

23-1020-1-01
November 18, 2013



Ms. Evonne Klein
Commissioner
State of Connecticut Department of Housing
505 Hudson Street
Hartford, Connecticut 06106

Re: **Washington Village Redevelopment
Norwalk, Connecticut
Request for Floodplain Management Exemption**

Dear Commissioner Klein:

In connection with the Washington Village Redevelopment project, and as discussed with your staff, we will be submitting a Floodplain Management Certification application to the Connecticut Department of Energy and Environmental Protection, a copy of which is enclosed. As required by CTDEEP, the requesting agency must endorse the application. Additionally, this project will require an exemption from floodplain management criteria enumerated in CGS Section 25-68d(b) regarding intensity of development in the floodplain. The proposed project meets the four criteria outlined in Section 25-68d(d) of the Connecticut General Statutes for an exemption as further described herein. In conjunction with the application, we ask that the Department of Housing of the State of Connecticut also submit a letter with the Floodplain Management Certification requesting the exemption..

Project Description

Existing Conditions

The existing site consists of three parcels. The southernmost parcel is enclosed by Water Street, Concord Street, Day Street, and Raymond Street. The middle parcel consists of the western half of the block bounded by Water Street, Raymond Street, Day Street, and Hanford Place. The northern parcel lies at the northwest quadrant of the intersection of Day Street and Hanford Place. Please refer to **Figure 1**. In total, the three parcels encompass 6.55 acres.

The southern parcel consists of 136 housing units in 11 buildings and a community center. The remaining two parcels are currently vacant, but once contained building structures.

Existing Flood Exposure

All three parcels are within or partially in the 100-year floodplain as shown in **Figure 2**. The parcels are located in Zone AE in an area subject to coastal flooding from Norwalk Harbor. Based upon the FEMA's Flood Insurance Study for Fairfield County to become effective October 26, 2013, the 100-year stillwater elevation is 10.4, and with wave setup is 12.0. The 500-year stillwater elevation in this area is 11.9 and 13.6 with wave setup. Therefore, the regulator 100-year flood elevation at the site is 12.0 and the 500-year flood elevation is 13.6. All of the existing housing units are within the floodplain, and all of the

first-floor units are below the base flood elevation, and therefore subject to flooding by the 100-year flood.

Project Proposal

The proposed redevelopment of Washington Village involves all three parcels described above. The Norwalk Housing Authority and its developer, Trinity Washington Village Limited Partnership, will construct one higher income unit for each of the existing public housing units for a total of 273 units. The units will be a mixture of one to four bedroom units in multi-story buildings. 500 parking spaces are proposed, with 198 to be at-grade beneath the proposed buildings, and 302 at-grade in surface lots. The development will also include a community center and substantial open space. Please refer to **Figure 3**.

Construction will begin with the northern and middle parcels. Once these housing units are constructed, residents at the existing Washington Village units on the southern parcel will be relocated, and then demolition may proceed with the existing Washington Village units, and the balance of the project construction completed.

The buildings will be constructed such that the first floor residential units are constructed at elevation 16.5, which is above the 500-year flood elevation plus wave setup of 13.6. Parking will be located at-grade below the first floor units. Floodproofed elevators and stairwells will provide access from the elevated units to street level. All mechanical units for the units will be placed above the 100-year flood elevation, and utilities below this elevation would be floodproofed to minimize infiltration or discharge.

In conjunction with the project, infrastructure improvements are proposed in the area. This includes raising the profile of Raymond and Day Streets such that the elevation of the intersection is 12.0, which is above the base flood elevation. Ryan Park, at the southwestern quadrant of the Day and Raymond intersection will also be redeveloped. The City of Norwalk is expected to issue an RFQ for the Master Plan of the park shortly, and it is anticipated that it will include provisions for a pathway supporting dry access to the intersection and the project buildings.

Pedestrian bridges will be constructed from the proposed buildings on the southern parcel to connect them to the proposed building at the intersection of Raymond and Day Streets. This would allow occupants of the building to exit to the intersection of Raymond and Day, and walk across Ryan Park for access to contiguous dry land.

