wireless facilities. The term shall not include the following: (A) the structure or improvements on, under, within, or adjacent to which the equipment is collocated (B) Wireline backhaul facilities; (C) Coaxial or fiber-optic cable that is between wireless structures or utility poles or city utility poles that is otherwise not immediately adjacent to or directly associated with a particular antenna.

Wireless Facility, Small Cell

A wireless facility that meets both of the following qualifications: (1) each antenna is located inside an enclosure of no more than six cubic feet in volume or, in the case of an antenna that has exposed elements, the antenna and all of its exposed elements could fit within an imaginary enclosure of no more than six cubic feet; and (2) all other wireless equipment associated with the facility is cumulatively no more than 28 cubic feet in volume. The following types of associated ancillary equipment are not included in the calculation of equipment volume: electric meter, concealment elements, telecommunications demarcation box, ground-based enclosures, grounding equipment, power transfer switch, cut-off switch, and vertical cable runs for the connection of power and other services. Such facilities may be installed on a new, modified, or replacement pole no greater than 50' in height or extended no more than 10' above such pole or wireless support structure.

CHAPTER 4: BUILDING DESIGN

SECTION 4.1: ELEMENTS OF ARCHITECTURAL COMPATIBILITY

There are eleven (11) architectural design elements, which create urban space. Building compatibility is attained through the incorporation of a combination of these elements within neighboring buildings. A specific project may not need to incorporate all eleven (11) elements to maintain architectural compatibility provided those elements not addressed do not create incompatibility.

1. Building silhouette: similar pitch and scale to a roofline.
2. Spacing between building facades: setbacks or notches between primary facades, which frame the structure.
3. Setback from property line: building setback and/or primary façade setback from the property line.
4. Proportion of windows, bays, and doorways: vertical or horizontal elements tied together in bands across façade lengths.
5. Proportion of primary façade: size of facades similar in area and height to width ratios.
6. Location and treatment of entryway: important visual commonality between structures.
7. Exterior materials used: similar materials and treatment add to detail and monumentality of a building.
8. Building Scale: similarity of building height and configuration.
9. Landscaping: ordered street plantings tie buildings together and define space.
10. Shadow patterns from massing and decorative features: the light and dark surfaces from materials used and projections from window bays and setbacks create visual breaks.
11. Style of architecture: similar architectural styles create building harmony along a block face.

SECTION 4.2: ARCHITECTURAL STANDARDS

All new construction, with the exception of single-family residential dwelling units and duplexes, shall conform to the architectural requirements of this Section. The Planning Director may approve minor variations to this Section provided similar materials, configurations, and/or techniques are used that fulfill the intent of this Section. Major variation to building façade requirements due to unique building use requirements may be approved by the Planning Board, provided the overall pedestrianism of the street is maintained in accordance with all other standards. All variations shall be noted on the final approved plan. All structures shall adhere to the following general principles:

4.2.1: General Standards

A. The front elevations facing the street and the overall massing shall be pedestrian in scale.
B. Adjacent buildings shall be architecturally compatible through similar silhouettes, spacing between facades, setbacks, proportions, treatments, exterior materials, scale, massing, and/or architectural style. See Section 4.1, Elements of Architectural Compatibility.
C. The primary entrance shall be both architecturally and functionally designed on the front façade of the building facing the primary public street. Such entrances shall be designed to convey their prominence on the fronting façade. The use of fire-escape or exit-only doors as primary entrances is explicitly prohibited.
D. All new construction shall conform in street orientation, massing, lot width, and setbacks to adjacent existing and proposed structures.

E. Ground mounted mechanical equipment shall be located to the rear or side yard and screened from off-site view. Roof-mounted mechanical equipment shall be screened from off-site view by a parapet wall.
F. Loading and service delivery areas shall be located to the rear or side yard away from the primary street frontage.
G. Canopies and awnings shall be canvas or similar material and shall be permitted to encroach over a sidewalk to within two feet of a public street curb and may be illuminated by external lighting only.
H. The front façade of all buildings shall extend parallel to the frontage line of the lot.

4.2.2: NON RESIDENTIAL, MIXED USE, AND MULTI-FAMILY BUILDINGS

A. Materials
   1. Building walls:
      a. All districts except IC: Building walls shall be brick, cast concrete, stucco, stone, marble, or other materials similar in appearance and durability. Regular or decorative concrete block, and siding (non-vinyl) materials may be used on building walls not visible from a public street or as an accent material only. All accessory buildings shall be clad in materials similar in appearance to the principal structure.
      b. IC District: All building walls visible from a public street shall be brick, cast concrete, stucco, stone, marble, decorative concrete, masonry, or other materials similar in appearance and durability. All accessory buildings shall be clad in materials similar in appearance to the principal structure.
   2. Pitched roofs shall be clad in wood shingles, standing seam metal, corrugated metal, slate, diamond tab asphalt shingles, or similar material.
   3. Flat roofs shall incorporate parapet walls to conceal the flat portions of the roof that are visible on the front and side elevations from any public street.

B. Configurations
   1. Two wall materials may be combined horizontally on one facade. The heavier material should be below.
   2. Sky- lights shall be flat (non-bubble).
   3. All Districts Except IC:
      a. For commercial buildings, at least seventy percent (70%) of the street level frontages shall be in windows or doorways. Street level windows shall be visually permeable. Mirrorized glass is not permitted in any location. Faux or display casements are not permitted in lieu of exterior window treatments for the frontage elevation.
      b. No frontage wall shall remain unpierced by a window or functional general access doorway for more than sixteen feet (16').
      c. Each exterior door that provides access to an individual unit or any shared door shall contain a porch, stoop, or awning that forms as the predominant aspect of the building design. Porches shall constitute at least fifteen percent (15%) of the front facade of apartment units.
      d. For buildings greater than one-hundred feet (100') in width, there shall be no uninterrupted wall length exceeding seventy-five feet (75'). An interruption may consist of a change in place or a change in texture/masonry patterns.

e. For buildings less than seventy-five feet (75'), one interruption is required within thirty feet (30') on either side of the center of the building.
f. At least one (1) ground entrance to every dwelling shall be located within a walking distance of one-hundred feet (100') to the parking area within the development designated to serve that dwelling.
g. Garage doors are not permitted on the front elevation of any multi-family dwelling.
h. Detached garages or garage buildings shall be located in the side or rear yard only.

C. Techniques
1. Stucco shall be float finish.
2. Windows shall be set to the inside of the building face wall.

4.2.3: School and Civic Buildings (Churches, Government Offices, and other Civic Facilities)

Schools, churches, and government buildings should be built so that they terminate a street vista whenever possible, and shall be of sufficient design to create visual anchors for the community. Such buildings shall adhere to the provisions as marked below.

A. Materials
1. Building walls shall be clad in stone, stucco, brick, marble. Decorative cast concrete and wood or vinyl siding may be used as a minority element on facades facing public streets.
2. Roofs shall be clad in slate, sheet metal, corrugated metal, or diamond tab asphalt shingles, or other material similar in appearance and durability.
3. Gutters and down spouts shall be made of copper or galvanized painted metal.
4. Columns, if provided, shall be made of wood, cast concrete, or fiberglass.
5. Stained glass or other decorative window treatments are encouraged.

B. Configurations
1. Two wall materials may be combined horizontally on one facade. The heavier material should be below.
2. Flat roofs are permitted; however, buildings adjacent to residential structures shall have pitched roofs or architectural features similar to the adjacent residential structures to ensure compatibility. This requirement may be waived when it is deemed to serve no meaningful purpose or public benefit.

C. Techniques
Windows shall be set to the inside of the building face wall.

4.2.4: Small Cell Wireless Facilities
a. Shall be collocated on existing poles where feasible;
b. May be installed on a new, modified, or replacement pole not to exceed 50' in height or extended no more than 10' above the utility pole, city utility pole, or wireless support structure on which it is located;
c. Shall be camouflaged, disguised, hidden, and/or blended in with the surrounding environment;

d. Shall be installed at property lines and street corners where feasible;
e. Shall be located such that they do not interfere with public health or safety, such as but not limited to a fire hydrant, fire station, fire escape, water valve, underground vault, valve housing structure, or any other public health or safety facility. New facilities shall not be installed directly over any water, sewer, or service line;
f. Shall be of the same or better nature as other utilities in the immediate area (same or better decorative pole type; underground; etc.)
~~a.~~g. Shall Bear no signs or advertising devices except as required by law.

5.**4.2: Table of Uses**

Use Table designations:

- "Permitted By right" is allowed in a zoning district as a matter of right and are designated with a “P";
- “Permitted with Supplemental Conditions” is allowed in a zoning district as a matter of right with specific conditions, as identified in Chapter 6 of this Code, and is designated with a “PC”;
- "Special Uses" are allowed only after a special use permit has been issued and are designated with an "S";
- Uses that require a “conditional zoning” district process are designated with “CZ”;
- Uses designated with an “A” are only allowed as accessory uses. Conditions for “accessory uses with supplemental conditions” (AC), may be found in Chapter 6 of this Code.

P - Permitted By Right
PC - Permitted w/ Supp. Conditions
S -Special Use Permit Required
CZ - Conditional Zoning Approval Required
A - Accessory Use Only
AC - Accessory w/ Supp. Conditions

Use Category	RP	GR	NR	NMX	WMX	TC	VC	HC	BC	CO	IC
Adult Establishment*								CZ			
Agricultural Uses	P										
Animal Hospital and Boarding & Grooming Service (no outdoor kennels)				P		P	P	P			P
Animal Hospital (w/outdoor kennel)								CZ			CZ
~~Antenna Systems*~~	~~CZ~~	~~CZ~~	~~CZ~~	~~CZ~~	~~CZ~~	~~CZ~~	~~CZ~~	~~CZ~~	~~CZ~~	~~CZ~~	~~CZ~~
ATM (Automated Teller Machine)				AC	AC	AC	AC	AC	AC	AC	AC
Automobile, Truck, Motorcycle, Boat, Manufactured Home, Recreational Vehicle Repair & Service*											
Automobile, Recreational Vehicle, Boat & Tractor Trailer Parking/Storage*											
Automobile, Truck, Motorcycle, Boat, Manufactured Home, Recreational Vehicle Sales & Rental*											
Bar				A	AC	A	A	A	A	A	A
Bed & Breakfast Inn	PC		PC	PC	PC	PC	PC				
Brewery, Large									PC		PC
Brewery, Micro				CZ	CZ	PC	PC	PC	PC	PC	PC
Bus Stop Shelter				PC	PC	PC	PC	PC	PC	PC	PC
Car Wash – Automatic & Self Service								CZ			
Cemetery/Columbarium	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	AC
Child Care/Preschools				PC	AC	PC	PC	PC	PC	PC	
Civic*	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	

P - Permitted By Right
PC - Permitted w/ Supp. Conditions
S -Special Use Permit Required
CZ - Conditional Zoning Approval Required
A - Accessory Use Only
AC - Accessory w/ Supp. Conditions

Use Category	RP	GR	NR	NMX	WMX	TC	VC	HC	BC	CO	IC
Commercial, Retail & Service Uses 0 - 9,999 square feet				P	P	P	P	P	P	P	
Commercial, Retail & Service Uses 10,000 - 29,999 square feet				CZ	CZ	P	P	P	P	P	
Commercial, Retail & Service Uses 30,000 - 49,999 square feet				CZ	CZ	CZ	CZ	P	P	P	
Commercial, Retail and Service Uses 50,000+ square feet						CZ	CZ	CZ	CZ	CZ	
Convenience Store							PC	PC	PC	PC	
Country Club*	CZ	CZ	CZ		CZ			CZ			
Cruise/Excursion/Dinner Boat				PC	AC		PC				
Distribution/Wholesale									P		P
Drive-Through Facilities (Excluding Restaurants)				PC	PC	PC	PC	PC	PC	PC	PC
Duplex			PC	PC							
Dwelling, Manufactured Home, Class A	PC										
Dwelling, Multi-Family*				CZ			CZ			CZ	
Dwelling, Single-Family	P	P	P	P						CZ	
Essential Services, Class I & Class II	PC	PC	PC	PC	PC	PC	PC	PC	PC	PC	PC
Essential Services, Class III											CZ
Essential Services, Class IV	CZ	CZ	CZ	P	P	P	P	P	P	P	P
Events/Gathering Facility, Indoor				CZ	CZ	CZ	CZ	P	P	P	P
Events/Gathering Facility, Outdoor	CZ			CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ
Firing Range (Indoor only)											CZ
Funeral Homes/Crematory				PC			PC	PC			
Golf Course	CZ	CZ						CZ			
Golf Driving Range	AC	AC						PC			
Golf, Miniature				CZ	P	P	P	P			
Greenways and Trails	P	P	P	P	P	P	P	P	P	P	P
Home Occupation	AC	AC	AC	AC	AC	AC	AC				
Hospital								CZ	CZ	CZ	
Hotel, Motel, Inn				CZ	CZ	CZ	CZ	PC	PC	PC	
Innovative Master Planned Development	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ
Kennel*	CZ							CZ			CZ
Manufacturing, Heavy											PC
Manufacturing, Light									P	P	P
Mining/Fracking/Quarry Operations											
Mini-Warehouse/Storage											
Mixed Use Building				PC	PC	PC	PC				

