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| Section | Text | Reference / Regulation | Comments |
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| 301.1 | SECTION 301 SUBDIVISIONS AND OTHER DEVELOPMENTS **General.** Any subdivision proposal, including proposals for manufactured home parks and subdivisions, or other proposed new development in a flood hazard area shall be reviewed to assure that:   * + 1. All such proposals are consistent with the need to minimize flood damage.     2. All public utilities and facilities, such as sewer, gas, electric and water systems are located and constructed to minimize or eliminate flood damage.     3. Adequate drainage is provided to reduce exposure to flood hazards; in Zones AH and AO, adequate drainage paths shall be provided to guide floodwater around and away from structures. | FEMA MCCO and 44 CFR 60.3 |  |
| 301.2 | 1. **Subdivision requirements.** Where any portion of proposed subdivisions, including manufactured home parks and subdivisions, lies within a flood hazard area, the following shall be required:    * 1. The flood hazard area, including floodways, coastal high hazard areas, and Coastal A Zones, and base flood elevations, as appropriate, shall be delineated on tentative subdivision plats.      2. Residential building lots shall be provided with adequate buildable area outside the floodway.      3. The design criteria for utilities and facilities set forth in these regulations and appropriate codes shall be met. | FEMA MCCO and 44 CFR 60.3 |  |
| 401.1 | SECTION 401 SITE IMPROVEMENT **Encroachment in floodways**. Development, land disturbing activity, and encroachments in floodways shall not be authorized unless it has been demonstrated through hydrologic and hydraulic analyses required in accordance with Section 105.3(1) of these regulations, that the proposed encroachment will not result in any increase in the base flood level during occurrence of the base flood discharge. If Section 105.3(1) is satisfied, proposed elevation, addition, or reconstruction of a lawfully existing structure within a floodway shall also be in accordance with Section 801.2 of this ordinance and the floodway requirements of N.J.A.C. 7:13. | FEMA MCCO and 44 CFR 60.3  Clarifying reference to determining the Best Available Data Flood Elevation and references the FHACA |  |
| 401.1.1 | **401.1.1 Prohibited in floodways.** The following are prohibited activities:   * + 1. The storage of unsecured materials is prohibited within a floodway pursuant to N.J.A.C. 7:13.     2. Fill and new structures are prohibited in floodways per N.J.A.C. 7:13. | 1) NJAC 7:13-7.49, 7.50  2 ) NJAC 7:13-11.3 |  |
| 401.2 | 1. **Coastal High Hazard Areas (V Zones) and Coastal A Zones.** In Coastal High Hazard Areas and Coastal A Zones:    * 1. New buildings shall only be authorized landward of the reach of mean high tide.      2. The placement of manufactured homes shall be prohibited except in an existing manufactured home park or subdivision.      3. Basements or enclosures that are below grade on all sides are prohibited.      4. The use of fill for structural support of buildings is prohibited. | 1. FEMA MCCO, ASCE24-14 4.3.1 2. See comment. This allows grandfathering but new homes need additional scrutiny. 3. NJAC 7:13-12.5(p) 4. FEMA MCCO, ASCE 24-14 4.5.4 | A V Zone manufactured home is possible but unlikely because a licensed design professional would have to certify that the foundation, anchoring, and the structure construction meet ASCE-24-14 Chapter 4 on a V zone certificate for wind and flood loads.  Although manufactured homes are considered Class II structures, their construction is not regulated under the UCC, which defers to US Department of Housing and Urban Development regulations for construction and installation.   However, the UCC does regulate manufactured home foundations.   It is recommended that Floodplain Administrators fully evaluate and require certifications under a variance if manufactured homes are proposed in V and Coastal A Zone areas to ensure that these structures do not increase flood damage. |
| 401.3 | **Sewer facilities**. All new and replaced sanitary sewer facilities, private sewage treatment plants (including all pumping stations and collector systems) and on-site waste disposal systems shall be designed in accordance with the New Jersey septic system regulations contained in N.J.A.C. 14A and N.J.A.C. 7:9A, the UCC Plumbing Subcode (N.J.A.C. 5:23) and Chapter 7, ASCE 24, to minimize or eliminate infiltration of floodwater into the facilities and discharge from the facilities into flood waters, or impairment of the facilities and systems. | FEMA MCCO with reference the NJPDES and Non-Point Source Rules, the UCC Subcode Plumbing Subcode |  |