State Floodplain Management Requirements

Section 25-68(b) of the Connecticut General Statutes requires that state agencies proposing actions within a floodplain demonstrate the following:

- (1) The proposal will not obstruct flood flows or result in an adverse increase in flood elevations, significantly affect the storage or flood control value of the floodplains, cause an adverse increase in flood velocities, or an adverse flooding impact upon upstream, downstream or abutting properties, or pose a hazard to human life, health or property in the event of a base flood or base flood for a critical activity;
- (2) The proposal complies with the provisions of the National Flood Insurance Program, 44 CFR 59 et seq., and any floodplain zoning requirements adopted by a municipality

in the area of the proposal and the requirements for stream channel encroachment lines adopted pursuant to the provisions of section 22a-342;

- (3) The agency has acquired, through public or private purchase or conveyance, easements and property in floodplains when the base flood or base flood for a critical activity is elevated above the increment authorized by the National Flood Insurance Program or the flood storage loss would cause adverse increases in such base flood flows;
- (4) The proposal promotes long-term non-intensive floodplain uses and has utilities located to discourage floodplain development;
- (5) The agency has considered and will use to the extent feasible flood-proofing techniques to protect new and existing structures and utility lines, will construct dikes, dams, channel alterations, seawalls, breakwaters or other structures only where there are no practical alternatives and will implement stormwater management practices in accordance with regulations adopted pursuant to section 25-68h; and
- (6) The agency has flood forecasting and warning capabilities consistent with the system maintained by the National Weather Service and has a flood preparedness plan.

The following paragraphs demonstrate compliance of the proposed project with the requirements outlined above

No Adverse Increase in Floodplain Elevations

Since the project will be constructed in an AE zone by the coast, the buildings will be designed with at-grade parking beneath the residential units. The building above the parking will be supported by columns with no exterior walls, which will allow floodwaters to freely enter and leave the open area below the buildings. Constructing the building in this manner would not adversely impact floodplain elevations or velocities since floodwaters may freely enter and leave.

Compliance with NFIP Regulations

The project will be designed to meet the floodplain management regulations of the City of Norwalk's Zoning Regulations. Since the City of Norwalk is a participating NFIP community, meeting the City's floodplain management regulations would also demonstrate compliance with the NFIP regulations.

Specific provisions incorporated into the design for City floodplain regulations compliance include:

1. Lowest habitable floor above the base flood elevation.
2. Utilities above the base flood elevation.
3. Space below the base flood elevation will be designed with openings sufficient for the passage of floodwaters.

4. Sanitary sewer and potable water systems will be designed to minimize the infiltration of floodwaters.

Easements for Flooding on Impacted Property (If Required)

Since the open design of the at-grade parking area below the building will promote the entrance and exit of floodwaters, the proposed construction will not exacerbate existing flooding conditions, therefore easements for flooding on adjoining impacted properties are not required.

Promotion of Non-Intensive Floodplain Uses

This is the requirement for which an exemption is being requested. The project is considered intensive because the proposed project once completed will contain more housing units than currently exists at the site.

Feasible Floodproofing Techniques

The proposed project does not rely upon diversions, channels, dikes, dams or other structures to physically channel and restrain floodwaters. Instead, the project relies upon the building design to keep the residential units above the floodplain elevation, and ensure that columns below the flood elevation are resistant to hydrostatic and hydrodynamic forces.

Flood Warning System

A flood warning system will be incorporated into the building, and the Norwalk Housing Authority would use the same warning system that the rest of the City uses. There may be times when a storm or series of storms in excess of the 100-year event may require individuals to take appropriate emergency actions above and beyond any floodproofing procedures that will be used. These actions may range from the careful monitoring of the progress of a storm to the evacuation of the property. The State of Connecticut Department of Energy and Environmental Protection and National Weather Service maintain a series of rain gauges, water level sensors and other technological resources throughout the area to monitor the progress of severe storm and flood events. As conditions dictate, flood watches, warnings, evacuation notices and/or other important information may be broadcast on local radio and television stations. During the days and hours preceding a major storm event, building management should carefully monitor local radio and television reports for relevant weather and flood hazard information.

As weather conditions worsen, occupants may be asked to consider the following:

1. Monitor the level of the Norwalk River and the surrounding area from within the building or from a safe distance. Never enter or approach flooded riverine areas.
2. Monitor local radio and television broadcasts for up to date weather and flood hazard information.
3. Assess the availability and condition of available modes of transportation.