P - Permitted By Right
PC - Permitted w/ Supp. Conditions
S -Special Use Permit Required
CZ - Conditional Zoning Approval Required
A - Accessory Use Only
AC - Accessory w/ Supp. Conditions

Use Category	RP	GR	NR	NMX	WMX	TC	VC	HC	BC	CO	IC
Nightclub*					CZ	CZ	CZ	CZ	CZ	CZ	
Nursery (wholesale only)	CZ										
Office				P	P	P	P	P	P	P	A
Park	P	P	P	P	P	P	P	P	P	P	P
Park & Ride Facility				CZ		PC	PC	PC	PC	PC	PC
Parking Area and/or Facility	AC	AC	AC	AC	AC	CZ	AC	AC	AC	AC	AC
Private Club					PC	PC		PC			
Recreation Center, Public (0 – 14,999 square feet)				P		P	P	P	P	P	P
Recreation Center, Public (15,000+ square feet)				CZ		P	P	P	P	P	P
Recreation Facilities	CZ	CZ	CZ	CZ	PC	PC	PC	PC	AC	AC	PC
Rental Cottages	AC	AC	AC	AC							
Residential Care Facility	PC	PC	PC	PC							
Residential Care Home	PC	PC	PC	PC							
Restaurant, Drive Through							PC	PC			
Restaurant, Non-Drive Through				P	P	P	P	P	P	P	
Restaurant, Brewpub				CZ	PC	PC	PC	PC	PC	PC	
Salvage											
School, Elementary, Middle, Senior High and College (public & private)*	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	
School, Vocational*				CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ
Small Cell Wireless Facility* (Wireless Facility, Small Cell)	S	S	S	S	S	S	S	S	S	S	S
Storage, Outdoor	AC	AC	AC					AC			AC
Subdivision, Conservation Rural*	CZ										
Subdivision, Conservation Low*	CZ										
Subdivision, Conservation Medium*	CZ										
Subdivision, Family	PC										
Subdivision, Farmhouse Cluster	PC										
Subdivision, Major	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ	CZ
Subdivision, Minor	P	P	P	P	P	P	P	P	P	P	P
Taproom				AC	AC	AC	AC	AC	AC	AC	AC
Traditional Neighborhood											
Transient Occupancy	PC			PC		PC	PC				
Transient Occupancy in multi-family buildings only		PC	PC								
Warehouse									A		P

*** See Chapter 6 for specific conditions.**

CHAPTER 6: USES PERMITTED WITH CONDITIONS

~~6.2.2: ANTENNA SYSTEMS~~

~~A. All Antenna Systems must follow the requirement of Section 18.5, unless located within a public right-of-way. If placed within a public right-of-way the applicable approval including right-of-way use permit for town streets and/or encroachment agreement for state streets must be obtained in accordance with the definition of "Antenna Systems" in Chapter 2. On private property or right-of-way, an agreement properly approved by the private property owner authorizing the use is required. Copies of all approvals must be provided to the Town. Placement of Antenna Systems on buildings, public spaces, and existing poles should be given priority.~~

~~B.~~A. ~~Maximum height of Antenna Systems, including the pole and antenna on the top of the pole, shall be at or below thirty feet (30') unless otherwise approved higher or lower by the Town Board of Commissioners based on unique site circumstances.~~

~~C.~~A. ~~Documentation including engineered plans, photographic renderings, GIS mapping and all other pertinent requirements of Chapter 13 are required to be submitted at time of application.~~

~~D.~~A. ~~After Conditional Zoning approval, placement of Antenna Systems node locations may be altered subject to the Administrative Amendment process in Section 18.5.12.~~

~~E.~~A. ~~All ground-mounted components of the Antenna Systems shall be screened with a Type A buffer.~~

~~F.~~A. ~~A Radio Frequency study shall be submitted with as-built documentation and plans upon installation completion.~~

~~G.~~A. ~~Antenna Systems are required to have underground fiber/cable to connect node locations of Antenna Systems if underground lines are consistent with the existing utility lines within a neighborhood or node location.~~

~~H.~~A. ~~Co-location is encouraged. Co-location may occur on poles of non-conforming Antenna Systems. Co-location of additional equipment is permitted for public uses of antenna nodes.~~

~~I.~~A. ~~Antenna Systems in existence before the adoption of this Ordinance may expand and change after going through an amendment process for the appropriate right-of-way permit or similar approval and an administrative zoning approval process.~~

~~J.~~A. ~~Obsolete equipment or unused portions of Antenna Systems that are abandoned must be removed within 180 days of abandonment. In the event of non-removal of outdated and unused antenna systems equipment, all other projects involving the company who has not removed equipment shall not be allowed to obtain additional permits for new antenna system service.~~

6.2.38: ~~ANTENNA SYSTEMS~~SMALL CELL WIRELESS FACILITY

A. All ~~Antenna Systems~~ Small Cell Wireless Facilities must follow the requirement of Section ~~18.5~~ 16.7, Special Use Permits, unless located within a public right-of-way. If placed within a public right-of-way ~~the applicable approval including~~ a utility right-of-way ~~use~~ master permit ~~for town streets and/or encroachment agreement for state streets.~~ must be obtained from the Town ~~in accordance with the definition of "Antenna Systems" in Chapter 2~~. On private property ~~or right of way~~, an agreement properly approved by the private property owner authorizing the use is required. Copies of all approvals must be provided to the Town. ~~Placement of Antenna Systems on buildings, public spaces, and existing poles should be given priority.~~

B. ~~Maximum height of Small Cell Wireless Facilities shall be 50' above the mean grade elevation of the road and shall not extend more than 10' above the utility pole, city utility pole, or wireless support structure on which it is located. Antenna Systems, including the pole and antenna on the top of the pole, shall be at or below thirty feet (30') unless otherwise approved higher or lower by the Town Board of Commissioners based on unique site circumstances.~~

C. Documentation including engineered plans, photographic renderings, GIS mapping and all other pertinent requirements of Chapter 13 are required to be submitted at time of application.

~~After Conditional Zoning approval, placement of Antenna Systems node locations may be altered subject to the Administrative Amendment process in Section 18.5.12.~~

D. All ground mounted components of the ~~Antenna Systems~~ Small Cell Wireless Facility shall be screened with a Type A buffer.

E. Must comply with Section 4.2.4, Building Design-Small Cell Wireless Facilities.

~~A Radio Frequency study shall be submitted with as-built documentation and plans upon installation completion.~~

~~Antenna Systems are required to have underground fiber/cable to connect node locations of Antenna Systems if underground lines are consistent with the existing utility lines within a neighborhood or node location.~~

~~Co-location is encouraged. Co-location may occur on poles of non-conforming Antenna Systems. Co-location of additional equipment is permitted for public uses of antenna nodes.~~

~~Antenna Systems in existence before the adoption of this Ordinance may expand and change after going through an amendment process for the appropriate right-of-way permit or similar approval and an administrative zoning approval process.~~

~~Obsolete equipment or unused portions of Antenna Systems that are abandoned must be removed within 180 days of abandonment. In the event of non-removal of outdated and unused antenna systems equipment, all other projects involving the company who has not removed equipment shall not be allowed to obtain additional permits for new antenna system service.~~

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REQUEST FOR BOARD ACTION

Print

Date of Meeting: September 24, 2018

To: Land Development Code Advisory Board Members

From: Becky Partin

Senior Planner

Action Requested:

Earlier this year, the North Carolina Division of Energy, Mineral and Land Resources (DEMLR) informed the Town that our practice of allowing impervious area transfers between properties was not in compliance with state statute. To comply with state statute, Section 11.3, Built-Upon Area Averaging, is proposed to be added to the Land Development Code.

Section 11.3 specifies the necessary process for a property owner to obtain additional built-upon area rights with the approval of a Built-Upon Area Averaging Certificate issued by the Watershed Review Board.

As a result of this change, an additional signature block on the plat is necessary and is reflected in Chapter 13, Development Plan Specifications.

These changes have been submitted to and reviewed by DEMLR. We are awaiting final approval.

Manager's Recommendation:

Discuss and consider.

ATTACHMENTS:

Name:	Description:	Type:
CH_11_Watershed_Protection-marked_(003).pdf	Chapter 11 - Watershed Protection	Backup Material
CH_13_Development_Plan_Specifications-marked.pdf	Chapter 13 - Development Plan Specifications	Backup Material

CHAPTER 11: WATERSHED PROTECTION

SECTION 11.1: GENERAL PROVISIONS

11.1.1: Authority

The Legislature of the State of North Carolina has, in Chapter 160A, Article 8, Section 174, General Ordinance Authority; and in Chapter 143, Article 21, Watershed Protection Rules, delegated the responsibility or directed local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. The Board of Commissioners of Cornelius does hereby ordain and enact into law the following sections as the Watershed Protection Ordinance of the Town of Cornelius.

11.1.2: Jurisdiction and Coordination with Other Ordinances

The provisions of this Chapter shall apply only to those lands within the Town of Cornelius corporate boundaries and extraterritorial jurisdictional limits that have been designated as a Public Water Supply Watershed by the N.C. Division of Water Quality. These areas are identified by the overlay districts "Lake Norman (LN)" and "Mountain Island Lake (MIL)" as shown and established on the Town of Cornelius Watershed & Environmental Features Map..

The requirements stated in this Chapter shall supersede all other applicable codes enumerated in this Ordinance, unless otherwise provided.

11.1.3: Rules Governing the Interpretation of Watershed Area Boundaries

Where uncertainty exists as to the boundaries of the watershed areas, as shown on the Protected Streams, Watersheds and Wetlands Map, the following rules shall apply:

A. Where area boundaries are indicated as approximately following either street, alley, railroad or highway lines or centerlines thereof, such lines shall be construed to be said boundaries.
B. Where area boundaries are indicated, as approximately following lot lines, such lot lines shall be construed to be said boundaries. However, a surveyed plat prepared by a registered land surveyor may be submitted to the Town or Cornelius as evidence that one or more properties along these boundaries do not lie within the watershed area.
C. Where the watershed area boundaries lie at a scaled distance more than twenty-five (25) feet from any parallel lot line, the location of watershed area boundaries shall be determined by use of the scale appearing on the watershed map.
D. Where the watershed area boundaries lie at a scaled distance of twenty-five (25) feet or less from any parallel lot line, the location of watershed area boundaries shall be construed to be the lot line.
E. Where other uncertainty exists, the Watershed Administrator shall interpret the Town of Cornelius Watershed & Environmental Features Map as to location of such boundaries. This decision may be appealed to the Watershed Review Board.

11.1.4: Application of Regulations

A. No building or land shall hereafter be used and no development shall take place except in conformity with the regulations herein specified for the watershed area in which it is located.
B. No area required for the purpose of complying with the provisions of this ordinance shall be included in the area required for another building.

C. If a use or class of use is not specifically indicated as being allowed in a watershed area, such use or class of use is prohibited.

D. For the purpose of calculating built-upon area, total project area shall include total acreage in the tract on which the project is to be developed. Land area which is below the 760-foot contour line of Lake Norman may not be used in this calculation.

11.1.5: GENERAL REMEDIES

A. If any subdivision, development and/or land use is found to be in violation of this Ordinance, the Town Board may, in addition to all other remedies available either in law or in equity, utilize such remedies specified in Section 14.6 of this Code. In addition, the N.C. Environmental Management Commission may assess civil penalties in accordance with G.S. 143-215.6(a). Each day that the violation continues shall constitute a separate offense.

B. If the Watershed Administrator finds that any of the provisions of this ordinance are being violated, he shall notify in writing the person responsible for such violation, indicating the nature of the violation, and ordering the action necessary to correct it. He shall order discontinuance of the illegal use of land, buildings or structures; removal of illegal buildings or structures, or of additions, alterations or structural changes thereto; discontinuance of any illegal work being done; or shall take any action authorized by this ordinance to ensure compliance with or to prevent violation of its provisions. If a ruling of the Watershed Administrator is questioned, the aggrieved party or parties may appeal such ruling to the Watershed Review Board.

SECTION 11.2: EXCEPTIONS TO APPLICABILITY

11.2.1: General Provisions

A. Nothing contained herein shall repeal, modify, or amend any Federal or State law or regulation, or any ordinance or regulation pertaining thereto except any ordinance which these regulations specifically replace; nor shall any provision of this Ordinance amend, modify, or restrict any provisions of the Code of Ordinances of the Town of Cornelius; however, the adoption of this Ordinance shall and does amend any and all ordinances, resolutions, and regulations in effect in the Town of Cornelius at the time of the adoption of this Ordinance that may be construed to impair or reduce the effectiveness of this Ordinance or to conflict with any of its provisions.

