

## Town of Surf City Street Regulations

### 1.1 General Street Design Principles

1.1.1 The Zoning Ordinance encourages the development of a network of interconnecting streets that work to disperse traffic while connecting and integrating neighborhoods with the existing urban fabric of the Town. Equally as important, the Zoning Ordinance encourages the development of a network of sidewalks and bicycle lanes that provide an attractive and safe mode of travel for cyclists and pedestrians. In addition to dispersing traffic, interconnecting street networks encourage alternate modes of transportation to the automobile, enhance transit service opportunities, improve traffic safety through promoting slower speeds, and potentially reduce vehicle miles traveled within the street network. The overall network function, and the comfort and safety of multi-modal or “shared” streets to slow and disperse traffic are primary to vehicular efficiency.

1.1.2 It is the intent of this Ordinance to build streets that are integral components of community design. Streets shall be detailed to compliment neighborhoods and commercial centers and shall be pedestrian in scale. Streets are encouraged to be designed with on-street parking. In an effort to protect this investment, the Town views streets as the most important public space and therefore has developed a set of principles which permit this space to be used by both cars and people.

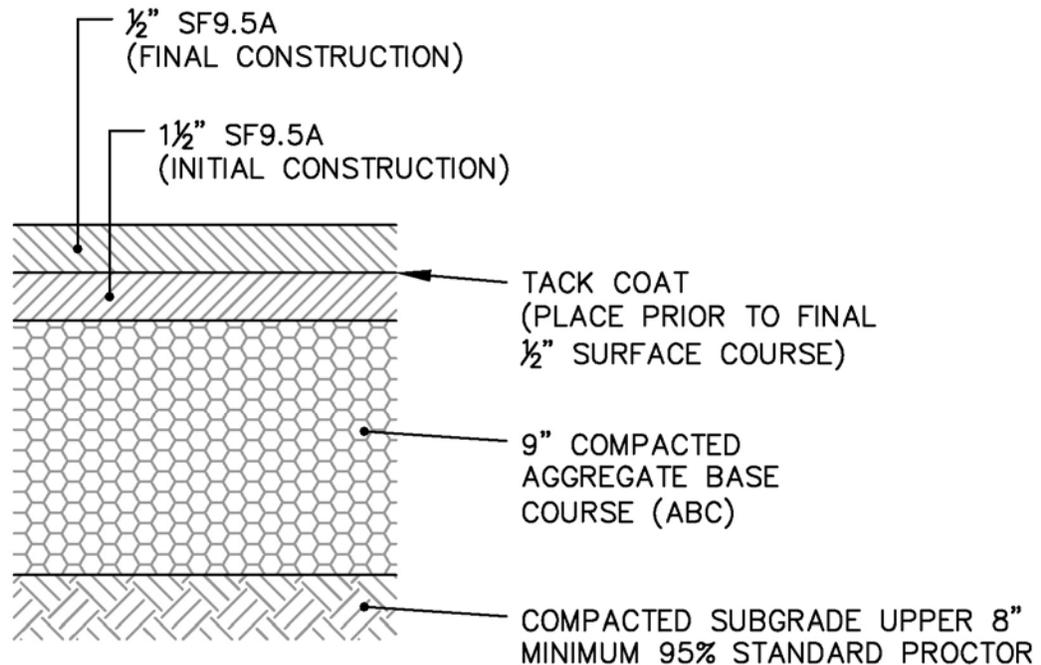
- a) Streets shall interconnect within a development and with adjoining development. Cul-de-sacs are permitted only where topographic conditions and/or exterior lot line configurations offer no practical alternatives for connection or through traffic. Street stubs should be provided with development adjacent to open land to provide for future connections.
- b) Streets shall be designed as the main public space of the Town and shall be scaled to the pedestrian.
- c) Streets are designed to be only as wide as necessary to accommodate the vehicular mix serving adjacent land uses, while providing adequate access.
- d) Streets shall be bordered by sidewalks in compliance with the Zoning Ordinance. The Town Council may grant exceptions upon recommendation by the Planning Board if it is shown that local pedestrian traffic on Minor Streets and other non-pedestrian-oriented streets warrant their location on one side only. In addition, in areas that no sidewalk currently exists adjacent to or within reasonable proximity of, the Zoning Administrator or designee may allow for an improvement guarantee in lieu of installation.
- e) Wherever possible, street locations should account for difficult topographical conditions, paralleling excessive contours to avoid excessive cuts and fills and the destruction of significant trees and vegetation outside of street-rights-of way on adjacent lands.
- f) Whenever an irreconcilable conflict exists among vehicular and pedestrian usage, the conflict should be resolved in favor of the pedestrian unless in the best interest of public safety.

- g) All streets, whether publicly or privately maintained, shall be constructed in accordance with the design and construction standards in this code and shall be maintained for public access whether by easement or by public dedication.
- h) Closed or gated streets are strictly prohibited, whether on private or public roads.
- i) Angle parking is permitted upon approval of the Town Council.
- j) The use of traffic calming devices such as raised intersections, lateral shifts, and roundabouts are encouraged as alternatives to conventional traffic control measures.
- k) Speed bumps are prohibited.

