Environmental Assessment
Owego Apalachin Administration Building Facility Construction Project

Village of Owego, Tioga County, New York
FEMA-4031-DR-NY

February 2015

U.S. Department of Homeland Security
Federal Emergency Management Agency
Region II, 26 Federal Plaza, NY, NY 10278

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LIST OF ACRONYMS

amsl	Above Mean Sea Level
ACHP	Advisory Council on Historic Preservation
AD	Area of Disturbance
ADA	Americans with Disabilities Act
APE	Area of Potential Effect
ASTM	American Society for Testing and Materials
BFE	Base Flood Elevation
BMP	Best Management Practices
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CWA	Clean Water Act
DRP	Data Recovery Plan
EA	Environmental Assessment
ECL	Environmental Conservation Law
EIS	Environmental Impact Statement
EJ	Environmental Justice
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
EO	Executive Order
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FT	Feet
NAAQS	National Ambient Air Quality Standards
NAVD	North Atlantic Vertical Datum
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHP	Natural Heritage Program
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NRCS	Natural Resources Conservation Service
NYS	New York State
NYSBC	New York State Building Code
NYSDEC	New York State Department of Environmental Conservation
NYSDHSES	New York State Division of Homeland Security and Emergency Services
NYSEC	New York State Energy Code
NYSOPRHP	New York State Office of Parks, Recreation, and Historic Preservation
OAAB	Owego Apalachin Administration Building
OSHA	Occupational Safety and Health Administration
PA	Public Assistance

LIST OF ACRONYMS continued

PAF	Public Archaeology Facility
RCRA	Resource Conservation and Recovery Act
SEQRA	State Environmental Quality Review Act
SF	Square Foot
SFHA	Special Flood Hazard Area
SHPO	New York State Historic Preservation Office
SPDES	State Pollutant Discharge Elimination System
SPL	Sound Pressure Level
SWPPP	Stormwater Pollution Prevention Plan
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

1.0 Introduction

The Owego Apalachin Central School District, herein referred to as the "Subgrantee", has requested funding from the U.S. Department of Homeland Security - Federal Emergency Management Agency (FEMA) Public Assistance (PA) Grant Program, to construct a new 15,118 square foot administration building within the community to replace the existing flood-damaged administration building. The new facility would be located at Sheldon Guile Boulevard in the Village of Owego, Tioga County, New York. Owego experienced storm damages and flooding from Tropical Storm Lee that occurred September 7, 2011 to September 11, 2011. The storm incident period was declared a major disaster by President Barack H. Obama on September 13, 2011 (amended September 23, 2011). Federal public assistance was made available to affected communities and certain nonprofit organizations per FEMA 4031-DR-NY and in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 (42 U.S.C. 5172), as amended. The Grantee for the proposed action is the New York State Division of Homeland Security and Emergency Services. The FEMA project worksheet reference number is 4031-DR-NY PW#2000.

The existing 10,514 square foot Owego Apalachin Administration Building, located at 36 Talcott Street in the Village of Owego, experienced substantial flood damage during the declared incident. Floodwaters damaged the facility's ground level where administrative offices and mechanical equipment are located. The Subgrantee temporarily relocated staff and administrative services from this location to other facilities within the school district. The Subgrantee seeks to reunify staff and services back into one facility and reduce flood risks from future storm events. The Subgrantee's preferred alternative, evaluated as the proposed action in this document, is to construct a new administration building on a different property outside the 100-year floodplain. The proposed action would restore administrative staff and services into one facility outside the floodplain within the Village of Owego. The Subgrantee would demolish the existing building.

The Sandy Recovery Improvement Act of 2013 amended the Stafford Act to authorize alternative procedures for FEMA's PA Program (Section 428). A pilot program using these procedures is being implemented in New York. Applicants may request funding for permanent work based on an estimate for repair, restoration, reconstruction or replacement of a public facility damaged in a disaster. The purpose of the pilot program is to increase flexibility for grant applicants, reduce costs for the PA Program, expedite assistance to eligible applicants, and provide financial incentives for timely, cost-effective completion of recovery projects. This project would take advantage of this pilot program and funding would be provided through the Section 428 program and applied to the Subgrantee's preferred alternative.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality regulations to implement NEPA (40 CFR Parts 1500-1508), and FEMA's regulations implementing NEPA (44 CFR Part 10). FEMA is required to consider potential environmental impacts before funding or approving actions and projects.

The purpose of this EA is to analyze the potential environmental impacts of the proposed relocation of the Owego Apalachin Administration Building, including analysis of the project

alternatives and identification of impact minimization measures. The EA also serves as written communication of the environmental evaluation for public and interested party comment. Public involvement is a component of NEPA to inform FEMA's determination of whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

Additionally, this EA serves as early notice to the public regarding another proposed action for the Owego Apalachin School District. The Subgrantee's Maintenance Building and Storage Building at 75 Elm Street in Owego, New York were also flood-damaged as a result of Tropical Storm Lee. The Subgrantee's preferred alternative is to relocate the two facilities into a combined facility to be newly constructed outside the 100-year floodplain at the same Owego School complex area as the proposed new Administration Building. The Maintenance and Storage Facility would be constructed north of the Owego Elementary School and proposed new Administration Building in an area of the complex referred to as the Monkey Run Site which is 49.88 acres in size. FEMA will be evaluating this related project in a separate Environmental Assessment in 2015; however, the public is welcomed to comment on the proposed action based upon this early notice to inform final decision-making for the Maintenance and Storage Facility.

2.0 Purpose and Need

The objective of the Public Assistance Grant Program is to provide assistance to State, Tribal and local governments, and certain types of Private nonprofit organizations so that communities can quickly respond to and recover from major disasters or emergencies. The purpose of the proposed project is to fully restore a school administration facility and its operational educational services within the community of Owego. The need for the project is to return educational services to the affected community due to the storm damage of the existing administration building during Tropical Storm Lee. The existing facility resides within the 100-year floodplain and received flood damage to the ground floor level from the declared event. Sections of the facility building are over 100 years old and would need renovations to meet current building codes and standards. A safe and resilient facility in the Village of Owego is sought to facilitate administration services for the entire school district.

3.0 Description of Alternatives Considered

3.1 Site Alternatives Considered in this EA

The Subgrantee completed a preliminary evaluation of the No Action Alternative, the alternative to repair the original facility with construction of a floodwall to meet National Flood Insurance Program (NFIP) and floodplain code requirements and the proposed alternative to construct a new facility at a relocation site outside of the 100-year floodplain. The original facility has been in the same location since 1912 (and the annex addition since 1957) within a highly developed mixed-use neighborhood. The facility site is located within the 100-year floodplain. The building was determined substantially damaged by the local code enforcement official in accordance with the NFIP. Project criteria was identified and used as a comparison evaluation tool for the Subgrantee's preferred alternative selection. Project criteria included such parameters as: Natural Environment; Social; Economic; and, Legal aspects. Through the evaluation process, the Subgrantee determined that relocating the existing facility to another site out of the 100-year

floodplain was the best option to meet their established criteria; this is considered the Subgrantee's preferred alternative and referred to herein as the Proposed Action. The No Action Alternative and Proposed Action Alternative are considered further in this EA and are summarized below.

3.1.1 No Action Alternative

NEPA requires the analysis of practicable alternatives as part of the environmental review process for the proposed project. Inclusion of a No Action Alternative in the environmental analysis and documentation is required under NEPA. The No Action Alternative is used to evaluate the effects of not providing Federal financial assistance for the project, thus providing a "without project" benchmark against which "action alternatives" may be evaluated.

The No Action Alternative would not provide any Federal funding to relocate the Owego Apalachin Administration Building outside of the 100-year floodplain or repair the existing facility (36 Talcott Street) in the 100-year floodplain. It is anticipated that absent Federal financial assistance, the Subgrantee would likely not construct the new facility outside the 100-year floodplain, as described in Section 3.1, Proposed Action. Thus, as the No Action Alternative, the original facility would remain abandoned/rendered safe and secure or be demolished. If the building were not demolished, the Subgrantee would be responsible to bring the structure into code compliance in accordance with the NFIP. The administrative staff, who previously worked at this location, would necessarily continue to be working from alternative buildings within the school district in a fragmented status. The No Action Alternative would not address the proposed project's purpose and need.

