U.S. Department of Homeland Security FEMA Region I 99 High Street Boston, MA 02110



September 9, 2015

-Scott-MacLeod — Mitigation and Disaster Recovery Manager Massachusetts Emergency Management Agency 400 Worcester Road Framingham, MA 01701

Robert Whritenour
Town Administrator
Town of Oak Bluffs
P.O. Box 1327, School Street
Oak Bluffs, MA 02557

Re: Public Assistance Eligibility Determination – Town of Oak Bluffs, North Bluff Seawall, FEMA-4097-DR-MA, Project Worksheet 297(0)

Dear Mr. MacLeod and Mr. Whritenour:

The Department of Homeland Security's Federal Emergency Management Agency ("FEMA") previously prepared Project Worksheet (PW) 297(0) having determined that the Town of Oak Bluffs ("Applicant") incurred \$2,339,650.04 in eligible costs for the North Bluff Seawall. This is to advise you that FEMA has revised its initial determination and approved this PW with \$113,318.00 in eligible costs. Please see the enclosed FEMA Public Assistance Determination Memo that details the basis for this revised determination and identifies the PW back-up documentation relevant to the determination.

Under Section 423 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act ("Stafford Act") and its implementing regulation at 44 C.F.R. 206.206, the Applicant is entitled to appeal this eligibility determination to the Regional Administrator. If the Applicant elects to file an appeal, the written appeal must: (1) contain documented justification supporting the Applicant's position, (2) specify the monetary figure in dispute, and (3) cite the provisions in federal law, regulation, or policy with which the Applicant believes this determination was inconsistent. An appeal must be submitted to the Massachusetts Emergency Management Agency ("Grantee") by the Applicant within sixty (60) days of the Applicant's receipt of this letter, and the Grantee must transmit this first appeal and a written recommendation to the Regional Administrator within sixty (60) days of its receipt of the Applicant's appeal.

Because FEMA will not accept additional information after the Regional Administrator issues his first appeal decision, the Applicant must submit all relevant supporting information with its first appeal.

Mr. Scott MacLeod and Mr. Robert Whritenour: Page 2 of 2

If you have any questions, please contact the Central Processing Center by email at fema-r1-cpc@fema.dhs.gov or by mail at 63 Old Marlboro Road, Building A, Maynard, Massachusetts 01754.

Sincerely,

Robert Grimley

Disaster Recovery Manager

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FEMA Region I

Enclosures:

I. FEMA Public Assistance Determination Memo

II. Project Worksheet - 297(0)

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PA-01-MA-4097-PW-00297(0) P	
Applicant Name:	Application Title:
OAK BLUFFS (TOWN OF)	OBLDVM3 - North Bluff Seawall
Period of Performance Start:	Period of Performance End:
12-19-2012	06-19-2014

Bundle Reference # (Amendment #)	Date Awarded
PA-01-MA-4097-State-0036(33)	09-18-2015

Subgrant Application - FEMA Form 90-91

Note: The Effective Cost Share for this application is 75%

FEDERAL EMERGENCY MANAGEMENT AGENCY PROJECT WORKSHEET									
DISASTER			PROJECT NO.	PA ID NO.	DATE 09-12-2015		CATEGORY		
FEMA	4097]-	DR	-MA	OBLDVM3	007-50390-	09-12-2013		
APPLICANT: OAK BLUFFS (TOWN OF)					OF)		WORK COMPLETE AS OF: 09-12-2015: 0 %		
	Site 1 of 1								
DAMAGED FACILITY: North Bluff Seawall						COUNTY: Dukes			
LOCATIO	DN:		0207//)\·				LATITUDE: 41.4591	LONGITUDE: -70.5566
PA-01-MA-4097-PW-00297(0): The concrete wall is approximately 2 ft wide by 5 ft high (from shoreline) running approximately 720 LF parallel to Seaview Ave. from the ferry dock northerly. located at (Lat. 41.46340, Long -70.55960). Damages from wave action due to the storm are described below:									
Current Version:									