## 1.2 Street Engineering And Design Specifications

Street designs shall permit the comfortable use of the street by cars, bicyclists, and pedestrians. Pavement widths and design speeds should be minimized without compromising safety. The specific design of any given street must consider the building types which front on the street and the relationship of the street to the Town's street network. New development with frontages on existing publicly maintained streets shall be required to upgrade all their frontages to meet the standards of this Section. The following specifications shall apply to street design:

### 1.2.1 Pavement Schedule



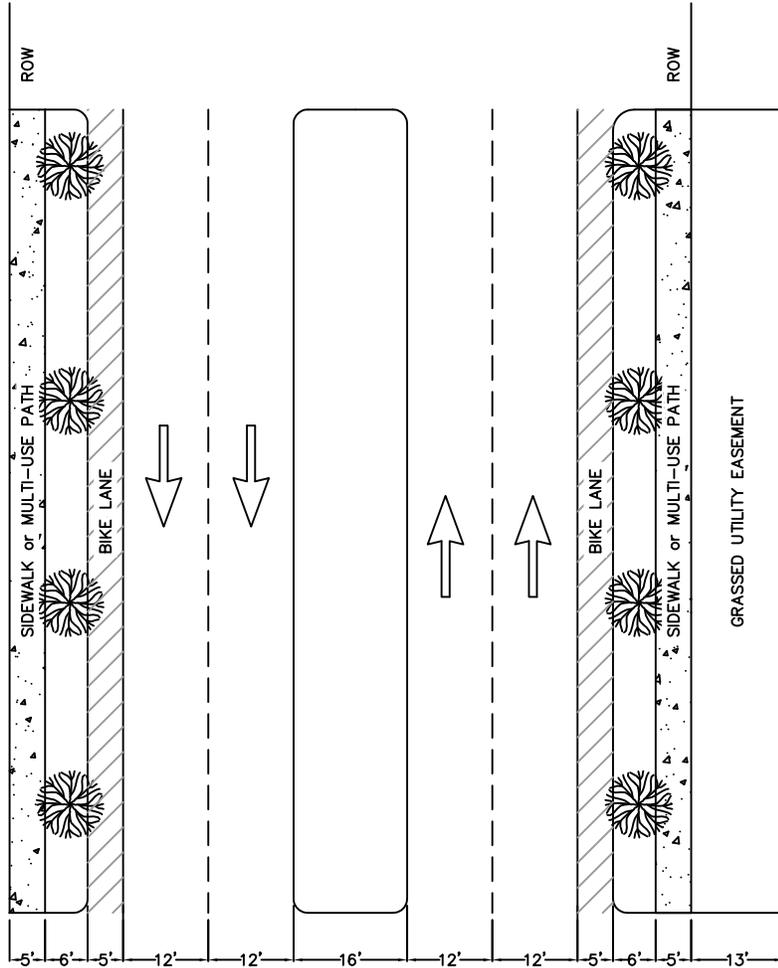
ALL MATERIALS SHALL MEET THE REQUIREMENTS SET FORTH IN THE LATEST EDITION OF THE NORTH CAROLINA STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES

a)

### 1.2.2 Street Diagrams

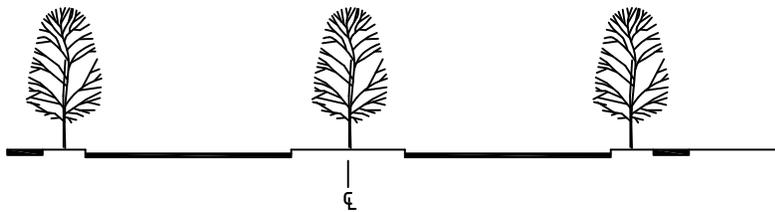
BOULEVARD

BOULEVARDS ARE URBAN IN CHARACTER AND PROVIDE MULTI-LANE ACCESS TO COMMERCIAL AND MIXED-USE BUILDINGS, GENERALLY SUPPORT ALL TRANSPORTATION MODES (AUTOMOBILE, COMMERCIAL VEHICLES, EMERGENCY VEHICLES, AND TRANSIT) WITH HIGH LEVELS OF EFFICIENCY, AND CARRY REGIONAL TRAFFIC.



94' R.O.W

NOTE: THE 13' UTILITY EASEMENT MAY BE DIVIDED ONTO EACH SIDE OF THE STREET SO THAT A TOTAL OF 13' IS USED (E.G., 6.5' ON EACH SIDE) SO LONG AS THE EASEMENT IS LOCATED IN A GRASSED AREA



