Town of Fairfield

Office of the First Selectman

Michael C. Tetreau
First Selectman
203-256-3030
203-256-3080 (fax)

725 Old Post Road
Fairfield, CT 06824
firstselectmanffld@fairfieldct.org
www.fairfieldct.org

August 15, 2019

VIA HAND DELIVERY to William Hackett, Dana Conover

Mr. Keith Turi
Acting Assistant Administrator – Recovery Directorate
Federal Emergency Management Agency
U.S. Department of Homeland Security
500 C Street, NW
Washington, DC 20472

Through: Mr. William Hackett
State Emergency Management Director
Connecticut Department of Emergency Services and Public Protection
1111 Country Club Road
Middletown, CT 06457

Through: Capt. W. Russ Webster, USCG (Ret.)
CEM Regional Administrator FEMA Region I
U.S. Department of Homeland Security
99 High Street, 6th Floor
Boston, MA 02110

Re: Second Appeal – Town of Fairfield, PA ID #001-26620-00, FEMA-4087-DR-CT, Project Worksheet # 680 – Scope of Work, Improved Project, National Flood Insurance Program Regulations, Floodplain Management, and National Environmental Policy Act - De-obligation of $4,340,054.11

Dear Mr. Turi:

In accord with 44 CFR 206.206, the Town of Fairfield, CT (hereinafter "Town" or "Fairfield") hereby submits its 2nd Appeal relating to FEMA's June 20, 2019, 1st appeal determination ratifying the de-obligation of $4,340,054.11 under Project Worksheet (PW) 680 (Exhibit 1). PW 680 pertained to damages to the Penfield Pavilion (hereinafter "Facility") resulting from Hurricane Sandy, October 27 to November 8, 2012 (FEMA 4087-DR-CT).

The 1st appeal determination at issue (Exhibit 20) resulted from FEMA's assertions under PW 680 that the Town's replacement of the Facility failed to comply with National Flood Insurance Program requirements and certain Public Assistance regulations (Exhibit 2). These included pursuit of a change in the scope of work without prior notice to FEMA in violation of 44 CFR 13.30(d), construction of the Facility in a manner which violated 44 CFR §§ 60.3(e)(5) and 9.11(d), completion of work before FEMA could conduct environmental and historic preservation reviews, plus failure to obtain a consistency determination from the Connecticut Department of Energy and Environmental Protection.

The Town asserts that FEMA's 1st appeal determination is incorrect since it misapplies regulations, policies and practices, and technical guidance affecting PW 680. Accordingly, the Town submits its 2nd appeal.

Factual Background

The Town notes that neither FEMA's 1st appeal determination nor its related analysis disputes the facts as submitted by the Town in its 1st appeal. Accordingly, for purposes of FEMA's 2nd appeal review the Town reiterates that which was previously provided.

Storm surge from Hurricane Sandy (FEMA 4987-DR-CT) substantially damaged the Facility, which is a 16,756 sq. ft. single story, wood/steel frame structure, surrounded by 10,811 sq. ft. wood decking. The storm surge breached over and around a concrete/stone revetment wall and a wooden bulkhead system designed to protect surrounding properties on the north, east and west of the Facility. Thereupon the storm surge water flowed under the Facility resulting in scouring which undermined and damaged the Facility's foundation resulting in additional damages. Damages were initially defined by J.M. Albaine Engineering (hereinafter "Albaine") and Roberge Associates Coastal Engineer, LLC who were retained by the Town to identify the damages and estimate repair costs, using local pricing.

As PW 680 advises, during the initial phase of PW 680 formulation FEMA requested that the Town retain an engineer to determine damages and recommend a scope of work to restore the Facility to its pre-disaster condition. On 2/6/13 the Town awarded the engineering contract to Albaine. On 7/23/14 Saugatuck Construction Group, retained by the Town, provided a scope of work to repair the damages and advised FEMA that its estimated cost to repair the Facility was $3,655,018. Thereafter, on 9/25/14 the Town advised FEMA that it believed the cost to repair the Facility exceeded the 50% of the replacement cost and asked that the Facility be replaced under 44 CFR 206.226(f). This request was supported by a CEF (Cost Estimating Formulation) calculation prepared by the Town and its consultant, Witt.

Thereupon, FEMA began its analysis of the Town's CEF calculation, engaging in numerous meetings and requesting additional information from the Town. On 7/17/2015, approximately 10 months after the Town's request for replacement of the Facility, FEMA agreed to such using its revised CEF. PW 680 was thereafter obligated on 12/17/2015 in the amount of $4,340,054.11. This was more than 3 years following the damages to the Facility.

At the time PW 680 was formulated FEMA estimated the Town had completed only 2% of the required work. Importantly, as explained below, any work which was undertaken did not constitute

the "start of construction". As stated above, PW 680 contemplated a replacement of the Facility under 44 CFR 206.226(f). However, prior to the start of construction for replacement, the Town determined that it would make more sense and cost less to make several modifications to the replacement process.

Changes Under Scope of Work of PW 680

On 4/18/2016, approximately 4 months after the obligation of PW 680 which was the replacement of the Facility under the 50% Rule, the Town advised the Grantee by letter (Exhibit 3) of its changes to the methodology for replacement of the Facility under PW 680 consisting of: (1) salvaging the West wing of the original building by detaching it from its foundation and the rest of the facility, moving it from its location then moving it back on to the new foundation and reutilizing it; (2) demolishing and fully reconstructing the East wing of the building and its foundation; (3) demolishing the wooden deck and pile system, and installing a new pile system and wooden deck; plus installing a new patio at an elevation midway between the new building height and beach (said patio was never built); (4) re-grading the parking lot by placing low cost road millings to slightly steepen the pitch, raising the high point of the parking lot thereby reducing the number of stairs and ramps previously required from the parking ramp to the building and establishing the natural grade plane consistent with the grade of the immediate vicinity by placing fill up to an elevation of 11' under the building and 12' around the building; and (5) retaining the existing timber bulkhead to the South and sealing the openings with whalers and sheeting and filling the grade on the building side of the bulkhead at an elevation of 12' . These changes for replacement of the Facility occurred because the Town was in the process of finalizing its final replacement design when PW 680 was obligated.

Importantly, the changes described in the Town's 4/18/2016 letter were prepared by DeStefano & Chamberlain, Inc., the Town's Design Architect Engineer firm (hereinafter "DeStefano & Chamberlain"), which also confirmed that the various changes were compliant with the building code, V zone requirements, and FEMA model regulations. As explained below, on 6/30/2016 the Town amended its 4/18/2016 notice of changes by deleting the changes pertaining to the bulkhead described above. (Exhibit 4)

Additionally, with its 6/30/2016 correspondence the Town included correspondence from the Town's NFIP Coordinator deeming these changes to be acceptable. (Exhibit 5) Succinctly, the Town's NFIP Coordinator advised that the Facility was being constructed in accordance with NFIP requirements and squarely met the requirements of FEMA Technical Bulletin 5.

The Grantee submitted the Town's 4/18/2016 methodology changes improperly stated as SOW modifications to FEMA on 4/29/2016. According to FEMA's 11/28/2018 determination analysis, on 5/12/2016 the Grantee telephonically advised FEMA that it expected more changes and asked FEMA to put the project on hold. Before submitting the final SOW change request, on 6/1/2016 the Grantee and Connecticut Department of Energy and Environmental Protection (hereinafter "CT DEEP") sent a joint letter to the FEMA Region I Floodplain and Insurance Branch requesting technical assistance. (Exhibit 6)

In their 6/1/2016 request for technical assistance the Grantee and CT DEEP erroneously advised FEMA that the Town had decided to repair rather than replace the Facility, deviating from the replacement SOW, with construction for such having begun on 2/29/2016. CT DEEP was

concerned that the project, as modified, would not be NFIP compliant. Thus, the Grantee and CT DEEP requested that the FEMA Regional Floodplain and Insurance Branch review the Town's design plans to insure NFIP compliance and that there would be no eligibility or funding concerns when the project was completed. As a parenthetical, the Town has never asserted that the project was anything but a full replacement of the Facility.

As mentioned above, on 6/30/2016 the Town submitted a revision to its previously submitted methodology change to complete the SOW of PW 680, which deleted the bulkhead. This was done following consultation with CT DEEP to satisfy its concerns. Upon receipt of the Town's 6/30/2016 revised change to the methodology to accomplishing the SOW of PW 680, the Grantee immediately sent such to the FEMA Region 1 Regional Administrator.

On 8/9/2016, the FEMA Region I Disaster Recovery Manager and Floodplain and Insurance Branch Chief jointly responded to the Grantee and CT DEEP 6/1/2016 request for technical assistance. (Exhibit 7).

