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**TECHNICAL ASSISTANCE WORK PRODUCTS
N.H. COASTAL PROGRAM -- FY-1996**

NEW CASTLE ASSISTANCE

1. *RESIDENTIAL BUILDOUT ANALYSIS*

2. *ZONING AND LAND USE REGULATIONS*
1996 Zoning Amendments

OCLC
45A 02242

Assistance Provided by the
Rockingham Planning Commission
121 Water Street
Exeter NH 03833

October 1995 - September 1996

These report, related products and technical assistance were funded in part by a grant from the Office of State Planning, New Hampshire Coastal Program as authorized by the National Oceanic and Atmospheric Administration (NOAA), Grant Award Number NA57OZ0320

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**RESIDENTIAL BUILDOUT ANALYSIS
FOR THE TOWN OF NEW CASTLE**

September 1996

prepared by

Rockingham Planning Commission
121 Water Street
Exeter, NH 03833



The project was Funded in part by a grant from the Office of State Planning, New Hampshire Coastal Program, as authorized by the National Oceanic and Atmospheric Administration (NOAA), Grant Award Number NA57OZ0320

**US Department of Commerce
NOAA Coastal Services Center Library
2234 South Hobson Avenue
Charleston, SC 29405-2413**

1. INTRODUCTION

Over the past several years the Town of New Castle has, with support from the NH Coastal Program, recodified and rewritten all of its zoning and land use regulations. While recodifying its zoning ordinance in 1994, the Planning Board Zoning Subcommittee considered potential changes in zoning districts that may be advisable based on remaining developable land in Town. One of the recommendations stemming from the initial zoning rewrite was that the Town undertake a detailed residential buildout analysis in order to better understand the potential amount, density and general location of future residential development in the community that would be permitted under the existing zoning ordinance. The existence of a digital composite property tax map for the Town (completed by Sewall Assoc. under contract with the Town and converted to Arc/Info GIS format by the RPC), together with extensive digital coverages of environmental constraints, land use, zoning and protected land information available through the Rockingham Planning Commission and the state GRANIT (GIS) system, made it possible to conduct the buildout analysis using GIS technology. To assist in this project, a grant was received from the NH Coastal Program to pay for a portion of the cost of developing the analysis.

2. OBJECTIVE

The objective of the buildout analysis is to determine the approximate amount of additional residential development that could occur in the Town's three residential zoning districts, given the current provisions of the ordinance, existing development and the suitability for development of currently undeveloped land. This information will be used to determine 1) to what extent the existing zoning districts can accommodate further development; 2) to indicate whether district changes are needed to be made to accommodate the future growth of the community, and 3) to show graphically where future residential growth is most likely to occur in New Castle. The buildout analysis is not intended to be a precise measure of future buildout potential. It is acknowledged that the soil layers used in this analysis to determine development suitability, are not intended to be used at site-specific or parcel level. However at a zoning district level -- the level at which the result of this analysis will be used -- the combining of this information is considered by the RPC to be acceptable and useful for townwide planning purposes.

3. DATA SOURCES

The following data sources were used to develop the residential buildout analysis

<u>Data Layer</u>	<u>Provided By</u>
Town Boundary	Sewall Assoc. CAD files, converted to GIS via RPC
Parcel Boundaries	Sewall Assoc. CAD files, converted to GIS via RPC

Parcel-based Land Use	RPC (<i>see Map 1</i>)
Zoning	RPC (<i>see Map 2</i>)
Soils	GRANIT (from 1:20,000 NRCS Soil Survey)
Surface Water	GRANIT (from 1:24,000 DLG-derived layer)
Wetland Areas	Normandeau maps (from GRANIT) (<i>see Map 3</i>)

4. TASKS AND ANALYSIS METHODOLOGY

Data Acquisition/Development

The data layers described above were obtained and/or assembled by RPC staff. Simultaneously, the CSRC created a coverage for flood hazard areas -- the only data item necessary for the analysis that was not already in digitized form. The Conservation and Protected Lands layer in the GRANIT database was reviewed and protected parcels were coded into the parcel-based land use map.

Buildout Analysis

The first step in the analysis was to identify and select all parcels that met the criteria for "eligible" for further development. Eligible parcels were defined to be any parcel that met three criteria: (1) is residentially zoned; (2) is not subject to residential use restrictions due to conservation easements or other such limitations.

The next step was to analyze the development constraints for the potentially developable areas. Due to the availability of sewer and water service in New Castle, the composite indicator of development suitability that is typically used -- the soil potential rating -- is not applicable in this case. Instead, the presence of wetlands was used to indicate developability. Detailed wetlands maps were prepared for New Castle (and the other primary coastal towns) by Normandeau Associates as a Coastal Program initiative in 1986. These maps were subsequently digitized by Complex Systems and are available in Arc/Info format. Wetland areas were overlaid with the parcel coverage and developable areas were recalculated.

