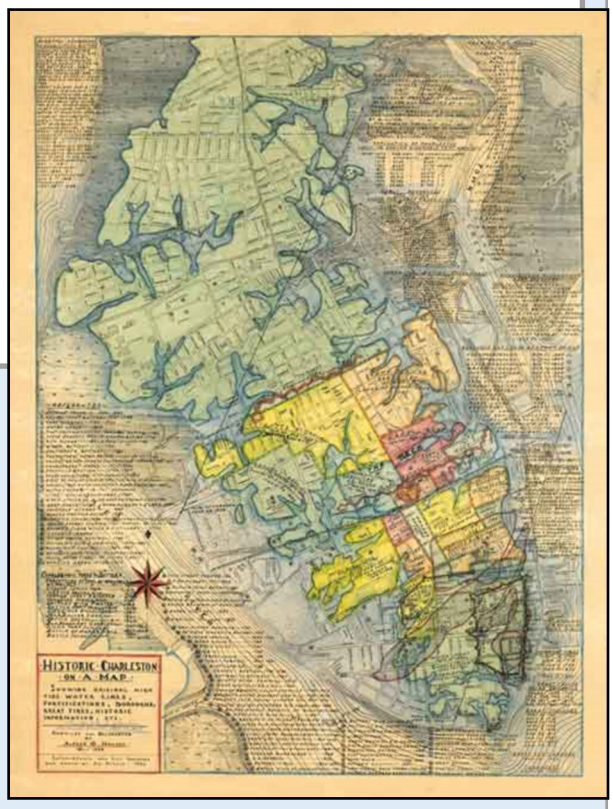
City of Charleston
Board of Architectural Review

Design Guidelines for Elevating Historic Buildings

Adopted: July 24, 2019

Charleston has historically been plagued by significant flooding issues, due to its low-lying nature and the development on infilled land where marshes once stood. However, in recent years there has been an intensification of flooding due to hurricanes, severe rainstorms, and high tides. The City concluded the best policy for the long-term preservation of historic structures was to support their need to elevate to the necessary FEMA requirement. In an effort to be proactive, two workshops were held in November 2017 and March 2018 with the public, architects, engineers, contractors, and preservationists to develop a set of guidelines to ensure elevations were done as sensitively and appropriately as possible. This resulting document focuses on four key areas to guide elevation projects for historic buildings: considerations for *streetscape/context, site design, foundation design, and architecture/preservation.*



Halsey Map (1949) - historic high tide water line shown

Flooding from Hurricane Matthew, Oct. 2016

Building Categories

Category 1 (Exceptional) and Category 2 (Excellent) Buildings :

- Require Board approval.
- All Preservation and Architectural Guidelines in this document are mandatory for these structures.
- Encourage use of FEMA Variance to minimize change to only that height necessary to avoid flood hazard.
- If approved for elevation, applicants must provide thorough documentation of the building in its existing state, to include as-built elevations, floor plans, site plan, and photographs.

Category 3 and 4 Buildings :

- Elevating 3'-0" or less may be staff approved. Anything above 3' requires Board approval.
- If approved for elevation, applicants must provide thorough documentation to include as-built elevations, floor plans, site plan, photographs.

Streetscape and Context Considerations

Guidelines

- Broadly, submittals must include careful consideration of the following:
  - ◊ Impact on important streetscape features (fences, walls, etc.).
  - ◊ Impact on relationship to immediate context and neighboring buildings.
  - ◊ Impact on streetscape scale and building patterns.

- More specifically, submittals for elevations must include careful consideration of contextual examples, including but not limited to elevated buildings, typical materials, and the following specific architectural details:
  - ◊ Relationship of entrance to street
  - ◊ Staircases
  - ◊ Piazza Screening
  - ◊ Railings and Ironwork
  - ◊ Foundation Treatments
  - ◊ Walls (garden and site)
  - ◊ Fenestration Patterns
  - ◊ Eave Heights
  - ◊ Stair Configuration
  - ◊ Landscaping

- Relocating buildings on the same lot may be more sympathetic to the context. For example, moving a house back to allow for the construction of steps typical to the context.

- Elevation of sister houses should be architecturally coherent within the grouping. The first sister house to be elevated shall instruct precedent for the future elevation of structures within the grouping. The BAR should demand the highest quality of design of the first building in a sister house grouping to be elevated.