3.1.2 Proposed Action

As the Proposed Action, the Subgrantee would construct a new 15,118 square foot administration building to replace the existing facility. The proposed project site is located on an undeveloped 1.2 acres parcel along Sheldon Guile Boulevard (Village of Owego). The site landscape is maintained lawn. This parcel is part of a larger 100+ acre property owned by the Subgrantee. This property also includes the Owego Apalachin Middle School, Owego Free Academy, Owego Elementary School, and portions of the associated road network, parking lots, and athletic fields.

The proposed action would relocate the facility and its function to outside the 100-year floodplain of concern. The proposed project site is partially located within the 500-year floodplain; however, the proposed building structure would be located outside of the 500-year floodplain. The total area of disturbance for the Proposed Action is 1.2 acres. See *Appendix A*, Figure 3 for a schematic of the Proposed Administration Building and Figure 4 for a schematic of the Proposed Administration Building – Main Elevation. This alternative would comply with the Village of Owego Floodplain Ordinances/Codes as well as the National Flood Insurance Program (NFIP) requirements. The existing building at 36 Talcott Street would be demolished and the Subgrantee would render the site safe and secure. This alternative would address the proposed project's purpose and need.

3.2 Alternatives Screened from Further Consideration

The Subgrantee and FEMA initially considered repairing the flood-damaged administration

building (36 Talcott Street) to its pre-disaster design and function. The repairs included upgrading the facility to be compliant with existing safety codes and standards set forth by the New York State Building Code and to meet current Americans with Disabilities Act standards in the damaged areas and connecting travel paths. The facility would also be modified to meet NFIP compliance requirements. The initial flooproofing mitigation measures the Subgrantee proposed to protect the facility from flooding included small-scale dry floodproofing measures, such as installing vent covers, door dams, and window dams to help floodproof the ground floor areas. However, the Subgrantee provided letter documentation from a licensed architect dated June 25, 2012 that stated that the existing building was believed to be substantially damaged and that the existing walls could not sustain the lateral load of 5.8' of floodwaters, such that dry floodproofing of the existing structure was not feasible from an engineering perspective. The letter identified that the only practical means to meet NFIP requirements and the local floodplain code requirements for the existing facility structure was to install a floodwall around the structure to provide flood damage risk reduction to the base floodplain elevation plus two feet. The local code enforcement official/floodplain manager concurred with the findings that the building was substantially damaged and that a floodwall alternative was the only practical floodproofing alternative and recommended demolition and relocation via letter correspondence dated August 29, 2012. Refer to *Appendix G* for referenced letters.

A floodwall alternative was explored for cost estimation and initial feasibility analysis to a concept level of design. The concept floodwall alternative proposed by the Subgrantee would be to construct a 525 foot long x 6 foot high (above grade) cast-in-place concrete floodwall, with a 30-foot deep below grade steel sheet pile cut-off wall, around the building and parking lot. The floodwall project would include two 20-foot wide self-activating floodgates and one 10-foot wide floodgate, a storm water pump station and emergency generator, a sanitary sewer bypass line and pump station, installation of backflow prevention devices on the existing utility lines, and relocation of existing utility pipes as required at the new floodwall footings.

The Village of Owego Floodplain Code dated September 4, 2012 requires that the volume of space occupied by new development below the base flood elevation be compensated for and balanced by a hydraulically equivalent volume of excavation taken from below the base flood elevation. Further, all such excavations shall be constructed to drain freely to the watercourse. The Subgrantee identified the following compensatory floodplain mitigation to satisfy local floodplain code for a floodwall alternative. The Subgrantee would acquire three properties immediately east of the Administration Building property, demolish the existing houses, and excavate a 150 foot x 250 foot x 4 foot deep flood retention basin with 2:1 side slopes. The flood retention basin would include all work necessary (excavation, pipe bedding, backfill, pavement repairs, and rip rap at the outfall) to install 2414 feet of 18" diameter High Density Polyethylene drainage pipe from the retention basin to Owego Creek.

As the costs were considerably high for a floodwall with compensatory floodplain mitigation alternative, the Subgrantee identified that it was preferable and prudent to apply available FEMA funding from the 428 PA Program towards a relocation alternative - the proposed action, instead of repairing the existing structure with code compliance. The Subgrantee determined that relocating outside the floodplain was practicable for the community and a preferred approach to continued occupancy of the 100-year floodplain. The repair of the existing facility with incorporation of flood damage risk reduction measures to floodproof the facility to at or above

the Base Flood Elevation (BFE) for the Special Flood Hazard Area (SHFA) was not furthered in this EA due to Subgrantee's preference to relocate the facility; however, is an alternative maintained for cost comparison and cost-share arrangement considerations handled separate of the EA.

4.0 Affected Environment and Environmental Consequences

Table 1 on Page 5 summarizes the potential environmental impacts and proposed mitigation measures associated with the No Action Alternative and the Proposed Action Alternative. The following sections provide a more detailed description of the affected environment and the potential environmental impacts of the No Action and Proposed Action alternatives.

4.1 Topography, Soils, and Geology

4.1.1 Existing Conditions

Topography

Both the existing facility site and the proposed project site are located in the Owego Creek river valley. The existing facility is located in a highly developed mixed-use neighborhood. Ground surface elevation is approximately 815 feet to 817 feet (or less) above mean sea level (amsl) The proposed project site, within the approximately 1.2 acre Area of Disturbance (AD), there is approximately a four foot elevation change from the west to east. Ground surface elevation is approximately 819 feet to 823 feet (or less) amsl. To the east of the project site, East Beecher Hill rises to approximately 1,300 feet amsl and to the west West Beecher Hill is located to the west of the Owego Free Academy, the athletic fields and Owego Creek. West Beecher Hill rises to approximately 1,350 feet asml. Owego Creek's flat river valley bottom gently increases in elevation as it continues upriver from the project site. Approximately 1.5 miles south from the project site, Owego Creek widens and joins the larger Susquehanna River.

Soils

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) operates the Web Soil Survey, which includes the soils of Tioga County. Both the existing facility sited and the proposed project site consist of one soil type; Howard gravelly silt loam (HrB) (See *Appendix E*, Environmental Site Assessment). As the project area, inclusive of all project alternatives is mapped as "urban" on the Census Bureau Map, by regulation at 7 CFR Part 658.2, development of soils/land in the area would not be subject to the Farmland Protection Policy Act.

Geology

Executive Order 12699 requires Federal agencies assisting in the financing, through Federal grants or loans, or guaranteeing the financing, through loan or mortgage insurance programs, of newly constructed building to initiate measures to assure appropriate consideration of seismic safety (WBDG, 1990). The U.S. Geological Survey (USGS) Percent Peak Ground Acceleration Seismic Hazard Maps (USGS, 2008) adopted by the NYSBC indicate that the project site is

Table 1: Summary of Potential Environmental Impacts and Mitigation

Resource	Potential Impacts		Agency Coordination/Permit	Mitigation Measures
	No Action Alternative	Proposed Action		
Topography, Geology and Soils	No impact.	Significant impact.	NYSDEC SPDES General Permit	Best management practices for erosion and sediment control.
Land Use and Zoning	No impact	No significant impact.	NYSDEC SWPPP	
Water Resources and Water Quality	No impact	No significant impact.	NYSDEC SPDES General Permit	Compliance with SWPPP and SPDES.
Wetlands	No impact	No impact		
Floodplains	Negative impact	Flood damage risk reduction due to relocation; results in floodplain occupancy for site (500-year floodplain).		Subgrantee's preferred alternative to relocate outside the 100-year Floodplain addresses flood risk management.
Coastal Resources	No impact.	No impact.		
Vegetation	No impact	Loss of lawn areas due to development of new facility.		Native plant species will be selected for site landscape plantings to the extent practicable
Wildlife and Fisheries Habitat	No impact.	No significant impact.		
Threatened and Endangered Species and Critical Habitat	No impact.	No impact.	NHP	Voluntary conservation recommendation for Northern Long-Eared Bat to avoid cutting down known roost trees during pup season (June 1 – July 31).
Cultural Resources	No impact.	No significant impact.	SHPO	
Aesthetic and Visual Resources	Negative impact.	No significant impact.		
Socioeconomic Resources	Short-term and long-term negative impact.	Short-term positive impact with construction, long-term net-return to pre-disaster conditions.		
Environmental Justice	No impact.	No impact.		
Air Quality	No impact.	No significant impact. Minimal temporary construction air impacts (dust).		Best management practices.
Contaminated Materials	No impact.	No significant impact.	NYSDEC	Best management practices.
Noise	No impact.	Short-term impact, no long-term impact -return to pre-disaster conditions.		Compliance with local codes and best management practices.
Traffic	No impact.	Short-term impact, no long-term impact -return to pre-disaster conditions.		Compliance with local codes related to operations on construction site.
Infrastructure	No impact.	No impact.		
Public Health and Safety	Negative impact with not securing, repairing, or	Positive impact associated with centralizing administrative services into one location.	NYS Dept. of Health	Compliance with local, state, and federal safety standards and codes.
Climate Change	No impact.	No impact.		
Cumulative Impacts	No cumulative adverse impact concerns.	No cumulative adverse impact concerns.		