Following the identification and selection of eligible parcels, and the determination of development potential, the eligible parcels were divided into two sets. The first set was made up of vacant parcels -- those with no residential structures located on the parcel (determined from the parcel-based land use map). The second set consisted of parcels that had one or more residential structures but were large enough to support further subdivision into one or more additional building lots. The minimum lot size needed to have potential for resubdivision differed based on the minimum lot size for each zone. For the Residential District each lot was divided by the minimum residential building lot size of 20,000 sq.ft.; for the Oceanside and Beach and Future Development Districts the minimum was 43,560 sq.ft. Any parcel were the result of this division, *after the subtraction of non-developable areas*, was 2.0 or greater were considered potentially eligible for future development. As a final step, the results of this calculation were generated an included as an attribute in each field of the polygon attribute table (PAT) for the parcel coverage.

displayed for each parcel on the printed map to indicate the potential number of building lots that could result from further subdivision. (See Map 4, Attached)

Product Generation

The analysis described above resulted in a map entitled "Re-subdivision Potential" (see Map 4, attached) which highlights all parcels that may have further development potential, and which includes a number indicating the number of building units that could potentially result under existing zoning. Note that this number does not account for losses that would inevitably result from the construction of access roads and from building setbacks. In addition, although the analysis does subtract wetland areas from the developable area of the lot, it does not take into account the location of wetland areas which may render the lot inaccessible and undevelopable.

5. RESULTS

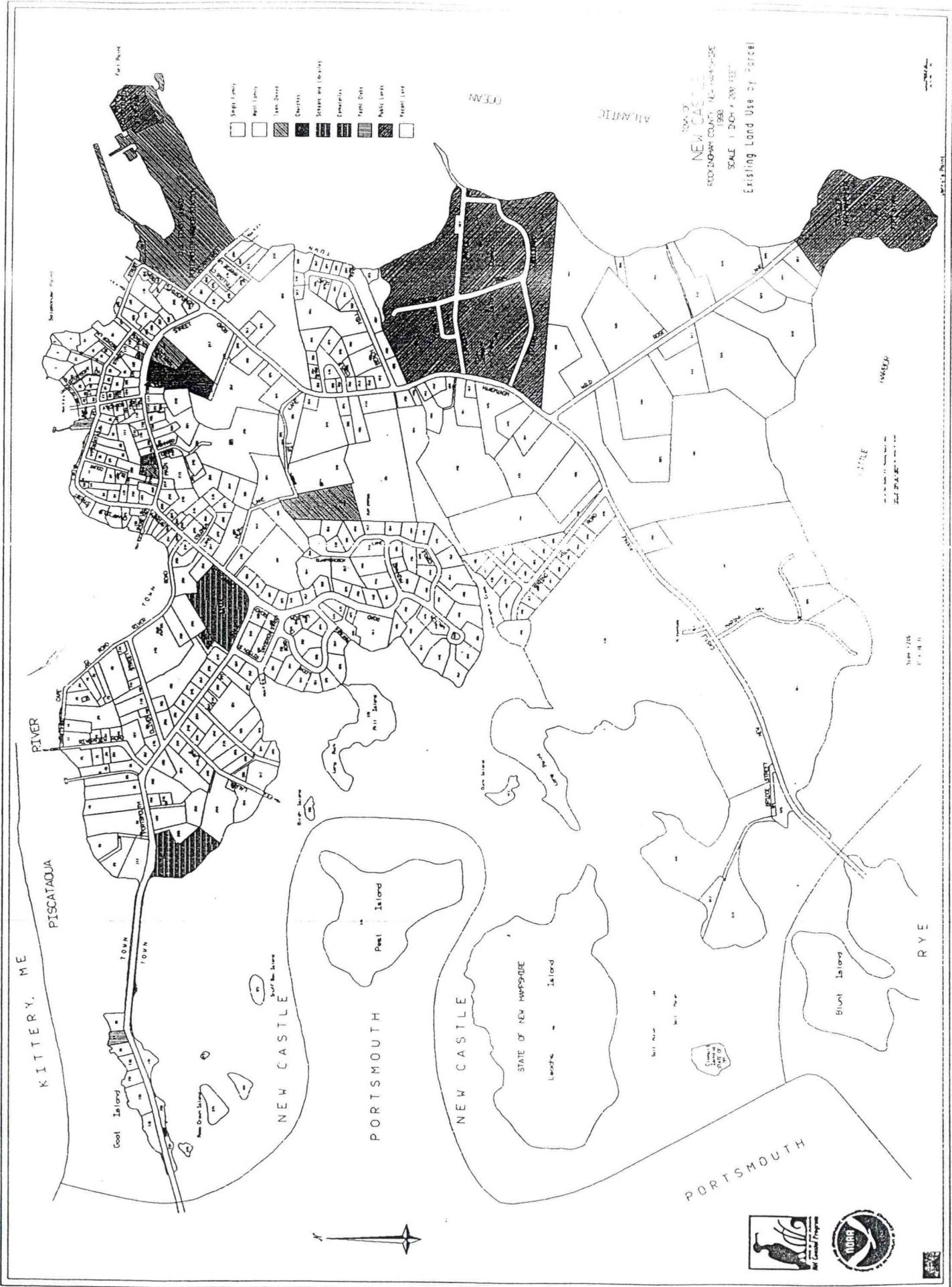
As shown on the buildout map, additional development potential remains in all the residential zoning districts in the community. The total non-developed acres where the SPI is better than severe or moderately severe is as follows, by zone:

Residential Buildout Analysis by Zone Vacant and Non-Vacant Sets		
ZONE	PARCELS	POTENTIAL UNITS
Residential	11	32
Oceanside-Beach	8	18
Future Development	10	44
<i>Subtotal</i>	29	94

Results indicate that there are 29 parcels in New Castle that are either vacant and developable or non-vacant with re-subdivision potential. Based on existing minimum lot sizes as defined in the current zoning, these parcels could support up to 94 new residential dwelling units. The zone with the greatest potential for future residential development is the future development district with 44 potential units in 10 parcels. This number does not include the more than 100 units approved and now under construction as part of the residential-cluster Wentworth development. The Oceanside and Beach District supports the smallest potential at 18 units in 8 parcels.

6. ZONING IMPLICATIONS

Based on the results of the buildout analysis, the Planning Board Zoning Review Committee considered several possible changes to the existent zoning district configuration. In particular, the Subcommittee focused their attention on the Future Development District, which, on the west side of Wentworth Avenue, has a minimum lot size of 20,000 sq. ft. per dwelling unit for conventional development. By contrast, this on the east side of Wentworth Ave., as well as the Oceanside and Beach District, both require 43,560 sq.ft. per dwelling unit. The subcommittee considered a proposal to reduce the size of the Future Development District on the west side, and to replace it with an expanded Residential District. This proposal is shown as *Map 5, Proposed Rezoning*. Ultimately, the subcommittee elected not to forward this or any other district change that would effect the Future Development District at least until after the final phases of Wentworth development are completed.