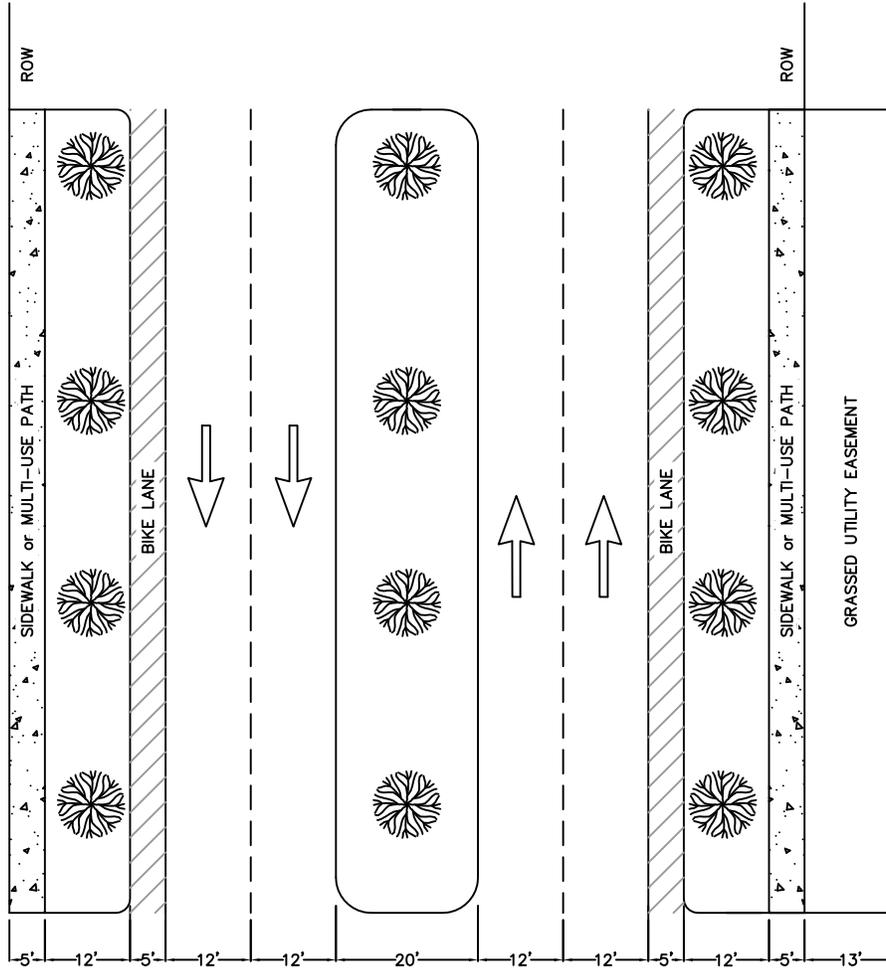
DESIGN SPEED  
CURB RADIUS  
DRAINAGE  
STREET TREES

45 MPH MAX.  
15 FT  
2.5' CURB GUTTER OR VALLEY CURBING  
PER SURF CITY ORDINANCE

NOTE: ALL DIMENSIONS SHOWN ARE MINIMUMS UNLESS STATED OTHERWISE

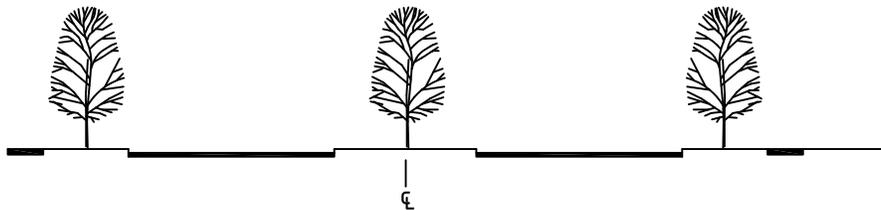
PARKWAY

PARKWAYS MAY BE USED IN LIEU OF RESIDENTIAL COLLECTOR STREETS. PARKWAYS PROVIDE A MORE NATURAL SETTING WITH ADDITIONAL LANDSCAPING AS COMPARED TO OTHER STREET TYPES.



112' R.O.W

NOTE: THE 13' UTILITY EASEMENT MAY BE DIVIDED ONTO EACH SIDE OF THE STREET SO THAT A TOTAL OF 13' IS USED (E.G., 6.5' ON EACH SIDE) SO LONG AS THE EASEMENT IS LOCATED IN A GRASSED AREA

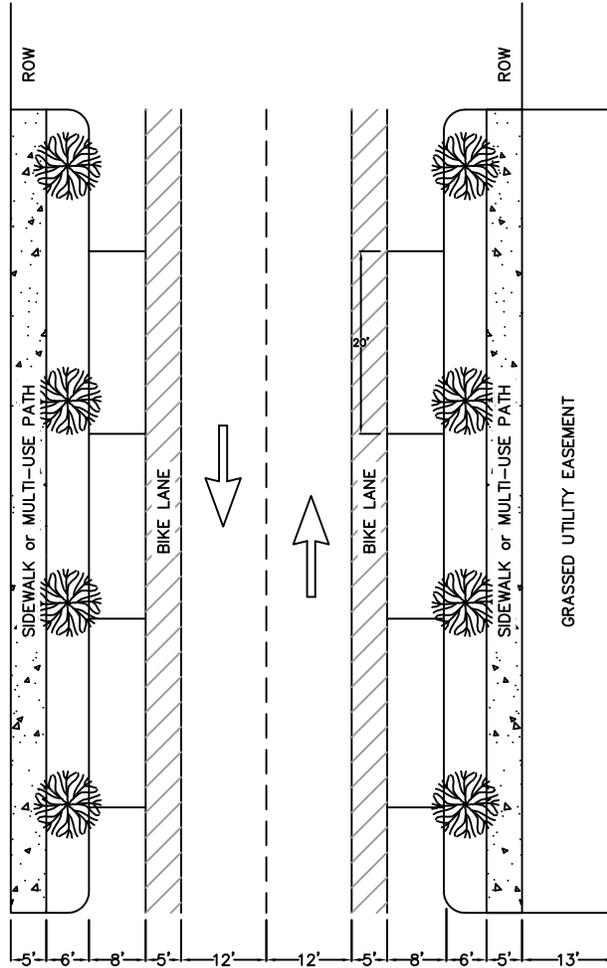


DESIGN SPEED	35 MPH MAX.
CURB RADIUS	15 FT
DRAINAGE	2.5' CURB GUTTER OR VALLEY CURBING
STREET TREES	PER SURF CITY ORDINANCE

NOTE: ALL DIMENSIONS SHOWN ARE MINIMUMS UNLESS STATED OTHERWISE

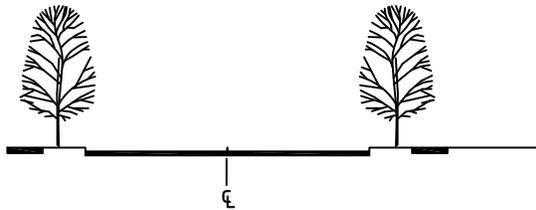
AVENUE

AVENUES, AS CIVIC SPACES, SERVE AS THE "GATEWAYS" OF TOWN, CONNECTING NEIGHBORHOODS TO COMMERCIAL CENTERS AND CARRY LARGE AND DIVERSE TRAFFIC VOLUMES AS MAJOR TRANSIT ROUTES. THE AVENUE IS URBAN IN CHARACTER. AVENUES CONNECT NEIGHBORHOODS TO VILLAGE AND TOWN CENTERS AND USUALLY EXTEND OVER A MILE IN LENGTH.