| 401.4 | **Water facilities**. All new and replacement water facilities shall be designed in accordance with the New Jersey Safe Drinking Water Act (N.J.A.C. 7:10) and the provisions of Chapter 7 ASCE 24, to minimize or eliminate infiltration of floodwater into the systems. | FEMA MCCO with reference to NJ law for public and private water utilities and wells. |  |
| 401.5 | 1. **Storm drainage.** Storm drainage shall be designed to convey the flow of surface waters to minimize or eliminate damage to persons or property. | FEMA MCCO |  |
| 401.6 | 1. **Streets and sidewalks**. Streets and sidewalks shall be designed to minimize potential for increasing or aggravating flood levels. | FEMA MCCO |  |
| 401.7 | 1. **Limitations on placement of fill.** Subject to the limitations of these regulations, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of floodwater, prolonged inundation, and protection against flood-related erosion and scour. In addition to these requirements, when intended to support buildings and structures (Zone A only), fill shall comply with the requirements of the UCC (N.J.A.C. 5:23). Proposed fill and encroachments in flood hazard areas shall comply with the flood storage displacement limitations of N.J.A.C. 7:13. | FEMA MCCO  NJAC 7:13-11.3, 11.4, 12.3 |  |
| 401.8 | **Limitations on sites in coastal high hazard areas (V Zones) and Coastal A Zones.**  In coastal high hazard areas and Coastal A Zones, alteration of sand dunes shall be permitted only when the engineering analysis required by Section 105.3(4) of these regulations demonstrates that the proposed alteration will not increase the potential for flood damage. Construction or restoration of dunes under or around elevated buildings and structures shall comply with Section 801.8 of these regulations and as permitted under the NJ Coastal Zone Management Rules (N.J.A.C. 7:7). | FEMA MCCO, ASCE 24-14 4.3.3  NJAC 7:7 |  |
| 401.9 | **Hazardous Materials.** The placement or storage of any containers holding hazardous substances in a flood hazard area is prohibited unless the provisions of N.J.A.C. 7:13 which cover the placement of hazardous substances and solid waste is met. | FHACA |  |
| 501.1 | SECTION 501 MANUFACTURED HOM ES **General.** All manufactured homes installed in flood hazard areas shall be installed pursuant to the Nationally Preemptive Manufactured Home Construction and Safety Standards Program (24 CFR 3280). | UCC does not address this – defers to the Federal Government |  |
| 501.2 | 1. **Elevation.** All new, relocated, and replacement manufactured homes to be placed or substantially improved in a flood hazard area shall be elevated such that the bottom of the frame is elevated to or above the elevation specified in Section 801.2. | FEMA MCCO |  |
| 501.3 | **Foundations**. All new, relocated, and replacement manufactured homes, including substantial improvement of existing manufactured homes, shall be placed on foundations as specified by the manufacturer only if the manufacturer’s installation instructions specify that the home has been designed for flood-resistant considerations and provides the conditions of applicability for velocities, depths, or wave action as required by 24 CFR Part 3285-302. The Floodplain Administrator is authorized to determine whether the design meets or exceeds the performance necessary based upon the proposed site location conditions as a precondition of issuing a flood damage prevention permit. If the Floodplain Administrator determines that the home’s performance standards will not withstand the flood loads in the proposed location, the applicant must propose a design certified by a New Jersey licensed design professional and in accordance with 24 CFR 3285.301 (c) and (d) which conforms with ASCE 24, the accepted standard of engineering practice for flood resistant design and construction. | N.J.A.C. 7:13-12.5 is more stringent than 44 CFR 60.3(c)12  24 CFR Part 3285-302  24 CFR Part 3285.102  24 CFR Part 3285.903  ASCE 24 – Engineering Standard of Practice for Flood Resistant Design and Construction including Foundation Design |  |
| 501.4 | 1. **Anchoring.** All new, relocated, and replacement manufactured homes to be placed or substantially improved in a flood hazard area shall be installed using methods and practices which minimize flood damage and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces. | FEMA MCCO |  |