located within a moderate seismic hazard area, as is most of New York State (NYS). The only area in NYS that has a higher hazard is located in the Central Adirondacks and further toward the Canadian border. Since seismic activity is so low within an area categorized as a moderate seismic hazard area, the construction of buildings would not have to meet any higher standards. The bedrock under the proposed site is at a depth greater than five feet deep and may be as deep as 20 feet below the surface.

4.1.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would have no impact on topography, geology, or soils.

Proposed Action

Disturbance of site soils and topography during construction would be expected for the proposed project. The AD for the undeveloped parcel is 1.2 acres. This acreage includes disturbances for adding fill materials, grading the site, and for facility construction including site development inclusive of parking areas, driveways, and walkways.

No impact to the bedrock or geology would be expected. Five soil borings were advanced on the project site to evaluate the soil. Each boring advanced to 30 feet. No bedrock was encountered during the soil evaluation. There is no proposal to excavate deeper than seven feet or to discharge any waste on site over this bedrock.

The duration of construction would be approximately 12 to 18 months. The Subgrantee is responsible for obtaining and adhering to requirements in all applicable Federal, state, and local required permits. Erosion and sedimentation impacts would be minimized through the implementation of an approved erosion and sediment control plan for construction activities. This stormwater plan would be developed as part of the State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities (GP-0-10-001) for the proposed project, and submitted to the New York State Department of Environmental Conservation (NYSDEC) prior to project construction. Best management practices (BMP) for soil erosion and sediment control would be established, such as the installation of perimeter silt fences to control the migration of silt from the site. All construction activities would be subject to the requirements of the stormwater SPDES General Permit.

4.2 Land Use and Zoning

4.2.1 Existing Conditions

The proposed project site is 1.2 acres undeveloped yet lawn maintained parcel. It is located in the southeast corner of a 36.6 acres parcel owned by the Subgrantee (part of the larger 100+ acre site). This particular parcel (Tioga County Tax Map No. 493001-117.15-2-3) includes the Owego Apalachin Middle School, Owego Free Academy, and portions of the associated road network, parking and athletic fields for these two schools. Access to the proposed project site is from Sheldon Guile Boulevard off George Street.

The existing school complex borders the proposed project site to the north and west. This school complex received flood damage from Owego Creek flooding as a result of Tropical Storm Lee in which Owego Apalachin Middle School and Owego Free Academy received flood damage.

Directly south of the project site is Tioga Opportunities, Inc., which is a private, not for profit intergenerational human service agency. To the east of the project site are NYS Routes 38/96 and a railroad right-of-way.

Further southwest beyond the school complex was the Owego Elementary School (1 Christa McAuliffe Lane) which was part of the 100+ acres property owned by the Subgrantee. This school also experienced flood damage as a result of Tropical Storm Lee and has been abandoned and demolished. The area is now an active construction site for the new replacement school. Geographically, the proposed site is situated adjacent to the narrow Owego Creek river valley. Outside the Village, in the surrounding Town of Owego, most of land is hilly farmland or forested areas with pockets of residential development.

The Farmland Protection Policy Act requires Federal agencies to minimize the extent to which Federal programs contribute to the unnecessary conversion of farmland to nonagricultural use and to assess potential conversion of farmland to developed property. The project site is zoned 612 School and is located in an area surrounded by mixed zoning districts, including Industrial, Commercial, and R1, R2 and R4 residential zones. See *Appendix B*, SEQRA Documents, Environmental Assessment Form for additional site details. As the project area, inclusive of all project alternatives is mapped as "urban" on the Census Bureau Map, by regulation at 7 CFR Part 658.2, development of soils/land in the area would not be subject to the Farmland Protection Policy Act.

4.2.2 Potential Impacts and Proposed Mitigation

Neither alternative would impact zoning. Since the 1960s, the proposed site has been vacant, undeveloped section of the larger middle school and high school complex is zoned for school usage (Refer to *Appendix E*, Phase I – Environmental Site Assessment, for the historical uses of the project site). Since the Subgrantee owns the proposed project site, the new administration building would not require approvals from the local government.

However, as a result of the Proposed Action, the land use for the proposed site would change from a vacant, maintained site to an excavated site with new construction and associated parking areas, driveways and walkways.

4.3 Water Resources and Water Quality

Congress enacted the Federal Water Pollution Control Act in 1948 which was reorganized and expanded in 1972 and became known as the Clean Water Act (CWA) in 1977, as amended. The CWA regulates discharge of pollutants into water with sections falling under the jurisdiction of the U.S Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (EPA). Section 404 of the CWA establishes the USACE permit requirements for discharging dredged or fill materials into Waters of the United States and traditional navigable waterways. Under National Pollutant Discharge Elimination System (NPDES), the EPA regulates both point and non-point pollutant sources, including stormwater. Activities that disturb one (1) acre of ground or more are required to apply for an SPDES permit administered in NYS through the NYSDEC.

4.3.1 Existing Conditions

The existing facility site and the proposed project site are located on the floor of the narrow river valley of the Owego Creek, approximately 1.5 miles upstream from the broader of the Susquehanna River valley. The existing facility is located in a highly developed mixed-use neighborhood. The proposed project area abuts the east bank of the Owego Creek, which has a low berm along much of this reach of the creek to reduce or minimize flooding onto the adjacent properties. Owego Creek has a drainage basin above the area to be disturbed of approximately 800 kilometers^2. The project site is located in a generally flat to gently sloping floodplain approximately 250 meters wide. Owego Creek is a Class C (T) stream. The "T" standard means that this stream's highest and best use is for the potential to support trout. In accordance with NYS' Environmental Conservation Law (ECL), any disturbance to the bed or banks of a stream with trout standards would be prohibited without a permit from the NYSDEC (NYSDEC-Mapper, 2013).

The depth to the high water table in the AD is 13 to 14 feet below the surface level and possibly as much as 12 to 20 feet deep. There would be no treated sanitary wastes discharged into the groundwater; the facility would hook into the existing municipal sewer system and wastewater treatment plant.

4.3.2 Potential Impacts and Proposed Mitigation

Neither alternative would impact water resources and water quality. No impact to surface water quality of Owego Creek and Susquehanna River would be anticipated; stormwater would be controlled to prevent pollutants from entering water sources. No impacts to Owego Creek bed and banks would be expected. The Subgrantee is responsible for obtaining and adhering to requirements in all applicable Federal, state, and local required permits and use of best management practices. A Stormwater Pollution Prevention Plan (SWPPP) is required and must be approved prior to construction, in accordance with the NYS stormwater SPDES General Permit for Construction Activities (GP-0-10-001). No impacts to groundwater quality are anticipated as excavation in the mitigation area would not reach high water table depths and there would be no discharge of sanitary wastes into groundwater. Except for some site grading, excavation within the AD is not proposed to reach the highest known water table.