B. It is not intended that these regulations interfere with any easement, covenants or other agreements between parties. However, if the provisions of these regulations impose greater restrictions or higher standards for the use of a building or land, then the provisions of these regulations shall control.

11.2.2: Lots Less Than One-Acre in Size

In the Lake Norman Critical Area, new development or redevelopment on parcels platted or described by metes and bounds in a recorded deed prior to the adoption date of the Lake Norman Watershed Protection Ordinance may be developed for non-residential or multi-family, high density residential uses without having to comply with the typical built upon limitations, provided the parcel is less than one acre in size and does not require an erosion/sedimentation control plan under State law or approved local program. However, such development shall comply with the following:

1. Subject to an approved plan, lots less than one acre in size shall not exceed eighty percent (80%) of a combined total of existing and new built-upon area and should comply with the Town of Cornelius Low Impact Development Policy.
2. This exemption shall not impact any requirement for storm water detention, buffers, setbacks, or any other portion of this ordinance.
3. All development subject to this provision shall submit a conceptual plan to the Mecklenburg County Land Use and Environmental Services Agency (LUESA) for review and approval prior to formal engineering plan submittal.

11.2.3: Existing Development

Existing development as defined in this ordinance may be continued and maintained subject to the provisions provided herein. Expansions to structures or modifications to plans classified as existing development must meet the requirements of this ordinance; however, the built-upon area of the existing development is not required to be included in the built-upon area calculations.

A. Exemption Dates. Lots recorded at the Register of Deeds prior to the dates listed in the chart below are exempt from built upon requirements unless the recorded plat specifies differently.

Zoning Jurisdiction	Lake Norman Critical Area	Mtn Island Protected Area
Town of Cornelius	September 20, 1993	September 20, 1993
Mecklenburg County	June 20, 1994	March 8, 1993

B. Uses of Land. This category consists of uses existing at the time of adoption of this ordinance where such use of the land is not permitted to be established hereafter in the watershed area in which it is located. Such uses may be continued except as follows:
   1. When such use of land has been changed to an allowed use, it shall not thereafter revert to any prohibited use.
   2. Such use of land shall be changed only to an allowed use.
   3. When such use ceases for a period of at least one year, it shall not be re-established.

C. Reconstruction of Buildings or Built-upon Areas. Any existing building or built-upon area not in conformance with the restrictions of this ordinance that has been damaged or removed may be repaired and/or reconstructed, except that there are no restrictions on single family residential development, provided:
   1. Repair or reconstruction is initiated within twelve (12) months and completed within two (2) years of such damage.
   2. The total amount of space devoted to built-upon area may not be increased unless stormwater control that equals or exceeds the previous development is provided.

D. Exemption when existing uses are present and ongoing. This rule shall not apply to portions of the riparian buffer where a use is existing and ongoing according to the following:
   1. A use shall be considered existing if it was present within the riparian buffer as of the time of adoption of this ordinance. Existing uses shall include, but not be limited to, agriculture, buildings, industrial facilities, commercial areas, transportation facilities, maintained lawns, utility lines and onsite sanitary sewage systems. Only the portion of the riparian buffer that contains the footprint of the existing use is exempt from this rule. Change of ownership through legal purchase or inheritance is not considered change of use.

Activities necessary to maintain uses are allowed provided that no additional disturbance occurs in the buffer.

2. A use shall be considered as existing if projects or proposed development at a minimum have established a vested right under North Carolina zoning law as of the effective date of this rule, based on at least one of the following criteria:
   a. Substantial expenditures of resources (time, labor, and money) based on good faith reliance upon having received a valid local government approval to proceed with the project.
   b. Having an outstanding valid building permit in compliance with G.S. 153A-344.1 or G.S. 160A-385.1.
   c. Having and approved site specific or phased development plan in compliance with G.S. 153A-344.1 or G.S. 160A-385.1.
   d. Project requires a 401 Certification/404 Permit and these were issued prior to the effective date of this rule.

SECTION 11.3: BUILT-UPON AREA AVERAGING

Built-upon area averaging (also known as density averaging) allows parcels located within the Town of Cornelius corporate boundaries and extraterritorial jurisdictional limits that have been designated as a Public Water Supply Watershed by the N.C. Environmental Management Commission to obtain additional development rights through an increase in a site's built-upon-area ("BUA") by averaging the total BUA of the developing lot (i.e. "receiving lot") with the total BUA of an undeveloped/less developed lot within the same watershed and jurisdiction ("donating lot"). This is accomplished by transferring undeveloped area on a donating lot to a receiving lot via a BUA Averaging Certificate, which includes a non-revocable easement, metes and bounds description, and recorded plat(s) of the affected lots including the area(s) to remain undisturbed. The BUA Averaging Certificate requires approval by the Watershed Review Board, a sub-set of the Planning Board; for the purposes of this ordinance, the Planning Board may act as the Watershed Review Board.

11.3.1 PURPOSE & ELIGIBILITY

A. Purpose: The purpose of this provision is to preserve open space in the more sensitive areas of the watershed, and to ensure orderly and planned development throughout the watershed.

B. Uses: All parcels are eligible to be a receiving lot or a donating lot.

C. Requirements: The following requirements must be met by all parcels:

1. Ownership: Only the owner(s) of the participating parcels may submit a Built-Upon Area Averaging Certificate application. Areas subject to easements, covenants, and/or development restrictions not legally controlled by the owner may not be included as donated parcel area; this includes right-of-way area.

2. Pre-Existing Variance: No parcel for which a watershed variance has been granted, or would be required, may be included as a donating or receiving parcel.

3. Location: Participating parcels shall be located in the same water supply watershed. BUA transfers may not occur between critical areas and protected areas. All parcels must be located within the Town of Cornelius' planning jurisdiction.

4. Overall Area: The cumulative BUA of all participating parcels shall not exceed the BUA that would be allowed if the parcels were developed separately under applicable Ordinance standards.

5. Preservation: The donated area shall remain in an undisturbed vegetated or natural state. Previously developed or graded lots may be used as donating parcels so long as the donated area of the lot is revegetated in accordance with Section 9.9.6, Replacement of Vegetation, of this Code. The donated area shall be irrevocable unless amended per the requirements of this ordinance prior to the undertaking of any development activity on the participating parcels.

6. Stormwater Design: All participating parcels must meet the applicable buffer and engineered stormwater controls as outlined in the ordinance. For clarity any participating parcels buffers shall at least meet the applicable, minimum ordinance requirements for parcels located in water supply watersheds. For further clarity, development meeting applicable high density requirements shall have on-site stormwater facilities and development meeting applicable low density requirements shall transport stormwater runoff by vegetated conveyances to the maximum extent practicable; all in accordance with applicable ordinance requirements.

7. Design: Built-upon areas shall be designed and located to minimize stormwater runoff impact to the receiving waters, minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas, and maximize the flow length through vegetated areas.

11.3.2: PROCESS

A Built-Upon Area (BUA) Averaging Certificate shall be obtained from the Watershed Review Board to ensure that all participating parcels considered together meet the standards of the ordinance, including any standards and requirements on previously recorded subdivision plats, and that potential owners have a record of how the watershed regulations were applied to each parcel.

A. **Applicability:** All participating parcels may be processed under a single BUA Averaging Certificate application, and will be considered as one development for the purpose of counting total built-upon-area. If approved by the Watershed Review Board, one BUA Averaging Certificate will be issued per application. Unless otherwise specified, the application shall follow the rules and procedures specified by the Planning Board and Appeals & Variances sections of this ordinance.

B. **Process:** The following steps outline the typical process for obtaining a BUA Averaging Certificate. Note: Application preparation is considered an iterative process; an application must be deemed complete by the Planning Director or designee, and all revisions addressed in order for the request to be added to the next regularly scheduled Planning Board meeting

Commented [BP1]: New language in response to your comment to "Clarify that if one of the properties is located in the critical area of the watershed, the critical area property shall not be developed beyond the applicable density requirements for its classification [Ref. § 143-214.5(d2)(1)]."

agenda for their consideration as the Watershed Review Board. Incomplete, improperly formatted, or documentation errors may require revision prior to acceptance by the Planning Director or designee.

1. Lot Identification: The applicant shall identify participating lots, prepare draft plats, and complete a BUA Averaging Certificate Application.

2. Pre-Application Meeting: The applicant must set up an appointment with the Planning Director or designee. At the initial meeting the Planning Director or designee will explain the BUA averaging process and review with the applicant the appropriate ordinances, documents, and plans relevant to the project. Additional meetings may be required prior to application submission, as deemed necessary by the Planning Director or designee.

3. Submit Application & Fee: The applicant must submit the following documents (see the Documentation section for further information):

- Town of Cornelius BUA Averaging Certificate Application and Application Fee
- Surveys of Existing Conditions
- Existing Plats and Deeds
- Metes & Bounds Description(s) (a metes and bounds description of the undisturbed natural area, intended for recordation.)
- Final Plats (Drafts)
- Existing development materials (as applicable)
- Preliminary Sketch Plan (if required)

4. Application Review: Staff will review the application and determine whether the materials constitute a complete submittal. Application revisions, and additional meetings, may be required by the Planning Director or designee prior to the application being deemed complete. Once the application is determined to satisfy the requirements, the request will be added to the next regularly scheduled Planning Board meeting agenda for their consideration as the Watershed Review Board.

5. Watershed Review Board Decision: The Watershed Review Board shall issue a decision within 31 days from the date they first meet to hear the request. The board shall make written findings supported by appropriate calculations and documentation that the participating parcels as a whole conform to the intent and requirements of this Section, and that the proposed application and supporting documents assures protection of the preserved area. The request must be consistent with adopted plans and/or policies, approved development plans, Cornelius Land Development Code requirements, and the Watershed Review Board's determination based on these resources that the proposal achieves an identified public interest.

6. Certificate Issued: If approved, the Town of Cornelius will issue a BUA Averaging Certificate to the applicant. The BUA Averaging Certificate shall constitute the Watershed Review Board decision, staff approval letter, and application documentation.

7. Document Submission: If approved by the Watershed Review Board, the applicant must submit the following documents via the current Mecklenburg County online review system:

- Mecklenburg County Application
- Final Plats and any applicable Deeds, Covenants or Conservation Easement documents

8. Plat Approval/Signature: Once approved in the current Mecklenburg County online review system, the applicant must submit two (2) mylar copies of each plat in accordance with the requirements of Section 13.8, Final Plat Requirements, of this Code for signature. One mylar of each plat included in the application and filed with the Register of Deeds must be provided to the Town of Cornelius for filing.

9. Amendment: If a BUA certificate is approved by the Watershed Review Board, no change in the development proposal authorized for participating parcels shall be made unless the certificate is amended by the Watershed Review Board.

11.3.3: DOCUMENTATION REQUIREMENTS

The following documentation shall be provided to constitute a complete Built-Upon Area (BUA) Averaging Certificate application:

A. Administrative:

1. Town of Cornelius Application: A completed BUA Averaging Certificate Application including a chart summarizing the existing and proposed BUA for all participating properties.

2. Fee: A remitted fee in accordance with the fee schedule approved by the Town of Cornelius Board of Commissioners.

B. Surveys: Surveys of all participating parcels showing current BUA and current maximum BUA allowances, along with easements and/or development restrictions. The surveys must be performed by a licensed surveyor.

C. Existing Plats & Deeds: Copies of the existing, registered plats and deeds for all participating parcels.

D. Metes & Bounds Description (Donating Parcel): A metes and bounds description of the undisturbed natural area intended for recordation. The description must specify any limits on use and shall be recorded on the plat, in homeowner covenants (if applicable), and on the donating parcel's individual deed and shall be irrevocable unless amended per the ordinance.

E. Final Plats (Draft): Revised plats for all participating parcels. The plats must be in accordance with the requirements of Section 13.8, Final Plat Requirements, of this Code. Additionally, the plats must include:

1. Purpose Statement:

The purpose of this plat is to allocate xxxxx square feet of allowable built-upon area from PID xxxxxxxx (donor parcel) to PID xxxxxxxx (receiving parcel). Each parcel is located within the same watershed.