| 501.5 | 1. **Enclosures.** Fully enclosed areas below elevated manufactured homes shall comply with the requirements of Section 801.2(d). | FEMA MCCO |  |
| 501.6 | 1. **Protection of mechanical equipment and outside appliances.** Mechanical equipment and outside appliances shall be elevated to or above the elevation of the bottom of the frame required in Section 801.2 of these regulations.   **Exception.** Where such equipment and appliances are designed and installed to prevent water from entering or accumulating within their components and the systems are constructed to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding up to the elevation required by Section 801.2*,* the systems and equipment shall be permitted to be located below that elevation. Electrical wiring systems shall be permitted below the design flood elevation provided they conform to the provisions of NFPA 70 (National Electric Code). | FEMA MCCO |  |
| 601.1 | SECTION 601 RECREATIONAL VEHICLES **Placement prohibited.** The placement of recreational vehicles shall not be authorized in coastal high hazard areas and in floodways. | FEMA MCCO |  |
| 601.2 | **Temporary placement.** Recreational vehicles in flood hazard areas shall be fully licensed and ready for highway use and shall be placed on a site for less than 180 consecutive days | FEMA MCCO |  |
| 601.3 | 1. **Permanent placement.** Recreational vehicles that are not fully licensed and ready for highway use, or that are to be placed on a site for more than 180 consecutive days, shall meet the requirements of Section 801.2 for habitable buildings and Section 501.3. | FEMA MCCO  N.J.A.C. 7:13-12.5 is more stringent than 44 CFR 60.3(c)12  24 CFR Part 3285-302  24 CFR Part 3285.102  24 CFR Part 3285.903  ASCE 24 – Engineering Standard of Practice for Flood Resistant Design and Construction including Foundation Design |  |
| 701.1 | SECTION 701 TANKS **Tanks.** Underground and above-ground tanks shall be designed, constructed, installed, and anchored in accordance with ASCE 24 and N.J.A.C. 7:13. | FEMA MCCO with reference to FHACA rules |  |
| 801.1 | SECTION 801 OTHER DEVELOPMENT AND BUILDING WORK **General requirements for other development and building work.** All development and building work, including man-made changes to improved or unimproved real estate for which specific provisions are not specified in these regulations or the Uniform Construction Code (N.J.A.C. 5:23), shall:   * + 1. Be located and constructed to minimize flood damage;     2. Meet the limitations of Section 105.3(1) of this ordinance when located in a regulated floodway;     3. Be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic and hydrodynamic loads, including the effects of buoyancy, during the conditions of flooding up to the Local Design Flood Elevation determined according to Section 102.3;     4. Be constructed of flood damage-resistant materials as described in ASCE 24 Chapter 5;     5. Have mechanical, plumbing, and electrical systems above the Local Design Flood Elevation determined according to Section 102.3 or meet the requirements of ASCE 24 Chapter 7 which requires that attendant utilities are located above the Local Design Flood Elevation unless the attendant utilities and equipment are:        1. Specifically allowed below the Local Design Flood Elevation; and        2. Designed, constructed, and installed to prevent floodwaters, including any backflow through the system from entering or accumulating within the components.     6. Not exceed the flood storage displacement limitations ​in fluvial flood hazard areas in accordance with N.J.A.C. 7:13; and     7. Not exceed the impacts to frequency or depth of offsite flooding as required by N.J.A.C. 7:13 in floodways. | In addition to NJAC 5:23 and ASCE 24   * + - 1. 44 CFR 60.3(a)3iii       2. 44 CFR 60.3(d)3 and NJAC 7:13       3. 44 CFR 60.3(a)3i       4. 60.3(a)3iii       5. 60.3(a)3iv       6. NJAC 7:13-11.3, 11.4, and 12.3       7. NJAC 7:13 – 12.1(h) and (i) |  |