72' R.O.W

NOTE: THE 13' UTILITY EASEMENT MAY BE DIVIDED ONTO EACH SIDE OF THE STREET SO THAT A TOTAL OF 13' IS USED (E.G., 6.5' ON EACH SIDE) SO LONG AS THE EASEMENT IS LOCATED IN A GRASSED AREA

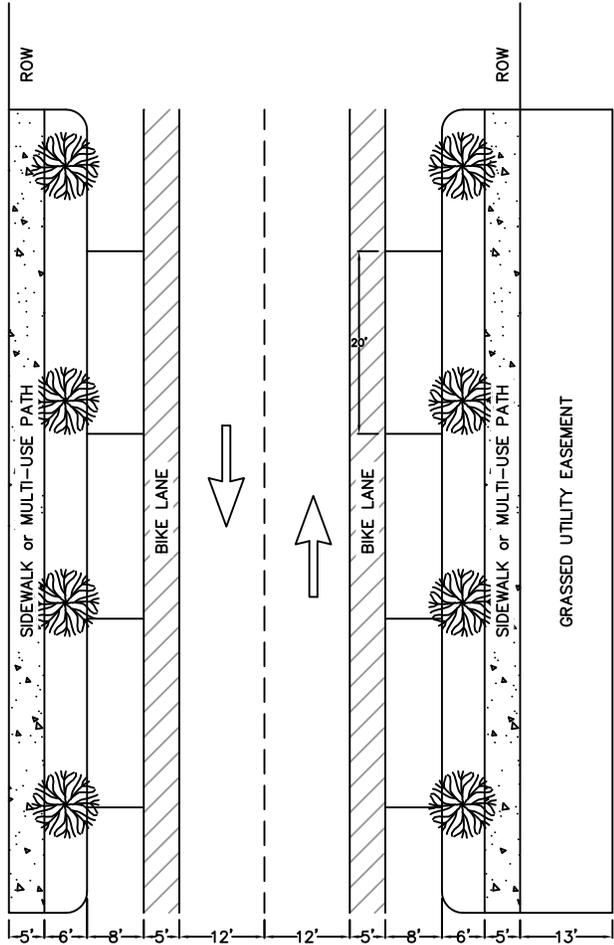


DESIGN SPEED	35 MPH MAX.
CURB RADIUS	15 FT
DRAINAGE	2.5' CURB GUTTER OR VALLEY CURBING
STREET TREES	PER SURF CITY ORDINANCE

NOTE: ALL DIMENSIONS SHOWN ARE MINIMUMS UNLESS STATED OTHERWISE

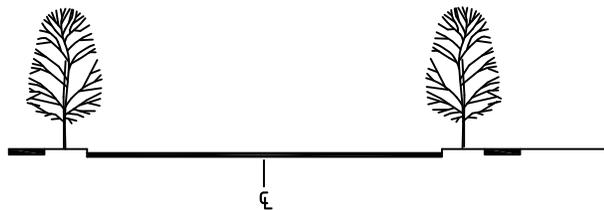
NON-RESIDENTIAL COLLECTOR OR MULTI-FAMILY STREET

NON-RESIDENTIAL COLLECTOR OR MULTI-FAMILY STREETS ARE URBAN IN CHARACTER AND PROVIDE LOW-SPEED, PEDESTRIAN FRIENDLY ACCESS TO NEIGHBORHOODS AS WELL AS NEIGHBORHOOD COMMERCIAL AND MIXED-USE BUILDINGS.



72' R.O.W

NOTE: THE 13' UTILITY EASEMENT MAY BE DIVIDED ONTO EACH SIDE OF THE STREET SO THAT A TOTAL OF 13' IS USED (E.G., 6.5' ON EACH SIDE) SO LONG AS THE EASEMENT IS LOCATED IN A GRASSED AREA

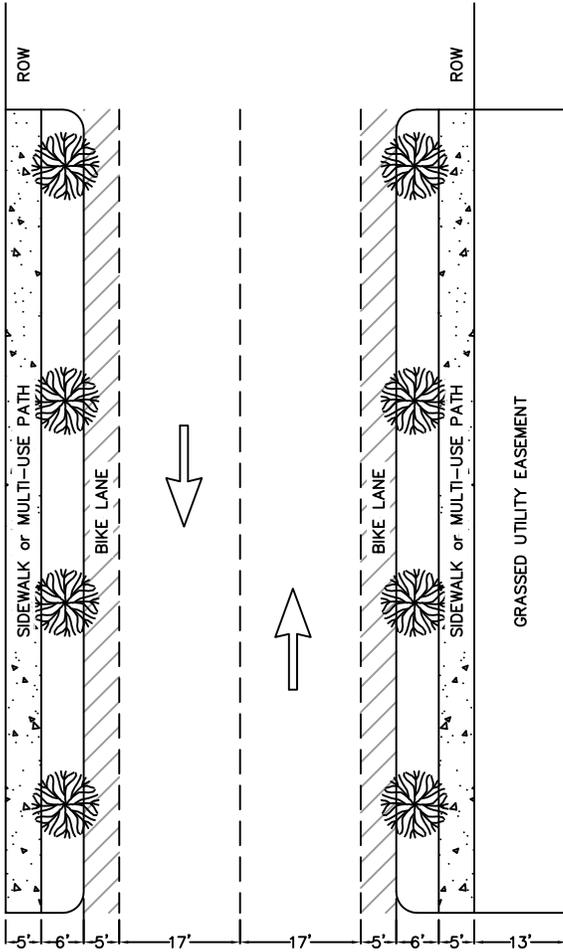


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|--------------|--------------------------------------|
| DESIGN SPEED | 35 MPH MAX.                          |
| CURB RADIUS  | 15'                                  |
| DRAINAGE     | 2.5' CURB & GUTTER OR VALLEY CURBING |
| STREET TREES | PER SURF CITY ORDINANCE              |
- NOTE: ALL DIMENSIONS SHOWN ARE MINIMUMS UNLESS STATED OTHERWISE