4. Ensure that telephone capacity is available to allow for important phone messages or emergency calls.
5. Provide for any persons having special needs (the elderly, ill or physically handicapped) - individuals that would be unable rapidly evacuate the building in an emergency situation. Arrange for any special transportation needs as required.

Additionally, those responsible for building maintenance should initiate action to reduce potential damages caused by adverse weather conditions and flood. Appropriate action may include the following:

1. Store, elevate or make provisions for safe, dry storage of important documents, and other readily damaged items.
2. Bring outdoor possessions inside the building to prevent them from floating or blowing away. These items include unsecured outdoor furnishings, benches, trash receptacles, tools, signs, building supplies and other moveable objects.
3. Tape windows to prevent shattering if it is anticipated that the storm will be accompanied by strong winds.

Basis of Exemption Request

The exemption request for this project is based upon criteria (4) above, regarding non-intensive floodplain uses. During our pre-application meeting with the Connecticut Department of Energy and Environmental Protection on July 29, 2013, it was determined that this project would require an exemption because the proposed development is more intensive than the existing since the proposed project contains more units than the existing development, although the proposed development would remove all the residential units from the floodplain and there have been buildings on all three of the parcels in the past. The proposed project needs more units than currently exist at the site to be financially viable and achieve the vision of a vibrant, active neighborhood contemplated by the Norwalk Housing Authority and the designated developer.

Exemption Criteria

Section 25-68(d)(d) of the Connecticut General Statutes outlines the criteria for granting an exemption to the floodplain management statutes. The four basic criteria are:

- (1) The activity or critical activity is in the public interest,
- (2) The activity will not injure persons or damage property in the area of such activity or critical activity,
- (3) The activity complies with the provisions of the National Flood Insurance Program
- (4) In the case of a loan or grant, the recipient of the loan or grant has been informed that increased flood insurance premiums may result from the activity or critical activity.

The following paragraphs outline the compliance of the proposed project with the exemption criteria cited above.

Public Interest

We offer the following information to support that the project is in the public interest:

1. The project was the subject of a Choice Neighborhood Planning Grant from the US Department of Housing and Urban Development (HUD) for its potential to transform the existing Washington Village housing development and the surrounding neighborhood.
2. The City of Norwalk Common Council and Norwalk Housing Authority Board have both approved the current plan.
3. Relocating the project to a different area could potentially exclude it from being eligible to receive funding under the HUD Choice Neighborhoods Implementation program which would provide funds to complete the demolition and redevelopment of the project site..
4. The proposed activities incorporate numerous Low Impact Development methodologies to promote and improve the quality of stormwater runoff draining from the site in comparison with the untreated runoff that currently drains from the site.
5. The project will create opportunities for families to increase economic self-sufficiency and thrive based on the following five strategies:
 - a. Individualized case management system coordinated with existing service providers.
 - b. Promote employment, training, and asset building.
 - c. Maximize Section 3 employment opportunities.
 - d. Improve overall health and wellness.
 - e. Minimize displacement and disruption.
6. The project will improve educational outcomes for all children using the following four strategies:
 - a. Build a learning community.
 - b. Connect children 0 to 5 years in age to quality Early Childhood Education opportunities.
 - c. Ensure children have access to high quality education from Kindergarten through High School.

- d. Supplemental and continuous education.
7. The project will have a positive transformation impact upon the neighborhood:
- a. The developer will pay property taxes on both the affordable and market rate units.
 - b. Research shows the surrounding property increases in value and generates increased tax revenue following development similar to the proposed project.
 - c. More households means greater demand for retail / commercial facilities
 - d. Research shows crime rates are substantially reduced by development similar to the proposed project.
8. Preserve low-income housing in a mixed income community that is two blocks away from a public transportation center (South Norwalk Metro North Railroad Station) which is critical for commuting to and from jobs.

Potential of Injury to Persons or Damage to Property

It is the opinion of the project design team that this project will not cause injury to persons or damage to property in the area of the activity. This opinion is based upon the elevation of the proposed residential units, provisions for dry access, and the design of the proposed stormwater management system.

Elevation of Residential Units

The proposed project will place all of the residential units above the 500-year floodplain elevation with wave run-up. The existing development has first floor units that not only below this elevation, but also below the 100-year floodplain elevation. Therefore, the proposed project will afford residents a significantly greater level of protection against floodwaters than what exists today.