| 801.2.1 | **Requirements for Habitable Buildings and Structures**.   * + 1. Construction and Elevation in A Zones not including Coastal A Zones.  1. No portion of a building is located within a V Zone. 2. No portion of a building is located within a Coastal A Zone, unless a licensed design professional certifies that the building’s foundation is designed in accordance with ASCE 24, Chapter 4. 3. All new construction and substantial improvement of any habitable building (as defined in Section 201) located in flood hazard areas shall have the lowest floor, including basement, together with the attendant utilities (including all electrical, heating, ventilating, air-conditioning and other service equipment) and sanitary facilities, elevated to or above the Local Design Flood Elevation as determined in Section 102.3, be in conformance with ASCE Chapter 7, and be confirmed by an Elevation Certificate. 4. All new construction and substantial improvements of non-residential structures shall:   Have the lowest floor, including basement, together with the attendant utilities (including all electrical, heating, ventilating, air-conditioning and other service equipment) and sanitary facilities, elevated to or above the Local Design Flood Elevation as determined in Section 102.3, be in conformance with ASCE Chapter 7, and be confirmed by an Elevation Certificate; or  Together with the attendant utility and sanitary facilities, be designed so that below the Local Design Flood Elevation, the structure:  Meets the requirements of ASCE 24 Chapters 2 and 7; and  Is constructed according to the design plans and specifications provided at permit application and signed by a licensed design professional, is certified by that individual in a Floodproofing Certificate, and is confirmed by an Elevation Certificate.   1. All new construction and substantial improvements with fully enclosed areas below the lowest floor shall be used solely for parking of vehicles, building access, or storage in an area other than a basement and which are subject to flooding. Enclosures shall: 2. For habitable structures, be situated at or above the adjoining exterior grade along at least one entire exterior wall, in order to provide positive drainage of the enclosed area in accordance with N.J.A.C. 7:13; enclosures (including crawlspaces and basements) which are below grade on all sides are prohibited; 3. Be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters unless the structure is non-residential and the requirements of 802.2.1(d)ii are met; 4. Be constructed to meet the requirements of ASCE 24 Chapter 2; 5. Have openings documented on an Elevation Certificate; and 6. Have documentation that a deed restriction has been obtained for the lot if the enclosure is greater than six feet in height. This deed restriction shall be recorded in the Office of the County Clerk or the Registrar of Deeds and Mortgages in which the building is located, shall conform to the requirements in N.J.A.C.7:13, and shall be recorded within 90 days of receiving a Flood Hazard Area Control Act permit or prior to the start of any site disturbance (including pre-construction earth movement, removal of vegetation and structures, or construction of the project), whichever is sooner. Deed restrictions must explain and disclose that:    * 1. The enclosure is likely to be inundated by floodwaters which may result in damage and/or inconvenience.      2. The depth of flooding that the enclosure would experience to the Flood Hazard Area Design Flood Elevation;      3. The deed restriction prohibits habitation of the enclosure and explains that converting the enclosure into a habitable area may subject the property owner to enforcement; | 1a. ASCE 24-14 4.1.1  1b. ASCE 24-14 4.1.1  1c. 44 CFR 60.3(c)2, 44 CFR 60.3(a)3iv, NJAC 7:13-7.11, 7.12, 7.13, 7.14, 8.5, 8.6, 8.8, 9.5, 9.6, 12.4, 12.5 (may include other sections of NJAC 7:13 in addition to those listed)  1d i. 44 CFR 60.3(a)iv, NJAC 7:13- 12.5(s), (t) and (u)  1d ii 1 – ASCE 24 Chapter 2 language is preferable to FEMA’s  1d ii 2 - 44 CFR 60.3(4)  1e. 44 CFR 60.3(c)5  1e i. NJAC 7:13-12.5(p)2  1e ii. 44 CFR 60.3(c)5 and NJAC  7:13-12.5(i)  1e ii. NJAC 5:23 is preferable. 44 CFR 60.3  1e iii. NJAC 5:23 is preferable. 44 CFR 60.3  1e iv.  1e v. NJAC 7:13-12.5(p) | ASCE 24 language for openings is more specific than FEMA’s and is preferable because it distinguishes between engineered and non-engineered openings. |
| 801.2.2 | 2) Construction and Elevation in V Zones and Coastal A Zones.   * 1. All new construction and substantial improvements shall be constructed according to structural designs, plans and specifications conforming with ASCE 24 Chapter 4 which are signed by a licensed design professional and certified by that individual in a V Zone Certificate.  1. All new construction and substantial improvement of any habitable building (as defined in Section 201) located in coastal high hazard areas shall have the lowest horizontal structural member, together with the attendant utilities (including all electrical, heating, ventilating, air-conditioning and other service equipment) and sanitary facilities, elevated to the Local Design Flood Elevation as determined in Section 102.3, be in conformance with ASCE Chapter 7, and be confirmed by an Elevation Certificate. 