

Monmouth Beach Lot Coverage Study



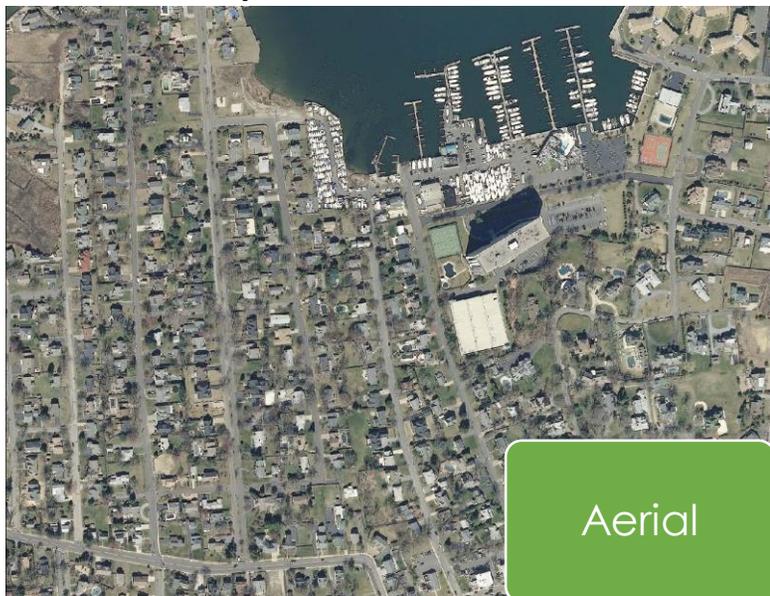
Image Source: Realtor.com

Purpose of the Lot Coverage Study

- October 2012 – Superstorm Sandy
- Floodplain Management Plan
- Analyze both Pre- and Post-Sandy Borough-wide coverage
- Study Comprises of
 1. GIS analysis
 2. Review of Existing documents
 3. Results of Analysis
 4. Recommendations



GIS Analysis



Planning Board Annual and Construction Reports Analysis

- 2013 – 2016 Planning Board Annual Reports
- Construction Reports for 184 Parcels
- Cross-referenced against Google Earth Street View
 - Permits were treated as built
 - Demolitions were treated as demolished
 - Maximize the amount of Impervious and Building Coverage