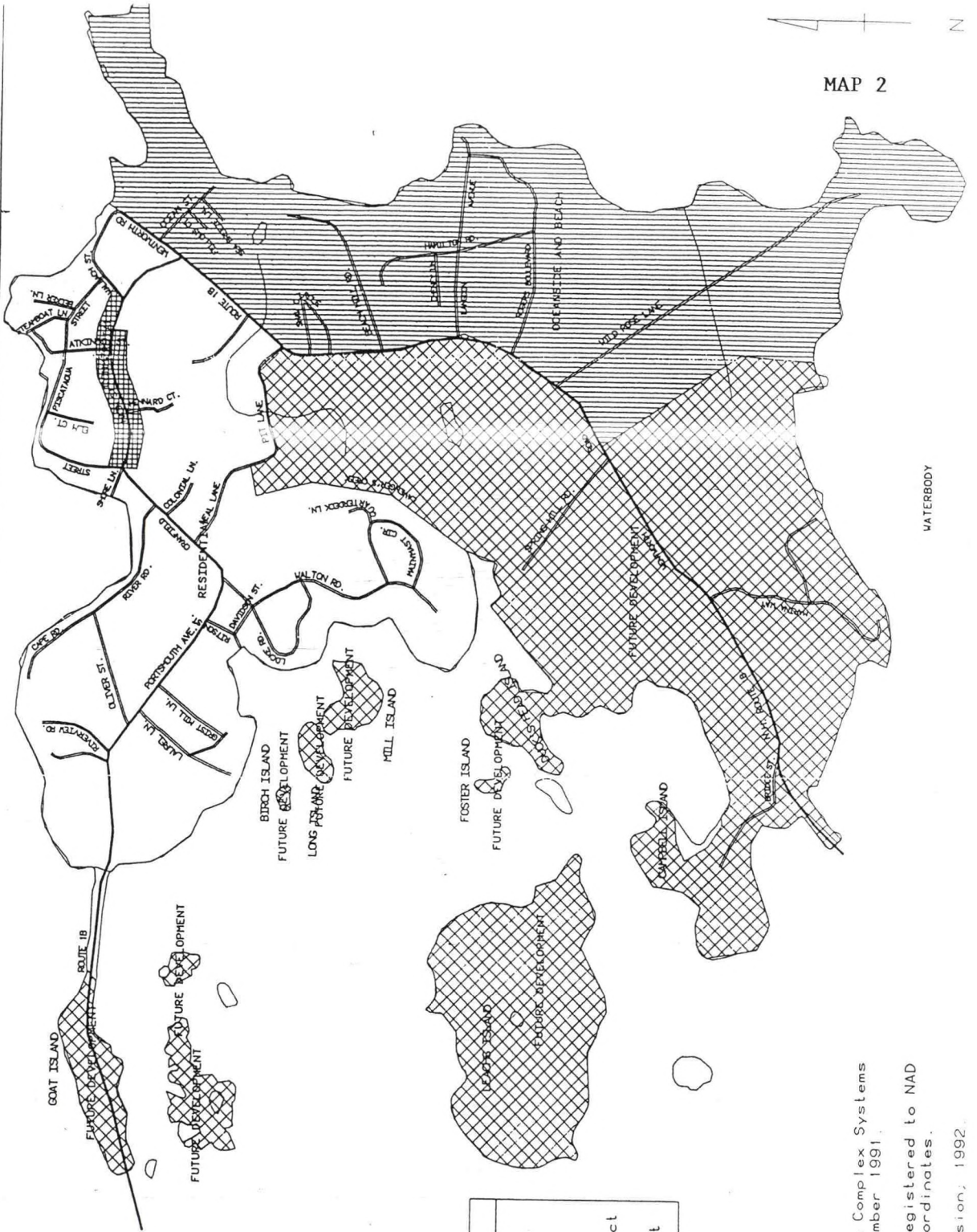


Figure 1

ZONING DISTRICTS

Town of New Castle

Key legend	
	Residential District
	Oceanside and Beach District
	Commercial District
	Future Development

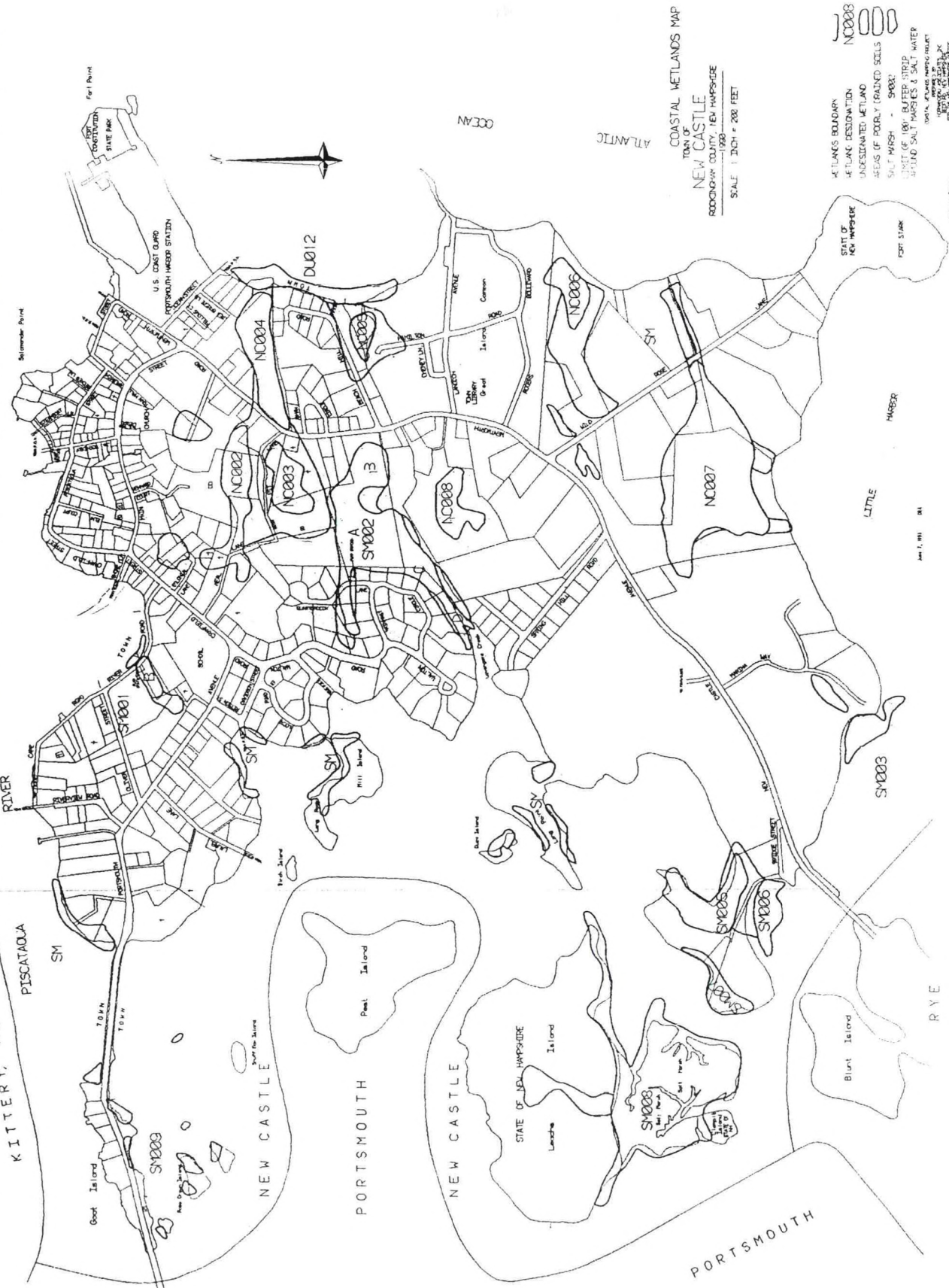
Sources:
 GRANIT 1:24,000 quads from Complex Systems
 Research Center, UNH; December 1991.