2. All new construction and substantial improvements of non-residential structures shall:   Have the lowest horizontal structural member, including basement, together with the attendant utilities (including all electrical, heating, ventilating, air-conditioning and other service equipment) and sanitary facilities, elevated to or above the Local Design Flood Elevation as determined in Section 102.3, be in conformance with ASCE 24 Chapter 7,  and be confirmed by an Elevation Certificate; or  Together with the attendant utility and sanitary facilities, be designed so that below the Local Design Flood Elevation, the structure:  Meets the requirements of ASCE 24 Chapters 4 and 7; and  Is constructed according to the design plans and specifications provided at permit application and signed by a licensed design professional, is certified by that individual in a Floodproofing Certificate, and is confirmed by an Elevation Certificate.   1. All new construction and substantial improvements shall have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. All breakaway walls shall be constructed according to structural designs, plans and specifications conforming with ASCE 24 Chapter 4, signed by a licensed design professional, and certified by that individual in a Breakaway Wall Certificate. 2. All new construction and substantial improvements with fully enclosed areas below the lowest floor shall be used solely for parking of vehicles, building access, or storage in an area other than a basement and which are subject to flooding. Enclosures shall:   Be situated at or above the adjoining exterior grade along at least one entire exterior wall, in order to provide positive drainage of the enclosed area in accordance with N.J.A.C. 7:13; enclosures (including crawlspaces and basements) which are below grade on all sides are prohibited.  Be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters unless the structure is non-residential and the requirements of 802.2.2(c)ii are met;  Be constructed to meet the requirements of ASCE 24 Chapter 4;  Have openings documented on an Elevation Certificate and have breakaway wall construction documented on a Breakaway Wall Certificate unless the requirements of 802.2.2(c)ii are met for a non-residential structure; and  Have documentation that a deed restriction has been obtained for the lot if the enclosure is greater than six feet in height. This deed restriction shall be recorded in the Office of the County Clerk or the Registrar of Deeds and Mortgages in which the building is located, shall conform to the requirements in N.J.A.C.7:13, and shall be recorded within 90 days of receiving a Flood Hazard Area Control Act permit or prior to the start of any site disturbance (including pre-construction earth movement, removal of vegetation and structures, or construction of the project), whichever is sooner. Deed restrictions must explain and disclose that:   1. The enclosure is likely to be inundated by floodwaters which may result in damage and/or inconvenience. 2. The depth of flooding that the enclosure would experience to the Flood Hazard Area Design Flood Elevation; 3. The deed restriction prohibits habitation of the enclosure and explains that converting the enclosure into a habitable area may subject the property owner to enforcement; 4. Enclosures are prohibited for new construction or substantial improvements; OR For new construction or substantial improvements, enclosures shall be less than 295 square feet in size. | 2a. 44 CFR 60.3 60.3(e)4  2b. 44 CFR 60.3(e)4. ASCE 24 is more specific for utilities. NJAC 7:13-7.11, 7.12, 7.13, 7.14, 8.5, 8.6, 8.8, 9.5, 9.6, 12.4, 12.5 (may include other sections of NJAC 7:13 in addition to those listed)  2c i. 44 CFR 60.3(a)3iv, NJAC 12.5(s), (t), and (u)  2c ii 1. NJAC 5:23  2c ii 2. 44 CFR 60.3e(4)  2d. 44 CFR 60.3(e)5  2e. 44 CFR 60.3(c)5  2e i. NJAC 7:13 12.5(p)2  2e ii. 44 CFR 60.3(c)5  2e iii. ASCE 24 is preferable 44 CFR 60.3  2e iv. 44 CFR 60.3  2e v. NJAC 7:13-12.5(p) |  |
| 801.3 | 1. **Garages and accessory storage structures.** Garages and accessory storage structures shall be designed and constructed in accordance with the Uniform Construction Code. | FEMA MCCO  NJAC 5:23 |  |