Pre-Sandy Map Results



Post-Sandy Map Results

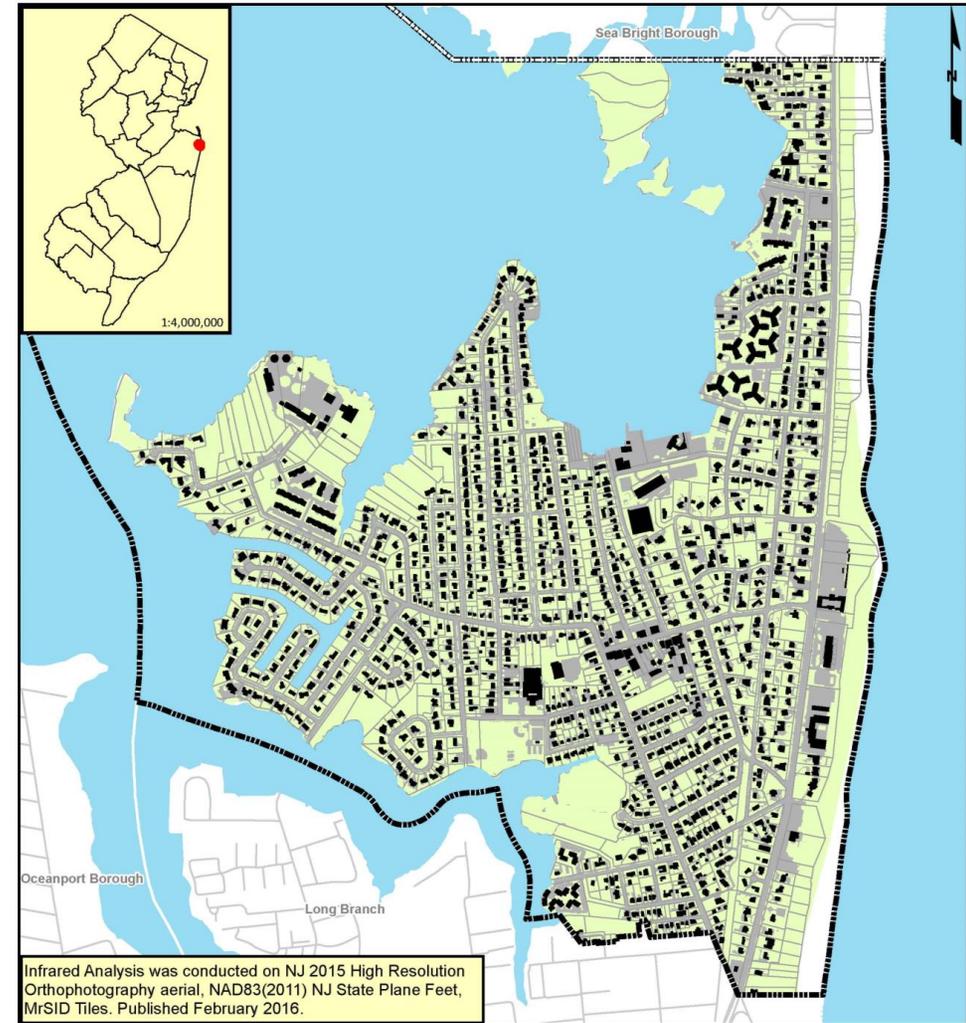


Pre-Sandy Map Results



- Impervious Coverage* – 42%
- Building Coverage – 14.0%

Post-Sandy Map Results



- Impervious Coverage* - 44%
- Building Coverage – 14.7%

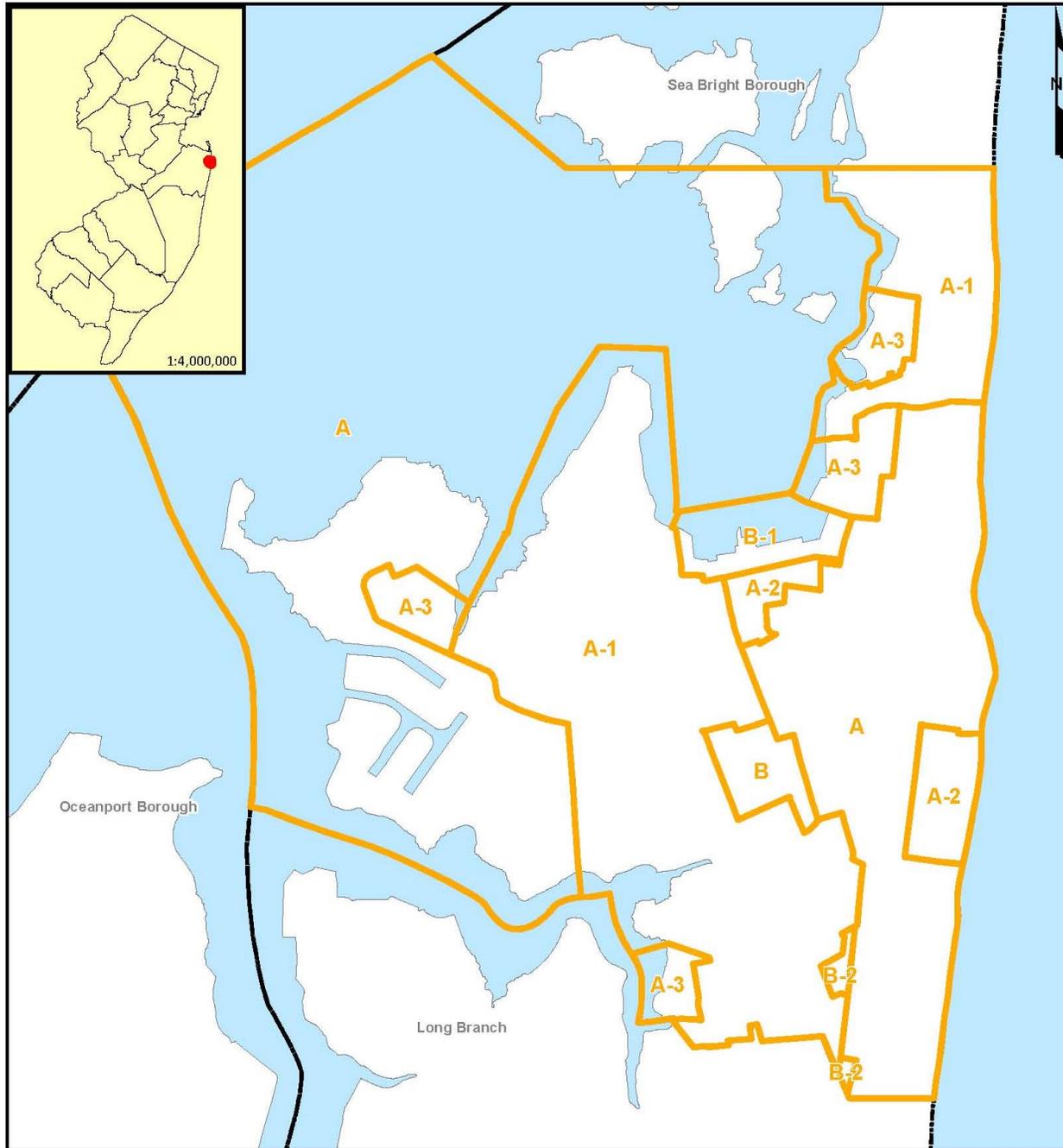
* Total Borough-wide coverage including public rights-of-way and all tax parcels