In brief, this joint response referred to "repair" as an unauthorized change to the "replacement" SOW, with the design possibly failing to meet the requirements of 44 CFR §60.3, which would also result in violation of 44 CFR §9.11(d)(6) and the Town's zoning regulations. This response seemed to focus on "repair" instead of "replacement" as a result of the Grantee's and CT DEEP's incorrect description of the Town's replacement methodology. Further, FEMA questioned whether CT DEEP issued a consistency determination, thereby allowing FEMA to meet its requirement under the Coastal Zone Management Act. Importantly, FEMA advised that this response did not constitute a final determination or set penalties, but it did advise that FEMA was placing a financial hold on the project and would issue a Request for Information (hereinafter "RFI"). Again, the Town has never maintained or advised the Grantee or CT DEEP that the changes to the SOW changed the project from replacement to repair. That was a mis-statement of fact by the Grantee and CT DEEP.

FEMA RFI

On 9/30/2016, FEMA sent a 14 question RFI to the Town, fundamentally pertaining to three issues. (Exhibit 8) The first was whether the proposed design complied with the requirements of 44 CFR Part 9. The second was whether FEMA should undertake remedies for asserted possible violations of the Public Assistance award (i.e., failure to obtain FEMA's approval before making SOW revisions, undertaking a repair instead of replacement, making elevation of the lowest floor of the Facility below 15.5', and re-grading and placement of fill in the parking lot next to the Facility). Third, was whether there was compliance with environmental and historic preservation requirements.

Fairfield's Response to FEMA's RFI

On 10/28/2016 the Town responded to the FEMA RFI's 14 questions relating to the following three issues: (1) Whether the requested scope comports with the minimum floodplain management requirements of the National Flood Insurance Program ("NFIP") and 44 CFR §9.11

(d); (2) Whether the Applicant has violated the material terms and conditions of the award by commencing the revised scope before notifying and obtaining approval from the Grantee and FEMA; and (3) Whether the revised scope of work falls within the scope of a categorical exclusion under the National Environmental Policy Act and comports with other environmental and historic preservation laws. (Exhibit 9)

The Town's response to the questions relating to the above 3 issues was confirmation that: (1) the requested scope comports with the minimum floodplain management requirements of the National Flood Insurance Program ("NFIP") and 44 CFR §9.11 (d); (2) the Applicant did not violate the material terms and conditions of the award by commencing the revised scope before notifying and obtaining approval from the Grantee and FEMA; and (3) the revised scope of work fell within the scope of a categorical exclusion under the National Environmental Policy Act and comports with other environmental and historic preservation laws.

In support of its response, the Town included 8 exhibits, including the responses of its engineering firm, DeStefano & Chamberlain, and James Wendt, its NFIP/CRS Coordinator, each clearly supporting the Town's position that the requested changes did not violate NFIP requirements and PW 680 should be amended to include the Town's methodology changes to accomplishing the SOW. (Included in Exhibit 9)

Grantee Response to FEMA's RFI

On 10/28/2016 the Grantee forwarded the Town's response to FEMA's 9/20/2016 RFI. (Exhibit 10) In that correspondence the Grantee acknowledged that the Town never asserted that its changes to the original SOW of PW 680 constituted a repair rather than a replacement. Further, the Grantee explained that the changes the Town identified were primarily changes to methodology in carrying out restoration of the Facility. The Grantee pointed out that the Town asserted that the changes at issue were in full compliance with local and State requirements and that this was supported by the local Floodplain Manager (Exhibit 5) and a highly respected engineering firm.

Further, the Grantee noted that the Town was obligated to implement its restoration plan to eliminate potential liability while the Facility sat unused and in a structurally compromised state. The Grantee advised that its intention through meetings and discussions with the Town was to articulate a SOW change request to FEMA in a way which would allow FEMA to expeditiously approve it.

The Grantee explained that CT DEEP had raised two concerns about the changes. First, it had a concern about the bulkhead which had been constructed after FEMA 4023-DR-CT, which the Town intended to incorporate in the restoration of the Facility under PW 680. Second, CT DEEP was concerned about the restoration's compliance with NFIP standards. The Grantee then explained that following meetings with the Town, the Town removed the bulkhead from the revised SOW revision request which satisfied CT DEEP.

Further, the Grantee advised that the Town's A&E firm and NFIP Coordinator explained that the SOW revision was in full compliance with NFIP standards. This satisfied CT DEEP except for its concern regarding NFIP Technical Bulletin 5. Parenthetically, the Grantee further noted that as to

CT DEEP and the Grantee CRS §25-68b through §25-68h were suspended for projects under FEMA 4087-DR-CT through agreement between CT DEEP and the Grantee.

As to the three issues raised in FEMA's RFI the Grantee responded as follows:

1. *Compliance with the Town's Zoning Regulations and 44 CFR Part 60.* The Grantee, CT DEEP and the Town believed that the project as designed met all requirements, excepting the CT DEEP concern regarding NFIP Technical Bulletin 5.

2. *Compliance with Other Terms and Conditions of the Public Assistance Project Award.* While FEMA did not approve the project revisions prior to the beginning of construction, the Town sought the revisions at issue well before construction varied from that approved in the PW's scope of work. Further, the Facility was severely compromised and remained in that condition for more than 3 years before PW 680 was obligated. During that time the Facility was unusable, subject to additional damage, a hazard to the public, and a liability to the Town. Accordingly, the Town believed that the final design and methodology were prudent, saved costs and complied with all applicable requirements. Accordingly, the Town did not anticipate the time required to obtain FEMA approval.

3. *Environmental and Historical Review.* The Grantee believed that the change in the SOW relates to methodology, with completion of the project resulting in the return of the Facility to its pre-disaster condition at the same location, with the same footprint, capacity and function. Further, the changed methodology represents less of a threat to the surrounding environment than the methodology existing in the original SOW of PW 680. Finally, the State Historic Preservation Officer previously determined that the Facility was neither eligible for inclusion on the National Register of Historic Places nor was a contributing resource, thereby eliminating the need for additional EHP review.

In conclusion the Grantee asserted that the only issue appeared to be whether FEMA believed that the revised SOW was in compliance with NFIP Technical Bulletin 5. If FEMA did not believe that the revised SOW was in compliance with NFIP Technical Bulletin 5, the Grantee requested that FEMA provide specific actions which would bring the design into compliance.

FEMA Disaster Recovery and Floodplain and Insurance Branch Chief Joint Response to Request for Technical Assistance

On 8/9/2016 the FEMA Region I Disaster Recovery Manager and Floodplain Management and Insurance Branch Chief jointly responded to the CT DEEP 6/1/2016 request for technical assistance. (Exhibit 7) The Disaster Recovery Manager and Floodplain Branch Chief advised that the Town may have failed to meet the requirements of 44 CFR 60.3 and may have violated the terms and conditions of the Public Assistance project award. However, FEMA advised that its response did not constitute a final determination, but PW 680 was being placed on hold.

FEMA Floodplain and Insurance Branch Chief Response to Request for Technical Assistance

On 10/17/2017, nearly one year after FEMA's joint response to the Grantee and CT DEEP for technical assistance, the FEMA Floodplain Management and Insurance Branch Chief separately responded to the Grantee and CT DEEP request for technical assistance by declaring that the Town violated the minimum floodplain management criteria under 44 CFR 60.3(e)(5) and Technical Bulletin 5 by creating impermissible obstructions. (Exhibit 11) These included installation of major quantities of fill under and around the Facility, constructing new retaining walls which create an obstruction, and constructing the foundation with a horizontal beam above the natural grade and below the BFE.

However, before undertaking any enforcement the Branch Chief provided 60 days for the Town to submit additional information, including: (1) An explanation of the natural grade before Hurricane Sandy; (2) Why the major quantities of fill would not divert flood waters to adjacent properties and cause damage to the underside of the Facility; and (3) What corrective actions the Town would take to address the violations.

Importantly, the Branch Chief advised that he was not making a final determination but was allowing the Town 60 days in which to provide additional information as to the matters identified above. Additionally, the Branch Chief advised that there could be additional impediments to the project, including failure to obtain FEMA approval before pursuing a change to the SOW, failure to allow FEMA environmental and historic review before moving forward with the change, and failure to obtain a CT DEEP consistency determination.

Fairfield Response to FEMA Floodplain and Insurance Branch Request

On 12/12/2017 the Town responded to the FEMA Floodplain and Insurance Branch request for additional information by submitting the following documents (Exhibit 12):

A. An engineering report by DeStefano-Chamberlain, Design Engineers for the restored Penfield Pavilion, dated 12/1/17. (Exhibit 17)

B. An engineering report by RACE Coastal Engineering, an engineering firm with expertise along the Connecticut Shoreline, dated 12/1/17 (Exhibit 18)

C. Background - A description of the geomorphic characteristics of the area.

D. History of the buildings on the property.

E. A series of captioned historical photos of the buildings and grades over the last 100 years, # 1 – 25

F. A series of USGS Quadrangle Maps form 1920-2016 which illustrate the general land formation, # 1 – 6

G. The following historical mapping:

1. Town of Fairfield Topographic Maps, Sheet 3, 1935, 1"=200'

2. Town of Fairfield Topographic Maps, Sheets C-18 and C-19, April 12, 1968, 1" = 100'

3. Town of Fairfield, April 2004 LiDar, 0.5' contour intervals, 1"=50'

4. April 2006 LiDar, superimposed on 2016 aerial photograph. 0.5' contour intervals, 1"=20'

5. Town of Fairfield Existing Condition Survey, April 2015, 1.0' contour intervals, 1"=40'

6. As- Built Improvement Location Survey, Geskck & Associates, P.C., 12/21/16, 1.0 'contour intervals, 1" = 30'

FEMA Floodplain and Insurance Branch Final Review

On 11/28/2018, the FEMA Region I Floodplain Management and Insurance Branch Chief responded to the 12/12/2017 additional information provided by the Town and a related teleconference. (Exhibit 13) Succinctly, the Branch Chief determined that the Town had not demonstrated that the Facility complied with floodplain management regulations. Specifically, the Branch Chief asserted that the Town placed horizontal grade beams for the Facility above the natural grade and below the base flood elevation in violation of 44 CFR § 60.3(e)(5).