4.4 Wetlands

Executive Order (EO) 11990 "Wetlands Protection" requires that Federal agencies take actions to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the beneficial effects of wetlands. Compliance with this EO is insured through the process of identifying whether the action will be located within or will potentially affect wetlands. Additionally, wetlands are afforded protection in accordance with Section 404 of the CWA and NYS's ECL.

4.4.1 Existing Conditions

Based on a wetlands review of both the existing facility site and the proposed project site for the presence of NYS regulated freshwater wetlands conducted at the NYSDEC's "Environmental Resource Mapper" website; no state regulated wetlands are within 100 feet of the proposed project site. Based on a review of the U.S. Fish and Wildlife Service's (USFWS) National

Wetlands Inventory (NWI) website, the proposed site is not located within a federally-regulated wetland (USFWS-NWI, November 2014).

4.4.2 Potential Impacts and Proposed Mitigation

Neither alternative would have an impact on wetlands or to Owego Creek.

4.5 Floodplains

EO 11988 Floodplain Management requires that Federal agencies avoid funding activities that directly or indirectly support occupancy, modification, or development of the 100-year floodplain whenever there are practicable alternatives. FEMA uses Flood Insurance Rate Maps (FIRM) to identify floodplains for the National Flood Insurance Program (NFIP). Federal actions within the 100-year floodplain, or 500-year floodplain for critical actions, require the Federal agency to conduct an Eight-Step Decision-Making Process. This process, like NEPA, requires the evaluation of alternatives prior to funding the action. FEMA's regulations for conducting Eight-Step Review processes are contained in 44 CFR Part 9.5. Refer to *Appendix G EO 11988 & 11990 Eight-Step Review Documentation*.

4.5.1 Existing Conditions

According to the FIRM (Community Panel Number 36107C0382E, effective April 17, 2012), the proposed project site is located outside the 100-Year floodplain and partially located within Shaded Zone X or the 500-year floodplain. Refer to the FIRM in *Appendix D Subgrantee's Environmental Evaluation Documentation* showing the location of the proposed site location. The existing facility is located in Zone AE, a special flood hazard area (SFHA) also referred to as the 100-year floodplain with a Base Flood Elevation (BFE) of approximately 816 feet NAVD 1988. The elevation of the 100-year base flood elevation plus two feet at the existing facility location is equivalent to the approximate 500-year floodplain elevation. The existing building was determined substantially damaged in accordance with the NFIP per the local code enforcement official/floodplain manager on/before August 29, 2012.

4.5.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative may have a negative impact on the floodplain if the existing building was not demolished and/or not properly secured such that materials remain that could become floating debris or pollutant releases during future floods or over time in the floodplain. If the building was not demolished, the Subgrantee would be responsible for bringing the substantially damaged structure into code compliance in accordance with the NFIP and local floodplain management codes.

Proposed Action

The proposed action would relocate the facility to outside the 100-year floodplain, thus would achieve flood damage risk reduction benefits for the facility structure and its operations. As a portion of the new site property is located within the 500-year floodplain, the action would result in some development within the 500-year floodplain. However, the new building structure and the majority of site development would be outside the 500-year floodplain at higher elevations of the property. Impacts to the 500-year floodplain could involve adding fill materials, site grading, and placement of walkways, and driveways for accessing the proposed parking lot. Flood

damage risk reduction "minimization" measures that the Subgrantee plans to incorporate may involve elevation with fill material or siting of the structure such that the first floor elevation would be above the 500-year floodplain elevation. The minimum requirement in accordance with the NFIP would be to elevate or floodproof to at/above the 100-year Base Flood Elevation at the new site, which is approximately 818 feet NAVD 1988. The Subgrantee is responsible for obtaining all applicable Federal, state, and local floodplain permits. The Subgrantee's engineer documented that the proposed action would not induce flooding on downstream or upstream properties. The Subgrantee intends to demolish the existing structure at 36 Talcott Street and maintain the property as open space.

4.6 Vegetation

4.6.1 Existing Conditions

The existing facility is located in an urban, highly developed mixed-use neighborhood. The proposed project site is an undeveloped parcel consisting of manicured lawns. There is a thick stand of mature hardwood trees along the eastern property line of the project site. This stand of trees is located outside the construction area of the new facility. This parcel is part of a larger 100+ acre property that has school buildings, maintenance facilities, parking areas, driveways, walkways, mowed athletic fields, ornamental plantings with few trees scattered along walkways and at various locations. On the west side of the property, trees line the Owego Creek bank; these trees are located outside the AD. Tioga County is currently identified as a quarantine zone for the invasive insect Emerald Ash Borer (EAB). Since the proposed project is located in an EAB quarantine county, it is required that any woody tree and shrub material to be removed for the proposed action be chipped on site to chips of less than one inch in two dimensions or not be transported whole outside the community in order to adhere with EO 13112 Invasive Species, Federal regulations at 7 CFR Part 301.53-1 through 301.53-9 and state regulations at 1 NYCRR Part 141. Invasive insects can devastate the forests of the northeast and it is recommended that communities in the northeast treat or handle wood materials in place to minimize the spread of these non-native insects.

4.6.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not impact vegetation.

Proposed Action

The proposed action would convert existing pervious lawn cover to impervious cover. The entire 1.2 acres project site, consisting of manicured lawns, would be disturbed. However, once construction activities are completed, undeveloped disturbed ground would be re-vegetated as part of a landscaping plan. Wherever possible, native plant species would be selected for site landscape plantings, in accordance with EO 13112 Invasive Species (NEPA, 1999). It is not anticipated that tree removal would be required for the proposed action; however, the quarantine protocol for Emerald Ash Borer is included as a condition of the grant and must be adhered to if tree removal is to be undertaken during construction.

4.7 Wildlife and Fisheries Habitat

4.7.1 Existing Conditions

The existing facility site, a developed, urban parcel, and the proposed project site, an undeveloped parcel, do not support any sensitive landscape features such as wetlands, streams or water bodies. The sites are previously disturbed and provide little or no suitable habitat for wildlife and birds, such as raccoons, skunks, chipmunks, squirrels, sparrows, wild turkey, whitetail deer, rabbits and passerine birds. There is no sensitive migratory bird habitat at the proposed project sites. Approximately 1,250 feet to the west is Owego Creek, a Class C (T) stream. A Class C (T) means that for this stream, the highest and best use is its potential to support trout. The "T" standard indicates the potential to support trout (but not trout spawning) and is also an indication of the high quality of the freshwater in that stream. However, the stream is sufficiently west of the boundary of the project location and would not be impacted by the Proposed Action.

4.7.2 Potential Impacts and Proposed Mitigation

Neither alternative would impact wildlife, birds, and fisheries habitat. The project site is currently manicured lawns surrounded by an active school complex to the north, west and south and by mature hardwoods to the east. There is no habitat for wildlife located on the project site except for the possibility that wildlife may occasionally traverse the lawns to get to other suitable habitat. In accordance with Migratory Bird Treaty Act, FEMA has determined that there would be no significant adverse impact to migratory bird habitat and no take of migratory bird species associated with either of the project alternatives.

4.8 Threatened and Endangered Species and Critical Habitat

The Endangered Species Act (ESA) of 1973 provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The lead Federal agencies for implementing the ESA are the USFWS and National Oceanic and Atmospheric Administration (NOAA) - National Marine Fisheries Service (NMFS). The law requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The law also prohibits any action that causes a "taking" of any listed species of endangered fish or wildlife.

4.8.1 Existing Conditions

The USFWS's Endangered Species Program webpage was reviewed to determine whether any federally-threatened or endangered species were known to be located at or near the existing facility site or the proposed project site (USFWS-Species, 2014). The USFWS website indicated no federally-listed endangered species located at or near the site (USFWS-Endangered, 2014). The Bald eagle (*Haliaeetus leucocephalus*) may occasionally be found in Tioga County. The Northern Long-Eared Bat (*Myotis septentrionalis*) is a proposed federal species identified by IPaC to be potentially found in the project area.