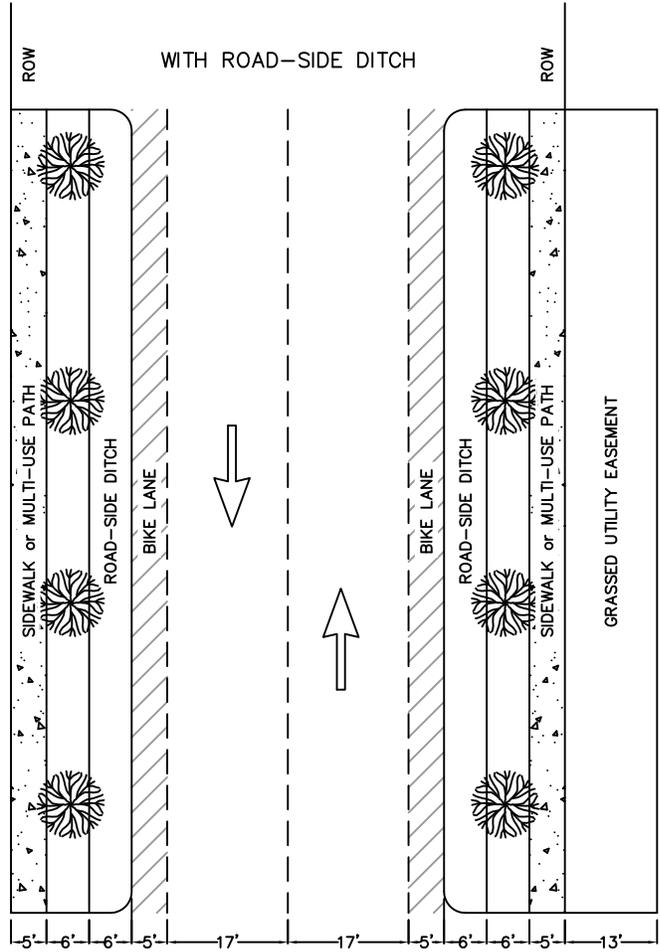
RESIDENTIAL COLLECTOR STREET (DOES NOT INCLUDE MULTI-FAMILY)

RESIDENTIAL COLLECTOR STREETS PROVIDE LOW-SPEED, PEDESTRIAN FRIENDLY ACCESS FOR MAIN COLLECTOR STREETS WITHIN NEIGHBORHOODS.

RESIDENTIAL COLLECTOR STREETS SERVE A MINIMUM OF 50 RESIDENTIAL DWELLING UNITS.

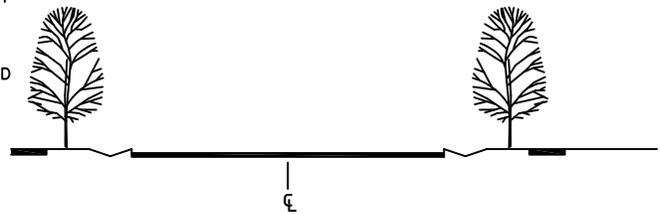
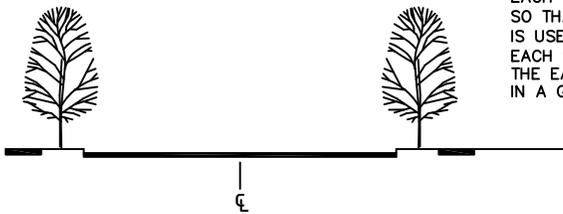


66' R.O.W



78' R.O.W

NOTE: THE 13' UTILITY EASEMENT MAY BE DIVIDED ONTO EACH SIDE OF THE STREET SO THAT A TOTAL OF 13' IS USED (E.G., 6.5' ON EACH SIDE) SO LONG AS THE EASEMENT IS LOCATED IN A GRASSED AREA



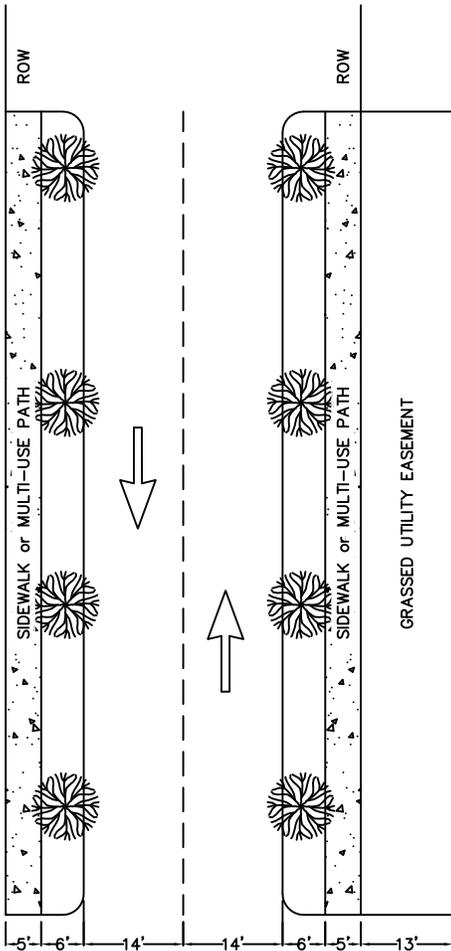
- DESIGN SPEED 35 MPH MAX.
- CURB RADIUS 15 FT
- DRAINAGE 2.5' CURB & GUTTER, VALLEY CURBING, OR ROAD-SIDE DITCHES
- STREET TREES PER SURF CITY ORDINANCE