| 801.4 | **Fences.** Fences in floodways that have the potential to block the passage of floodwater, such as stockade fences and wire mesh fences, shall meet the requirements of Section 105.3(1) of these regulations. Pursuant to N.J.A.C. 7:13, any fence located in a floodway shall have sufficiently large openings so as not to catch debris during a flood and thereby obstruct floodwaters, such as barbed-wire, split-rail, or strand fence. A fence with little or no open area, such as a chain link, lattice, or picket fence, does not meet this requirement. Foundations for fences greater than 6 feet in height must conform with the Uniform Construction Code. Fences for pool enclosures having openings not in conformance with this section but in conformance with the Uniform Construction Code to limit climbing require a variance as described in Section 107 of this ordinance. | FEMA MCCO with clarification from NJAC 7:13-7. 20 & 7.61 and NJAC 5:23 |  |
| 801.5 | 1. **Retaining walls, sidewalks, and driveways.** Retaining walls, sidewalks and driveways that involve placement of fill in floodways shall meet the requirements of Section 105.3(1) of these regulations and N.J.A.C. 7:13. | FEMA MCCO  NJAC 7:13-12.3, 12.4 |  |
| 801.6 | 1. **Swimming pools.** Swimming pools shall be designed and constructed in accordance with the Uniform Construction Code. Above-ground swimming pools and below-ground swimming pools that involve placement of fill in floodways shall also meet the requirements of Section 105.3(1) of these regulations. Above-ground swimming pools are prohibited in floodways by N.J.A.C. 7:13. | FEMA MCCO with clarification from FHACA on fences – see 801.4 |  |
| 801.7.1 | 1. **Roads and watercourse crossings.**     * 1. For any railroad, roadway, or parking area proposed in a flood hazard area, the travel surface shall be constructed at least one foot above the Flood Hazard Area Design Elevation in accordance with N.J.A.C. 7:13.      2. Roads and watercourse crossings that encroach into regulated floodways or riverine waterways with base flood elevations where floodways have not been designated, including roads, bridges, culverts, low- water crossings and similar means for vehicles or pedestrians to travel from one side of a watercourse to the other side, shall meet the requirements of Section 105.3(1) of these regulations. | 1. NJAC 7:13-12.6   2) FEMA MCCO |  |
| 801.8 | 1. **Other development in coastal high hazard areas (Zone V) and Coastal A Zones.** In Coastal High Hazard Areas (V Zones) and Coastal A Zones, development activities other than buildings and structures shall be permitted only when also authorized by the appropriate federal, state or local authority; when located outside the footprint of, and not structurally attached to, buildings and structures; and when analyses prepared by a licensed professional engineer demonstrates no harmful diversion of floodwater or wave runup and wave reflection that would increase damage to adjacent buildings and structures. Such other development activities include but are not limited to:    * 1. Bulkheads, seawalls, retaining walls, revetments, and similar erosion control structures;      2. Solid fences and privacy walls, and fences prone to trapping debris, unless designed and constructed to fail under flood conditions less than the base flood or otherwise function to avoid obstruction of floodwater; and      3. On-site filled or mound sewage systems | FEMA MCCO  CAFRA NJAC 7:7  NJAC 7:13-12.13, 7.20, 7.61  44 CFR 60.3(a)6 |  |
| 801.9 | **Nonstructural fill in coastal high hazard areas (Zone V) and Coastal A Zones.** In coastal high hazard areas and Coastal A Zones:   * + 1. Minor grading and the placement of minor quantities of nonstructural fill shall be permitted for landscaping and for drainage purposes under and around buildings.     2. Nonstructural fill with finished slopes that are steeper than one unit vertical to five units horizontal shall be permitted only when an analysis prepared by a licensed professional engineer demonstrates no harmful diversion of floodwater or wave runup and wave reflection that would increase damage to adjacent buildings and structures.     3. Sand dune construction and restoration of sand dunes under or around elevated buildings are permitted without additional engineering analysis or certification of the diversion of floodwater or wave runup and wave reflection where the scale and location of the dune work is consistent with local beach-dune morphology and the vertical clearance is maintained between the top of the sand dune and the lowest horizontal structural member of the building. | FEMA MCCO   1. FEMA MCCO and NJAC 7:13-7.7 – 5 cu yds. Landscaping materials 2. FEMA MCCO 3. FEMA MCCO and CAFRA 7:7 |  |