Additionally, the Branch Chief noted that a community must enforce regulations meeting the requirements of 44 CFR § 60.3(e)(5) and take corrective actions to remedy violations. He further advised that failure to do so may result in formal enforcement actions of probation, suspension, Community Rating System retrogrades, or other appropriate actions. However, the Branch Chief additionally noted that in the instant case corrective action would require movement of the horizontal grade beams below natural grade or above the BFE. That he believed would require structural modifications to the completed Facility foundation, which he believed would be unfeasible. Accordingly, he advised that FEMA would be contacting the Town to discuss remedial actions and potential enforcement actions.

FEMA Regional Office Disaster Recovery Determination Pertaining to PW 680

On 11/28/2018, two years and seven months after the Town noticed the Grantee of its changes to the SOW of PW 680, FEMA Region I issued its initial determination relating to PW 680. (Exhibit 14) Succinctly, the FEMA Disaster Recovery Manager determined that PW 680 was ineligible for any FEMA grant assistance.

Specifically, FEMA advised this was due to: (1) The Town pursuing a change to the approved SOW without prior FEMA approval in violation of 44 CFR § 13.30(d); (2) The Town constructing the Facility in a manner violating 44 CFR §§ 60.3(e)(5) and 9.11(d); (3) FEMA's foreclosure from conducting environmental and historic reviews before the work was completed; and (4) the Town's failure to obtain a consistency determination from CT DEEP. The Town thereupon timely submitted its 1st appeal.

FEMA's First Appeal Determination

FEMA's June 20, 2019, 1st appeal determination ratified the de-obligation of $4,340,054.11 under PW 680 for four reasons.

1. The Applicant violated the terms and conditions of PW #680 by pursuing changes in the scope of work without prior approval in violation of 44 C.F.R. § 13.30;

2. The Applicant completed the changes in the scope of work before FEMA fulfilled the specific documentation and procedural requirements of the National Environmental Policy Act and 44 C.F.R. pt. 9;

3. The Applicant constructed the foundation of the new Penfield Pavilion with horizontal grade beams located above the natural grade and below the base flood elevation in violation of the regulations at 44 C.F.R. § 60.3(e)(5) and 44 C.F.R. § 9.11(d)(6); and

4. The Applicant failed to obtain a consistency determination from Connecticut Department of Energy and Environmental Protection as required by the implementing regulations for the Coastal Zone Management Act.

The Town believes that each of these reasons is without merit, as discussed below.

Determination 1 - Violation of 44 C.F.R. § 13.30

FEMA's 1st appeal determination found that Town violated the terms and conditions of PW 680 by pursuing changes in the scope of work without prior approval in violation of 44 C.F.R. § 13.30.

Precisely, the Scope of Work of PW 680 states:

> "Eligible Replacement Costs:
>
> FEMA will restore an eligible facility to its pre-disaster design. Replacement Cost includes the costs for all work necessary to provide a new facility of the same size or design, capacity and function as the damaged facility in accordance with current codes and standards. This includes demolition, disposal, and elevation above new FEMA flood height. . ."

The Town notes that neither the SOW nor FEMA DAP 9524.4 required that the entirety of the Facility be demolished. The statement "To summarize the Scope of Work of the Project: The existing building will be razed and properly disposed of" is not the language of the SOW. It is only the comment of PW 680's Final Reviewer. Further, that statement was mischaracterized in FEMA's 1st appeal analysis as being the actual SOW. (Exhibit 20, Analysis pg. 1)

In the instant case a portion of the Facility was fully removed, another portion was demolished, with the removed portion ultimately returned and elevated and the demolished portion restored. The result was the completed Facility replaced the damaged Facility in the same footprint, with the same capacity and function, and meeting all codes and standards at an elevation above the new FEMA flood height.

Simply stated, the Town's choice to fully remove and return a portion of the Facility to its original footprint was not a change in the SOW to replace the Facility, but merely a change of methodology for construction of the replacement Facility.

It further appears that in denying eligibility FEMA primarily relied upon 44 C.F.R. § 13.30(d)(1), which states:

> "(d) Programmatic changes. Grantees or subgrantees must obtain the prior approval of the awarding agency whenever any of the following actions is anticipated:
>
> (1) Any revision of the scope or objectives of the project (regardless of whether there is an associated budget revision requiring prior approval)."

The Town notes that in its 1st appeal determination, FEMA further asserts that the final repairs to the Facility constituted an *improved project*. Specifically, relying on 44 C.F.R. 206.203(d)(1) and FEMA 322, Public Assistance Guide, at 110-111 (June 2007), FEMA stated:

> "An applicant may decide to make improvements to a facility, pursue a different methodology of construction, or pursue any other work not included in the FEMA-approved scope of work when replacing it under a permanent work project. Such a project is an "improved project," which is a project that restores the predisaster function and at least the same pre-disaster capacity as the damaged facility and incorporates improvements or changes to its pre-disaster design and/or adds additional work beyond the FEMA-eligible scope of work."

As the Town and the Grantee have consistently advised, the changes which are the subject of the instant case were merely changes to the methodology for accomplishment of replacement the Facility in the same location, with the identical footprint, capacity, and function. Importantly, FEMA has mischaracterized the Town's replacement of the Facility as an *improved project* because of a "different methodology of construction" (Exhibit 21, Analysis pg. 10), when, in fact, neither 44 C.F.R. 206.203(d)(1) nor FEMA 322, Public Assistance Guide, at 110-111 (June 2007) include a change of construction methodology as an act resulting in an *improved project*. Moreover, it cannot be overlooked that the Grantee has reviewed the project, does not consider it an improved project, and has no further objection.

Specifically, FEMA's reliance upon FEMA 322, Public Assistance Guide, at 110-111 (June 2007) is simply incorrect. Specifically, the Public Assistance Guide only advises:

> "When performing permanent restoration work on a damaged facility, an applicant may decide to use the opportunity to make improvements to the facility while still restoring its pre-disaster function and at least its pre-disaster capacity."

The Public Assistance Guide makes no mention of a "different methodology of construction" or pursuit of "any other work" not included in the FEMA-approved scope of work under a permanent work project replacement.

Further, 44 C.F.R. §206.203(d)(1) only mentions that:

> "If a subgrantee make improvements, but still restore the predisaster function of a damaged facility, the Grantee's approval must be obtained. Federal funding for

such improved projects shall be limited the Federal share of the approved estimate of eligible costs."

Thus, FEMA's reliance upon 44 C.F.R. §206.203(d)(1) is also incorrect as it provides no definition of an improved project or mention of a "different methodology of construction". Again, it cannot be overlooked that the Grantee has reviewed the project, does not consider it an *improved project*, and has no further objection.

Moreover, 44 C.F.R. § 13.30(c)(2) advises:

"(c)(2) Construction projects. Grantees and subgrantees shall obtain prior written approval for any budget revision which would result in the need for additional funds."

The Town notes that while the replacement of the Facility was a construction project, the change of methodology resulted in a cost reduction, not an increase to the cost of the replacement as originally approved. Thus, 44 C.F.R. § 13.30(c)(2) does not apply.

As both the Town and Grantee repeatedly advised, there was no change to the scope of work. The revisions retained the scope and objective of the project which was replacement of the Facility within the original footprint, precisely retaining the same function and capacity. Thus, there was no violation of 44 C.F.R. § 13.30 since, unlike an improved project there was no change in the scope or objective of the original approved project.

Additionally, the Town notes that 44 C.F.R. § 13.30(a) advises that: "(a) General. . .unless waived by the awarding agency, certain types of post-award changes in budgets and projects shall require the prior written approval of the awarding agency." Thus, even if the scope or objective of the original approved project had been changed, FEMA had the ability to waive the requirement of prior approval, particularly since it was apprised of the revised methodology.

Specifically, it took FEMA, two years and seven months after the Town noticed the Grantee and FEMA of its changes to the methodology for completing the SOW of PW 680, for FEMA Region I to issue its determination relating to PW 680, relying on the fact that construction had begun before FEMA issued its approval of the changed methodology. (Exhibit 14). During FEMA's delay the Town could wait no longer and initiated construction to protect the safety of the public and overcome the significant adverse economic effect resulting from the inability to use the Facility.