2. Site Data

	Donor Parcel	Recipient Parcel
PID:		
Total Site Area		
Current Allowed Built-Upon Area for Parcel		
Built-Upon Area Allocated	-	+
New Allowed Built-Upon Area		
Existing Surveyed Built-Upon Area		
Remaining Allowed Built-Upon Area		

3. Metes/Bounds Description: Metes/bounds description(s) of designated undisturbed natural area(s).

4. Designation in Perpetuity: A note that the natural area will remain undisturbed in perpetuity.

5. BUA Averaging Certification on Plat: See Chapter 13.

F. Existing Development: If a participating parcel(s) is part of an existing development, then the following documentation shall be provided:

1. Approved Stormwater Mitigation Plan: A storm water mitigation plan approved by Mecklenburg County Storm Water Services, Water Quality Program, for the receiving parcel based on the pathway pursued:

a. Buffer/Vegetative Conveyances: Must meet all applicable ordinance requirements for parcels located in water supply watersheds.

b. Engineered Stormwater Controls: Must confirm the following:

- The effected BMP(s) has been designed to handle the additional BUA.
- All participating lots are in the same drainage basin.
- Verified as-built information of the existing, approved BMP.
- Sealed engineer calculations to prove existing and future compliance with the water quality requirements based on the proposed BUA to be transferred.

2. Homeowner's Covenant Agreements: A draft of revised covenant documents reflecting the additional BUA and other pertinent information for all affected parcels.

SECTION 11.~~34~~: BUFFER AREA REQUIRMENTS

The following buffer requirements for all new development activities in the Lake Norman (LN-O) and Mountain Island Lake (MIL-O) shall apply:

A. A minimum one-hundred (100) foot undisturbed buffer is required along the shoreline of Lake Norman and along perennial streams for all new development activities that utilize the High Impervious Cover Option; otherwise, a minimum fifty (50) foot undisturbed buffer is required. Buffers are measured horizontally from the high water mark of impounded structures and from the top of bank of streams.

B. An existing vacant lot platted prior to the effective date of this ordinance, regardless of whether or not a vested right has been established, may be developed for single family residential purposes subject to the buffer requirements.

C. No trees larger than two (2) inches in caliper are to be removed except for diseased trees. Trees less than two (2) inches in caliper and undergrowth may be removed and replaced by an effective stabilization and filtering ground cover utilizing Land Use and Environmental Services Agency guidelines and as approved by Land Use and Environmental Services Agency and the Town of Cornelius Planning Department. The Town of Cornelius may require enhancement of the existing vegetation through the use of supplemental plantings in the buffer area, if necessary, to ensure that the buffer area can properly and effectively perform its filtering and absorption functions, based upon Land Use and Environmental Services Agency guidelines.

D. No permanent structures, impervious covers, septic tank systems or any other disturbance of existing vegetation is allowed in the buffer except:

1. Water related structures and other structures such as flag poles, signs and security lights, which result in only diminutive increases in impervious area.
2. Artificial stream bank or shoreline stabilization plans shall be submitted to the Land Use and Environmental Services Agency for approval.
3. Public projects such as road crossings and greenways where no practical alternative exists. (These activities should minimize built-upon surface area, direct runoff away from the surface waters and maximize the utilization of stormwater Best Management Practices.)

E. Where stream buffers are also required in another section of this Code, the more stringent requirement shall apply.

F. Diffuse Flow Requirement. Diffuse flow of runoff shall be maintained in the buffer by dispersing concentrated flow and reestablishing vegetation. Techniques for providing diffuse flow are specified in the Mecklenburg County Land Development Standards Manual.
1. Concentrated runoff from ditches or other manmade conveyances shall be diverted to diffuse flow before the runoff enters the buffer.
2. Periodic corrective action to restore diffuse flow shall be taken by the property owner as necessary to impede the formation of erosion gullies.

SECTION 11.~~45~~: PUBLIC HEALTH REGULATIONS

11.~~45~~.1: Public Health – General Provisions

No activity, situation, structure or land use shall be allowed within the watershed, which poses a threat to water quality and the public health, safety and welfare. Such conditions may arise from inadequate on-site sewage systems which utilize ground absorption; inadequate sedimentation

and erosion control measures; the improper storage or disposal of junk, trash or other refuse within a buffer area; the improper management of stormwater runoff; or any other situation found to pose a threat to water quality.

11.~~4~~5.2: Abatement

A. The Watershed Administrator shall monitor land use activities within the watershed areas to identify situations that may pose a threat to water quality.

B. The Watershed Administrator shall report all findings to the Watershed Review Board. The Watershed Administrator may consult with any public agency or official and request recommendations.

C. Where the Watershed Review Board finds a threat to water quality and the public health, safety and welfare, the Board shall institute any appropriate action or proceeding to restrain, correct or abate the condition and/or violation.

SECTION 11.~~5~~6: STORMWATER CONTROL

11.~~5~~6.1: Stormwater Control Structures

A. All stormwater control structures shall be designed by a North Carolina registered professional with qualifications appropriate for the type of system required; these registered professionals are defined as professional engineers, landscape architects (to the extent that the General Statutes, Chapter 89A allow) and land surveyors (to the extent that the design represents incidental drainage within a subdivision, as provided in General Statutes 89C-3(7)).

B. All stormwater controls shall use wet detention ponds as a primary treatment system unless alternative stormwater management measures, as outlined in this Section, are used. Wet detention ponds shall be designed for specific pollutant removal according to modeling techniques approved by the State of North Carolina. Specific requirements for these systems shall be in accordance with Mecklenburg County Land Development Standards and with the following minimum design criteria:

1. Wet detention ponds shall be designed to remove eighty-five percent (85%) of total suspended solids in the permanent pool and storage runoff from a one (1) inch rainfall from the site above the permanent pool;
2. The designed runoff storage volume shall be above the permanent pool;
3. The discharge rate from these systems following the one (1) inch rainfall design storm shall be such that the runoff does not draw down to the permanent pool level in less than two (2) days and that the pond is drawn down to the permanent pool level within at least five (5) days;
4. The mean depth of the permanent pool shall be a minimum of three (3) feet;
5. The design shall assume full development (maximum allowed in accordance to applicable zoning regulations) in the contributing drainage area;
6. The inlet structure shall be designed to minimize turbulence using baffles or other appropriate design features;
7. Vegetative filters shall be constructed for the overflow and discharge of all storm water wet detention ponds and shall be at least thirty (30) feet in length. The slope and width of the vegetative filter shall be determined so as to provide a non-erosive velocity of flow through the filter for a 10-year, 24-hour storm with a slope of five percent (5%) or

less. Vegetation in the filter shall be natural vegetation, grasses or artificially planted wetland vegetation appropriate for the site characteristics.

C. Alternative stormwater management systems, consisting of one treatment option or a combination of treatment options, may be used. The design criteria for alternative systems are as follows:
   1. Alternative systems shall be designed to remove an average of eighty-five percent (85%) of total suspended solids on an annual basis;
   2. The discharge rate following the one (1) inch design storm shall be such that the runoff draws down to the pre-storm design stage within five (5) days, but no less than two (2) days or the post development peak discharge rate shall be equal to the predevelopment rate for the one (1) year, 24-hour storm.
   3. Meet the Town of Cornelius Low Impact Development (LID) Policy Guidelines.

D. Qualifying areas of the stormwater control structure may be considered pervious when computing total built-upon area. However, if the structure is used to compute the percentage built-upon area for one site, it shall not be used to compute the built-upon area for any other site or area.

E. In addition to the vegetative filters required above, all land areas outside of the pond shall be provided with a ground cover sufficient to restrain erosion within thirty (30) days after any land disturbance. Upon completion of the stormwater control structure, a permanent ground cover shall be established and maintained as part of the maintenance agreement. An applicant seeking the high-impervious development option shall enter into a binding Operation and Maintenance Agreement between Mecklenburg County and all interests in the development. Said agreement shall require the owning entity to maintain, repair and, if necessary, reconstruct the stormwater control structure in accordance with the operation and maintenance plan or manual provided by the developer. The Operation and Maintenance Agreement shall be recorded at the Mecklenburg County Register of Deeds.

F. A description of the area containing the stormwater control structure(s) shall be prepared and recorded as a separate deed with the Mecklenburg County Register of Deeds along with any easements necessary for general access to the stormwater control structure. The deeded area shall include the stormwater control structure, vegetative filters, all pipes and water control structures, berms, dikes, etc., and sufficient area to perform inspections, maintenance, repairs and reconstruction.

11.~~5~~6.2: Operation and Maintenance (O & M) Plan Required

Any stormwater control structure approved by the Town Board shall be predicated on the developer, Mecklenburg County, and the Town entering into a binding Operation and Maintenance (O & M) Plan. Said Plan shall require the owning entity (i.e. the developer or his assigns) of the structure(s) to maintain, repair and, if necessary, reconstruct said structure(s) in accordance with the Operation and Maintenance Plan provided by the developer to the Town. Said Plan must be approved by Mecklenburg County and the Town Board prior to, or in conjunction with, approval of the high-density option for said project.

A separate O & M plan must be provided by the developer for each stormwater control structure, containing, at a minimum, what operation and maintenance actions are needed and will be undertaken, what specific quantitative criteria will be used for determining when those actions are to be taken, and who is responsible for such actions. The Plan shall be recorded in the

Mecklenburg County Register of Deeds Office and shall clearly indicate what steps will be taken for restoring a stormwater control structure to design specifications if a failure occurs.

Amendments to the Plan and/or specifications of the stormwater control structure(s) may only be approved by the Town Board. Proposed changes shall be prepared by a North Carolina registered professional with qualifications appropriate for the type of system designed and submitted to the Town Board for approval. Such amendments shall be accompanied by all information and fees prescribed in this Ordinance.

If the Town Board finds that the O & M Plan, once approved, is inadequate for any reason, the Watershed Administrator shall notify the owning entity of any changes mandated by the Town and a time frame in which changes to the Plan shall be made.

11.~~5~~6.3: Posting of Financial Securities Required

All new stormwater control structures approved employing the high impervious cover option shall be conditioned on the posting of adequate financial assurance for the purpose of constructing, maintaining, repairing, or reconstructing said services.

A. If the Board of Commissioners approves the use of the high impervious cover option for a particular project, it may do so only after the applicant has posted a surety bond, cash, irrevocable letter of credit, or equivalent security, in an amount not less than one and one-quarter (1.25) times the cost of constructing the necessary stormwater control structure(s). Such financial security shall be paid to the Town and shall be in a form prescribed by the Town. All construction costs shall be verified by the Town in consultation with other agencies and the Town may assess the applicant for actual costs associated with such verification. The total cost of the stormwater control structure shall include the value of all materials such as piping and other structures, seeding and soil stabilization, design and engineering, grading, excavation, fill, etc. The costs shall not be prorated as part of a larger project, but rather shall be priced as an individual project.

B. Prior to said release, the applicant shall be required to establish an escrow account in an amount equal to fifteen percent (15%) of the total construction cost or one hundred percent (100%) of the cost of maintaining, repairing or reconstructing said structure over a twenty (20) year period, whichever is greater. The estimated cost of maintaining the stormwater control structure(s) shall be consistent with the approved O & M Plan provided by the applicant.

11.~~5~~6.4: Default

Upon default of the applicant to complete the stormwater control structure(s) as detailed in the surety bond or other equivalent security, the Board of Commissioners may obtain and use all or any portion of the funds necessary to complete the improvements based on actual construction costs. The Board of Commissioners shall return any funds not spent in completing the improvements to the owning entity.

Upon default of the owning entity to maintain, repair and, if necessary, reconstruct the stormwater control structure in accordance with the O & M Plan, the Board of Commissioners

shall obtain and use any portion of the cash security posted to make necessary improvements based on the actual costs borne by the Town to make such improvements.

11.~~5~~6.5: Inspections

A. INSPECTIONS OF NEWLY CONSTRUCTED STORMWATER STRUCTURES

1. All new stormwater control structures shall be inspected by the Town or their designated agents after the owning entity notifies the Watershed Administrator that all construction has been completed. At this inspection the owning entity shall provide:
   a. The signed deed, related easements and survey plat for the structure in a manner suitable for filing with the Register of Deeds, if ownership of the stormwater control structure(s) is to be transferred to another person, firm or entity. (This requirement will be waived for any repair work when such deed has previously been filed.)
   b. A certification by a professional engineer or landscape architect (to the extent allowable by the General Statutes) stating that the stormwater control structure is complete and consistent with the approved Plan and all specifications previously stipulated by the Town.

When structural BMPs are required under the High Impervious Cover Option, approval will be subject to developer compliance with Section 12.14.3 of this Ordinance, which requires a maintenance guarantee for said BMP.

An occupancy permit shall not be issued for any building within the permitted development when such building and associated impervious surface causes the entire development to exceed twenty-four percent (24%) impervious area, until the stormwater control structure(s) has been approved in a manner as herein prescribed.