DAMAGE DESCRIPTION AND DIMENSIONS:

PA-01-MA-4097-PW-00297(0):

During the incident period of October 26th - 31st, 2012, Hurricane Sandy caused widespread damages within the State of Massachusetts due to high winds and flooding from high tides and surges along the coastal areas. BACKĞROUND

During the Hurricane Sandy incident period (10/26-31/2012) a seawall running 720 ft. from the ferry dock northerly and parallel to Seaview Ave. was damaged at three locations totaling 12'L and the area behind the seawall eroded over an area 489'L x 16'W(avg.) x 3'D. The seawall was constructed and some sections reconstructed during the period 1932 - 1940 (ATTACHMENT - 13023.100 seawall - Adobe p. 18-21). It is of unreinforced concrete varying in overall height from 8 ft. to 13 ft. (approx. 5'H exposed above shoreline) with a bottom width varying from 5-6 ft. and a top width of 2 ft. The eligible repair work includes repair of seawall at 3 locations totaling 12 ft. in length and located at the southerly end of the wall (97' north of ferry dock 6'L x 2'W x 1'D at cap), (148' north of ferry dock 2'L x 3'W x .5'D at cap and 3'L x 2'W x 1'D at face) and (197' north of ferry dock 4'L x 2'W x .5'D at cap) plus the repair of erosion behind the seawall from the fish pier northerly approx. 489 ft. L x 16 ft. W (avg.) x 3 ft. D (avg.) = 869 CY.
PROPOSED REPAIRS: Applicant proposed repairs were based on 2010 plans developed prior to the disaster event and include total

replacement of the seawall, increasing the height of the wall by 4 ft. (HMP measure), the addition of railings along the length of the seawall, the addition of a 112 ft. ADA ramp at the north end leading to a small beach, and the addition of a board walk along the length of the seawall. The original project work sheet found replacement of the seawall eligible on belief that the structural down grading or the wall from seawall. The original project work sneet found replacement of the seawall eligible on belief that the structural down grainty of the wall not "B" to "D" — "F" by the Mass. Dept. of Conservation and Recreation (DCR) and their letter of 9 Aug. 2013 from Mooney to Masucci (Attached) constituted a "condemnation" of the wall requiring complete replacement. The PW also included as eligible work, a) the increased height of 4 ft. as a hazard mitigation measure, b) the installation of railings based on the International Building Code, and c) the addition of an ADA ramp at the northern end based on ADA rules. (See ATTACHMENT — ORIGINAL PW #297)

EXTENT OF ELIGIBLE SEAWALL DAMAGE: Further inspection found that much of the proposed work originally identified as eligible did

not meet eligibility criteria. The detailed analysis of that is given in the attached "Determination Memo" dated 9 Sept. 2015. Based on those inspections it was determined that there was visible damage at 10 sites along the seawall, 7 of which (north of the fish pier) were found to have existed prior to the disaster event (ATTACHMENTS- "field data" and "Pre-disaster Damage" and "Seawall Damage Points"). FEMA rules at 44 CFR 206.226 provide that assistance may be provided to restore eligible facilities on the basis of the design of such facilities as they existed immediately prior to the disaster event. In this instance only three for the ten sites appear to be a direct result of the disaster