These digital layers are registered to NAD
 83 and N.H. State Plane Coordinates.

Rockingham Planning Commission, 1992.

Prepared by the Rockingham Planning Commission
 March 22, 1993
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Re-Subdivision Potential

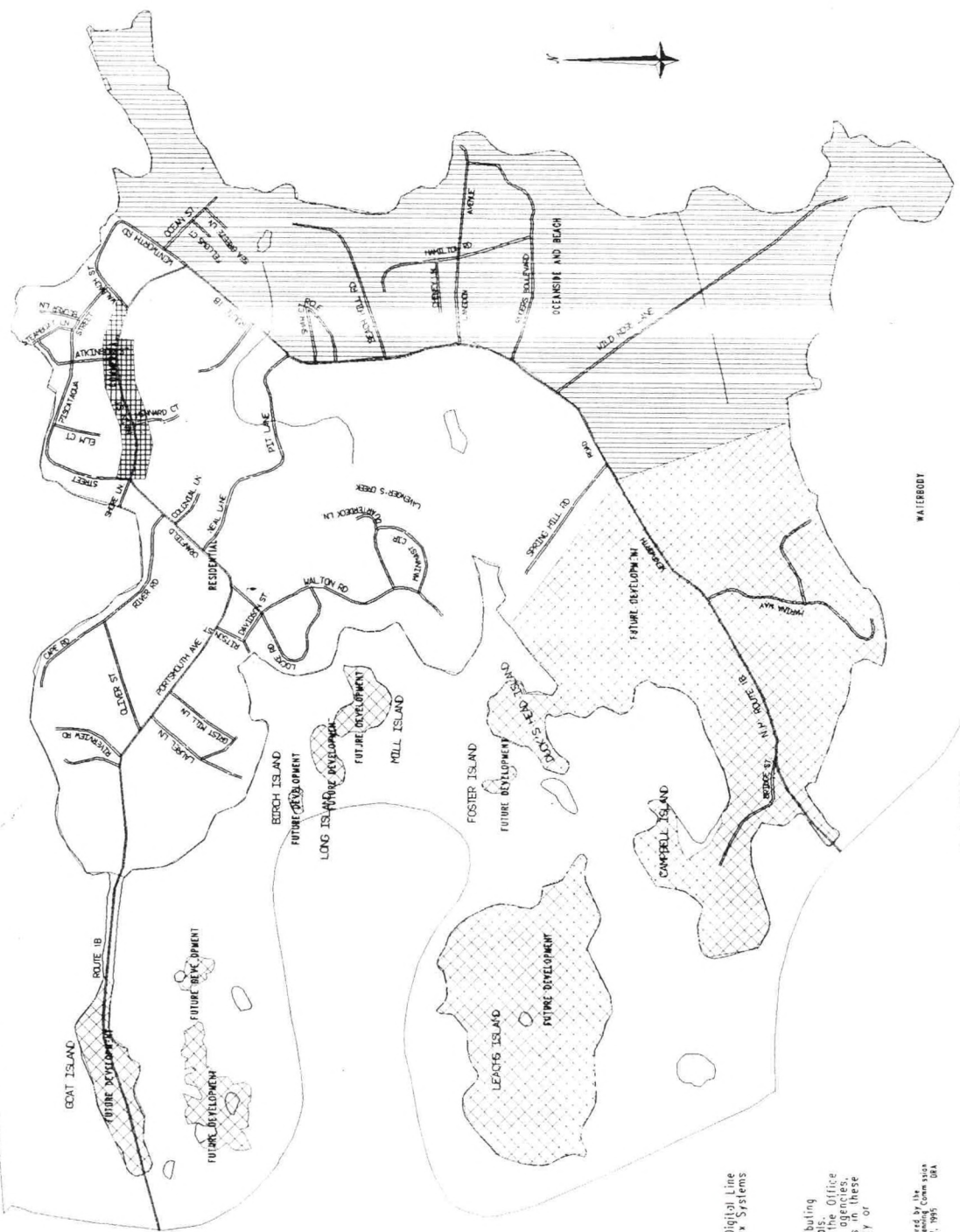


Prepared by the
 Planning Board
 October 6, 1955

Scale 1:7800
 1 inch = 550 feet

This map was based in part on a grant from the Office of State Planning -
 Municipal Administration (ROAD), Grant Number MS3702050.