B. ANNUAL INSPECTION OF STORMWATER STRUCTURES

1. All stormwater control structure(s) shall be inspected by the Town or their designated agents on an annual basis to determine whether the structures are performing as designed and intended. Records of inspection shall be maintained on forms approved or supplied by the State of North Carolina. Annual inspections shall begin one (1) year after approval of the stormwater control structure(s) or one year after the filing date of the deed for the stormwater control structure(s). A copy of each inspection report shall be filed with the Watershed Administrator.
2. In the event the Town's report indicates the need for corrective action or improvements, the Watershed Administrator shall notify the owning entity of the needed improvements and the date by which such improvements are to be completed. All improvements shall be consistent with the adopted O & M Plan and specifications. Once such improvements are made, the owning entity shall forthwith contact the Watershed Administrator and ask that an inspection be made.

C. VEGETATION AND GROUNDS MANAGEMENT

1. Landscaping and grounds management shall be the responsibility of the owning entity of said structure(s). Vegetation shall not be established or allowed to mature to the extent that the integrity of the structure(s) is in any way threatened or diminished, or to the extent of interfering with any easement of access to the structure.

2. Except for routine landscaping and grounds maintenance, the owning entity shall notify the Watershed Administrator prior to any repair or reconstruction of the structure. All improvements shall be consistent with the approved Plan and specifications for that structure. After notification by the owning entity, Town staff shall inspect the completed improvements and inform the owning entity of any required additions, changes, or modifications needed to complete said improvements. A time period for making such changes shall also be stipulated by the Town. A fee, in accordance with the fee schedule adopted by the Board of Commissioners, shall be charged the entity for each inspection (or re-inspection).

11.~~5~~6.6: Periodic Inspection and Fee

Inspection of all stormwater control structures shall be conducted: 1) after work on the stormwater control structure is complete, 2) annually once the stormwater control structure(s) has been approved by the Town, and 3) any time after improvements, modifications, or changes to said structures have been made by the owning entity.

SECTION 11.~~6~~7: ADMINISTRATION, ENFORCEMENT AND APPEALS

11.~~6~~7.1: Watershed Administrator and Duties Thereof

The Town of Cornelius Planning Director shall be appointed as Watershed Administrator, who shall be duly sworn in. It shall be the duty of the Watershed Administrator to administer and enforce the provisions of this ordinance as follows:

A. The Watershed Administrator shall issue Watershed Protection Permits and Watershed Protection Occupancy Permits as prescribed herein. A record of all permits shall be kept on file and shall be available for public inspection during regular office hours.
B. The Watershed Administrator shall serve as clerk to the Watershed Review Board.
C. The Watershed Administrator shall keep records of all amendments to the local Water Supply Watershed Protection Ordinance and shall provide copies of all amendments upon adoption to the State of North Carolina.

D. The Watershed Administrator is granted the authority to administer and enforce the provisions of this Ordinance, exercising in the fulfillment of his responsibility the full police power of the Town of Cornelius. The Watershed Administrator, or his duly authorized representative, may enter any building, structure, or premises, as provided by law, to perform any duty imposed upon him by this Ordinance.
E. The Watershed Administrator shall keep a record of variances to the requirements of this Chapter. This record shall be submitted for each calendar year to the State of North Carolina on or before January 1st of the following year and shall provide a description of each project receiving a variance and the reasons for granting the variance.

11.~~6~~7.2: Appeal from the Watershed Administrator

Any order, requirement, decision or determination made by the Watershed Administrator may be appealed to and decided by the Watershed Review Board.

An appeal from a decision of the Watershed Administrator must be submitted to the Watershed Review Board within thirty (30) days from the date the order, interpretation, decision or

determination is made. All appeals must be made in writing stating the reasons for appeal. Following submission of an appeal, the Watershed Administrator shall transmit to the Board all papers constituting the record upon which the action appealed from was taken.

An appeal stays all proceedings in furtherance of the action appealed, unless the officer from whom the appeal is taken certifies to the Board after the notice of appeal has been filed with him, that by reason of facts stated in the certificate, a stay would in his opinion cause imminent peril to life or property. In such case, proceedings shall not be stayed otherwise than by a restraining order which may be granted by the Board or by a court of record on application of notice of the officer from whom the appeal is taken and upon due cause shown.

The Board shall fix a reasonable time for hearing the appeal and give notice thereof to the parties and shall decide the same within a reasonable time. At the hearing, any party may appear in person, by agent or by attorney.

11.~~6~~7.3: Changes and Amendments to the Watershed Protection Ordinance

The Cornelius Board of Commissioners shall not adopt any amendment, addition, or deletion that would cause these regulations to violate the watershed protection rules as adopted by the N.C. Environmental Management Commission (EMC). All proposed amendments to this Chapter must be filed with the N.C. Division of Environmental Management, N.C. Division of Environmental Health, and the N.C. Division of Community Assistance for their review prior to adoption by the Board of Commissioners. After review and approval, all amendments shall follow the procedures outlined in Chapter 18 of this Ordinance.

11.~~6~~7.4: Powers and Duties of the Watershed Review Board

The Planning Board shall be designated as the Watershed Review Board and shall be vested with the responsibility to hear and approve all subdivisions and all site plans which utilize the high impervious cover option. They shall also hear and decide upon all appeals to the decision of the Watershed Administrator, and all variances to the provisions of these regulations.

11.~~6~~7.5: Variances

The Watershed Review Board shall have the power to authorize, in specific cases, minor variances from the terms of this Ordinance as will not be contrary to the public interests where, owing to special conditions, a literal enforcement of this Ordinance will result in practical difficulties or unnecessary hardship, so that the spirit of this Ordinance shall be observed, public safety and welfare secured, and substantial justice done. In addition, the Town of Cornelius shall notify and allow a reasonable comment period for all other local governments having jurisdiction in the designated watershed where the variance is being considered.

A. Applications for a variance shall be made on the proper form obtainable from the Watershed Administrator and shall include the following information:
   1. A site plan, drawn to a minimum scale of at least one (1) inch to forty (40) feet, indicating the property lines of the parcel upon which the use is proposed; any existing or proposed structures; parking areas and other built-upon areas; and surface water drainage. The site plan shall be neatly drawn and indicate north point, name and

address of person who prepared the plan, date of the original drawing, and an accurate record of any later revisions.

2. A complete and detailed description of the proposed variance, together with any other pertinent information which the applicant feels would be helpful to the Watershed Review Board in considering the application.
3. The Watershed Administrator shall notify in writing each local government having jurisdiction in the watershed and the entity using the water supply for consumption. Such notice shall include a description of the variance being requested. Local governments receiving notice of the variance request may submit comments to the Watershed Administrator prior to a decision by the Watershed Review Board. Such comments shall become a part of the record of proceedings of the Watershed Review Board.

Before the Watershed Review Board may grant a variance, it shall make the four (4) findings as specified in Chapter 16.6 B.

B. In granting the variance, the Board may attach thereto such conditions regarding the location, character, and other features of the proposed building, structure, or use as it may deem advisable in furtherance of the purpose of this ordinance. If a variance for the construction, alteration or use of property is granted, such construction, alteration or use shall be in accordance with the approved site plan.

C. The Watershed Review Board shall refuse to hear an appeal or an application for a variance previously denied if it finds that there have been no substantial changes in conditions or circumstances bearing on the appeal or application.

D. A variance issued in accordance with this Section shall be considered a Watershed Protection Permit and shall expire if a Building Permit or Watershed Occupancy Permit for such use is not obtained by the applicant within six (6) months from the date of the decision.

E. If the application calls for the granting of a major variance, and if the Watershed Review Board decides in favor of granting the variance, the Board shall prepare a preliminary record of the hearing with all deliberate speed. The preliminary record of the hearing shall include:

1. The variance application;
2. The hearing notices;
3. The evidence presented;
4. Motions, offers of proof, objections to evidence, and rulings on them;
5. Proposed findings and exceptions;
6. The proposed decision, including all conditions proposed to be added to the permit.

F. The preliminary record shall be sent to the N.C. Division of Water Resources (DWR) for its review as follows:

1. If the DWR concludes from the preliminary record that the variance qualifies as a major variance and that (1) the property owner can secure no reasonable return from, nor make any practical use of the property unless the proposed variance is granted, and (2) the variance, if granted, will not result in a serious threat to the water supply, then the DWR shall approve the variance as proposed or approve the proposed variance with conditions and stipulations. The DWR shall prepare a decision and send it to the Watershed Review Board. If the DWR approves the variance as proposed, the Board

shall prepare a final decision granting the proposed variance. If the DWR approves the variance with conditions and stipulations, the Board shall prepare a final decision, including such conditions and stipulations, granting the proposed variance.

2. If the DWR concludes from the preliminary record that the variance qualifies as a major variance and that (1) the property owner can secure a reasonable return from or make a practical use of the property without the variance or (2) the variance, if granted, will result in a serious threat to the water supply, then the DWR shall deny approval of the variance as proposed. The DWQ shall prepare a decision and send it to the Watershed Review Board. The Board shall prepare a final decision denying the variance as proposed.

11.~~6~~7.6: Appeals from the Watershed Review Board

Appeals from the Watershed Review Board must be filed with the Superior Court within thirty (30) days from the date of the decision. Decisions by the Superior Court will be in the manner of certiorari.

CHAPTER 13: DEVELOPMENT PLAN SPECIFICATIONS

SECTION 13.1: REQUIRED IMPROVEMENTS FOR ALL DEVELOPMENT PLANS

All development plans shall be required to install or provide the following improvements:

- Public Water Supply Distribution and Fire Hydrants
- Public Sewer
- Public Streets (paved) and other Public Rights-of-Way
- Easements (Includes Farmhouse Clusters) - Chapter 7
- Sidewalks - Chapter 7
- Curb and Gutter - Chapter 7
- Street Lights - Chapter 7
- Underground Wiring
- Dedicated Open Space - Chapter 8
- Landscaping (Including Supplemental Tree Plantings) - Chapter 9

SECTION 13.2: Procedures for Traffic Impact Analysis (TIA):

When a TIA is required, it must be approved by the North Carolina Department of Transportation (NCDOT) prior to project review by either the Planning Board or the Town Board.

1. Responsibility for TIA – After a completed development application has been filed, and upon initial submittal of a site or sketch plan, the Planning Director or his/her designee shall determine the need for a TIA. If warranted, the **transportation consultant assigned by the Town** shall prepare the TIA. At the discretion of the North Carolina Department of Transportation (NCDOT) and the Town, a technical memorandum, in lieu of a full TIA report, may be allowed for some developments. If proposed street connections are not consistent with adopted plans, then an explanation or proposed alternative that is equal or better should be discussed in the study.

2. Minimum Thresholds for TIA's – A TIA shall be required for any site or sketch plan expected to generate traffic volumes that will incrementally impact the delay, level-of-service (LOS, and/or safety of the transportation system. The latest version of the Institute of Transportation Engineers (ITE) Trip Generation Manual shall be used to determine the expected gross traffic volumes a specific site and/or a specific use will generate. A TIA will be **required** to accompany a site/sketch plan when expected gross trip generation is **1000 total trips or more both entering and exiting the site in a 24-hour period, and/or 100 total trips both entering and exiting the site during either the AM or PM peak (prior to any trip reductions applied). The gross trip generation will be calculated by the Town based on information provided by the applicant and the final determination for requiring the TIA will be by the Planning Director.** The Planning Director or his/her designee may also determine the need for a TIA based on special circumstances associated with the development, and may determine that a TIA is still necessary even if the gross trips falls below this threshold. This may be due to the location, an intersection or thoroughfare nearby that is at or above capacity, or the nature of the use. The Planning Director or his/her designee may also require a TIA in any of the following scenarios:

    a. Traffic generated from a non-residential development that could significantly impact adjacent residential neighborhoods.
    b. Traffic operation problems for current and/or future years on nearby streets are expected to be significantly aggravated by traffic generated from the proposed new development.
    c. Major and minor thoroughfares near the site are experiencing noticeable delays.

d. Traffic safety issues exist at the intersection or street that would serve the proposed new development.
e. The proposed land use differs significantly from the adopted Land Use Plan for the Town.
f. The internal street or access system is not anticipated to accommodate the expected traffic generation.
g. The proposed development project includes a drive through facility, or other uses such as schools that require significant on site circulation that may have an off-site impact to adjoining roads and/or intersections.
h. The amount and/or character of traffic is significantly different from a previously approved TIA, or more than 24 months have passed since completion of the previous TIA.

3. Scoping Meeting – A mandatory scoping meeting is required prior to beginning the TIA to discuss the requirements and strategies for a TIA specific to the site and the proposed development. This program shall be submitted by the applicant five or more business days prior to the scoping meeting and shall include a conceptual site plan showing proposed access points, proposed land use and densities, structure and parking envelopes. Planning staff, the **Town Engineer**, NCDOT district staff, the **transportation consultant assigned by the Town**, and the applicant(s) are required to attend the mandatory scoping meeting. The applicant may invite members of his/her development team as needed.