Notwithstanding FEMA's 1st appeal determination advised that the Town could have requested security fencing assistance from FEMA to protect the public, that would not have overcome the enormous adverse economic effect resulting from the Town's inability to use the Facility. Most importantly, if the beginning of construction was of such importance to FEMA it could have acted quickly to assist the Town. It did not, but instead chose to deny assistance, incorrectly relying in part that the Town failed to apprise FEMA of the change of methodology to the original scope of work of PW 680 before beginning construction.

Thus, relative to FEMA's assertion that the Town's failure to obtain approval for its change of methodology relating to completing the scope of work of PW 680 violates 44 C.F.R. § 13.30, FEMA's 1st appeal determination is simply incorrect. The Town's methodology request did not pertain to construction which would result in an increase of cost and therefore FEMA approval

was not required under 44 C.F.R. § 13.30(c). Further, there was no violation of 44 C.F.R. § 13.30(d)(1) as there was no change to the scope of work. The revisions retained the scope and objective of the project which was replacement of the Facility within the original footprint, precisely retaining the same function and capacity.

Accordingly, there was no violation of the requirements of 44 C.F.R. § 13.30. Based upon this and FEMA's avoidable delays, the Town asserts that FEMA's determination that the project is ineligible for grant assistance under the notice requirements of 44 C.F.R. § 13.30 is without merit.

Determination 2 - National Environmental Policy Act and 44 C.F.R. pt. 9 Interference

National Environmental Policy Act

Relative to the National Environmental Policy Act (NEPA) FEMA's 1st appeal determination advised that:

> "NEPA is a federal environmental law that FEMA must comply with when making Public Assistance project awards. The law requires FEMA to follow a specific planning process to ensure that it has considered and the general public is fully informed about the consequences of a proposed federal action, such as the approval of a permanent work project under the Public Assistance grant for a major disaster. NEPA does not require that FEMA limit the impacts of a project on the environment nor require FEMA to only fund the alternative that has the least environmental impact—it does, however, require that FEMA make the decision to fund a project in an informed manner."

FEMA further points out that of the four levels of a NEPA review two are exclusions. One is a statutory exclusion (STATEX), the other is a categorical exclusion (CATEX). A STATEX requires no NEPA review. A CATEX includes actions that can be categorically excluded from further review because they do not individually or cumulatively have significant impact on the human environment.

In its 1st appeal the Town noted that a CATEX existed in original PW 680, meaning that no NEPA review was required. In its 1st appeal determination, FEMA noted that as of August 26, 2016, it no longer uses 44 C.F.R. pt. 10 or any of the CATEXs previously listed in that regulation. FEMA now evaluates new projects and scope change requests using the CATEXs listed in Appendix A of DHS Instruction Manual No. 023-01-001-01, Rev. 1, Implementation of the National Environmental Policy Act.

FEMA's 1st appeal determination thereupon explained,

> "DHS Instruction Manual No. 023-01-001-01 sets forth a specific CATEX for a Public Assistance project involving actions in coastal areas subject to moderate wave action or V Zones.91 This CATEX, numbered "N5," addresses federal assistance for repair, hazard mitigation, new construction, or restoration actions of less than one-half acre within areas seaward of the limit of moderate wave action (LiMWA) (a line mapped to delineate the inland extent of wave heights of 1.5 feet or higher) during the base flood (an area that has at least a one-percent chance of

being flooded in any given year); or areas within the V zone if the LiMWA has not been established. In order to fall within the CATEX, the actions must meet the following criteria:

(1) They are consistent with the State or Tribe enforceable policies of approved coastal management programs;

(2) They are not within or affect a Coastal Barrier Resource System unit;

(3) They do not result in man-made alterations of sand dunes;

(4) They do not result in the permanent removal of vegetation (including mangrove stands, wetlands, and dune vegetation);

(5) Applicable Federal requirements and local codes and standards are followed; and

(6) They involve substantial improvement or new construction of structures, the structure is elevated in open works (e.g., piles and columns) as opposed to fill in a manner that the bottom lowest horizontal structural member is at or above the base flood level, the foundation is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads, and the siting of the project conforms to applicable State, Tribe, or local setback requirements." (Exhibit 20, pgs. 24 – 25)

Based upon the revisions to the CATEXs utilized at the time PW 680 was formulated, FEMA's 1st appeal held that the current replacement CATEX is CATEX N5, and the work completed by the Applicant fails to meet the criteria of that CATEX thereby requiring FEMA to prepare either an environmental assessment or an environmental impact statement, as appropriate.

First, the Town notes that the revisions to the CATEXs did not take place for approximately four (4) months following FEMA's receipt of the Town's initial notice of a modification to PW 680 and two (2) months following the minor revision to its noticed change. Accordingly, the Town believes that if FEMA had promptly acted, discussion of CATEXs would not be an issue. The original CATEX would still have governed.

Further, even with the existence of a new CATEX, the original SOW (replacement of the Facility) was not changed. Specifically, the Town was not pursuing an Improved Project without the prior approval of the Grantee; and the footprint, function, and capacity of the original PW 680 was unmodified. Thus, the original CATEX remained applicable.

Second, following discussion with the State, the Town asserts that a STATEX should apply to PW 680 and its two revisions. Specifically, Sec. 316 of the Stafford Act NEPA review, preparation of environmental impact statements and environmental assessments are not required in certain instances. The statute states:

"Sec. 316. Protection of Environment (42 U.S.C. 5159)An action which is taken or assistance which is provided pursuant to section 5170a, 5170b, 5172, 5173, or 5192 of this title [Section 402, 403, 406, 407, or 502], including such assistance provided pursuant to the procedures provided for in section 5189 of

> this title [Section 422], which has the effect of restoring a facility substantially to its condition prior to the disaster or emergency, shall not be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969 (83 Stat. 852) [42 U.S.C. §4321 et seq.]. Nothing in this section shall alter or affect the applicability of the National Environmental Policy Act of 1969 [42 U.S.C. §4321 et seq.] to other Federal actions taken under this Act or under any other provisions of law."

In the instant case there is no doubt that the Facility under PW 680, including the final revision was being restored to substantially its condition prior to the disaster. Therefore, relating to FEMA Section 406 grant assistance, the restoration is not a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act and NEPA review is not required. Specifically, FEMA states on its website:

> ***"The following actions are statutorily excluded from NEPA and the preparation of environmental impact statements and environmental assessments by section 316 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, 42 U.S.C. 5159; . . .***
>
> 2. Action taken or assistance provided under section 406 of the Stafford Act that has the effect of restoring facilities as they existed before a major disaster or emergency.
>
> Actions falling within the bounds of these statutory exclusions are exempt from NEPA, including all NEPA review and documentation. *These actions must, however, still comply with all applicable environmental laws and Executive Orders.*
>
> For section 406, repair, restoration, reconstruction or replacement of a facility damaged or destroyed. These 406 funded activities must take place on the same site as the damaged facility and conform substantially to the pre-existing condition. Also, the proposed facility must conform substantially to the pre-existing footprint and location on the site of the pre-existing damaged facility. Alternate or improved projects not meeting the above criteria do not fall within the STATEX, and require NEPA review." (https://www.fema.gov/fema-statutory-exclusions)

This is precisely the case at issue. The damaged Penfield Pavilion was replaced within the per-existing footprint and location on the site of the pre-existing damaged facility. Accordingly, under Section 316 of the Stafford Act, as amended, no further NEPA review is required. Accordingly, the statutory language contradicts FEMA's determination in that the project at issue falls within a "section 406, repair; restoration, reconstruction or replacement of a facility" and "take(s) place on the same site as the damaged facility and conform(s) substantially to the pre-existing footprint and location on the site of the pre-existing damaged facility." Further, as explained above the project is not an *improved project.*

Accordingly, the Town asserts that both a STATEX clearly applies to the project at issue, and the prior CATEX should not have been deemed inapplicable by FEMA. In either case the project at issue does not require a NEPA review, preparation of an environmental impact statement, or an environmental assessment, and FEMA's determination to the contrary is without merit.

Additionally, the Town invites attention to the fact that both the State Historic Preservation Officer and FEMA concurred that the project presented no historic preservation issue. (Exhibit #24)

Floodplain Management

FEMA's 1st appeal determination noted that under Executive Order 11988:

> "(e)ach federal agency is directed to use a decision-making process to evaluate the potential effects of projects located in or affecting the floodplain and consider alternatives to avoid adverse effects. Pursuant to this direction, FEMA has adopted implementing regulations at 44 C.F.R. pt. 9, Floodplain Management and Protection of Wetlands to set forth the policy, procedures, and responsibilities to implement and enforce the Executive Order." (Exhibit 20, pg. 21)

FEMA explained that it conducted an original review under 44 C.F.R. pt. 9 based on the scope of work in PW #680, which involved the replacement of the Pavilion. FEMA then explained that because the Town revised the scope of work by not demolishing the West Wing and moving it into the parking lot, re-grading the parking lot through the placement of road millings and use of fill, constructing a new patio, and placing large amounts of fill at the project site, those changes warranted a new review under 44 C.F.R. pt. 9, which FEMA did not complete before the Town initiated the changes. FEMA therefore deemed the project ineligible for financial assistance because FEMA did not complete its floodplain management review to comply with Executive Order 11988 and 44 C.F.R. pt. 9. Therefore, FEMA disallowed all costs under 44 C.F.R. § 13.43.