Results of Analysis

Zoning	Impervious Coverage			Building Coverage		
	Pre-Sandy	Post-Sandy	Change	Pre-Sandy	Post-Sandy	Change
A	31.5 %	31.4 %	-0.1 %	11.8 %	12.4 %	+0.6 %
A-1	34.6 %	38.4 %	+3.7 %	15.3 %	16.4 %	+1.1 %
A-2	63.8 %	64.6 %	+0.9 %	13.9 %	13.9 %	0 %
A-3	61.0 %	62.1 %	+1.1 %	21.0 %	21.0 %	0 %
B	58.6 %	61.8 %	+3.2 %	18.9 %	19.5 %	+0.6 %
B-1	78.1 %	82.8 %	+4.7 %	9.4 %	9.4 %	0 %
B-2	56.9 %	55.4 %	-1.5 %	12.0 %	12.0 %	0 %
TOTAL*	37.6 %	39.3 %	+1.7 %	14.0 %	14.7 %	+0.7 %

* Excludes public rights-of-way

Borough of Monmouth Beach Zoning Map



Key Findings

- Pre-Sandy
 1. SF residential zones' lot coverage reflect Ordinance standards
 2. SF residential zones' building coverage was lower
 3. MF residential zones exceed Borough standards, with a consistent level of lot coverage
 4. Business districts have high impervious coverage (<50%) and a lower building coverage

- Post-Sandy
 1. SF residential zones significantly lower building coverage permitted
 2. A-1 zone is approaching the max. permitted lot coverage
 3. MF residential zones and some business zones have increases to its lot coverage
 - Can be attributed to an error in the analysis.
 4. All business districts continue to have high lot coverage and low level of building coverage

- Overall Changes
 1. All zones excluding A and B-2 had an increase to its impervious coverage
 - B-1 had greatest calculated change (+4.7%), can be attributed to error
 2. Building coverage only increased slightly

Ordinance Amendment & Zoning Related Recommendations

1. NOT to amend the Borough's coverage requirements
2. Establish building and lot coverage standards for ALL Zones
3. Separate 'Building' and 'Lot' Coverage standards
4. Revise and update definitions of 'Building' and 'Structure'
5. Front yard maximum impervious coverage standards
6. Review Off-Street Parking Standards, including:
 - Requirements
 - Design Standards
 - Stall Size
 - Alternative Strategies (e.g. Banked Parking, Shared Parking)



Image Source: Minnesota Stormwater Manual University of Minnesota Arboretum

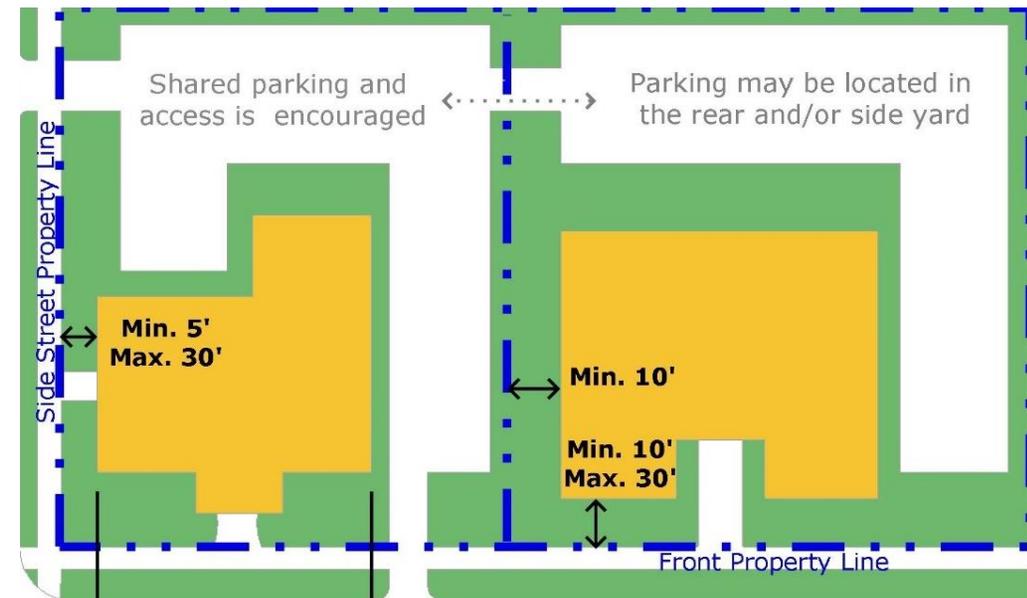


Image Source: Borough of Fanwood Municipal Code

Other Recommendations



Image Source: San Diego County
Dept. of Public Works



Image Source: Maricopa County Environmental
Services Department

1. Infrastructure improvement focus on recharge instead of retention
 - Presents challenges with existing soils and water table
2. Promote techniques, strategies, and methods to retain stormwater on site
 - Rain barrels, retention/rain gardens, dry wells, etc.
 - Brielle, Union Twp.,
3. Expand parks and open spaces
4. Maintain stormwater infrastructure, ensuring it is regularly free from debris.
 - Sustainable and responsible disposal of landscape debris
5. Apply for a State Plan Map Amendment.
 - Environmentally Sensitive Planning Area (PA5B) to Metropolitan Planning Area (PA1)