The New York Natural Heritage Program (NHP) was reviewed for potential NYS threatened and endangered species or their habitat within the project site. Correspondence dated October 18,

2012 was received from the NYSDEC's (NYSDEC-NHP, 2013) Division of Environmental Permits in Region 7, Syracuse, which provided a jurisdictional determination for the site (see *Appendix C*, Correspondence). The NYSDEC letter indicated a sighting of a Spatterdock Darner (*Rhionaeschna mutata*), which is an imperiled dragonfly/damselfly, in a small pond to the southwest of the proposed project site on the opposite side of Owego Creek. The Subgrantee does not own property in that location on the opposite side of Owego Creek. The construction activities would not impact the Creek or the pond on its opposite side. Response received from the NHP on December 14, 2012 indicated that there were also records for three NYS threatened or endangered plants/animals within 0.5 miles from the site: Green Floater (*Lasmigona subviridis*), Blackchin Shiner (*Notropis heterodon*), and Brook Floater (*Alasmidonta varicosa*).

4.8.2 Potential Impacts and Proposed Mitigation

FEMA determined that neither alternative would affect federally-listed or state-listed threatened, endangered, or proposed species or critical habitat. Pursuant to section 7(a)(4) of the Endangered Species Act (ESA) and implementing regulations at 50 CFR §402.02 and 50 CFR §402.10, FEMA determined that the proposed action would not be likely to jeopardize the proposed Northern Long-Eared Bat species, or destroy or adversely modify proposed critical habitat for the species. The Subgrantee is requested, as a voluntary conservation recommendation, to avoid cutting or destroying known, occupied maternity roost trees during the pup season (June 1-July 31) for the Northern long-eared bat.

4.9 Cultural Resources

Section 106 of the National Historic Preservation Act (NHPA), as amended, and implemented by 36 CFR Part 800 requires federal agencies to consider the effects of their actions on historic properties and provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on Federal projects that will have an effect on historic properties. These actions must take place prior to the expenditure of federal funds. Historic properties include districts, buildings, structures, objects, landscapes, archaeological sites and traditional cultural properties that are listed in or eligible for listing in the National Register of Historic Places (NRHP).

4.9.1 Existing Conditions

Standing Structures - The Owego-Apalachin School District's Administration building is a two story hipped roof painted brick building built in 1912. In 1957, a two story flat roofed unpainted brick addition was constructed on the north elevation which tripled the size of the original building. Original windows at the circa 1912 structure have been replaced with smaller metal frame single units. The original double entrance doors have been replaced with metal doors. The interior has lost most of its character defining features. Taken together, the physical alterations to the original building have sufficiently compromised the building that it no longer retains the character defining features that would make it eligible for listing in the National Register of Historic Places under Criterion C.

Archaeological Resources - Public Archaeology Facility (PAF) was contracted to conduct a Phase I Cultural Resource Survey (Survey) for the Proposed Action. Refer to Appendix F for Cultural Resources and C for correspondence associated with the cultural resources of the project site. In compliance with the New York State's Office of Parks, Recreation, and Historic

Preservation (NYSOPRHP) Standards (1994 and 2005), the area within the proposed project limits (the existing lawn area and staging area) are considered the area of impact for the purpose of conducting this survey. The purpose of the investigation was to determine the potential for the presence of intact, in-situ cultural material, particularly deeply buried material, within alluvium and colluvium in the area of potential effect (APE) of the proposed project area. According to the Survey, no prehistoric or historic archaeological sites were identified within the APE of the Proposed Action.

4.9.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not impact cultural resources. FEMA consulted with NYSOPRHP and they responded in a letter dated June 27, 2013 reference number 12PR02265; It is the SHPO's opinion that the Owego-Apalachin School District Administration Building located at 36 Talcott Street is not individually eligible for listing on the NRHP. Furthermore, the property is not a contributing element to an eligible Historic District.

Proposed Action

FEMA has determined that the proposed action would not affect historic properties. FEMA consulted with NYSOPRHP and they responded in a letter dated May 7, 2013; reference number 13PR01988 No Effect, refer to *Appendix F*. FEMA initiated consultation with the Tribal Historic Preservation Officers of the Seneca Nation of Indians, the Cayuga Nation, and the Onondaga Nation via e-mail on April 23, 2013 and by surface mail posted on the same date. The Seneca and Onondaga Nations indicated they had no further interest in the project (*Appendix F,* Cultural Resources).

4.10 Aesthetics and Visual Resources

4.10.1 Existing Conditions

The existing facility has been in the same location since 1912 in a highly developed mixed-use neighborhood. The proposed project site is located in the southeast corner of a larger property owned by the Subgrantee. The 100+ acres parcel includes the 1.2 acres proposed project site and the existing Owego Apalachin Middle School, Owego Free Academy, Owego Elementary School, portions of the associated parking areas, road network, and athletic fields. The site was farmland up to the mid-1960's when it was converted to accommodate the existing school complex. Refer to *Appendix E* for details pertaining to the historical land uses of this site. The larger property is bordered on the east by NYS Routes 38/96 and a railroad right-of-way and on the west by the Owego Creek. To the north, it is bordered by open, grassy fields and farm fields in the Owego Creek floodplain, and on the south, it is bordered by dense residential housing in the Village of Owego. There are no forested areas within the AD.

4.10.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative may have a negative impact on aesthetic or visual resources. If the existing facility is abandoned a deteriorated structure could adversely impact the aesthetic and/or visual resources.

Proposed Action
Minor impact on aesthetic and/or visual resources would be expected. An administration building would be consistent with planned land use at the 100+ acre school complex property.

4.11 Socioeconomic Resources

4.11.1 Existing Conditions
According to the U.S. Census Bureau 2010 Population, the population for the Village of Owego was 3,896 persons and Tioga County had a population of 51,125 persons (US Census Bureau, 2013). The total number of households located in the Village is approximately 1,678 whereas the County consists of approximately 20,350 households (US Census Bureau, 2013). The 2008-2012 American Community Survey lists medium household income in the Village as $56,296, and in the County as $56,488.

4.11.2 Potential Impacts and Proposed Mitigation
No Action Alternative
This alternative may have adverse impact on the socioeconomic resources of the Village of Owego. Administration services would be conducted from different locations which may lead to increased travel by administrators and may also increase redundancy of actions which wastes tax revenue.

Proposed Action
Short-term (12 to 18 months) positive impact to socioeconomic resources would be anticipated as a result of construction jobs and activity in the area that may support shopping, restaurants, gasoline/hardware & supplies/other retail. The long-term impact would restore pre-storm socioeconomic resources condition within the Village of Owego. Long-term, having the administrative staff in one central location would be a net-return to the pre-disaster socioeconomic conditions.

4.12 Environmental Justice

EO 12898, entitled “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”, guides Federal agencies to “make environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations” (EPA-EO, 2013).

4.12.1 Existing Conditions
The EPA Environmental Justice (EJ) Mapper indicated that there are no potentially sensitive EJ communities within the Village of Owego or Tioga County. NYSDEC identified a potential environmental justice area in Owego less than 1,000 feet from the site. NYSDEC does not guarantee the accuracy, completeness, or timeliness of the EJ information.

4.12.2 Potential Impacts and Proposed Mitigation

Neither project alternative would have a disproportionately high or adverse impact on human health and human environment of minority or low-income populations. There are no low income or minority populations identified for the project area.

4.13 Air Quality

The Federal Clean Air Act requires each state to attain and maintain specified air quality standards. National Ambient Air Quality Standards (NAAQS) have been promulgated by the Federal government and by NYS for carbon monoxide (CO), nitrogen dioxide (NO2), total suspended particulate (TSP), sulfur dioxide (SO2) and lead (Pb). The New York standards are generally the same as the Federal standards for these pollutants. Primary air quality standards are set to protect human health and secondary standards are set to protect human welfare. The EPA is implementing 2008 ozone standards as required by the Clean Air Act and meeting these standards would provide important public and environmental health benefits.

4.13.1 Existing Conditions

Tioga County is located in NYSDEC Region 7. As identified on the EPA EJ Mapper, the proposed project is located in an attainment area for Ozone 8-Hour, Lead 2008 Standard, Particulate Matter (PM) 2.5 Annual and PM 2.5 24-Hour Standard.

4.13.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not impact air quality.