4. Memorandum of Understanding (MOU) – An MOU shall be prepared by the **transportation consultant assigned by the Town** documenting the understood scope of the project. The MOU shall be signed by the applicant, the Planning Director, the **Town Engineer**, and the NCDOT District Engineer if access to a state road is involved before the consultant can begin work on the TIA. Failure by the applicant to provide accurate information or failure by the assigned transportation consultant to follow the MOU shall result in disapproval of the TIA. If significant changes are made to the scoping parameters documented in the MOU, a revised MOU will be required.

5. Fees – After the scoping meeting, **the transportation consultant assigned by the Town** shall submit a summary of consultant fees for preparing the TIA to the Planning Director. Per the MOU, the applicant(s) shall agree to provide payment in full to the Town for preparation of the TIA so that the Town can release the work to the consultant. Any additional services incurred by the transportation consultant in addition to the MOU must be approved by Planning Director, and agreed to and paid for by the applicant, prior to performance of the additional work.

6. Transportation Mitigation Agreement (TMA) – Upon completion of the TIA, certain on or off-site transportation mitigation measures may be required as recommended by the TIA. If so, Planning staff shall prepare a Transportation Mitigation Agreement (TMA) which will summarize the following:

a. Development plan
b. Phasing and timing of development (if applicable)
c. Site access and points of ingress/egress
d. On and off-site improvements required to adequately mitigate the project impacts to the Town's transportation system

The TMA must be signed by the Planning Director, the Town Engineer, and the NCDOT District or Division Engineer if the mitigation involves a state roadway. All required mitigation measures must be implemented prior to final Certificate of Occupancy (CO), or the applicant(s) shall provide a cost estimate to Planning Staff for review, and provide a payment in lieu for said measures prior to CO.

7. TIA Outline and Contents – The outline and contents of what is required to be included in the TIA will be discussed at the scoping meeting and included in the Memorandum of Understanding (MOU). A detailed summary of the expected content and methodologies to be used in the TIA are discussed below.

   a. Cover/Signature page – Includes the project name, location, name of the applicant, contact information for the applicant, and date of the study. The name, contact information, registration number, signature, and seal of a duly qualified and registered professional engineer in the State of North Carolina are also required to appear on this page.

   b. Table of Contents – Includes a list of all section headings, figures, tables, and appendices included in the TIA report. Page numbers shall denote the location of all information, excluding appendices, in the TIA report.

   c. Executive Summary – Includes a description of the study findings, a general description of the project scope, study horizon years, probable transportation impacts of the project, and mitigation measure recommendations. Technical publications, calculations, documentation, data reporting, and detailed design should not be included in this section.

   d. Project Description – Includes a detailed description of the development, including the size of the parcel, development size, existing and proposed uses for the site, anticipated completion dates (including phasing). Should also include the square footage of each use and/or the number and size of dwelling units proposed, and should also include a map and copy of the site plan provided by the applicant(s).

   e. Site Description – Includes a description of the project location within the Town and region, existing zoning and use (and proposed use if applicable), and key physical characteristics of the site, including general terrain and environmentally sensitive or protected areas.

   f. Site Access – Includes a complete description of the ingress/egress of the site should be explained and depicted. It should include number of driveways, their locations, distances between driveways and intersections, access control (full-movement, leftover, right-in/right-out, etc.) types of driveways (two-way, one-way, etc.), traffic controls, etc. Internal streets (lanes, flow, and queuing), parking lots, sidewalks and bicycle lanes, and designated loading/unloading areas should also be described. Similar information for adjacent properties, including topographic grade relationship, should be provided to evaluate opportunities for internal connections. The design, number, and location of access points to collector and arterial roadways immediately adjacent to the site must be fully analyzed. The number of access points should be kept to a minimum and designed to be consistent with the type of roadway facility. Driveways serving the site from state

roads should be designed in accordance with the NCDOT's Policy on Street and Driveway Access, and/or the Town or Mecklenburg County's standards, as applicable.

g. Study Area – The limits of the study area shall be based on the location, size and extent of the proposed project, and an understanding of existing and future land uses and traffic conditions surrounding the site. The limits of the study area for the TIA shall be reviewed and approved by Planning Staff, the **Town Engineer**, and NCDOT staff at the mandatory scoping meeting. At a minimum, the study area should include all streets and signalized intersections within a 1-mile radius of the proposed site and/or where site traffic estimated for build-out of the project will constitute 5% or more of any signalized intersection approach during the peak hour. Unsignalized intersections between the required signalized intersections will be added to the scope as directed by the Town. To initially determine the impacts, the Town will maintain a database of recent peak-hour intersection turning-movement counts. The applicable intersection counts will be equated to current year baseline volumes. Based on the proposed development program submitted by the applicant, a preliminary trip generation analysis, distribution and assignment will be performed within the area surrounding the site and compared to the current year base volumes. Due to related impacts or current operational problems, town staff and/or NCDOT staff may require other intersections be included in the study area. A narrative describing the study area should identify the location of the proposed project in relation to the existing transportation system and list the specific study intersections and/or segments. Any unique transportation plans or policies applicable to the area (e.g., CATS bus service and future plans) should be mentioned. A site location map shall be provided and should identify natural features, major and minor roadways within the study area, study intersections, and a boundary of the site under consideration.

h. Existing Conditions – Shall include a narrative and map that represents AM and PM peak hour turning movement volumes for all intersections within the study area. Traffic volumes shall be 15-minute interval weekday turning movement counts (Tuesday through Thursday) and no more than twelve months old. The required count timeframes are from 7:00-9:00 a.m. and 4:30-6:30 p.m.; however site-specific conditions may necessitate additional or different traffic counting hours and/or days depending on the development program and location within the Town (these unique circumstances will be determined and directed by the Town). For example, 12-hour turning movement counts shall be required to complete the analysis if a traffic signal warrant analysis is required as part of the TIA. Planning staff and the **Town's Engineer** will determine if additional peak hours or weekend analyses shall be included in the TIA at the mandatory scoping meeting. For example, if the development is nearby a school that significantly alters traffic volumes at times other than the peak hours described above, additional study hours will be required. Traffic volumes should also represent weeks that have no observed federal, state, or local holidays and periods of the year when local schools are in session. The source of existing traffic volume information should be explicitly stated (e.g., Town counts, new counts collected by the applicant, NCDOT counts, etc.). If previous counts were obtained, only counts collected within the one year of the Scoping Meeting will be deemed acceptable Summary sheets for existing turning movement counts should be included in the appendix of the TIA report. A separate narrative and map shall be prepared to describe the characteristics of surrounding major roadways, including functional classification, number of lanes, posted speed limit, existing average daily traffic volumes, typical cross section, intersection control, and lineal distance

between major roadways. Field notes for the existing conditions investigation may be included in the appendix of the TIA report.

i. Future Year Background Conditions – The number of phases will determine the build out scenario of a particular development. Unless otherwise approved by the Planning staff and the Town Engineer, future year conditions for a single phase development shall be analyzed for the year the development is expected to be at full occupancy (build-out year) and five years after the build-out year (build-out + 5). For multiple phases, the scenarios should be completed in order, with any improvements specified by development included in the subsequent build scenarios, including five years after the full build-out year (build-out + 5). Specific analysis periods to include in the study shall depend greatly upon the development program, proposed project phasing plan, and significant improvements programmed for the transportation system. The committed development and transportation projects to be included in the base Future Year Conditions for the transportation system within the study area shall be determined during the scoping meeting. Transportation improvements assumed in the base future year conditions analysis may include those with an expected completion date concurrent with that of the development and funded through either by the Town of Cornelius, State of North Carolina Transportation Improvement Program, or indicated as a required condition of approval from another nearby development application. Only projects approved by the Planning Staff at the scoping meeting may be included in the analysis as future existing infrastructure. Those improvements committed by other projects must be clearly identified in the report as approved offsite development road improvements. Adjacent development traffic information used in the development of the base future year condition should be included in the appendix of the TIA report. Unfunded, planned infrastructure projects may be mentioned but the description should specifically identify that these projects are not included in the base condition. Future year background traffic volumes shall be forecasted using historical growth rate information, regional models, and/or TIA reports for development approved by the Town but not yet built. A narrative and map shall be prepared that presents turning movement volumes for each peak hour for all intersections identified within the study area. Future year base volumes, other development volumes, and site traffic volumes should be clearly separated, and combined in the map.

j. Trip Generation – Base trip generation for the proposed land use(s) should be calculated using data published in the latest version of the Institute of Transportation Engineers' (ITE) Trip Generation Manual. Data limitations, data age, choice of peak hour or adjacent street traffic, choice of independent variable, and choice of average rate versus equation shall be discussed at the mandatory scoping meeting. Local trip generation rates may be acceptable if appropriate validation is provided by the applicant to support them. Any deviation from ITE trip generation rates shall be discussed in the mandatory scoping meeting and documented in the MOU if approved by Planning staff, the Town Engineer, and NCDOT. The NCDOT Municipal School Transportation Assistance (MSTA) calculator should be used to calculate projected trip generations for school sites.

- Internal Capture – Base trip generation may be reduced by rate of internal capture when two or more land uses are proposed using methodology recommended in the most current Trip Generation Handbook published by the Institute of Transportation Engineers. Reductions greater than 10% in any peak hour require consultation and acceptance by the Planning staff,

the Town Engineer and NCDOT. The internal capture reduction should be applied before pass-by trips are calculated.

- Pass-by Trips – Pass-by trips are those made as intermediate trips between an origin and primary destination (i.e., home to work, home to shopping, etc.). However, pass-by trips are not diverted from another roadway. Base trip generation may be reduced by rate of pass-by capture using methodology recommended in the most current Trip Generation Handbook published by the Institute of Transportation Engineers. Pass-by trips associated with the development program may not exceed 10% of the existing volume reported for the adjacent public street network. This network shall include the streets that provide primary access to/from the site. For example, a site access drive that connects to a low-volume local street, which its primary access is to a major collector road, the traffic on the major collector shall be used as the adjacent street for pass-by calculation purposes. Evaluation of diverted trips may apply depending on the specifics of each site. A trip generation table shall summarize all trip generation calculations for the project.

k. Trip Distribution – External trip distribution shall be determined on a project-by-project basis using one of several sources of information available to transportation and land planning professionals. Potential sources for determining project trip distribution may include the regional travel demand model, market analysis, existing traffic patterns, or professional judgment. At the Town's direction, multiple trip distributions may be required for differing land use types. Regardless of methodology, the procedures followed and logic for estimating trip distribution percentages must be well-documented in the TIA. Trip distribution percentages proposed for the surrounding transportation network should be discussed during the scoping meeting and shall be approved by Planning staff, the Town Engineer, and NCDOT before proceeding with the TIA. A map showing the percentage of site traffic on each street included in the study area should be included in the TIA.

l. Trip Assignment – Project traffic shall be distributed to the surrounding transportation system based on the site's trip generation estimates and trip distribution percentages. Future year build-out traffic forecasts (i.e., future year background traffic plus project traffic) shall be presented in both tabular and graphic formats for AM and PM peak hour conditions at all intersections included in the study area. If the project will be built in phases, traffic assignments shall be reported for each phase. Pass-by traffic shall be included at the driveways and access points for evaluating driveway volumes. Multiple assignment analyses may be required if the traffic control at the access drives varies (i.e., right-in/right-out vs. stop controlled vs. signalized).

m. Capacity Analysis – Level of Service (LOS) is the primary measurement for impacts to the transportation system, and is defined by the most current edition of the Highway Capacity Manual. Unless otherwise noted, Synchro LOS and delay shall be reported for signalized intersections and approaches. Unsignalized minor street approach LOS and delay shall be reported according to HCM analysis, as reported by Synchro. LOS for existing signalized intersections shall be determined using existing signal timing plans provided by either the Town or NCDOT. Existing signal timing plans should be included in the appendix of the TIA report. If a traffic signal is part of a coordinated system, it must be analyzed as such under all conditions. Other standard practices and default input values for evaluating signalized intersections should

be consistent with the most recent guidelines published by the NCDOT, Traffic Engineering and Safety Systems Branch, Congestion Management Unit ("Capacity Analysis Guidelines"). Planning staff and the Town Engineer may also require safety, traffic simulation, gap and/or other analyses appropriate for evaluating a development application. Additional analyses and/or traffic capacity or simulation tools (such as VISSIM) required for the TIA shall be identified during the scoping meeting. Capacity analyses shall be conducted to determine levels of service in each peak hour for all intersections, and their approaches, identified for study using methodologies contained in the most current edition of the Highway Capacity Manual. Capacity calculations should be included for the existing and all future year scenarios, as described in Section 7.i. Impacts from the proposed project shall be measured by comparing the Future year build year and the Future year no-build year conditions. Requirements for mitigation are described in Section 7.q. All TIA reports submitted to the Town shall use SYNCHRO, SimTraffic or VISSIM Software, for signalized and unsignalized intersections, or Sidra Software, for roundabouts, consistent with policies released by the NCDOT. A narrative, table, and map shall be prepared that summarizes the methodology and measured conditions at the intersections reported in level of service (LOS A – F), intersection and approach signal delay for signalized intersections, approach delay for unsignalized intersections, and 95th percentile queue lengths for all movements. Capacity analysis worksheets and auxiliary turn lane warrants for unsignalized intersections should be included in the appendix of the TIA report.