FEMA's 1st appeal determination further noted that if it had been able to conduct a review under 44 C.F.R. pt. 9, it would not have allowed the Town to pursue its revised scope of work because 44 C.F.R. § 9.11(d)(6) prohibits FEMA from providing financial assistance for permanent work if it is constructed in violation of the NFIP. FEMA thus advised that the Pavilion violates the free-of-obstruction prohibition under 44 C.F.R. § 60.3(e)(5), causing the facility to be inconsistent with the criteria of" the NFIP and violative of 44 C.F.R. § 9.11(d)(6). FEMA's 1st appeal determination also noted that because the Pavilion violated Executive Order 11988 and the NFIP it also violated Section 323 of the Stafford Act and its implementing regulations relating to applicable standards of safety, decency, and sanitation.

In response, the Town first notes that an alleged violation of Section 323 of the Stafford Act is a determination which did not appear in FEMA's initial determination and therefore possibly represents a fundamental new issue warranting a new 1st appeal.

Relative to FEMA's 1st appeal determination relating to Executive Order 11988 and 44 C.F.R. pt. 9, as with FEMA's initial determination, it ignores the simple facts of the instant case. First, compliance with the minimization standards of pt. 9 had to be approved by FEMA <u>prior</u> to its obligation of the original PW 680. Second, the change to PW 680 as originally formulated was insignificant with respect to FEMA's compliance review under pt. 9. It was merely a modification to the replacement technique of the original SOW.

Specifically, the change to the SOW at issue simply related to the methodology for replacement of the Facility which had already been approved under PW 680, with completion of the project resulting in the return of the Facility to its pre-disaster condition at the same location, with exactly the same footprint, capacity and function.

Accordingly, the changes implemented under PW 680 altered none of the conditions or outcomes which could affect FEMA's pt. 9 minimization determination of the original SOW. Thus, there was no basis to deny eligibility of the project relating to the minimization requirements of 44 C.F.R. pt. 9. For the above reasons the Town asserts that it was incorrect for FEMA to assert a violation of the minimization standards of 44 C.F.R. Part 9 as a reason for denying FEMA grant assistance for the SOW modification of PW 680.

Lastly, as noted above, FEMA's 1st appeal determination advised:

> "It is also important to recognize that—had FEMA performed its review under 44 C.F.R. pt. 9 before the Applicant commenced the scope changes—FEMA would have not allowed the Applicant to pursue its revised scope of work. This is because the regulation at 44 C.F.R. § 9.11(d)(6) prohibits FEMA from providing financial assistance for a permanent work project if it is constructed in a manner violative of the criteria of the NFIP. As detailed in the previous section, the Pavilion violates the free-of-obstruction prohibition under 44 C.F.R. § 60.3(e)(5), which means that the facility is "inconsistent with the criteria of" the NFIP and violates the regulation at 44 C.F.R. § 9.11(d)(6)." (FEMA 1st appeal determination, pg. 23)

Effectively, this portion of FEMA's 1st appeal determination nullifies FEMA's assertion that it was denied the ability to review the Town's changes to the methodology for accomplishing the SOW for PW 680 prior to completion of those changes. By its own admission, FEMA ultimately reviewed the changes at issue and determined (although incorrectly) they breached the criteria of NFIP by violating the free-of-obstruction prohibition of 44 C.F.R. § 60.3(e)(5). Because FEMA was not denied the ability to make a review resulting in a determination relating to an NFIP violation making the project ineligible, the timeliness of such a review under 44 C.F.R. pt. 9 can no longer be an eligibility issue.

Determination 3 - Violations of 44 C.F.R. § 60.3(e)(5) and 44 C.F.R. § 9.11(d)(6)

As FEMA advised on pg. 14 of its 1st appeal determination, the Town is a participating community in the National Flood Insurance Program (NFIP) and has adopted zoning regulations making 44 C.F.R. § 60.3(e)(5) applicable. 44 C.F.R. § 60.3(e)(5) states that among the minimum required standards a participating community shall:

> "(5) Provide that all new construction and substantial improvements within Zones...VE...on the community's FIRM 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 . . . "

FEMA's 1st appeal determination explained that the "free of obstruction" requirement of 44 C.F.R. § 60.3(e)(5) is governed by FEMA's Technical Bulletin 5. Specifically, FEMA advised that:

> "Technical Bulletin #5 recognizes that any construction or development practice below the BFE (such as piles and columns allowed under the NFIP) will comprise an obstruction and that it is not always clear whether a particular building element or site development practice will be a significant obstruction that prevents the free passage of floodwater and waves. In light of this lack of clarity, Technical Bulletin #5 provides various guidance regarding common building elements that may significantly affect the free passage of flood flow and waves under elevated buildings" (Exhibit 20, pgs. 14 – 15)

As FEMA further explained:

> "One of the below building elements that Technical Bulletin #5 specifically addresses is horizontal grade beams that are not part of the lowest floor. Technical Bulletin #5 states that horizontal grade beams that are placed with their upper surfaces flush with or below the natural grade are not considered obstructions and are allowed under the NFIP. After making this very limited exception, Technical Bulletin #5 makes no allowance for the placement of horizontal grade beams above the natural grade and below the BFE." (Exhibit 20, pg. 15)

Thereafter, FEMA defined a "natural grade" of a location as:

> ". . . the grade unaffected by construction techniques such as fill, landscaping, or berming. As a FIRM does not identify the elevation of the natural grade, determining the natural grade for a specific location requires the analysis of site-specific topographical data, any available contour maps, light detection and ranging ("LIDAR") data, field observations of surrounding topography, photographs, and other available data." (Exhibit 20, pg. 15)

Succinctly, the regulation at issue, 44 C.F.R. 60.3(e)(5), contemplates that new construction of a facility, or a substantial improvement to a facility as defined by FEMA, within a V Zone shall be elevated. That elevation shall have the lowest horizontal structure of the lowest floor of the facility at or above the Base Flood Elevation (BFE). Further, between the lowest horizontal structure of the lowest floor and the ground below there shall be no obstructions, excepting for 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. In most cases the ground level below the building to be elevated is the natural grade. However, that is not the situation in the instant case, since the ground below the Facility was reduced by construction, which FEMA acknowledges is an activity which affects the natural grade.

While FEMA advises that Technical Bulletin 5 advises that unless the placement of a horizontal grade beam is flush with or below the natural grade, it is a violation of 44 C.F.R. 60.3(e)(5), that interpretation of Technical Bulletin 5 is clearly wrong in the instant case.

Specifically, FEMA's 1st appeal determination advised that the natural grade at the Facility's location ranged between 8.0' and 9.0' NAVD 1988 and the Town placed horizontal grade beams

at 10.7' NAVD 1988. The lowest floor of the Facility was at the Base Flood Elevation (BFE) of 13.0' NAVD 1988 and the horizontal grade beams were therefore below the BFE. Thus, applying its interpretation of the guidance of Technical Bulletin 5, FEMA incorrectly determined that the horizontal grade beams, being above FEMA's determination of the natural grade and below the BFE resulted in the horizontal grade beams being an impermissible obstruction under 44 C.F.R. § 60.3(e)(5), thereby precluding financial assistance under 44 C.F.R. 9.11(d)(6); notwithstanding that the horizontal grade beams were below additional fill which the Town asserts restored the actual natural grade below the Facility.

Moreover, as discussed below, a proper interpretation of Technical Bulletin 5 would also recognize that the Facility's horizontal grade beams which have a 2' vertical clearance below the BFE do not constitute an obstruction in violation of 44 C.F.R. § 60.3(e)(5).

The Town disputes both FEMA's belief that the "natural grade" was 8.0' – 9.0' NAVD 1988 and that Technical Bulletin 5 completely disallows every instance of a horizontal beam being placed above the natural grade and below the BFE.

Horizontal Grade Beams

Focusing on the placement of horizontal grade beams, Technical Bulletin 5 merely provides guidance on the minimum requirements of the NFIP regulations. It is neither a regulation, nor meant to supplant the professional expertise of licensed design professionals. In its 1st appeal determination FEMA concurred that Technical Bulletin 5 is not a regulation and does not have the force and effect of law. Nonetheless, FEMA asserted that 44 C.F.R. § 60.3(e)(5) is a regulation which prohibits all obstructions such as horizontal grade beams below the lowest floor for substantial improvements in a VE Zone, with Technical Bulletin 5 merely explaining that this prohibition would not apply to horizontal grade beams below the natural grade. (Exhibit 20, pgs. 14 – 15)

FEMA also asserts that Technical Bulletin 5 requires placement of horizontal grade beams flush with the natural grade to protect the beams from unnecessary stress during flooding incidents. (Exhibit 20, pg.20) However, DeStefano & Chamberlain furnished engineering reports, without contention, that the free flow of flood water would not be restricted, and the building and its foundations would safely sustain the flood flows, pressures, impacts, velocities, and uplift forces associated with a Base Flood, as well as the effects of scour and erosion. (Exhibit 16, pg.1)

Importantly, the Town's other licensed engineering firm, Race Engineering advised:

> "RACE performed coastal engineering analyses using methodologies outlined in FEMA's Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update (February 2007), the U.S. Army Corps of Engineers ("USACE") Coastal Engineering Manual (April 2002), and the USACE's Shore Protection Manual (1984). These analyses incorporated the use of numerical coastal hydraulic models developed by FEMA and the USACE. As part of this effort, the grade beam elements of the building were reviewed to determine if they would divert water to adjacent properties or cause damage to the Pavilion structure. . .