PROPOSED REZONING

September 1995

Key legend	
	Residential District
	Oceanside and Beach District
	Commercial District
	Future Development

Sources:
 "Base data (town boundaries, hydrography, roads) from USGS Digital Line Graphs, 1:24,000, as archived in the GRAN 1 database, Complex Systems Research Center, University of New Hampshire."
 These digital layers are registered to NAD 83 and N.H. State Plane Coordinates.

"Digitized data in NH GRANIT represent the efforts of the contributing agencies and the GIS Center. The GIS Center is under contract to the Office of State Planning (OSP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. Neither OSP nor GIS make any claim as to the validity or reliability of any implied uses of these data."

Prepared by the
 Rockingham Planning Commission
 September 27, 1995



Scale 1:7800
 1 inch = 650 feet

WATERBURY

**DOCUMENTATION OF
ZONING AMENDMENT ASSISTANCE
FOR THE TOWN OF NEW CASTLE**

December 1995

prepared by

Rockingham Planning Commission
121 Water Street
Exeter, NH 03833



The project was Funded in part by a grant from the Office of State Planning, New Hampshire Coastal Program, as authorized by the National Oceanic and Atmospheric Administration (NOAA), Grant Award Number NA57OZ0320

PROPOSED ZONING AND BUILDING CODE AMENDMENTS
FOR 1996 TOWN MEETING

New Castle Planning Board

This posting reflects final revisions made at the Planning Board Meeting on 10-18-95 and minor editorial changes made on 12-05-95

PART 1: ZONING AMENDMENTS

AMENDMENT 1 - SECTION 2.3 - DEFINITIONS

Replace the existing definitions in Section 2.3 with the following:

Coverage: That percentage of the plot or land area covered by the principal and accessory building areas. This includes the area of in-the-ground pools as well as above-the-ground pools that are more than 18" high and are enclosed with a deck or platform.

Grade: With reference to a building or structure, means the average elevation of the ground adjoining the building or structure on the lowest side. When the ground slopes away from the exterior walls, the grade shall be established by the lowest points within the area between the building and the lot line or, when the lot line is more than six (6) feet from the building, between the building and a point six feet from the building.

Height: As applied to a building, means the vertical distance measured from the building line at the lowest grade on any side, to the highest point of the roof, excluding chimneys and similar projections that are usually appurtenant to the building.

Structure: A combination of material to form a construction greater than 18" high, with or without foundation, that is safe and stable; including among others, buildings, stadiums, reviewing stands, platforms, stagings, observation towers, radio towers, water tanks and towers, trestles, piers, wharves, sheds, shelters, and display signs but excluding retaining walls, fences and other customary landscaping elements. The term structure shall be construed as if followed by the words "or part thereof".

Add the following definition for "Living Area" to Section 2.3:

Living Area: the gross floor area of the primary building on a lot, including 50% of the area of walkout basements, but excluding the floor area of garages, porches, patios and decks.

AMENDMENT #2 - SECTION 4.2.2 - NEW PROVISION RE: MAXIMUM LIVING AREA

Add section to 4.2.2 to establish maximum living area for the principal structure on a building lot:

4. **Maximum Living Area:** The maximum living area permitted in a dwelling unit shall be limited according to the following schedule:

For Building Lots up to and including 4000 sq. feet in area: 50% of total lot area

For Building Lots greater than 4000 square feet in area: 50% of the lot area for the first 4000 sq. ft. and 25% of the lot area greater than 4000 sq. ft.

AMENDMENT #3 - SECTION 4.2.2 - NEW PROVISION RE: MINIMUM ROOF PITCH

Add section to 4.4.2 to establish minimum roof pitch for the principal structure on a building lot:

- 5. **Roof Pitch:** The minimum roof pitch on the principal building of a lot shall be 1-to-3. (one foot vertical distance for every three feet in horizontal distance).

AMENDMENT #4 - SECTION 5.3 - ACCEPTANCE OF STREETS

Delete existing Section 5.3 - **Acceptance of Streets** and replace with the following: (specific Road constructions standards are replaced by reference to Subdivision Regulations)

5.3 STREETS

5.3.1 Acceptance of Streets

Any new or existing streets, or extensions to existing streets, must meet the requirements of this Section and of the Road Construction Standards as specified in the New Castle Subdivision Regulations before they may be accepted by the Town. Streets may only be accepted as town streets by action of the Town Meeting or by action of the Board of Selectmen if duly authorized per RSA 674:40-a.

5.3.2 Right-of-Way

The width of the street right-of-way and the apportioning of the right-of-way amongst roadway, sidewalks, and grass strips shall be subject to the approval of the Planning Board. The right-of-way width shall not be less than 30 feet and may be greater if warranted by anticipated traffic volume and safety considerations.