The building columns, footings and foundations will be designed to resist both hydrostatic and hydrodynamic forces in accordance with ASCE 24, Chapter 5, Flood Loads.

Since the project is proposed in an AE Zone by the coast, where tidal influences are the primary driver for flooding events, construction of the building will not measurably negatively impact conveyances, and therefore would not increase flood heights and impact neighboring structures, especially since the area below the buildings for parking will be open and will freely permit the passage of floodwaters.

Dry Access

Currently, the existing site development provides no dry access from buildings that are inundated by floodwaters. The proposed development provides dry access to contiguous land above the flood elevation, providing for resiliency for the project in the event of a flood. The City is advancing a proposal to provide dry access that will raise the road profiles of Raymond Street and Day Street. The result would raise the elevation of Raymond and Day to elevation 12.0, which is above the floodplain elevation. Each building will have



connecting pedestrian walkways on the third floor which would ultimately connect to a proposed building at the corner of Raymond and Day. Residents could then access the intersection from the lobby of either one of these buildings. They could then walk across Ryan Park to contiguous land above the floodplain elevation. The main walkway across Ryan Park would be constructed with a cross section substantial enough such that it could support emergency vehicle traffic, affording dry access to Raymond and Day for emergency vehicles.

Buildings on the northern parcel are adjacent to land above the 100-year floodplain elevation, and would have dry access to contiguous dry land.

Stormwater Management System

The proposed stormwater management system has been designed to applicable local and state regulatory standards, and coordinates with the National Pollution Discharge Elimination System permit program that is currently administered by CTDEEP's Bureau of Materials Management and Compliance Assurance.

Compliance with Provisions of the National Flood Insurance Program

Communities that participate in the National Flood Insurance Program (NFIP) agree to adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding. Section 60.3 of the NFIP Regulations provides floodplain management criteria for flood-prone areas. The City of Norwalk, as a participant in the program, has adopted compliant ordinances as part of their Zoning Regulations. The design team has developed a matrix identifying the City's pertinent regulations, and how this project complies with these regulations

Specific provisions incorporated into the design of the project for City floodplain regulations compliance include:

1. Lowest habitable floor above the base (100-year) flood elevation. The project will exceed the City's regulations by being built above the 500-year flood elevation.
2. Utilities above the base flood elevation, or floodproofed to minimize infiltration of floodwaters.
3. Space below the base flood elevation will be designed with openings sufficient for the passage of floodwaters.
4. Sanitary sewer and potable water systems will be designed to minimize the infiltration of floodwaters.

Please refer to **Appendix A**, which offers a more detailed breakdown of compliance with the floodplain regulations of the City of Norwalk, section by section.

Recipient of Grant Informed of Potential of Increased Insurance Premiums

The recipient of the grant, the City of Norwalk Housing Authority, has been informed of the potential of increased insurance premiums as a result of developing within the floodplain.

Conclusion

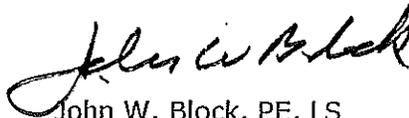
Since the proposed Washington Village Redevelopment Project is in the public interest, will not cause injury to persons or damage to property, is in compliance with NFIP regulations, and the grantee is aware of the possible increase in flood insurance premiums, we request an exemption from the intensive use provisions of the State of Connecticut's Floodplain Management Regulations.

Please review the attached application, and forward the application materials to CTDEEP. CTDEEP requires one original and one copy of the application, and the transmittal application form. Two additional copies are furnished: one for your records, and another for our records. Please contact us when our record copy is executed and we will pick it up. Should you have any questions, please feel free to contact us.

Sincerely,



Joseph Canas, PE, LEED AP, CFM
Project Manager



John W. Block, PE, LS
Senior Vice President

Enclosures: Floodplain Management Certification Application

Copy: Michael Santoro, CTDOH
Hermia Delaire, CTDOH
Jeff Caiola, CTDEEP
Frank Edwards, Trinity Financial
Tim Sheehan, Norwalk Redevelopment Agency
Greg Lickwola, Norwalk Housing Authority

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