It is the opinion of RACE, that if the building has been designed to be stable accounting for the loads and scour depths discussed above then the fill, grade beam and retaining wall under the building will not divert water to adjacent properties and will not cause damage to the underside of the Pavilion structure during flood events. As such, these elements should not be considered "significant" obstructions and are consistent with the floodplain management criteria of 44 C.F.R. 60.3(e)(5).

The stability of the building and structural capacity to resist the loads and scour was analyzed by DeStefano & Chamberlain, Inc. Mr. Kevin H. Chamberlain, P.E. in his December 1, 2017 letter to Mr. Joseph Michelangelo, P.E., with the subject, RE: Penfield Pavilion – Repair and Reconstruction 323 Fairfield Beach Road, Fairfield, CT states:

> "We have performed structural calculations to verify that the grade beams can resist these loads in combination with hydrostatic pressure, wind, and gravity loads. We can certify that the foundation system can safely resist flood depths, pressures, velocities, impact, and uplift forces associated with the Base Flood in the VE 13' Zone based on these calculated pressures." (Exhibit 19, pgs. 3 and 4)

Thus, FEMA's 1st appeal determination contention that unless the Facility's horizontal grade beams are placed flush with or below the natural grade, they will be subjected to unacceptable stress is simply incorrect. Again, this FEMA assertion was not made by a licensed engineer. The Town's response to this assertion was made by licensed professional engineers.

The Town does not contest that Technical Bulletin 5 removes horizontal grade beams which lie no higher than the upper level of the natural grade from any discussion of whether they constitute a prohibited obstruction. However, the Town disputes FEMA's interpretation of Technical Bulletin 5 as making <u>any</u> horizontal grade beam which lies above the natural grade a prohibited obstruction.

Precisely, the Town asserts the proper interpretation of Technical Bulletin 5's reference to a horizontal grade beam placed so its upper surface is flush with or below the natural grade is merely a starting point. If the intention was to prohibit placement of all horizontal grade beams above the natural grade it would have stated such. It did not. Thus, it left the issue of whether a horizontal grade beam placed above the natural grade was an obstruction to be determined on a case-by-case basis. There can be no other reasonable interpretation of Technical Bulletin 5's reference to the placement of horizontal grade beams.

Ignoring for the moment whether the natural grade was 8.0' – 9.0' NAVD 1988 or 10.0' – 11.0' NAVD 1988, the Town asserts that the placement of the horizontal grade beams in the instant case was not violative of 44 C.F.R. § 60.3(e)(5). Specifically, the placement of the horizontal grade beams below the upper level of the revised grade, left a space of 2 feet between the upper level of the grade and the floor of the Facility located at the BFE. As Technical Service Bulletin 5, pg. 24, advises, "There are no established rules as to what constitutes acceptable vertical clearance but, for floodplain management purposes, a vertical clearance of 2 feet is considered adequate in most cases." Thus, relying on the specific language of Technical Bulletin 5, the horizontal grade

beams in the instant case do not constitute obstructions in violation of 44 C.F.R. § 60.3(e)(5) and therefore do not prohibit FEMA from providing financial assistance under 44 C.F.R. 9.11(d)(6).

Moreover, based upon the analysis of licensed engineers, the Town's placement of the Facility's horizontal grade beams above what FEMA considers to be the natural grade does not expose those beams to unacceptable stress.

Natural Grade

Notwithstanding that the Facility's horizontal grade beams do not constitute obstructions in violation of 44 C.F.R. § 60.3(e)(5), the Town again asserts that the natural grade under the Facility was 11.0' NAVD 1988, not 8.0' – 9.0' NAVD 1988 as claimed by FEMA. Thus, the Town contends that the placement of the horizontal grade beams below 11.0' NAVD 1988 conformed to the clearly safe placement of horizontal grade beams described in Technical Bulletin 5. This, by itself, negates further discussion of whether there is a violation of 44 CFR 60.3(e).

The issue regarding natural grade is simply whether it is 8.0' – 9.0' NAVD 1988 as asserted by FEMA, or 10.0' – 11.0' NAVD 1988 as asserted by the Town's licensed professional engineers. FEMA's assertion relies on pre-event (Hurricane Sandy) grades on the property, using recent topographic surveys. The Town concluded natural grade elevation varied between 10 and 11 NAVD based on adjacent dune crests.

FEMA's 1st appeal determination advises that ". . . determining the natural grade for a specific location (such as the site of the Penfield Pavilion) requires the analysis of site specific topographical data, any available contour maps, light detection and ranging ("LIDAR") data, field observations of surrounding topography, photographs, and other available data." As the Town explained in its 1st appeal, based upon the opinion of its licensed professional engineers (See Exhibit 16) this methodology is inherently illogical, and technically unsound. As DeStefano and Chamberlain, the Town's experienced licensed professional engineer, states:

> "The Penfield Site is a beach. It is a dynamic landform. It is inaccurate and misleading to use modern topographic maps of a site that has long been disturbed, developed, modified, regraded, scoured, replenished, and covered over with buildings for 100 years. Such an analysis paints a false picture of what the natural conditions are." (Exhibit 16, pg. 2)

The Penfield Site is clearly an active landform. FEMA's reliance upon only current topographical data to determine the natural grade is unsound and incorrect. Thus, it cannot be overlooked that FEMA's Guidance for Flood Risk Analysis and Mapping, MT-1 Technical Guidance, Section 5, pgs. 35 – 36, that for Letter of Map Amendments there are several categories of submissions where LiDAR cannot be used because it cannot be depended upon. This specifically, includes requests involving Coastal High Hazard Areas (Zones V, VE, or V1-V30) or involving fill. Succinctly, the natural grade at issue is located in a VE Zone and therefore the LiDAR based topographical data upon which FEMA solely relies in its 1st appeal determination is unreliable.

FEMA's 1st appeal determination relative to this issue relates to a VE Zone and the fact that the horizontal grade beams at issue were placed below the height of fill added by the Town to restore

the historic natural grade above the natural grade declared by FEMA. Specifically, FEMA's 1st appeal determination asserts that the Town's submissions (including the historical photographs of the buildings at the site and grades over the past 100 years, U.S. Geological Service ("USGS") quadrangle maps from 1920-2016 to illustrate the general land formation, other historic mapping products, and separate engineering reports prepared by DeStefano-Chamberlain and Race Coastal Engineering) did not establish with certainty the natural grade claimed by the Town and its professional engineers. However, the Town asserts that its methodology for determining the natural grade is clearly far more dependable than FEMA's methodology for determining the natural grade which relies primarily upon LiDAR mapping.

Importantly, Technical Bulletin 5 does not require that to determine natural grade the grades and slopes in the immediate vicinity need be connected as a continuous dune, only that they be in the immediate vicinity. Nonetheless, the Town has included a series of recent drone photographs evidencing that a continuous dune does exist and confirming the 2007 – 2010 demolition and construction of the previous building reduced the grade heights from 10.0' – 11.0' NAVD to 8.0' - 9/0' NAVD below the Facility. (Exhibit 21)

Importantly, FEMA's methodology never took into consideration the fact that when the building was demolished and replaced by new construction (2007 – 2010), the grade under the building was lowered to 8.0' NAVD to allow for the floor construction of the building, which had a finish floor elevation of 10.9' NAVD. Thus, the grade elevation 8.0' – 9.0' NAVD under the pre-Sandy building was not the natural grade elevation of this portion of the site. The natural grade would have been the continuous dune with crest elevation 10.0' – 11.0' NAVD. The current project at issue filled in the breach in the dune consistent with the DeStefano and Chamberlain assertion that:

> "... the dune crest elevation at the two ends of the building can be seen to be as 10.0' and 11.0' NAVD. Based upon the photographs, the LiDAR and the as built survey, it is our opinion that it is reasonable and logical to infer that this crest elevation would have continued across the entire length of the site in the property's natural state." (Exhibit 17, pg. 2)

This is fully confirmed by the drone photos of Exhibit 21

Moreover, Technical Bulletin 5, pages 21 and 22, advises:

> "If additional fill is proposed for a site, the proposed final grade should be compared to the local topography. If the proposed final fill is similar to grades and slopes in the immediate vicinity, a detailed analysis of the effects on flood flow and waves need not be required. If more than 2 feet of fill is proposed and the proposed fill exceeds local grade heights and variations an analysis must be performed."