5.3.3 Parking

All residential building lots must provide for the parking within the lot of at least two cars for each dwelling unit.

AMENDMENT #5 - SECTION 6.1.5.1 - DIMENSIONAL STANDARDS FOR CLUSTER DEVEL.

Amend paragraphs A. through D. of Section 6.1.5.1 as follows:

- | | | |
|----|---|----------|
| A. | Maximum number of dwelling units per building ... | 4 units |
| B. | Minimum distance between buildings for single and duplex buildings... | 20 feet |
| C. | Minimum distance between single or duplex buildings and a street ... | 20 feet |
| D. | Minimum distances between multifamily dwelling structures and: | |
| | 1. other multifamily structures... | 30 feet |
| | 2. lot lines (internal or external)... | 15 feet |
| | 3. Residential and Oceanside and Beach District boundaries... | 500 feet |

AMENDMENT #6- SECTION 6.1.5.2 - LOT SIZE AND DENSITY STANDARDS FOR CLUSTER DEVELOPMENT

Amend paragraph C. of Section 6.1.5.2 as follows:

- C. **Minimum Lot Size and Lot Coverage:** Clustered residential units shall have a minimum building lot size of **7500** square feet per dwelling unit. *Maximum lot coverage shall be the same as that required for conventional residential development as per Section 4.2.2.3* This standard shall apply whether or not the proposed development plats individual lots for the clustered units.

AMENDMENT #7- SECTION 6.1.6.1 - PROVISIONS FOR COMMON OPEN SPACE

Amend paragraph C. of Section 6.1.6.1 as follows (*added text in italics*):

- C. Common open space areas must be used for amenity or recreational purposes, must be accessible, and must be suitably landscaped except that areas containing natural features worthy of preservation may be kept unimproved. Common open space areas may contain accessory structures and improvement necessary and appropriate for educational, recreational, cultural or social uses. Facilities devoted to such uses may be operated on a membership basis whereby membership is open to residents or patrons of the planned development. *The Planning Board shall approve the area and general layout of open space to ensure consistency with the requirements of this section and with term definition contained in Section 2.3.*

AMENDMENT #8 - SECTION 6.1.7 - UTILITIES AND ROADS ; SECTION 6.5.2 - MISCELLANEOUS PROVISIONS

Update the document reference in paragraph #4 of Section 6.1.7 as follows:

4. The frontage requirements of this ordinance shall not apply except that at least two hundred (200) feet of frontage on a State or Town road shall be provided for each development for access. Even though on a Town road, all intersections shall meet the design and sight line standards set forth for wet pavements in *A Policy on Geometric Design of Highways and Streets - 1990 - AASHTO.*

Update the document reference in paragraph #4 of Section 6.5.2 as follows:

4. All electrical installations provided and installed and used in connection with swimming pools shall be in conformance with Article 680 of the *National Electrical Code, 1993 Edition.*

AMENDMENT #9 - SECTION 6.5.2 - MISCELLANEOUS PROVISIONS

Add new paragraph (#8) of Section 6.5.2 as follows:

8. The area of in-the-ground pools, as well as above-the-ground pools that are more than 18" high and are enclosed with a deck or platform, shall be included in calculations for allowable lot coverage. See also definition of Coverage in Section 2.3.

AMENDMENT #10 - SECTION 6.2.3 - SIGNS

Move Section 6.2.3 - Signs to a new Section 6.7 and amend as follows:

6.7 SIGNS

No display sign or advertising shall be permitted except for a single stationary announcement sign that: (1) is not larger than four (4) square feet in area, (2) has no more than two sides, (3) does not utilize direct or indirect lighting and (4) is compatible in design with the surrounding residential neighborhood.

AMENDMENT #11 - SECTION 7.2.1 - REPLACEMENT

Amend Section 7.2.1 to read as follows:

7.2.1 The replacement of any nonconforming building or structure that is intentionally demolished, all or in part, must either conform to the regulations of the district in which the building or structure is located, or, the non-conforming portion must not exceed in size, shape, or volume, that of the building or structure that was demolished.

AMENDMENT #12 - SECTION 4.1.2 - RESIDENTIAL DISTRICT

Add the following use to the list of Prohibited Uses listed for the Residential District (and for other Districts by reference):

5. Buildings, structures and other devices that exist to restrict access to public or private rights of way, including but not limited to, Gate houses and automatic or manually operated access control gates.

EDITORIAL CHANGES (the following does not require a formal amendment)

Clarify language in existing lot coverage standards in Section 4.2.2. - **Lot Coverage** by replacing with the following:

4.2.2 Modifications and Special Provisions

3. **Maximum Lot Coverage:** The maximum portion of a lot that may be covered by principal and accessory buildings shall be determined according to the schedule shown below.