| 901.1 | SECTION 901 TEMPORARY STRUCTURES AND TEMPORARY STORAGE **Temporary structures.** Temporary structures shall be erected for a period of less than 180 days. Temporary structures shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the base flood. Fully enclosed temporary structures shall have flood openings that are in accordance with ASCE 24 to allow for the automatic entry and exit of flood waters. | FEMA MCCO |  |
| 901.2 | 1. **Temporary storage.** Temporary storage includes storage of goods and materials for a period of less than 180 days. Stored materials shall not include hazardous materials. | FEMA MCCO  NJAC 7:13 - 7:48 - 53 |  |
| 901.3 | 1. **Floodway encroachment.** Temporary structures and temporary storage in floodways shall meet the requirements of Section 105.3(1) of these regulations. | FEMA MCCO |  |
| 1001.1 | SECTION 1001 UTILITY AND MISCELLANEOUS GROUP U **Utility and Miscellaneous Group U.** In accordance with Section 312 of the International Building Code, Utility and Miscellaneous Group U includes buildings and structures that are accessory in character and miscellaneous structures not classified in any specific occupancy in the Building Code, including, but not limited to, agricultural buildings, aircraft hangars (accessory to a one- or two-family residence), barns, carports, communication equipment structures (gross floor area less than 1,500 sq. ft.), fences more than 6 feet (1829 mm) high, grain silos (accessory to a residential occupancy), livestock shelters, private garages, retaining walls, sheds, stables, tanks and towers. | FEMA MCCO with reference to NJAC 5:23 |  |
| 1001.2 | **Flood loads.** Utility and miscellaneous Group U buildings and structures, including substantial improvement of such buildings and structures, shall be anchored to prevent flotation, collapse or lateral movement resulting from flood loads, including the effects of buoyancy, during conditions up to the Local Design Flood Elevation as determined in Section 102.3. | FEMA MCCO with clarification on how to determine the elevation from NJAC 7:13 – see section 801 |  |
| 1001.3 | **Elevation.** Utility and miscellaneous Group U buildings and structures, including substantial improvement of such buildings and structures, shall be elevated such that the lowest floor, including basement, is elevated to or above the Local Design Flood Elevation as determined in Section 102.3 and in accordance with ASCE 24. Utility lines shall be designed and elevated in accordance with N.J.A.C. 7:13. | FEMA MCCO with FHACA reference to utility lines |  |
| 1001.4 | **Enclosures below base flood elevation.** Fully enclosed areas below the design flood elevation shall be constructed in accordance with Section 801.2 and with ASCE 24 for new construction and substantial improvements. Existing enclosures such as a basement or crawlspace having a floor that is below grade along all adjoining exterior walls shall be abandoned, filled-in, and/or otherwise modified to conform with the requirements of N.J.A.C. 7:13 when the project has been determined to be a substantial improvement by the Floodplain Administrator. | FEMA MCCO, NJAC 7:13-12.5(p) |  |
| 1001.5 | **Flood-damage resistant materials.** Flood-damage-resistant materials shall be used below the Local Design Flood Elevation determined in Section 102.3. | FEMA MCCO, NJAC 5:23. ASCE 24-14 Chapter 5 |  |
| 1001.6 | **Protection of mechanical, plumbing, and electrical systems.** Mechanical, plumbing, and electrical systems, equipment and components, heating, ventilation, air conditioning, plumbing fixtures, duct systems, and other service equipment, shall be elevated to or above the Local Design Flood Elevation determined in Section 102.3.  **Exception:** Electrical systems, equipment and components, and heating, ventilating, air conditioning, and plumbing appliances, plumbing fixtures, duct systems, and other service equipment shall be permitted to be located below the Local Design Flood Elevation provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the Local Design Flood Elevation in compliance with the flood-resistant construction requirements of ASCE 24. Electrical wiring systems shall be permitted to be located below the Local Design Flood Elevation provided they conform to the provisions of NFPA 70 (National Electric Code). | FEMA MCCO |  |
| Section 3 | SECTION 3. SEVERABILITY. Where any section, subsection, sentence, clause, or phrase of these regulations is, for any reason, declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the regulations as a whole, or any part thereof, other than the part so declared. | FEMA MCCO |  |
| Section 4 | SECTION 4. EFFECTIVE DATE. This ordinance shall take effect on **{insert date}.**  *[Jurisdiction to add signature blocks.]* | Administrative Requirement |  |
|  |  |  |  |