The fill at issue was correctly used to increase height to similar grades and slopes in the immediate vicinity. Further, relative to merely raising the grade elevation 2', Technical Bulletin 5,

pg. 22, advises that a detailed analysis of the effects on flood flow and waves is not required. Moreover, Technical Bulletin 5, pg. 23, does not require an analysis if the addition of more than 2' of fill does not exceed local grade heights and variations. Notwithstanding the amount of fill in this case did not exceed local grade heights and variations, a favorable analysis was nonetheless performed by the Town's coastal consultant, Race Coastal Engineering confirming tolerability. (Exhibit 18)

Explicitly, the grade elevation under the pre-Sandy building was not the natural grade elevation of the site at issue. As DeStefano & Chamberlain point out, when the "old" building was demolished and replaced by new construction (2007 -2010) the grade under the building was lowered to 8.0' NAVD to allow for the floor construction of the building, which had a finish floor elevation of 10.9' NAVD. However, the natural grade would have been the continuous dune with crest elevation 11.0' NAVD.

Thus, when Penfield Pavilion was constructed in 2008-2010 the building was elevated to the then current FEMA AE 12 elevation, which created a large unobstructed opening between the finished grade and the bottom of the building. In the process the dune was excavated to construct the new facility's foundation system. This sand was not replaced, potentially exposing the neighborhood to flooding from Long Island Sound. However, the placement of additional sand upon the excavated dune under the revised SOW of PW 680 effectively mirrored the site conditions existing prior to the 2008-2010 construction of the pavilion. Therefore, the current Penfield project merely filled in the breach in the dune caused by prior development of the site and the effects of Superstorm Sandy and restored the natural grade to 10.0' – 11.0' NAVD. (See Exhibit 16)

Based upon the fact that the grade elevation under the pre-Sandy building was not the natural grade elevation of that portion of the site, FEMA's assertion that the addition of fill below the Facility left the natural grade elevation of between 8.0' and 9.0' NAVD 1988 unchanged is simply incorrect. The correct explanation is that of the Town's Connecticut professional licensed engineer that the 8' grade elevation under the pre-Sandy building was not the natural grade, but the natural grade was a prior continuous dune with an elevation of 10.0 – 11.0' NAVD. (Exhibit 16, pg. 2)

Accordingly, FEMA's 1st appeal determination is incorrect because it failed to recognize or consider that the natural grade below the Facility had been deliberately reduced by construction when the Facility was first built. The SOW modification merely increased the grade below the Facility to the original natural grade. This is not prohibited by Technical Bulletin 5 and FEMA is clearly wrong to assert otherwise.

For the above reasons, the horizontal grade beams in the instant case do not constitute obstructions in violation of 44 C.F.R. § 60.3(e)(5) and therefore do not prohibit FEMA from providing financial assistance under 44 C.F.R. 9.11(d)(6).

Lastly, the Town notes that FEMA advises in its 1st appeal analysis that it believes the fill used to restore the original natural grade, was instead used to serve as a flood control measure to protect landward properties against flooding, which FEMA asserts is prohibited in a V Zone. (Exhibit 20, Analysis pg. 19). The Town again asserts that the fill was used to restore the natural grade, and any ensuing flood protection for surrounding properties was merely a latent beneficial outcome.

Unlike a levy or a dam, it was not a flood control measure. Further, the Town notes that this is the first time that FEMA has stated that this activity was a prohibited flood control measure. Accordingly, the Town believes that if FEMA chooses to pursue this, it would be a fundamental new issue subject to a new 1st appeal.

Conclusions Relating to 44 C.F.R. § 60.3(e)(5) and 44 C.F.R. § 9.11(d)(6)

First, as examined above, Technical Bulletin 5 does not specifically prohibit placing a horizontal grade beam above the natural grade; provided there is not an obstruction created which would violate 44 C.F.R. § 60.3(e)(5). In the instant case the placement of the horizontal grade beams below the upper level of the revised grade, left a space of 2 feet between the upper level of the grade and the bottom of the lowest structural member of the floor of the Facility located at the BFE. This complies with Technical Bulletin 5 which advises that a vertical clearance of 2 feet is adequate to avoid obstruction. Thus, relying on the specific language of Technical Bulletin 5, the horizontal grade beams in the instant case do not constitute an obstruction in violation of 44 C.F.R. § 60.3(e)(5), regardless of whether the natural grade is 8.0' – 9.0' NAVD or 10.0' – 11.0' NAVD, and therefore do not prohibit FEMA from providing financial assistance under 44 C.F.R. 9.11(d)(6). Moreover, based upon the analyses of licensed professional engineers, the current placement of the Facility's horizontal grade beams does not subject them to excessive stress.

Second, ignoring the fact that the 2' vertical clearance relating to the Facility's horizontal grade beams do not constitute an obstruction under 44 C.F.R. § 60.3(e)(5), the placement of the horizontal grade beams flush with or below the natural grade of 10.0' – 11.0' NAVD are also excluded under Technical Bulletin 5 as being an obstruction in violation of 44 C.F.R. § 60.3(e)(5).

Specifically, the Town's assertion, based upon the guidance of its professional engineers, that the proper natural grade is 10.0' – 11.0' NAVD is far more credible than FEMA's belief that the natural grade is 8.0' – 9.0' NAVD. Specifically, FEMA defines "natural grade" as "the grade unaffected by construction techniques such as fill, landscaping, or berming." (Exhibit 20, pg. 15) In the instant case what FEMA claims is the natural grade was specifically the result of construction. Thus, the Town's submissions regarding what constitutes the natural grade are far more credible than FEMA's assertion. Therefore, the placement of the horizontal grade beams flush or below the natural grade, as defined by the Town, do not result in obstructions in violation of 44 C.F.R. § 60.3(e)(5) per Technical Bulletin 5 and therefore do not prohibit FEMA from providing financial assistance under 44 C.F.R. 9.11(d)(6).

Finally, as explained above, the restoration of the natural to the 10.0' – 11.0' NAVD is not a prohibited flood control measure.

Importantly, the Town's arguments are supported by the Town's Connecticut licensed, professional engineers who routinely work with these matters. Further, it appears that FEMA, to date, has engaged no professional engineering support for its determinations.

Determination 4 - Failure to Obtain a Consistency Determination from Connecticut Department of Energy and Environmental Protection as Required Under the Coastal Zone Management Act

FEMA's 1st appeal determination (Exhibit 20) held:

> "The Applicant commenced and completed its replacement of the Pavilion without ever obtaining a coastal zone consistency determination approval from CTDEEP, such that the Applicant has violated the term and condition of PW #680 specifically requiring the Applicant to do so."

As a result, FEMA advised:

> "The DRM, therefore, took a permissible enforcement action under 44 C.F.R. § 13.43 to terminate PW #680 and disallow all costs."

Importantly, PW 680 stated:

> "The applicant is responsible for coordinating with and obtaining any required permit(s) from the Connecticut Department of Energy and Environmental Protection Office of Long Island Sound Program (800-424-3034) prior to initiating work. The Applicant shall comply with all conditions of required permits. All coordination pertaining to these activities and applicant compliant compliance with any condition should be documented and copies forwarded to the state and FEMA for inclusion in the permanent project files." (Exhibit 1, pg. 25)

Relative to the enforcement action, 44 C.F.R. § 13.43 provides a plethora of enforcement remedies, including: "Temporarily withhold cash payments pending correction of the deficiency by the grantee or subgrantee. . ." (44 C.F.R. § 13.43(a)(1)) In the instant case, notwithstanding that the Town has sought a consistency determination from CT DEEP, that agency has advised that it does not have a responsibility to issue such. Moreover, the Town Plan and Zoning Commission has approved the project, which is submitted herewith as Exhibit 22. Thus, consistent with PW 680, the Town has provided all available permits and FEMA's imposition of this penalty disallowing all FEMA grant assistance seemingly confirms that FEMA intended to unfairly punish the Town.

However, there is a more important issue regarding this portion of FEMA's 1st appeal determination. That is, that CT DEEP had no regulatory role in providing a consistency determination in the instant case. This was a fact acknowledged by FEMA in the footnotes to its First Appeal Analysis, notwithstanding the FEMA 1st appeal determination was contradictory to CT DEEP's asserted regulatory prohibition. (Exhibit 20, Analysis, pg. 29, footnote 114)

As the facts indicate, the Town contacted CT DEEP because the Town had applied to the Connecticut Department of Housing (DOH) for Sandy CDGB-DR funds to be used towards the replacement project. This triggered a CT DEEP review of the project for a Flood Management Certification (FMC), a state permit required when state funds are utilized for a project located in a 100-year floodplain. CT DEEP visited the site on 3/1/2016. The CT DEEP Office of Long Island Sound Programs (OLISP) determined that between Tropical Storm Irene and Superstorm Sandy the Town had installed a bulkhead in front of the Pavilion and rip-rap revetment without the requisite Coastal Site Plan Review and referral to CT DEEP OLISP for comment. Following discussions with CT DEEP the Town chose to not include the bulkhead or rip-rap revetment in the replacement of the Pavilion and to not pursue state funding through the Connecticut DOH.