NOTE: ALL DIMENSIONS SHOWN ARE MINIMUMS UNLESS STATED OTHERWISE

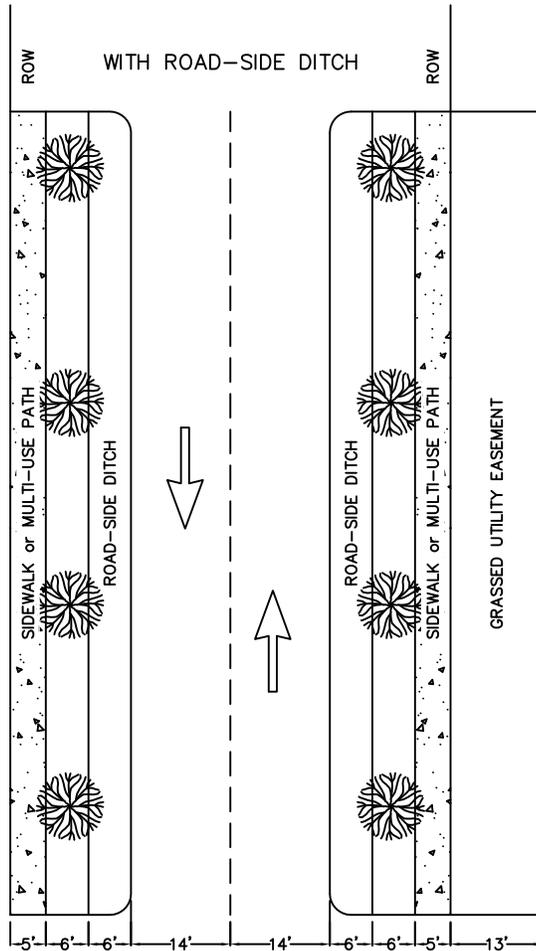
RESIDENTIAL STREET

RESIDENTIAL STREETS ARE PEDESTRIAN ORIENTED AND RESIDENTIAL IN CHARACTER, FUNCTIONING PRIMARILY TO PROVIDE ACCESS TO NEIGHBORHOOD DESTINATIONS AND TO PROVIDE CONNECTIONS WITHIN NEIGHBORHOODS.

RESIDENTIAL STREETS SERVE A MAXIMUM OF 50 RESIDENTIAL DWELLING UNITS.

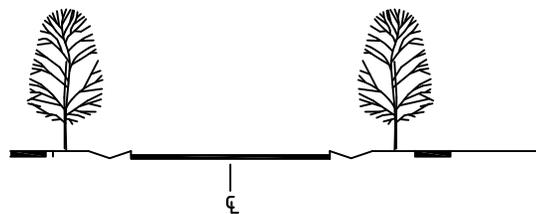
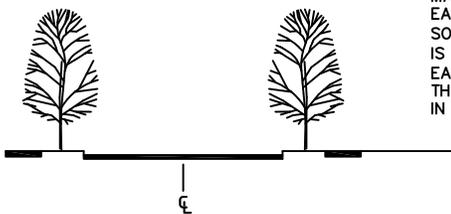


50' R.O.W



52' R.O.W

NOTE: THE 13' UTILITY EASEMENT MAY BE DIVIDED ONTO EACH SIDE OF THE STREET SO THAT A TOTAL OF 13' IS USED (E.G., 6.5' ON EACH SIDE) SO LONG AS THE EASEMENT IS LOCATED IN A GRASSED AREA



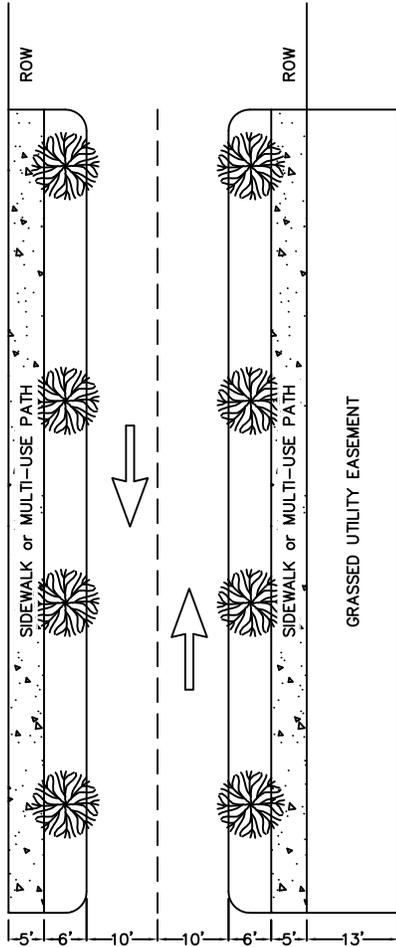
- |              |  |
|--------------|--|
| DESIGN SPEED | 35 MPH MAX.  |
| CURB RADIUS  | 15 FT  |
| DRAINAGE     | 2.5' CURB & GUTTER, VALLEY CURBING, OR ROAD-SIDE DITCHES |
| STREET TREES | PER SURF CITY ORDINANCE                                  |