<u>Lot Size</u>	<u>Maximum % of Lot Covered</u>
-less than 3500 square feet:	30%
-3500 to 9000 square feet:	1050 square feet or 25% of lot size whichever is greater
-more than 9000 square feet:	2250 square feet or 20% of lot size whichever is greater

PART 2: BUILDING CODE AMENDMENTS

BUILDING CODE AMENDMENT #1 - SECTION 1 (a) - BOCA BUILDING CODE REF.

Amend Section 1.(a) to adopt the 1993 edition of the BOCA Basic Building Code:

- (a) *The 1993 BOCA Basic National Building Code, and associated references, is hereby adopted by reference for the Town of New Castle. (May 1996)*

TABLE 1

DENSITY AND DIMENSIONAL REGULATION
Town of New Castle Zoning Ordinance

DENSITY/DIMENSION	RESIDENTIAL DISTRICT	OCEANSIDE/BEACH DISTRICT	COMMERCIAL DISTRICT	FUTURE DEVEL. DIST. West of Wentworth Rd. - Conventional Devel. -	FUTURE DEVEL. DIST. East of Wentworth Rd. - Conventional Devel. -	FUTURE DEVEL. DIST. Special Exceptions (See Section 6.1)
Minimum Lot Area per Dwelling Unit ("sf" = square feet)	20,000 sf	43,560 sf	20,000 sf	20,000 sf for non-clustered residential units;	43,560 sf for non-clustered residential units;	20,000 sf per dwelling unit; ¹ 10,000 sf per 500 sf hotel/apartment unit; 10 acres min. parcel size for non-resid. development
Frontage	100 ft.	100 ft.	NA	100 ft.	100 ft.	200 ft. for planned development
Building Setback -Front or Street -Side -Rear	20 ft. 10 ft. 10 ft.	20 ft. 10 ft. 10 ft.	20 ft. 10 ft. 10 ft.	20 ft. 10 ft. 10 ft.	20 ft. 10 ft. 10 ft.	<u>Single Family and Duplex Setbacks:</u> -- 20 ft. from street -- 20 ft. from another structure -- 10 ft. from lot line <u>Multifamily Unit Setbacks:</u> -- 15 ft. from interior lot line ² ; -- 500 ft. buffer to other residential districts; -- 300 ft. buffer to preexisting residential units;
Minimum Lot Depth	NA	NA	100 ft. if two-family resid. use	NA	NA	NA
Min. Ground Floor Area (per Unit) -One Fam., 1 Story -One Fam., 2 Story -Two Fam., 1 Story -Two Fam., 2 Story - Commercial Bldg.	900 sf 720 sf 720 sf 500 sf NA	900 sf 720 sf 720 sf 500 sf NA	NA NA NA NA 500 sf	900 sf 720 sf 720 sf 500 sf NA	900 sf 720 sf 720 sf 500 sf NA	NA

TABLE 1 continues on the next page

TABLE 1 - DENSITY AND DIMENSIONAL REGULATIONS

New Castle Zoning Ordinance

Page 2 of 2

DENSITY/DIMENSION	RESIDENTIAL DISTRICT	OCEANSIDE/BEACH DISTRICT	COMMERCIAL DISTRICT	FUTURE DEVEL. DIST. West of Wentworth Rd. - Conventional Devel. -	FUTURE DEVEL. DIST. East of Wentworth Rd. - Conventional Devel. -	FUTURE DEVEL. DIST. Special Exceptions (See Section 6.1)
Max. Building Height	2 ½ stories above grade, not to exceed 35 ft.	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT
Minimum Roof Pitch (for principal bldg on lot)	1:3 (see Section 4.2.2.5)	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT
Max. Lot Coverage <u>Lot Size:</u>	<3500sf: 30%; 3500-9000sf: 1050 square feet or 25% of lot size, whichever is greater; >9000sf: 2250 square feet or 20% of lot size, whichever is greater	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT
Max. Living Area per Dwelling	1st 4000sf of lot; --50% of lot area above 4000sf; -- 25% of area	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT
Max. Units per Building	2	1	2	2	1	4
Max. Non-residential Floor Area	25%	25%	100%	25%	25%	15% of total hotel floor area
Minimum Street Width -ROW -Paved Surface	30 ft. 20 ft.	30 ft. 20 ft.	30 ft. 20 ft.	30 ft. 20 ft.	30 ft. 20 ft.	30 ft. 20 ft.
Min. Parking Spaces per Residential Unit	2	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT	same as RESIDENTIAL DISTRICT
Max. Poorly Drained Soil portion of Min. Lot Size	25%	25%	25%	25%	25%	25%

FOOTNOTES:

- ¹ - refers to the average density of dwelling units per acre; the size of a clustered building lot may be smaller (see Section 6.1.5)
 - ² - refers to building lot line which may be created, but must be planned for, within a residential cluster development (see Section 6.1.8.2)
- "NA." = not specified or not applicable; "sf" = square feet (See sections 4.2 and 6.1 for additional explanation)