Residential Design Standards for “VE” Flood Zone Properties

Virtual Meeting with Design Community

December 2, 2021
Purpose of Meeting

Present
- Proposed changes to residential design standards applicable to “VE” Flood Zone properties located in Newport Beach
- Building & Fire Code regulations

Gather Input
- Design Community
• Overview of “VE” Flood Zone and Proposed Code Changes – Planning staff

• Building and Fire Regulations – Building staff
“VE” Flood Zone Overview
Where are “VE” Flood Zone Properties?

• West Ocean Front
• Generally located between 24th Street and 48th Street
• Designated by FEMA (Federal Emergency Management Agency) as being in “VE-13 and VE-15” Flood Zone
Affected West Ocean Front Properties
April 8, 2019 Community Meeting

• FEMA adoption & requirements

• Identified Zoning Code issues:
  - ✔ Building height
  - ✔ Enclosed Parking
  - ❏ Access to dwelling
  - ❏ Accessory structures
Building Height

Previous Design

FEMA Compliant Design

Existing Grade 12'

BFE 15'

29'

Finish Floor 17'

34'
Enclosed Parking

- Traditional garages not feasible
- Potential breakaway wall designs
Access to Dwelling

Front Setback
- 42” accessory height limit

Side Setback
- 18” stair/deck/landing limit

Carport/Garage
- Landing interference with parking spaces
- Safety issue if primary entrance
Accessory Structures ×

- Traditional decks, landings, patios, walls, guardrails etc. in setbacks
  - Would not comply with current zoning:
    - Max 18” height allowance in SYSB
    - Max 42” for anything in FYSB
  - Building code challenges too
Why change the zoning code?

To allow the use and address access challenges for new homes that need to be raised per FEMA requirements
Proposed Zoning Code Amendment
What are the proposed changes?

Allow raised walkways, decks, and stairs (with guardrails) to encroach into the **front and side yard setback areas** in order to provide:

1. Access to the house from the ground; and
2. Provide more usable outdoor space
typ. 2-story building with 3rd floor deck
raised walkway & stairs in sideyard
raised deck
raised walkway & stairs in sideyard
beach
Within 5-foot front yard (beach) setback of residential structure:

- Raised deck with railings and stairs for access to/from the ground;
- Raised walkways with guardrails, and
- Stairs with railings for access to/from the ground
Within 3-foot side yard setbacks on both sides of residential structure:

- Raised walkways with guardrails
- Stairs with railings for access to/from the ground
EXISTING 2-STORY BLDG.

EXISTING 1-STORY BLDG.

SIDE YARD:
- FULL ENCROACHMENT ON BOTH SIDES
- RAISED WALKWAY WITH GUARDRAILS
- STEPS/STAIRS FOR ACCESS TO GROUND

FRONT YARD:
- FULL ENCROACHMENT
- RAISED DECK WITH GUARDRAILS FROM LOWEST FLOOR
- STEPS/STAIRS FOR ACCESS TO GROUND

BEACH ALLEY

3' - 0" CLR. FOR GATE

DECK

OPEN RISER STAIR & GUARD
LANDING & ENTRY ABV. BFE.

ELEV.

TYP. FOOTPRINT OF BLDG.

3' - 0" CLR.

3' - 0" CLR.

ELEC. PANEL

STAIR LANDING TO BE CLEAR OF PARKING SPACE

3' - 0" CLR. FOR GATE

RAISED WALKWAY & DECK IN SETBACK

CITY OF NEWPORT BEACH | FLOOR PLAN
Building and Fire Code Requirements

Virtual Meeting with Design Community

December 2, 2021
Building & Fire Code Requirements

- Minimum access clearance within side yard setback
  - 3 ft min. clear width for raised walkways for access and egress

- Building materials within setback areas
  - 1 hour fire rated construction or non-combustible material for structures within 5 feet of the property lines
  - Walls, including enclosure walls for crawl spaces or areas underneath exterior stairs or decks within 3 feet of property lines shall have no openings.
  - Fire rated wall construction may not be able to comply with breakaway wall requirement.
• Seismic separation
  • Structures located along property lines need to be setback from the property line a sufficient distance to accommodate structural deflection.

• Utility Equipment (A/C, FAU, etc.)
  • Located above DFE
MAX. RIDGE HEIGHT
46.50'

SECOND FLOOR T.O.S. (TYP.)
28.08'

THIRD FLOOR T.O.S. (TYP.)
37.86'

MAX FLAT
41.50'

FIRST FLOOR (T.O.S.)
17.50'

DESIGN FLOOD ELEVATION
16.00'

B.F.E.
15.00'

TYP. GRADE
12.00'

PL TYP. 2-STORY VE ZONE BLDG.
5' - 6" 24' - 0"

THIRD FLOOR DECK

EXISTING 2-STORY BLDG.

EXISTING 1-STORY BLDG.

PL
3'-0"
SVSB

3'-0"
CLR.

3'-0"
SVSB

3'-0"
CLR.

RAISED WALKWAY & DECK INSETBACK

CITY OF NEWPORT BEACH | TRANSVERSE SECTION
Building Code Requirements

Internal access to different floors

- Elevator in garage to top level
  - Elevator construction shall comply with NFIP Technical Bulletin 4: Elevator Installation (June 2019 ed.)

- Stairway in garage to main level
  - Stairs located below the Design Flood Elevation (DFE) shall comply with both Building Code exiting and NFIP flood construction requirement

- Fire rated construction providing separation between the **GARAGE and dwelling** shall be located above the DFE.
Building Code References

- Referenced Design Standard
- FEMA P-55: Coastal Construction Manual (Guidelines based on NFIP requirements)
- California Building Code (CBC) as amended by City of Newport Beach
- ASCE 24: Flood Resistant Design and Construction
Next Steps

- Community meeting with residents
- Planning Commission consideration
- City Council adoption
- Coastal Commission approval
- City Council acceptance & final approval
Email Planning staff by **December 16, 2021**

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