Examples

Adjoined townhomes (Rainbow Row)

Sister Houses

Common site features (walls, fences)

Site Considerations

Examples

Terraced Landscaping / Raised Planter Beds

Coping Walls & Fencing

Transitional Porch

Guidelines

- Buildings should not be moved to accommodate additions, parking, etc. Buildings should remain in their original location on the lot, unless doing so prevents the reasonable introduction of stairs.
- It is preferred to maintain a distinct stair connection to the sidewalk.
- Entry stairs are preferred to be constructed of masonry, unless context dictates otherwise.
- It may be acceptable to move buildings back on a lot to correspond to adjacent properties (i.e. to align with neighboring properties).
- If necessary to move the building on the property, the impact should be minimized with porches, low walls, iron fencing, planting beds, and terraced landscaping.
- An alternative entry location might be considered in cases where the structure does not have a traditional sidewalk entry.
- In instances where a structure has to be raised a full story, look at maintaining the entry and piazza screen at its current ground level .
- Maintain existing historic hardscape features, such as planter walls, fences, gates.
- Retain to the greatest extent possible existing circulation paths from the street/sidewalk to the building.
- Introducing planter walls (approximately 30" max.) will help mitigate transition in height.
- Front fencing should be relatively transparent (wrought iron or wood picket)
- Encourage use of plantings or other pervious materials to help absorb water.

Foundation Design Considerations

Successful Examples

Historically elevated foundation

Extension of column line to pier foundation

Guidelines

- Generally, foundations should be based on historically elevated foundations in Charleston, and also based on neighborhood/context specific examples.
- Foundation components should complement existing façade features:
  - ◊ Visual support of columns
  - ◊ Pilaster expression
  - ◊ Solid foundation wall under main body of house, especially at the street front, and piers at piazza with infill screening
  - ◊ Use traditional masonry materials
  - ◊ Use existing elements as visual references to be repeated and extended throughout foundation design
- Pier infill should be:
  - ◊ Recessed
  - ◊ Use louvers or custom lattice
  - ◊ No "beachy" style horizontal slats or stock lattice

Solid foundation at front

"Beachy" style foundation

Stock Lattice

Foundation Design Considerations

Successful Examples

Fenestration in foundation

Elevated Planter in front of foundation

Guidelines

- New foundation material should match the historic foundation material, and when possible, use salvaged material from the historic foundation.
- Any required venting should be limited to the sides and rear of the house, however if using decorative ironwork, it may be acceptable at the front of the house.
- Front elevation mitigation strategies include decorative iron vents/grilles, water tables, elevated planters, staircases etc. Use of creative openings/windows to break up wall expanse is also encouraged.
- For buildings elevated 6ft or more, parking underneath the structure is strongly discouraged, unless not visible from the street or R.O.W..
- Garage doors on front elevations are prohibited.

Decorative ironwork at venting

Preservation/Architecture Considerations

Examples

Lowered siding and windows on new structures only

Guidelines

- Primary entries should maintain the existing circulation pattern.
- Employ architectural devices relating to the specific context to lessen the overall impact of the raised structure:
  - ◊ Continue siding down foundation.
  - ◊ Lowering window level to relate to streetscape pattern and pedestrian scale on new buildings. This only pertains to new structures.
  - ◊ Add a skirt board/water table
  - ◊ Introduce a coping wall.
- Significant elevation changes should create the appearance of an additional full floor that proportionally relates to the floors above and fenestration patterns on the streetscape, maintaining piazza entry at the ground floor.

Additional full floor (historic house shown for example only).

Water table at foundation

Preservation/Architecture Considerations

Successful Examples

Historic, character defining features

Piazza Screens

Significant Chimneys

Guidelines

- Quality of historic materials and detail shall be maintained at the pedestrian level.
- Buildings that have a direct architectural relationship with their neighbors (such as sister houses or adjoined row houses) will be considered within their context and the effect on one another and future elevations.
- Historic, character defining features should be retained first, salvaged and reused second, or rebuilt when necessary as a last option, using like materials.
- Piazza screen and all associated elements should be conserved at current elevation (including door surround, steps, and railing). Stairways within the piazza and piazza screen height may increase to mitigate the elevation change.
- Stairs should generally occur in front of or within piazzas, rather than extending from the side.
- Chimney options (in order of preference):
    - ◊ Preferred method: retain chimney and elevate with the structure.
    - ◊ Elevate the house around the chimney and extend the chimney accordingly with materials to match.
    - ◊ Least preferred method: extend chimney above roof at height equal to original height above the roof, using materials to exactly match existing.