n. Queuing Analysis – 95th percentile and simulation analysis of future year queues shall be consistent with NCDOT's Traffic Engineering and Safety Systems Branch, Congestion Management Unit current practices and published Capacity Analysis Guidelines. Turn lanes for unsignalized driveways serving the site shall be identified using volume thresholds published in the NCDOT's Policy on Street and Driveway Access to North Carolina Highways (see Warrant for Left- and Right-Turn Lanes Nomograph, pg. 80). Recommendations for left and right turn lanes serving the site shall be designed to meet future year capacity needs identified in the TIA report. For projects that include drive-through facilities, pick-up/drop-off areas or entrance gates, a queuing analysis may be required by the Town to ensure that vehicle stacking will not adversely impact the public transportation system. The queuing analysis must be performed using accepted transportation engineering procedures approved by the Town. This analysis shall be required for all drive-through facilities. If a TIA is required for a new school site, the consultant must model the internal circulation and ingress/egress of the site using a "dummy signal" in the SYNCHRO software as prescribed by NCDOT Municipal School Transportation Assistance (MSTA) department.

o. Collision Analysis – A summary of crash data (type, number, and severity) for the most recent 3-year period at each study location is required. Traffic Engineering Accident Analysis System reports will be provided by the Town and/or NCDOT and should be included in the appendix of the TIA report. For locations with prevalent crash types and/or frequency, a discussion shall be included describing factors that may be contributing to the incidents. At a minimum, the proposed development features shall not contribute to factors potentially involved in collision rates. If contributing factors are identified, recommendations to eliminate or mitigate these features shall be included.

p. Traffic Signal Warrants – Town staff and NCDOT may consider potential signal locations at the scoping meeting. However, traffic flow progression is of paramount importance when considering

a new traffic signal location. A new traffic signal should not cause an undesirable delay to the surrounding transportation system. Installation of a traffic signal at a new location shall be based on the application of warrants criteria contained in the most current edition of the Manual on Uniform Traffic Control Devices (MUTCD) and engineering judgment. Traffic signal warrants should be included in the appendix of the TIA report. Additionally, spacing of traffic signals within the Town must adhere to NCDOT requirements. Pedestrian movements must be considered in the evaluation and adequate pedestrian clearance provided in the signal cycle split assumptions. If a signal warrant analysis is recommended in the TIA, the Town and/or NCDOT may decide to defer a signal warrant analysis until after the development has opened in order to use actual turning movement counts at an intersection. The TIA recommendations must clearly state that this analysis shall occur at a specified date following the opening of the development. The applicant must issue a bond or letter of credit in the name of the Town for the estimated cost of the signal warrant analysis and resulting signal prior to final approval of the TIA. The cost shall be established based on an engineer's estimate provided by the engineer of record for the applicant, however final approval of the dollar amount rests with the Town.

q. Mitigation Measure Recommendations – This section shall provide a description of the study's findings regarding impacts of the proposed project on the existing and proposed transportation system and describe the location, nature, and extent of all mitigation measures recommended to the applicant to improve and/or maintain the future background year no-build level of service (LOS) conditions through phasing and build-out of the project. This mitigation will be based on the build-out year scenario. The applicant is only required to mitigate transportation deficiencies for their development and not unacceptable background conditions or other deficiencies caused by offsite development within the defined study area. The following LOS table (Table 1), using the most recent Level of Service methodology, shall be used when determining the adequacy of intersection/approach within the applicable impact areas of town:

ZONING DISTRICT	LOS Threshold
RP, GR, NR	C
NMX, VC, HC, WMX	D
BC, IC, CO	D
TC, TRD-O, TND	E

Where an intersection/approach is located within more than one zoning district, the less restrictive LOS shall apply to the entire intersection or approach for purposes of complying with this ordinance. Where an intersection is included in the study, but not listed in Table 1, LOS D will be LOS designation requiring mitigation.

A narrative and table shall be prepared that summarizes the methodology and measured conditions at the intersections reported in level of service (LOS A–F) and seconds of stop delay for the intersection and approach.

If the existing level of service (intersection or approach) is inadequate (i.e., “D”, "E" or "F" dependent on the governing zoning district shown in the table above), or the existing plus the background growth (not including the site) causes an inadequate level of service, then the developer will be expected to mitigate only the traffic to be generated by the proposed project. Town staff and NCDOT will review the recommendations in the final version of the TIA and will have the ultimate determination in the scope of the required mitigation measures.

For multi-phase developments, the capacity analyses scenarios shall address the phasing of improvements for each phase of development. The build-out + 5 scenario will only require the analysis of five years beyond the full build-out year.

A narrative and map shall also be prepared that describes and illustrates recommended mitigations, by phase if necessary, for maintaining the integrity of the transportation system.

r. Compliance with Adopted Transportation Plans – All TIA reports must include a statement of compliance with plans, programs, and policies adopted by the Town of Cornelius for maintaining a safe and efficient multi-modal transportation system.

SECTION 13.3: CONFORMANCE WITH ADOPTED PLANS

A. Street and Thoroughfare Plans: Where a proposed development plan includes any part of a street or thoroughfare which has been designated as such in official plans adopted by the North Carolina Department of Transportation (Statewide Transportation Improvement Program (STIP)), or the Charlotte Regional Transportation Planning Organization (Comprehensive Transportation Plan (CTP), Metropolitan Transportation Plan (MTP)), or any Town of Cornelius Plan or Program (i.e., Centennial Transportation Plan, Bond Programs, etc.), a right-of-way shall be platted in the location shown on the plan in accordance with any adopted plan, as well as Chapter 7 of this Code.

   As a condition of approval, the developer shall be required to construct the proposed street or thoroughfare within the borders of the development in accordance with the adopted standards or plans for such construction. In instances where such a street is scheduled for construction by the Town or the North Carolina Department of Transportation, the developer may make a payment in lieu of construction equal to the developer’s pro-rata share of the costs associated with the project (design, right-of-way, construction, etc.). Major thoroughfare and highway construction are exempt from this requirement.

B. If the total residential development size exceeds two hundred (200) acres or five hundred (500) housing units, the developer shall reserve adequate (minimum of 18 usable acres) prominent sites for the location of schools. Sites reserved for schools may include up to one-half (½) of their total area towards the open space dedication requirement.

SECTION 13.4: SKETCH PLAN REQUIREMENTS

The sketch plan shall show in simple sketch form the proposed layout of streets, lots, buildings, public open spaces and other features in relation to existing conditions. It shall also include the following information:

A. The existing topographic conditions of the property.

B. The boundary lines of the property being subdivided.

C. Water courses on the land to be subdivided.

D. The location, names, and right-of-way width of any existing streets on or within three hundred feet (300') of the land to be subdivided.

E. The location of all flood hazard areas, watershed district boundaries, and any other environmentally significant areas.

F. Illustrative elevations for any buildings proposed.

G. Location of significant vegetation on the site.

SECTION 13.5: DEVELOPMENT PLAN REQUIREMENTS

The development plan for Major Site Plans, Conditional Zoning Plans, Major Subdivisions, Special Use Permits, Vested Rights, and Master Plans shall be submitted at a scale no smaller than one inch equals one hundred feet (1" = 100'). Plans shall be submitted electronically, compatible with current Planning Department standards.

The development plan must be drawn to the following specifications and must contain or be accompanied by the information listed below. No processing or review of a development plan will proceed without all of the following information:

A. The boundary, as determined by survey, of the area to be developed with all bearings and distances shown and the location within the area, or contiguous to it, of any existing streets, railroad lines, water courses, easements or other significant features of the tract.

B. Scale denoted both graphically and numerically with north arrow and declination.

C. A vicinity map at a scale no smaller than one inch equals twelve hundred feet (1" = 1,200') showing the location of the development with respect to adjacent streets and properties.

D. The location of proposed buildings, parking and loading areas, streets, alleys, easements, lots, parks or other open spaces, reservations (i.e. school sites), property lines and building setback lines with street dimensions, tentative lot dimensions, the location of any building restriction areas (i.e. flood hazard areas, watershed protection districts, and/or jurisdictional wetlands) and any other environmentally-significant areas noted on the Lake Norman Shoreline Management Plan. Site calculations shall include total acreage of tract, acreage in parks and other non-residential uses, total number and acreage of parcels, the total number of housing units, area of all mixed use and non-residential buildings and gross project density per acre.

E. Illustrative plans denoting site, landscape, and buildings, as well as 3-D renderings and building elevations from all sides of the development.

F. All necessary engineering calculations required for compliance with the watershed protection requirements per Chapter 11.

G. The proposed name of the development, street names, the owner's name and address, the names of adjoining subdivisions or property owners, the name of the township, county and state in which the development is located, the date of plan preparation and the zoning classification of the tract to be developed and of adjoining properties.

H. Typical cross-sections of proposed streets. Where a proposed street is an extension of an existing street, the profile of the street shall include three hundred feet (300') of the existing roadway, with a cross section of the existing street. Where a proposed street within the development abuts a tract of land that adjoins the development and where said street may be expected to extend into said adjoining tract of land, the profile shall be extended to include three hundred feet (300') of the said adjoining tract.

I. A timetable for estimated project completion for each phase proposed.

J. Original contours at intervals of not greater than five feet (5') for the entire area to be developed (two feet is preferred) and extending into adjoining property for a distance of three hundred feet (300') at all points where street rights-of-way connect to the adjoining property and fifty feet (50') at all other points of common project boundaries. Mecklenburg County aerial photography may be used to satisfy this requirement.

In addition to the above required information, the following additional information may be required by the Planning Director or designee, Planning Board, or Town Board on a discretionary site-specific basis:

K. Environmental Impact Statement, pursuant to Chapter 113A of the North Carolina General Statutes, if the development exceeds two (2) acres in area and if the Planning Board deems it necessary due to the nature of the land or peculiarities in the proposed design.

L. Development Permit and Certification application with supporting documentation as required by the Cornelius Flood Damage Prevention Ordinance.

M. All proposed common access water-related structures (i.e. boat launches and community piers) shall be forwarded to the Lake Norman Marine Commission and Duke Energy for written comments prior to administrative approval.

N. Written comments from Duke Energy detailing any potential impacts on environmentally significant areas noted in the Lake Norman Shoreline Management Plan.

SECTION 13.6: CONSTRUCTION DOCUMENT REQUIREMENTS

The Construction Documents for Minor Site Plans, Major Site Plans, Conditional Zoning Plans, Special Use Permits, Major Subdivisions, Vested Rights, and Master Plans shall be submitted in accordance with the specifications of this Section except where specifically noted. Construction Documents shall constitute the complete submittal requirements for Site Plans and Preliminary Plats required prior to construction.

Plans shall be submitted electronically, compatible with current Planning Department standards. Construction drawings must be drawn to the following specifications and must contain or be accompanied by the applicable information listed below. No processing or review of Construction Documents will proceed without all of the following information:

A. The boundary, as determined by survey, of the area to be developed with all bearings and distances shown and the location within the area, or contiguous to it, of any existing streets, railroad lines, water courses, easements or other significant features of the tract.

B. Scale denoted both graphically and numerically with north arrow and declination.

C. A vicinity map showing the location of the development with respect to adjacent streets and properties.

D. Existing topography and finish grading with contours drawn at two foot (2') intervals. The Zoning Administrator, at his discretion, may permit the use of County topographic data in five foot (5') intervals on a site-specific basis. This requirement may be waived for developments smaller than one (1) acre or where it is determined that there is insufficient topographic change to warrant such information.

E. The proposed name of the development, street names, the owner's name and address, signature of the owner or owner's duly authorized agent, the name of the surveyor, the names of adjoining subdivisions or property owners, the name of the township, county, and state in which the development is located, the date of preparation, and the zoning classification of the tract to be developed and of adjoining properties.

F. A statement from Charlotte Water regarding the availability of adequate water and sewer capacity for the proposed development.

G. Environmental Survey in accordance with Section 9.3.3, Environmental Survey.

H. Landscape plan in accordance with Section 9.4, Landscape Requirements, and lighting plan and in accordance with Section 7.6, Exterior Lighting.

I. The plans for utility layouts, including sanitary sewers, storm sewers, and water lines, illustrating connections to existing systems. All water supply systems and sewage collection systems noted on the construction documents shall conform to current Charlotte Water standards. All storm drainage systems shall conform to Mecklenburg County Land Development Standards Manual.