Proposed Action

Temporary impact (12 to 18 months) to air quality would be anticipated during construction activities. Construction activities on the project site may have a potential impact on the local air quality through the generation of fugitive dust or airborne dust. Fugitive dust is generated during ground-breaking and excavation activities. Emissions from diesel construction vehicles are also a potential source of air pollution. The use of best management practices (BMP) would help minimize dust and vehicle emissions. Occupational Safety and Health Administration (OSHA) standards would be followed to preserve public health of construction workers and future occupants of the facility. Long-term, the facility would contribute minor increased air quality emissions due to standard operational and utility system usage associated with the larger school building; however, the emissions would be de minimis and the area is in an attainment area for criteria pollutants. The emissions associated with transportation to/from the site would expect to be similar to levels and ambient air quality prior to the disaster incident. The Subgrantee is responsible for all permits or other authorizations required for new facility construction.

4.14 Contaminated Materials

4.14.1 Existing Conditions

A Phase I Environmental Site Assessment was conducted by Ecological Analysis, LLC on the proposed project site in conformance with the scope and limitations of American Society for Testing and Materials (ASTM) Standard Practice E 1527-05 (See *Appendix E*). Ecological

Analysis did not identify potential recognized environmental conditions of concern at the project site. Ecological Analysis did not observe any indication of generation, storage, disposal, transfer, or historical use of hazardous waste or hazardous material at the project site; and there was no obvious sign of significant chemical release to the project site or to the local environment. Ecological Analysts did not observe any evidence of aboveground or underground chemical or petroleum storage tanks or chemical storage drums, or containers of toxic/hazardous substances, or strong/pungent/noxious odors or pesticides or PCB-containing equipment or pits or ponds or pools of liquid or chemical lagoons or dumps or signs of land filling or discolored soil/pavement or stressed vegetation on the property.

The Phase I Environmental Site Assessment identified only one potential hazardous substance within the vicinity of the project site. A north adjacent property (1 Sheldon Guile Boulevard, Owego Free Academy School) contains a double-walled Above Ground Storage Tank. Based on tank construction, topography and location, it is unlikely that this tank would have any impacts on the project site.

4.14.2 Potential Impacts and Proposed Mitigation

Neither alternative would impact or be impacted by contaminated materials. However, during construction activities, hazardous materials may be present on-site. Best management practices would be used in the event of petroleum or other hazardous material leak. Any spills are required to be reported to NYSDEC. Contractors are responsible for ensuring responsible action on the part of construction personnel. As described in Section 4.15.2, OSHA standards would be adhered to during construction to avoid impacts to public health. The Subgrantee would be responsible to ensure that the existing facility site is secure for both alternatives.

4.15 Noise

Sound pressure level (SPL) is used to measure the magnitude of sound and is expressed in decibels (dB or dBA), with the threshold of human hearing defined as 0 dBA. The SPL increases logarithmically, so that when the intensity of a sound is increased by a factor of 10, its SPL rises by 10 dB, while a 100-fold increase in the intensity of a sound increases the SPL by 20 dB. Equivalent noise level (Leq) is the average of sound energy over time, so that one sound occurring for 2 minutes would have the same Leq of a sound twice as loud occurring for 1 minute. The day night noise level (Ldn) is based on the Leq, and is used to measure the average sound impacts for the purpose of guidance for compatible land use. It weights the impact of sound as it is perceived at night against the impact of the same sound heard during the day. This is done by adding 10 dBA to all noise levels measured between 10:00 pm and 7:00 am. For instance, the sound of a car on a rural highway may have an SPL of 50 dBA when *measured* from the front porch of a house. If the measurement were taken at night, a value of 60 dBA would be recorded and incorporated into the 24-hour Ldn.

Leq and Ldn are useful measures when used to determine levels of constant or regular sounds (such as road traffic or noise from a ventilation system). However, neither represents the sound level as it is perceived during discrete events, such as fire sirens and other impulse noises. They are averages that express the equivalent SPL over a given period of time. Because the decibel scale is logarithmic, louder sounds (higher SPL) are weighted more heavily; however, loud

infrequent noises (such as fire sirens) with short durations would not significantly increase Leq or Ldn over the course of a day.

The Noise Control Act of 1972 required the EPA to create a set of noise criteria. In response, the EPA published *Information On Levels Of Environmental Noise Requisite To Protect Public Health and Welfare With An Adequate Margin Of Safety* in 1974 which explains the impact of noise on humans. The EPA report found that keeping the maximum 24-hour Ldn value below 70 dBA will protect the majority of people from hearing loss. The EPA recommends an outdoor Ldn of 55 dBA. According to published lists of noise sources, sound levels, and their effects, sound causes pain starting at approximately 120 to 125 dBA (depending on the individual) and can cause immediate irreparable damage at 140 dBA. OSHA has adopted a standard of 140 dBA for maximum impulse noise exposure.

4.15.1 Existing Conditions

The ambient noise in the vicinity of the existing facility site is consistent with a developed mixed use neighborhood. The ambient noise level in the vicinity of the proposed project site is typical for a rural area. The proposed site is an existing school complex located on the northern edge of the Village of Owego, Tioga County. Outside the Village, most of land is farmland or forested areas with pockets of residential development. Additional vehicle noise emanates from the nearby NYS Route 38/96 roadway. The ambient noise level in the vicinity of the proposed project site is typical for a rural/residential area. The Ldn is typically about 45 dBA for rural agricultural areas, and 55 dBA for small-town and suburban residential areas. (Reference: NYSDEC program policy memorandum "Assessing and Mitigating Noise Impacts," www.dec.ny.gov/docs/permits_ej_operations_pdf/noise2000.pdf and "Environmental Noise: The Invisible Pollutant," www.nonoise.org/library/envarticle/).

4.15.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not impact ambient noise levels.

Proposed Action

This alternative would have a short-term, minor impact to ambient noise levels during the construction phase; no long-term impacts are expected. The Village Noise Ordinance would be adhered to during construction. Avoidance of construction related noise impacts can be mitigated by implementing a typical work-day schedule, such as limiting heavy machinery use to between the hours of 7:00 a.m. and 5:00 p.m.

4.16 Traffic

4.16.1 Existing Conditions

The traffic patterns in the vicinity of the existing facility site are consistent with a developed mixed use neighborhood. The proposed project site, located east of Sheldon Guile Boulevard in the Village of Owego, is an undeveloped parcel. Since the 1960s, sections of the larger 100+ acres property owned by the sub-grantee has been used a multi-school complex. South of the project site, also along Sheldon Guile Boulevard, is Tioga Opportunities, Inc., a not for profit intergenerational human service agency. Tioga Opportunities has been incorporated and active since 1965. The site is bordered on the east and northeast by NYS Routes 38/96 and a railroad

right-of-way. NYS Route 38/96 is an active roadway that supports automobile, truck, and agricultural traffic. Traffic has increased along Christa McAuliffe Drive since Owego Elementary School received significant flood damage in September 2011 and was subsequently demolished. That area is now an active construction site with the building of a new replacement school.

4.16.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would not impact traffic volume.

Proposed Action

Short-term (12 to 18 months) minor impact to traffic would be anticipated during construction phase. Long-term minor impact on traffic volume would be expected. The presence of construction and delivery vehicles is unavoidable, however, this impact would be short lived and all site construction activities would comply with Village ordinances that relate to operations on a construction site. Post-construction, the traffic volume would increase on roadways leading to the school complex site due to relocating the building to the new location.

4.17 Infrastructure

4.17.1 Existing Conditions

The existing facility site is located in an urban neighborhood with existing water, sewer, and utility infrastructure. The proposed project site is located on a larger 100+ acres property owned by the Subgrantee that also houses the elementary, middle, and high schools. All of the major utilities are available to this site. The new administration building would be expected to use existing infrastructure located on, to, and from the project site.

4.17.2 Potential Impacts and Proposed Mitigation

Neither alternative would be expected to impact the existing infrastructure.

4.18 Public Health and Safety

4.18.1 Existing Conditions

The Village of Owego's public health and safety was negatively impacted by Tropical Storm Lee. The existing facility experienced flood damage which temporarily rendered the facility unsuitable for its intended purpose. The administrative staff was relocated to temporary accommodations until the damaged facility is repaired.