These determinations resulted in the revision to the change of methodology of PW 630 submitted by the Town on 6/30/2016.

As a result of its 3/1/2016 visit and subsequent discussions with the Town, CT DEEP expressed concern regarding NFIP compliance relative to replacement of the Facility. It was this concern which triggered the joint CT DEEP and Grantee 6/1/2016 letter to FEMA seeking technical review of the NFIP concerns (Exhibit 6).

The critical point is the fact that the Town was incorrectly advised by FEMA that a consistency determination from CT DEEP was a specific FEMA funding requirement. Succinctly, under Connecticut law CT DEEP's jurisdiction pertains only to projects located below the Coastal Jurisdiction Line (elevation 5.2'), or projects utilizing state grant assistance. (CGS 22a-359). The project at issue is well above the Coastal Jurisdiction Line. Thus, when the Town chose to discontinue seeking DOH funding CT DEEP was thereupon excluded from providing a consistency determination. However, CT DEEP did have concerns regarding NFIP "free of obstruction" compliance which is reflected in the joint CT DEEP/Grantee 6/1/2016 request for technical review.

Succinctly, the Town did not fail to invite CT DEEP to examine the change of methodology for the replacement of the Facility and modified the changes to conform to CT DEEP's concerns. However, the Town cannot force CT DEEP to act when CT DEEP declines to do so for want of regulatory responsibility. This fact was explained by CT DEEP in its 3/22/2019 letter to the Grantee, which was forwarded to FEMA with the Town's 1st appeal. (Exhibit 23)

Hence, FEMA's determination that the replacement of the Facility using the Town's modified methodology is ineligible because the Town did not obtain a consistency determination from CT DEEP is substantially the fault of FEMA. Precisely, FEMA continuously asserted that the Town failed to obtain a consistency determination from CT DEEP when it knew that CT DEEP did not have the regulatory responsibility to provide such.

Thus, the Town believes that FEMA's imposition of a penalty for the failure of the Town to obtain a consistency determination from CT DEEP is a penalty resulting from a knowingly false requirement consistently imposed by FEMA upon the Town. Accordingly, this portion of FEMA's 1st Appeal Determination is without merit.

Since Connecticut law places such analyses and determination requirements upon local communities regarding projects located above the Coastal Jurisdiction Line elevation 5.2', the Town hereby submits its findings and permit for the project as Exhibit 22. Accordingly, this should end further discussion of the requirement of a consistency determination from CT DEEP.

Summary

Violation of 44 C.F.R. § 13.30

FEMA's determination that the project is ineligible for grant assistance under the notice requirements of 44 C.F.R. § 13.30 is without merit.

First, the Town's change of methodology requests did not pertain to construction which would result in an increase of cost. Therefore, FEMA approval was not required under 44 C.F.R. §

13.30(c). Second, there was no violation of 44 C.F.R. § 13.30(d)(1) as there was no change to the scope of work. The revisions were changes to replacement methodology and retained the scope and objective of the project which was replacement of the Facility within the original footprint, precisely retaining the same function and capacity.

Accordingly, based upon these facts and FEMA's avoidable delays there was no violation of the requirements of 44 C.F.R. § 13.30.

National Environmental Policy Act and 44 C.F.R. pt. 9 Interference

Based upon the revisions to the CATEXs utilized at the time PW 680 was formulated

FEMA's 1st appeal determination held that CATEX N5 replaced the CATEX existing at the time PW 680 was originally obligated, and therefore the original CATEX cannot be utilized for the revisions to the methodology of PW 680; and the work completed by the Applicant fails to meet the criteria of CATEX N5. Thus, without an applicable CATEX, FEMA was precluded from preparation of an appropriate environmental assessment or an environmental impact statement.

First, the revisions to the original CATEX did not take place for approximately 4 months following FEMA's receipt of the Town's initial notice of a modification to PW 680 and 2 months following the minor revision to its noticed change. Thus, if FEMA had acted promptly, the original CATEX would control.

Second, a STATEX should clearly apply to the project at issue. Precisely, Section 316 of the Stafford Act does not require NEPA review, an environmental impact statement or an environmental assessment if the project is a Section 406, repair, restoration, reconstruction or replacement of a facility damaged or destroyed; provided such takes place on the same site as the damaged facility and conforms substantially to the pre-existing condition and pre-existing footprint and location on the site of the pre-existing damaged facility. This is precisely the case of the replacement of the Facility.

Moreover, even with the existence of a new CATEX, the original SOW (replacement of the Facility) was not exceeded. Specifically, the Town was not pursuing an Improved Project without the prior approval of the Grantee; and the footprint, function, and capacity of the original PW 680 was unmodified. Thus, the original CATEX should remain applicable. However, in any event the STATEX should have been applied to the project. Thus, FEMA's determination that a NEPA review was impeded is without merit.

Violations of 44 C.F.R. § 60.3(e)(5) and 44 C.F.R. § 9.11(d)(6)

First, Technical Bulletin 5 does not specifically prohibit placing a horizontal grade beam above the natural grade; provided there is not an obstruction created which would violate 44 C.F.R. § 60.3(e)(5). In the instant case the placement of the horizontal grade beams below the upper level of the revised grade, left a space of 2 feet between the upper level of the grade and the bottom of the lowest horizontal structural member of the floor of the Facility located at the BFE. This complies with Technical Bulletin 5 which advises that a vertical clearance of 2 feet is adequate to avoid obstruction. Thus, relying on the specific language of Technical Bulletin 5, the horizontal

grade beams in the instant case do not constitute an obstruction in violation of 44 C.F.R. § 60.3(e)(5), regardless of whether the natural grade is 8.0' – 9.0' NAVD or 10.0' – 11.0' NAVD. Therefore, the current placement of the horizontal grade beams do not prohibit FEMA from providing financial assistance under 44 C.F.R. 9.11(d)(6).

Second, ignoring satisfaction of the matter of a 2' vertical clearance, the placement of the horizontal grade beams flush with or below the natural grade of 10.0' – 11.0' NAVD are also excluded under Technical Bulletin 5 as being an obstruction in violation of 44 C.F.R. § 60.3(e)(5). Specifically, based upon the guidance of the Town's professional engineers, that the proper natural grade is 10.0' – 11.0' NAVD is far more credible than FEMA's non-engineering reliance upon LiDAR based maps that the natural grade is 8.0' – 9.0' NAVD. This is further confirmed by the documentation previously submitted by the Town, as well the drone photography included with this 2nd appeal.

Specifically, FEMA defines "natural grade" as "the grade unaffected by construction techniques such as fill, landscaping, or berming." (Exhibit 20, pg. 15) In the instant case what FEMA claims is the natural grade was explicitly the result of prior construction. Thus, the Town's submissions regarding what constitutes the natural grade are far more credible than FEMA's assertion. Therefore, the placement of the horizontal grade beams flush or below the natural grade, as defined by the Town and its licensed professional engineers, do not result in obstructions in violation of 44 C.F.R. § 60.3(e)(5) per Technical Bulletin 5, and therefore do not prohibit FEMA from providing financial assistance under 44 C.F.R. 9.11(d)(6)..

Again, it must be recognized that the Town's arguments are supported by the Town's Connecticut licensed professional engineers who routinely work with these matters. Conversely, FEMA has engaged no professional engineering support of its positions.

Failure to Obtain a Consistency Determination from Connecticut Department of Energy and Environmental Protection as Required Under the Coastal Zone Management Act

FEMA's determination that the replacement of the Facility using the Town's modified methodology is ineligible because the Town did not obtain a consistency determination from CT DEEP is the substantially the fault of FEMA. Precisely, under Connecticut law CT DEEP's jurisdiction pertains only to projects located below the Coastal Jurisdiction Line (elevation 5.2'), or projects utilizing state grant assistance. The project at issue is well above, the 5.2' Coastal Jurisdiction line and the Town declined state grant assistance. Thus, FEMA's determination that the Town failed to obtain a consistency determination from CT DEEP is without merit since there were no required permits to be issued by CT DEEP and CT DEEP has no regulatory responsibility to issue such to FEMA.

In Connecticut, Coastal Site Plan Reviews are conducted by local town planning & zoning agencies. Further, FEMA has already agreed that there was no historical preservation matter at issue. Consequently, the Town is submitting herewith the only permit that was required to facilitate restoration of the Facility, the Town Plan and Zoning Commission approval (Exhibit 22). Thus, the enforcement remedy under 44 C.F.R. § 13.43(a)(1) of "Temporarily withhold(ing) cash payments pending correction of the deficiency by the grantee or subgrantee", is the only logical

penalty in this case. Consequently, with submission of Exhibit 22, the matter of a consistency determination from CT DEEP should be satisfied without further consequence.

Thus, in accord with the arguments provided by the Town in this 2nd appeal, FEMA should reverse its 1st appeal determinations and obligate PW 680 in the amount of $4,340,054.11

Respectfully submitted,

Michael C. Tetreau

First Selectman