J. The location and size of all utility lines, easements, and rights-of-way including water, sewer, storm sewer, natural gas, and electric.

K. The location of proposed buildings, parking and loading areas, streets, alleys, easements, lots, parks or other open spaces, reservations (i.e. school sites), property lines and building setback lines with street dimensions, lot dimensions, the location of any building restriction areas (i.e. flood hazard

areas, watershed protection districts, and/or jurisdictional wetlands), and any other environmentally-significant areas noted on the Lake Norman Shoreline Management Plan.

L. Site calculations shall include total acreage of tract, acreage in parks and other non-residential uses, total number and acreage of parcels, the total number of housing units, area of all mixed-use and non-residential buildings, and gross project density per acre.

M. The location and dimensions of off-street parking and loading spaces, and walkways indicating the type of surfacing, size, angle of stalls, width of aisles and a specific schedule showing the number of parking spaces provided.

N. The location and dimensions of proposed recreation areas, open space and required amenities and improvements including the calculated area of all required open space dedications in accordance with Chapter 8, Open Space.

O. The location and dimensions of any sidewalks, curb and gutters to be installed along public street frontages, alleys, and other required street improvements designated in Chapter 7, Streets, Parking & Lighting, or the Mecklenburg County Land Development Standards Manual.

P. Typical cross sections of proposed streets showing rights-of-way, pavement widths, grades and design engineering data for all corners and curves. Where a proposed street is an extension of an existing street the profile of the street shall include three hundred feet (300') of the existing roadway, with a cross section of the existing street. Where a proposed street within the subdivision abuts a tract of land that adjoins the subdivision and where said street may be expected to extend into said adjoining tract of land, the profile shall be extended to include three hundred feet (300') of the said adjoining tract.

Q. The location of any existing or proposed demolition landfills in the site. Such sites shall not be used for building.

R. A copy of the full soil erosion and sedimentation permit application including forms, plans and calculations to be submitted to Mecklenburg County Land Use and Environmental Services Agency and a copy of the approval letter prior to site plan or preliminary plat approval.

S. Final proposed elevations of all non-single-family residential buildings proposed for construction as part of this site plan approval. Subsequent buildings within the development may be handled as separate site plans. Such elevations shall include all facades visible from public streets.

T. A timetable for estimated project completion for each phase covered by the development plan.

U. Certificate of Survey and Accuracy as shown in Section 13.8.K.1.

In addition to the above required information, the following additional information may be necessary for unique sites:

V. Where a proposed water and sewer system does not contemplate the use of facilities owned and operated by Charlotte Water, the proposed facility plans as approved by the appropriate agency shall be submitted with the construction documents.

W. Where public or community water supply and/or sewerage systems are not available or to be provided, a written statement from the Mecklenburg County Health Department shall be submitted with the construction documents indicating that each lot has adequate land area and soil conditions suitable to accommodate the proposed methods of water supply and sewage disposal.

X. Development Permit and Certification application with supporting documentation as required by the Cornelius Flood Damage Prevention Ordinance.

Y. All proposed common access water-related structures (i.e. boat launches and community piers) shall be reviewed by the Lake Norman Marine Commission and Duke Energy for written comments prior to approval.

Z. Written comments from Duke Energy detailing any potential impacts on environmentally significant areas noted in the Lake Norman Shoreline Management Plan.

SECTION 13.7: EASEMENTS

Easements shall be provided on all construction documents as follows:

A. Utility Easements: Easements for underground or above ground utilities shall be provided for and centered along rear or side lot lines and shall be a minimum of ten feet (10') in width. Easements for water lines, sanitary sewers and storm drains shall be centered on the pipe and a minimum of twenty feet (20') in width.

B. Drainage Easements: Where a development is traversed by a stream or drainage way, an easement shall be provided conforming with the lines of such stream and of sufficient width as shall be adequate to maintain the overall integrity of the drainage area and provide for its periodic maintenance.

C. Public Access Easements: Public Access Easements shall be provided for sidewalks, trails, greenways and other pedestrian and bicycle facilities that provide connections other than within public rights-of-way.

SECTION 13.8: FINAL PLAT REQUIREMENTS

The final plat shall be prepared by a registered land surveyor, licensed to practice in the State of North Carolina and must be drawn to a scale no smaller than one inch equals one hundred feet (1" = 100'), and shall meet the requirements of the Mecklenburg County Register of Deeds Office. The final plat shall constitute all portions of the preliminary plat site, which the subdivider proposes to record, and develop at the time.

- Final Submittal for Signatures: 3 sets (mylar)
- Following Approval and Recordation: 1 original mylar plat returned to the Town

No final plat shall be approved unless and until the subdivider has installed in the platted area all improvements required by this ordinance or has posted improvement guarantees in accordance with Section 12.14, Improvement Guarantees. The final plat shall contain the following:

A. The exact boundary of the tract of land being subdivided showing clearly the disposition of all portions of the tract.

B. Scale denoted both graphically and numerically with north arrow and declination.

C. A vicinity map showing the location of the subdivision with respect to adjacent streets and properties.

D. As built drawings and plans of all water, sewer, and storm drainage system facilities, illustrating their layouts and connections to existing systems. Such plans shall show all easements and rights-of-way, to demonstrate that the facilities are properly placed and the locations of all fire hydrants, blow-off valves, manholes, pumps, force mains, and gate valves are indicated. This information shall not be placed on the final plat but must be submitted at the time of request for final plat approval or release of any surety for required improvements, whichever comes later.

E. Sufficient data to determine readily and reproduce accurately on the ground the location, bearing, and length of every street, alley line, lot line, building line, easement line, and setback line. All dimensions shall be measured to the nearest one-hundredth of a foot and all angles to the nearest second.

F. The lines and names of all streets, alley lines, lot lines, lot and block numbers, lot addresses, building setback lines, easements, reservations, on-site demolition landfills and areas dedicated to public purpose with notes stating their purposes. All lots subject to flooding shall be noted with the following statement:

> "Any construction or use within the areas delineated as floodway are subject to the restrictions imposed by the Cornelius Flood Damage Prevention Ordinance."

G. The accurate locations and descriptions of all monuments, markers, and control points.

H. Underground and aerial utility easements shall be shown.

I. The name of the township in which the subdivision/development is located, the name of the subdivision/development, the name of the owner, the name, registration number, and seal of the registered surveyor under whose supervision the plat was prepared, and the date of the plat.

J. Submittal of payment in lieu of dedicated open space (if applicable).

K. All the following certifications must appear on the Final Plat:

1. **Certificate of Survey.** I, _____, certify that this plat was drawn under my supervision from an actual survey made under my supervision (deed description recorded in Book ____, page ____,

etc.) (other); that the boundaries not surveyed are clearly indicated as drawn from information found in Book ____, page ____; that the ratio of precision as calculated is 1: ____; that this plat was prepared in accordance with G.S. 47 30 as amended. Witness my original signature, registration number and seal this ____ day of ____, A.D., ____.

Seal or Stamp

_____
Surveyor
Registration Number

2. **Certificate of Ownership and Dedication.** I hereby certify that I am the owner of the property shown and described herein, which is located in the jurisdiction of the Town of Cornelius and that I hereby adopt this plan with my free consent, establish minimum building setback lines, preserve and protect all significant trees over 18 inches diameter in the tree and root protection area, plant supplementary trees if required, and dedicate all streets, alleys, walks, parks, and other sites and easements, to public or private uses as noted. Once streets have been accepted by the Town or the State, street trees shall be maintained and cared for by the property owner adjacent to the tree, except in subdivisions where the property owners association provides maintenance and care. Prior to street acceptance, the developer shall be responsible for ensuring maintenance and care. Maintenance shall include replacement and trimming as necessary. Furthermore, I hereby dedicate all sanitary sewer, storm sewer, and water lines that are located in public utility easements or rights-of-way to the Town of Cornelius and Charlotte Water.

_____ _____
Date Owner(s)

3. **Certificate of Approval of the Design and Installation of Streets, Utilities, and Other Required Improvements.** I hereby certify that all streets, utilities, and other required improvements have been installed in an acceptable manner and according to Town Specifications and Standards or that guarantees of the installation of the required improvements in an amount and manner satisfactory to the Town of Cornelius has been received.

_____ _____
Date County Engineer, Mecklenburg County

4. **4a. Certificate of Approval for Recording.** I hereby certify that the subdivision plat shown hereon has been found to comply with the Land Development Code for Cornelius, North Carolina, and that this plat has been approved by the Town of Cornelius for recording in the Office of the Register of Deeds of Mecklenburg County. I further certify that the Board of Commissioners only accepts the dedication of the public parks shown thereon, if such parks are located within the corporate limits of Cornelius, but assumes no responsibility to open or maintain the same until, in the opinion of the Board of Commissioners, it is in the public interest to do so.

_____ _____
Date Planning Director, Cornelius, North Carolina

OR

(The following certificate shall appear on all plats which do not meet the definition of subdivision as defined in this Ordinance, but which need approval from the Town for recording at the Mecklenburg County Register of Deeds Office. This Certificate is to be used in lieu of the above.)

4b. Certificate of Approval for Recording. I hereby certify that the subdivision plat shown hereon is exempt from the subdivision provisions of the Cornelius Land Development Code, and is therefore exempt from its provisions. The plat has been found to comply with the zoning regulations of the Cornelius Land Development Code, and has been approved by the Town of Cornelius for recording in the Office of the Register of Deeds of Mecklenburg County.

_____ _____
Date Planning Director, Cornelius, North Carolina

The following Certificate shall be placed on the final plat only when the proposed subdivision is not to be connected to publicly owned and operated water supply and sewage disposal systems.

5. **Certification of Approval of Water Supply and Sewage Disposal Systems.** I hereby certify that the water supply and sewage systems installed or proposed for installation in _____ Subdivision meet necessary public health requirements and are hereby approved.

_____ _____
Date County Health Officer or Authorized Representative

All plats approved in the Town of Cornelius' jurisdiction must have one of the following Watershed Certificates on the final plat:

6. **6a. Certificate of Approval for Recording.** This property is located within a Public Water Supply Watershed. Development restrictions may apply. I certify that the plat shown hereon complies with the Watershed Protection Ordinance and is approved by the Town of Cornelius for recording at the Mecklenburg County Register of Deeds Office.

_____ _____
Date Watershed Administrator, Town of Cornelius

OR

6b. Certificate of Approval for Recording. I certify that this plat is not within a designated Public Water Supply Watershed.

_____ _____
Date Watershed Administrator, Town of Cornelius

OR

6c. Certificate of Approval for Recording. I certify that this plat is within a designated Public Water Supply Watershed, and that the owner and developer have submitted plans and obtained permits for construction prior to the effective date of the Ordinance, and are exempt from its provisions.

_____ _____
Date Watershed Administrator, Town of Cornelius

7. **Review Officer Certification.** State of North Carolina, County of Mecklenburg
I, _____, Review Officer of Mecklenburg County, certify that the map or plat to which this certification is affixed meets all the statutory requirements for recording.

_____ _____
Date Review Officer

8. **North Carolina Department of Transportation Certification.**
Division of Highways

Proposed Subdivision Road
Construction Standards Certification

APPROVED: _____ DATE: _____
District Engineer

L. This certification is to appear on all Built-Upon Area (BUA) averaging plats:
Built-Upon-Area Transfer Plat
This plat represents a transfer of built-upon-area through preservation of a dedicated, undisturbed natural area for properties within the jurisdiction of the Town of Cornelius. The resulting action may or may not create tracts of land that are compliant with the Cornelius Land Development Code (LDC). This parcel is subject to the LDC built-upon area averaging standards: Any change to the development proposal affecting the approved built-upon-area allowance requires amendment to the existing Built-Upon Area Averaging Certificate and approval by the Cornelius Watershed Review Board. The Planning Director reserves the right to make periodic site inspections to ensure compliance with these conditions.
Date
Planning Director, Town of Cornelius

SECTION 13.9: PLACEMENT OF MONUMENTS

Unless otherwise specified by this ordinance, the Manual of Practice for Land Surveying, as adopted by the NC State Board of Registration for Professional Engineers and Land Surveyors under provisions of Chapter 89 of the General Statutes of North Carolina, shall apply when conducting surveys of subdivision; in order to determine the accuracy for surveys and placement of monuments, control corners, markers, and property corner ties; to determine the location, design, and material of monuments, markers, control corners, and property corner ties; and to determine other standards and procedures governing the practice of land surveying for subdivisions.

In addition, for the purpose of identification and protection of survey corners and monuments, each corner or monument within the subdivision shall have a disk attached to a ferrous rod or placed in concrete that shall be stamped to identify that point as a property corner and or control point. All monuments shall be set flush with or just below ground level and shall be made of durable materials. In addition, ferrous materials will be present in sufficient mass either in the monument or in close proximity to the monument to allow for detection by electronic metal detection devices.

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