NOTE: ALL DIMENSIONS SHOWN ARE MINIMUMS UNLESS STATED OTHERWISE

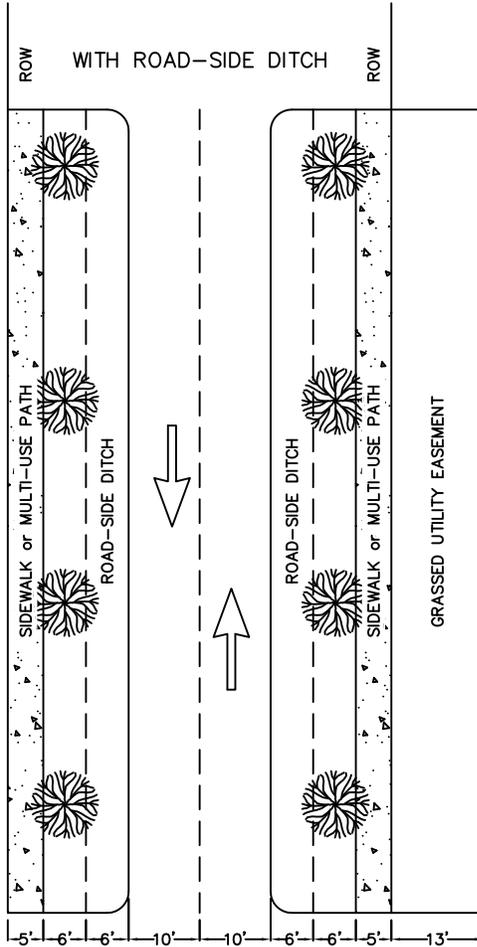
MINOR STREET

MINOR STREETS ARE PEDESTRIAN ORIENTED AND RESIDENTIAL IN CHARACTER, FUNCTIONING PRIMARILY TO PROVIDE ACCESS WITHIN NEIGHBORHOODS. A TRAFFIC SPEED OF 25 MPH IS APPROPRIATE SINCE THESE STREETS ARE DESIGNED TO ACCOMMODATE LOW TRAFFIC VOLUMES.

MINOR STREETS SERVE A MAXIMUM OF 15 RESIDENTIAL DWELLING UNITS.

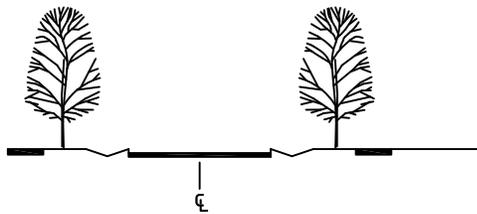
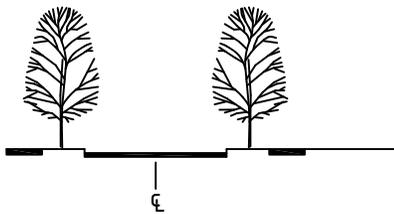


42' R.O.W



54' R.O.W

NOTE: THE 13' UTILITY EASEMENT MAY BE DIVIDED ONTO EACH SIDE OF THE STREET SO THAT A TOTAL OF 13' IS USED (E.G., 6.5' ON EACH SIDE) SO LONG AS THE EASEMENT IS LOCATED IN A GRASSED AREA



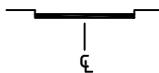
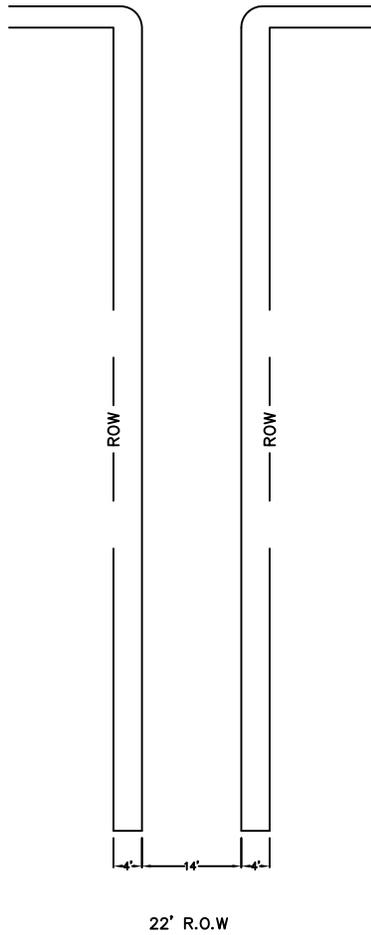
DESIGN SPEED  
CURB RADIUS  
DRAINAGE

25 MPH MAX.  
15 FT  
2.5' CURB & GUTTER, VALLEY CURBING, OR ROAD-SIDE DITCHES  
STREET TREES  
PER SURF CITY ORDINANCE

NOTE: ALL DIMENSIONS SHOWN ARE MINIMUMS UNLESS STATED OTHERWISE

NON-RESIDENTIAL ALLEY

NON-RESIDENTIAL ALLEYS ARE PRIVATELY MAINTAINED, LOW-SPEED SERVICE EASEMENTS PROVIDING ACCESS FOR SERVICE, DELIVERY, EMERGENCY ACCESS, UTILITIES, AND COMMERCIAL USES.

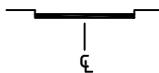
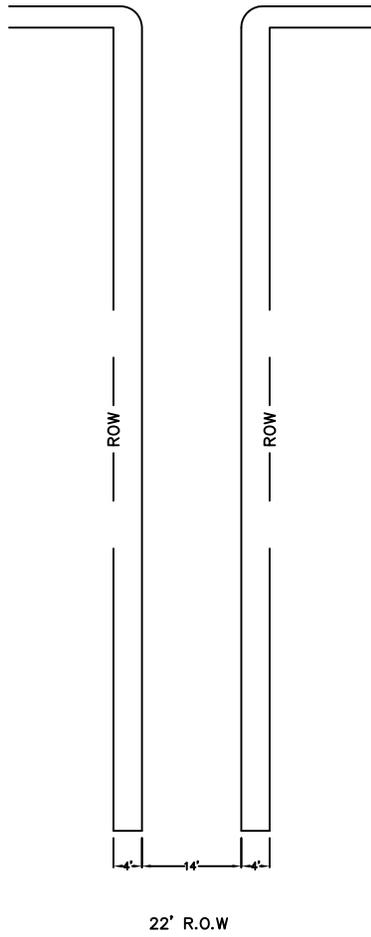


DESIGN SPEED	10 MPH
CURB RADIUS	5 FT
DRAINAGE	2.5' CURB AND GUTTER OR VALLEY CURBING

NOTE: ALL DIMENSIONS SHOWN ARE MINIMUMS

RESIDENTIAL ALLEY

RESIDENTIAL ALLEYS ARE PRIVATELY MAINTAINED, LOW-SPEED  
EASEMENTS PROVIDING ACCESS FOR RESIDENCES.