4.18.2 Potential Impacts and Proposed Mitigation

No Action Alternative

The No Action Alternative would negatively impact public health and safety. If the existing facility is abandoned and left to deteriorate, public safety may be at risk from harm by trespassers, arsonists, and facility instability. The facility may cause additional problems in future flood events if it collapses, caught fire, loosened from the foundation and floats away, etcetera.

Proposed Action
The impact on the overall public health and safety would be positive. The new facility would be constructed with code, safety, and Americans with Disabilities Act (ADA) upgrades.

4.19 Climate Change

According to the EPA, the premise of climate change "…refers to any significant change in the measures of climate lasting for an extended period of time" (EPA, no date). This includes major variations in precipitation, sea surface temperatures and levels, atmospheric temperature, wind patterns, and other variables resulting over several decades or longer. However, the EPA identifies and regulates anthropogenic or human actions that may affect climate change. This is dubbed, "abrupt climate change" which occurs over decades and distinguishes it from natural variability that occurs gradually over centuries or millennia. Embodied energy measures sustainability to account for the energy used by structures or to create materials. Another measure of sustainability is life-cycle or cradle-to-grave analysis, which accounts for the extraction, manufacture, distribution, use, and disposal of materials. While resources exist to quantify embodied energy and life cycle analysis, the calculations were not prepared by the Subgrantee for the options presented in this EA.

4.19.1 Existing Conditions

Climate change could potentially increase temperatures in the northeast United States; could potentially cause more severe weather incidents to occur; and could potentially cause sea levels to rise.

4.19.2 Potential Impacts and Proposed Mitigation

None of the alternatives would impact or be significantly or uniquely impacted by climate change. The new facility would be constructed in accordance with the New York State Energy Code (NYSEC). The code specifies basic mandatory requirements for newly constructed buildings. Requirements apply to heating and cooling systems, hot water systems, electrical systems, construction materials, equipment specifications and building sealing and insulation. The New York State Energy Research and Development Authority and the Public Service Commission promote compliance with Energy Star® and New York Energy Smart^{sm} programs by construction firms, building management firms and homeowners that encourage the use of energy conserving appliances, materials, technologies and building techniques. The Subgrantee could consider design and material options to reduce future energy demand, as well as reduce use of non-renewable resources in accordance with the principles of Leadership in Energy and Environmental Design. As noted in Section 4.13, the project is not located in a nonattainment area for air quality; therefore, construction emissions and future operational use emissions would not be exacerbating air quality attainment concerns. The proposed project would not be located in a coastal area with sea-level rise concerns, and as noted in Section 4.5 Floodplains, flood damage risk reduction is incorporated into the proposed project with relocation of the facility outside the 100-year at a site predominately outside the 500-year floodplain.

4.20 Cumulative Impacts

Cumulative effects are defined by the CEQ as the impact on the environment resulting from the incremental impacts of the evaluated actions when combined with other past, present, and reasonably foreseeable future actions, regardless of the source, such as Federal or non-Federal. Cumulative impacts can result from individually minor but collectively significant actions taken over time. Reasonably foreseeable future actions within the community include construction of a new, replacement Owego Elementary School Building and a new, replacement Maintenance and Storage Facility. The school facilities were also flood-damaged during Tropical Storm Lee. The potential impacts from the proposed project (Proposed Action), Owego Elementary School Building, and Maintenance and Storage Facility would not cumulatively have a significant adverse impact on the human environment. The area is now and would continue to be an active construction site for the three respective projects over the next few years. The restoration of public services would be a positive cumulative benefit to the community with the Proposed Action and the anticipated reconstruction of the Owego Elementary School Building and Maintenance and Storage Facility.

The proposed Administration Building site was determined not to have prehistoric or historic archaeological sites present as discussed in Section 4.9.1 of this document; however, both the Elementary School site (flood mitigation area) and proposed Maintenance and Storage Facility sites have known prehistoric archaeology sites. Cumulative effects of disturbance to the archaeological resources at the Elementary School and proposed Maintenance and Storage Facility will be addressed in the future Environmental Assessment for the Maintenance and Storage Facility. Impacts to known archaeological resources at the Elementary School Site were evaluated and mitigated as discussed in the Environmental Assessment for the Owego Elementary School (July 2013) available for download from www.fema.gov/media-library/assets/documents/33601.

5.0 Permits and Project Conditions

The Subgrantee is responsible to obtain all applicable Federal, state, and local permits for project implementation prior to construction, and to adhere to all permit conditions. The Subgrantee has already completed a SEQRA documentation process with forms provided in *Appendix B*. Any substantive change to the approved scope of work will require re-evaluation by FEMA for compliance with NEPA and other laws and executive orders. The Subgrantee must also adhere to the following conditions during project implementation:

1. The new facility must be located, elevated or floodproofed to at/above the 100-Year Floodplain plus any required state/local freeboard utilizing the Best Available Data for 100-year floodplain determination (*Flood Insurance Rate Map Community-Panel Number 36107C0382E dated April 17, 2012*) in accordance with the National Flood Insurance Program and 44 CFR Part 9. At the time this document was drafted, the Subgrantee identified that the new facility structure would be located outside the 100-Year floodplain, satisfying this condition.
2. Excavated soil and waste materials will be managed and disposed of in accordance with applicable Federal, state, and local regulations.

3. The Subgrantee shall ensure the original facility at 36 Talcott Street is safe and secure. It is anticipated that the Subgrantee will demolish the existing structure; however, if the existing structure is not demolished, the Subgrantee will be responsible to bring the structure into code compliance in accordance with the NFIP and local floodplain management code.
4. The Subgrantee shall be responsible to coordinate, as applicable, with the local floodplain administrator or code enforcement official prior to taking actions within regulated floodplain areas and must comply with Federal, state, and local floodplain laws, regulations and codes/ordinances.
5. The Subgrantee must comply with the NYSDEC State Pollutant Discharge Elimination System (SPDES) permit for Stormwater Discharge from Construction Activity or other applicable SPDES permit, in accordance with NYS Environmental Conservation Law. If the NYSDEC General Permit for Stormwater Discharges is determined to cover the proposed action, the Subgrantee shall provide NYSDHSES/DHS-FEMA a copy of the Stormwater Pollution Prevention Plan (SWPPP) and a copy of the Notice of Intent Form at grant project close-out or other time identified by NYSDHSES/DHS-FEMA Grant Programs Directorate per grant administrative documentation guidance requirements. If an individual SPDES permit is determined to be required, the Subgrantee shall provide a copy of the obtained permit, as well as supporting SWPPP to NYSDHSES/DHS-FEMA at grant project close-out or other time identified by NYSDHSES/DHS-FEMA Grant Program per grant administrative documentation guidance requirements. For more information, visit http://www.dec.ny.gov/chemical/43133.html. It is expected that the grantee and its construction contractor(s) will conduct construction utilizing best management practices to limit noise, dust and sedimentation & erosion during construction.
6. The construction and installation of any sanitary sewer and/or septic tank and leach field would need to be coordinated with the Tioga County Health Department.
7. In the event that unmarked graves, burials, human remains, or archaeological deposits are uncovered, the Subgrantee will immediately halt construction activities in the vicinity of the discovery, secure the site and restrict access to the area, and take reasonable measures to avoid or minimize harm to the finds. As soon as possible, the Subgrantee will contact: local law enforcement and the country coroner/medical examiner (for human remains), NYSDHSES, SHPO and FEMA. FEMA will immediately coordinate with the SHPO, notify Participating Tribe(s)/Nation(s) and any other consulting parties that may have an interest in the discovery, and consult to evaluate the discovery for National Register eligibility. Work in sensitive areas may not resume until consultations are completed
8. Tioga County is currently identified as a quarantine zone for the invasive insect Emerald Ash Borer (EAB). Since the proposed project is located in an EAB quarantine county, it is required that any woody tree and shrub material to be removed for the proposed action be chipped on site to chips of less than one inch in two dimensions or not be transported whole outside the community in order to adhere with EO 13112 Invasive Species, Federal regulations at 7 CFR Part 301.53-1 through 301.53-9 and state regulations at 1 NYCRR Part 141. Invasive insects can devastate the forests of the northeast and it is recommended that communities in the northeast treat or handle wood materials in place to minimize the spread of these non-native insects. For more

information concerning this environmental stewardship requirement, visit USDA-APHIS, New York State Department of Agriculture and Markets, and other websites concerning EAB:

- www.aphis.usda.gov/plant_health/plant_pest_info/emerald_ash_b/
- www.agriculture.ny.gov/PI/eab.html
- www.nyis.info/?action=news_detail&event_id=306

9. Occupational Safety and Health Administration (OSHA) standards shall be followed during construction to avoid adverse impacts to worker health and safety.
10. It is recommended that the grant Subgrantee restore disturbed construction areas of the site with native seed and/or plant species to minimize soil erosion and sedimentation, as well as enhance environmental habitat quality of project area. It is recommended that disturbed soil areas be planted with native plant material, as soon as practicable after exposure, to avoid or minimize growth of undesired and potentially invasive plant species that can potentially take hold without competition of native plant materials. Local landscape plant nurseries and soil conservation offices can assist with identification of suitable native plants for site location type. The following websites may also be useful to identification of native plant material for the proposed project site:
    - http://plants.usda.gov/java/
    - www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/plants/
    - www.fs.fed.us/wildflowers/nativeplantmaterials/rightmaterials.shtml
11. If the Grantee and Subgrantee obtain site fill for construction, the fill must be from a permitted commercial supplier or locally municipally owned soil/gravel borrow area permitted for mining/excavation as fill material. If the Grantee and/or Subgrantee plan to obtain soil or gravel from a non-commercial source or site that is not permitted, the details of the proposed source location must be submitted to FEMA for approval as a scope of work change prior to construction implementation. FEMA would need to conduct a federal agency environmental and historic preservation compliance review of non-permitted/non-commercial sources prior to construction implementation. The environmental concerns would be potential impacts to cultural resources or habitat areas at an excavation site not previously reviewed, permitted and otherwise cleared for use as a borrow area.
12. The Subgrantee shall submit copies of all obtained environmental, including floodplain management, permits to the Grantee/FEMA at or prior to final closeout of the public assistance grant.
13. The proposed project area serves as potential summer roosting habitat for the Northern long-eared bat (*Myotis septentrionalis***),** a proposed species for the federal threatened and endangered species list. Pursuant to section 7(a)(4) of the Endangered Species Act (ESA) and implementing regulations at 50 CFR §402.02 and 50 CFR §402.10, FEMA has determined that the proposed action would not be likely to jeopardize the proposed species, or destroy or adversely modify proposed critical habitat. The Subgrantee is requested, as a voluntary conservation recommendation, to avoid cutting or destroying known, occupied maternity roost trees during the pup season (June 1-July 31) for the Northern long-eared bat. If the Northern long-eared bat is listed, and if project activities are expected to continue afterwards, this concurrence will serve to satisfy consultation requirements pursuant to Section 7 of the ESA, provided that: (1) the

project scope and activities remain unchanged; (2) any proposed conservation recommendations are implemented as conservation measures; and (3) there are no other changes (e.g., to the landscape, habitat, etc.) that may affect the newly-listed species and that have not already been analyzed in this consultation. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of federally-listed and proposed endangered and threatened species in New York is available for your information. Until the proposed project is complete, the Grantee and Subgrantee are recommended to check the USFWS website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project is current. The U.S. Fish & Wildlife Service (USFWS) New York Field Office website provides general information about species. The Information, Planning and Conservation System IPaC website can be utilized for site specific information. The proposed species could be listed as endangered as early as April 2, 2015, although it is to-be-determined. If the proposed construction action has not been initiated by April 2, 2015 and the species is listed at that time, the Grantee/Subgrantee must contact FEMA to re-open project federal agency environmental compliance review and ESA consultation if the Grantee/Subgrantee cannot adhere to the tree removal window for known roost trees. If the tree window can be adhered to, the Grantee/Subgrantee will be in compliance with ESA. If the Grantee/Subgrantee has any questions concerning this conservation recommendation that is voluntary at this time, please feel free to contact FEMA Region 2 at 212.680.3600. Additional general information about the Northern long-eared bat is available at: www.fws.gov/Midwest/endangered/mammals/nlba/index.html.

6.0 Public Involvement

The Subgrantee presented plans for the Administration Buildings to the public in a meeting on March 21, 2013. The public was invited to participate in the meeting via local media (*Binghamton Press* & *Sun-Bulletin*), the School District's newspaper of record, and several other local network TV affiliates and radio stations. The School District Superintendent visited a local Owego radio station to discuss the meeting on air and did a "call-in" interview with another radio station in Binghamton, NY. Notice of the meeting and subsequent media coverage was disseminated widely using the district's social media and web sites. Several media organizations attended the public meeting and provided coverage. Numerous members of the public attended the meeting along with members of the Board of Education. The plans were also presented at regular Board of Education meetings and through meeting notes, email distribution lists and social media such as the Subgrantee's facebook page.

In accordance with NEPA, this Environmental Assessment (EA) will be released for a 15-day public review and comment period. Availability of the document for comment will be advertised in the *Binghamton Press & Sun-Bulletin* newspaper. A hard copy of the EA will be available for review at the Village of Owego's Village Clerk's Office at 178 Main Street, Owego, New York 13827. An electronic copy of the EA is available for download from the FEMA website at https://www.fema.gov/resource-document-library. This EA reflects the evaluation and assessment of the Federal government, the decision-maker for the Federal action; however,

FEMA will take into consideration any substantive comments received during the public review period to inform the final decision regarding grant approval and project implementation. The public is invited to submit written comments by mail to FEMA, Office of Environmental Planning & Historic Preservation, Leo O'Brien Federal Building, 11A Clinton Avenue, Suite 742, Albany, New York 12207, or E-mail to: FEMA4020-4031Comment@fema.dhs.gov.

The EA evaluation resulted in the identification of no significant impacts to the human environment. Obtaining and implementing permit requirements along with appropriate best management practices will avoid or minimize potential adverse effects associated with the three alternatives considered in this EA to below the level of a significant impact. If substantive comments are received from the public during the public review and comment period, comments will be evaluated and addressed as part of Final Environmental Assessment documentation prior to the anticipated issuance of a Finding of No Significant Impact (FONSI) by FEMA. If no substantive comments are received, this EA will be adopted as final with issuance of a Finding of No Significant Impact (FONSI).

Copies of the EA will be sent to:

NYSDHS
1220 Washington Avenue,
Suite 101, Building 22
Albany, NY 12226-2251

NYSDEC Region 7
Cortland Sub-office
1285 Fisher Avenue
Cortland, NY 13045

The following will receive notice of the EA's availability:

Mr. John Bonafide
New York State Office of Parks, Recreation and Historic Preservation
Peebles island, PO Box 189 Waterford, NY 12188-0189

Onondaga Nation
Mr. Anthony Gonyea, Faithkeeper
RR#1, Route 11A
Box 319B
Nedrow, New York 13120

7.0 Conclusion

FEMA, through NEPA, and the Subgrantee through the State Environmental Quality Review Act (SEQRA) process, have found that the Proposed Action to construct the Owego Apalachin Administration Building at the Sheldon Guile Boulevard, which is the Subgrantee's preferred alternative, would not have an adverse impact on the human environment. The Subgrantee's preferred alternative would apply 428 PA funding towards relocation of the facility and its

operations to outside the 100-Year Floodplain which would be beneficial for flood damage risk reduction and resiliency of the community. During the construction period, short-term impacts to soils, surface water, transportation, air quality, and noise are anticipated. Short-term impacts would be mitigated utilizing best management practices, such as silt fences, proper equipment maintenance, and appropriate signage. Environmental impacts of construction would also be minimized per adherence to any required Stormwater Pollution Prevention Plan (SWPPP), adherence to invasive insect quarantine protocols and compliance with building and floodplain development permit requirements. The long-term environmental impacts associated with site development and the occupancy of the 500-year floodplain for a small portion of site development are outweighed by the positive impact of the project to restore fully the school administration services within the community.

8.0 List of Preparers

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FEMA Region II, 26 Federal Plaza, New York, New York 10278

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