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	event. REPAIR VS REPLACEMENT – 50% RULE: Applicant intends to replace the entire 720 ft. length of the seawall with improvements discussed above. FEMA rules at 44 CFR 206.226 (f) require that for FEMA to fund replacement of a facility the cost of repair must exceed 50% of the cost of replacement. The remaining 3 sites, damaged by the event had an aggregate length of 12 ft. and resulted in a repair vs replacement ratio of 1.4% (ATTACHMENT – 50% rule); therefore, replacement does not qualify for FEMA assistance. SEAWALL ROTATION: The DCR rating downgrade was based on a reported rotation of the wall seaward; however, following repeated requests, applicant has not provided data demonstrating this. FEMA inspections found the seawall to have a seaward tilt of from 0.5 to 5 degrees at various locations (ATTACHMENT – field data), and an undamaged seawall of similar design and vintage south of the ferry dock (approx. 500 -600 ft. long) shows the same degree of tilt leading to a conclusion that the tilt is a result of age not the disaster event. RAILINGS: The original PW included the addition of railings along the length of the proposed replacement seawall and was thought necessary by requirements of the International Building Code (IBC). Replacement of the seawall does not meet the 50% rule discussed above and construction of a replacement seawall is a discretionary decision of the applicant. The replacement seawall is considered to be an "improved" project within FEMA's meaning. Any additional cost to comply with applicable codes and standards that may be triggered by "improvements" are not a FEMA eligible cost. Applicant has not shown that the IBC requires installation of railings along the 12 linear feet of damaged seawall based on repair of that 12 linear feet. Therefore, the cost of the proposed railings is not considered FEMA eligible. (ATTACHMENTS – International Building Code #1 and #2) See further discussion in the attached "Determination Memo" dated 9 Sept. 2015. Only ADA relevant repairs trigger accessibili							
The second secon	applicants proposed project an "improved project within Fewas hearing. The Public Assistance State at page 110 states that, may otherwise been eligible for the original facility." IMPROVED PROJECT: Applicant's plan to a) replace the entire seawall, b) increase its height by 4', c) add a boardwalk, d) add railings, and e) add an ADA ramp make this an "improved project" within FEMAs meaning. The Public Assistance Guide at page 110 – 111 state that, "The applicant must obtain approval for an improved project from the State prior the start of construction. Further, any improved project that results in a significant change from the pre-disaster configuration (that is, different location, footprint, function or size) of the facility must also be approved by FEMA prior to construction to ensure completion of the appropriate environmental and for historic preservation review." The increased size (height) of the seawall, new boardwalk, railings and ADA ramp constitute a significant change requiring FEMA approval prior to construction in addition to State approval. BASIS FOR REPAIR ESTIMATE The estimated cost of repairs has been based on the following: 1/ The rip rap fronting the damaged sections would removed and later replaced, being a wedge shaped approximately 10'W at the base and 5' high running for the 30' total length of the construction area. (rip rap would be removed 3' either side of each damaged section for an additional 18' 12'L + 18'L = 30'L) 2/ Material would be excavated (and later replaced) from behind (11'D x 4'W) and in front (5' deep x 4'W) at each of the 3 damaged sections (6'L, 3'L, and 3'L), 3/ Cofferdams would be placed and later removed around each of the damaged sections with a 7' return at each end and extending 3' beyond the edge of each damaged section. 4/ Dewatering behind the cofferdams would be done as needed with tidal movements. 5/ Each of the 3 damaged sections would be removed by saw cutting and their replacement formed and poured. 6/ Sand and sandy loam would be used to r							
ļ	Current Version:							
	SCOPE OF	WORK:						
·	PA-01-MA-4097-PW-00297(0): Work to be Completed: See above for scope of work. See attached cost estimate and CEF for estimate. Pre-CEF = \$88,335 and Post CEF = \$113,318 Current Version:							
1			k change the pre-disaster		In the state of th]No		
			☑Yes ☐No	Special Consid	derations included?	INO		
	Hazard Mit	Hazard Mitigation proposal included? Yes No Is there insurance coverage on this facility? Yes No						
•		PROJECT COST						
	ITEM	CODE	NARRATIVE		QUANTITY/UNIT	UNIT PRICE	COST	
*** Version 0 ***								
			CEF					
	1	9000 -	CEF-COST ESTIMATE		1/LS	\$ 113,318.00	\$ 113,318.00	
1						TOTAL		

1		COST	\$ 113,318.00
PREPARED BY William C Brierley	TITLE Project Specialist - Coastal Team Lead	SIGNATURE	
APPLICANT REP. Peter Martell	TITLE EMD	SIGNATURE	