DESIGN SPEED	10 MPH
CURB RADIUS	5 FT
DRAINAGE	2.5' CURB AND GUTTER OR VALLEY CURBING

NOTE: ALL DIMENSIONS SHOWN ARE MINIMUMS

### 1.2.3 Traffic Impact Study (TIS)

- a) In accordance with the most current edition of the NCDOT *Policy on Street and Driveway Access to North Carolina Highways*, applicants shall either (1) provide documentation from NCDOT that a TIS is not required for the proposed project, or (2) provide documentation of an NCDOT approved TIS for the proposed project.

### 1.2.4 Street Markers And Traffic Control Signs

- a) All street markers and traffic control signs shall be posted in accordance with the US Federal Highway Administration Manual of Uniform Traffic Control Devices, except for the pole type, and shall be installed by the developer prior to the issuance of any certificates of occupancy for any building on that street.
- b) The background color for all private street name signs shall be blue.

### 1.2.5 SIDEWALKS

- a) All sidewalk shall be built to the standards of NCDOT, particularly 2012 Standard Detail 848.01 Concrete Sidewalk.

### 1.2.6 BOARDWALKS

- a) All new boardwalks shall meet or exceed the aesthetic of boardwalks in the surrounding area.

### 1.2.7 CUL-DE-SACS

- a) Where practical, a close should be used in place of a cul-de-sac. Cul-de-sacs, if permitted, shall not exceed 250 ft in length from the nearest intersection with a street providing through access (not a cul-de-sac). Cul-de-sacs shall be offset from the street centerline and shall form a square. (See Section 8.5 Open Space Types for more information)

### 1.2.8 Intersections

- a) All streets shall intersect as nearly as possible at right angles and no street shall intersect at less than 70 degrees.
- b) Where a centerline offset occurs at an intersection, the distance between centerlines of the intersecting streets shall not be less than 125 ft.
- c) Proper sight lines shall be maintained at all intersections of streets in order to permit adequate sight distance. Minimum stopping distances should conform to the design speed and stopping distances required for wet pavement through both vertical and horizontal alignment.

### 1.2.9 Curb Radii

- a) Curb radii shall be designed to reduce pedestrian crossing times along all streets requiring sidewalks. In general, curb radii should not exceed 20 ft.

#### 1.2.10 Utility Location

- a) Wherever possible, utilities shall not be located under pavement. If it is necessary to locate a utility under pavement, stub-outs shall be provided to allow for future utility connections; in addition, any future recombination of lots (e.g., duplexes) will be required to cut the pavement as necessary to add the new connections.

#### 1.2.11 Curbs And Drainage

- a) If deemed necessary by the Planning Director, curb and gutter may be required for new development.

#### 1.2.12 Centerline Radius

- a) A 90 ft. minimum centerline radius shall be provided between reverse curves on all streets. Centerlines may be varied upon approval by the Technical Review Committee.

#### 1.2.13 Street Lights

- a) Street lights shall be installed by the developer on all streets except alleys in accordance with the Town's Ordinance. Lights located within an accepted public Town ROW will be maintained by the Town.
- b) All intersections shall include street lights.

#### 1.2.14 Curb Cuts

- a) Generally, curb cuts should be minimized to reduce vehicle/pedestrian/bicycle conflicts.

#### 1.2.15 Pedestrian Street Crossings

- a) Mid-block crossings, bulb-outs, raised crosswalks, and similar techniques may be used to accommodate pedestrians when appropriate traffic and site conditions exist.

#### 1.2.16 On-Street Parking

- a) Generally, on-street parking may provide a physical buffer between the pedestrian and traffic and may reduce the need for off-street surface parking.

#### 1.2.17 Design Speed

- a) Design speed should closely match the street type, vehicle use, and proposed speed limit.

#### 1.2.18 Connectivity

- a) All or most proposed streets within the network shall form an interconnected pattern and shall connect with the adjacent street pattern. Connectivity shall be assessed by the ability to permit multiple routes, diffuse traffic, and shorten pedestrian walking distances. Alleys may be used to provide site access. A properly designed street network, unless prohibited by the existing street layout or topography, should provide

at least two routes of access to a given location. This affords a high level of accessibility for emergency vehicles and appropriate service routing for school buses and transit vehicles.

#### 1.2.19 Rights-Of-Way

- a) The right-of-way of any street is an important design element of the public space or streetscape. Street right-of-way should be the minimum appropriate to accommodate the street, median, planting strip, sidewalks, utilities, and maintenance considerations and appropriate for adjacent land uses and building types. Utility easements shall be accounted for when determining street right-of-way width.

### 1.3 Bicycle And Pedestrian Infrastructure

1.3.1 Sidewalks and Multi-Use Paths (MUPs). Any new commercial development, residential development of more than three lots and/or units, or any change of use shall construct sidewalks along the property street frontage; the Planning Board may also require a multi-use path on one side of the street, as shown in the Section 1.2.2 street diagrams.

- a) All sidewalk shall be built to the standards of NCDOT, particularly 2012 Standard Detail 848.01 Concrete Sidewalk.
- b) MUPs shall be a minimum of ten (10) feet in width.

#### 1.3.2 Bicycle Lanes

- a) Bike lanes shall be a minimum of 5 ft in width and shall be required as applicable to the Town's Bicycle & Pedestrian Plan.

#### 1.3.3 Crosswalks

- a) Crosswalks shall match NCDOT's 2012 Standard Detail 1205.07 Pavement Markings Pedestrian Crosswalks.

#### 1.3.4 Wheelchair Ramps

- a) Wheelchair Ramps shall match NCDOT's 2012 Standard Detail 848.05 Wheelchair Ramp Curb Cut.
- b) Detectable warning domes / truncated domes shall be blue in color.