# Attachment C: Construction

1. Introduction

An assessment of potential for impacts due to construction of the Proposed Action was performed. The construction activity, the anticipated schedule and assessment of potential construction impacts are provided below.

1. Construction Schedule AND ACTIVITY

Construction of the Proposed Action, including all installation and removal tasks, will take approximately 20 months to complete. The number of construction workers on site per day will vary but is not expected to exceed 12 individuals at any one time. The typical work schedule will be from 8:00 AM to 4:00 PM, Monday to Friday, with possible night time work from 9:00 PM to 5:00 AM in the event that a road closure for the NYSDOT Road Widening project is necessary. PSEG-LI met with the Town of Brookhaven Councilman Michael Loguercio on April 8th, 2019 to discuss the transmission and distribution pole modifications along NYS-112 between Granny Road and Old Port Jefferson Road and the potential for night time work. Also, letters describing the Proposed Action were mailed to customers along the proposed route on December 17, 2018 and additional notification letters indicating the potential for night time work will be sent to the area residents and businesses notification letters will be sent to area residents and businesses indicating the potential night time work.

All poles will be directly embedded to depths of 6 to 10 feet, depending on the overall pole height. At locations with adjacent underground utilities, pole installation pits will be excavated by vacuum truck or hand tools. Once the new pole is set, the excavation will be backfilled with the removed soil or soil excavated from nearby pole installation locations. The distribution lines will be detached from the existing poles that will be removed, and reattached to the new poles. During the relocation of the distribution lines, temporary outages will be sporadic, if necessary. Power outages may be required during construction for safety purposes, and they will be minimized to the maximum extent practicable. If a power outage is required, the customers that would potentially be affected will be notified in advance.

After the transmission line and distribution lines are reattached to the new poles, any other utilities will be transferred to the new poles by the respective utility owner as needed, and existing poles no longer in use will be removed by other utility companies.

The UG construction includes installation of the following components via horizontal directional drilling (HDD): (i) 2,130 feet of cable and conduit along NYS-112 from the I-495 to approximately 515 feet north of Horseblock Road; (ii) approximately 660 feet of cable and 220 feet of cable to run parallel in proposed conduit along Horseblock Road; (iii) approximately 95 feet of cable and conduit to run across Horseblock Road to connect to an existing customer, (iv) approximately 325 feet of cable to run along NYS-112 and then cross the road to run along I-495 North Service Road; (v) two cables (140 feet and 505 feet in length, respectively) along the west side of NYS-112 to connect to existing customers; and (vi) three manholes (two 11’ by 6’ and one 8’ by 4.5’ manhole), one below grade transformer and one switchgear along the west side of NYS-112. One 815-foot section of existing UG cable along NYS-112 crosses I-495 will be abandoned in place. Twelve drill pits, each 4’ by 8’ wide, will be created along the length of the proposed cable installation. All sections of cable that are proposed to run along NYS-112 will be located underneath the proposed curb as part of the NYSDOT Road Widening Project. The excavation area will be minimized to the maximum extent practicable. It is anticipated that the largest disturbance areas will be approximately 12’ by 7’ wide, the area for the 11’ by 6’ manhole installations. The manholes, below grade transformer and switchgear will be installed within developed, previously disturbed areas and franchise areas, including paved sidewalks and landscaped areas.

As discussed for the OH portions of the Proposed Action pits for pole installation will be excavated by vacuum truck or hand tools. A super line truck (derrick) would be needed to lift and install the poles. Bucket trucks and specialized equipment will be required for the construction workers to complete the OH transmission and distribution work, and additional trucks will be needed to transport the materials.

The UG work will require the following types of trucks: a drill rig, support trucks, a crane truck, and an excavator truck. Up to four trucks for the OH work will be utilized at any one location and up to five trucks for the UG work will be utilized at any one location. A maximum of thirteen trucks will be used at any given time for construction of the Proposed Action along the length of the Proposed Action (three to four trucks each at the two OH locations and 5 trucks at one UG work location). Construction of the Proposed Action is anticipated to occur 8 hours per day, 5 days a week, for a maximum of 20 months. All trucks for the Proposed Action will be operating within the construction limits of the NYSDOT Road Widening project.

In total, 0.1 acres or less will be disturbed as a result of the installation of the UG cable, inclusive of the manholes, below grade transformer, switchgear, and the OH transmission and distribution pole work. Once the Proposed Action is complete, all disturbed areas will be restored by the NYSDOT as part of their Road Widening project. No tree removal for the Proposed Action will occur. Minor tree trimming for OH utility clearances will be performed as part of the Proposed Action and is discussed further below. Any impacts to land from construction will be strictly temporary in nature and will be mitigated by work methods and engineering controls.

stormwater, surface waters and groundwater

Since the Proposed Action will disturb less than 1 acre, a New York State Department of Environmental Conservation (“NYSDEC”) State Pollution Discharge Elimination System (“SPDES”) General Permit for Stormwater Discharges from Construction Activity is not required. The Proposed Action will result in soil disturbance at a depth no greater than 10 feet below ground surface. Since the approximate depth to groundwater along the Proposed Action route is 37-60 feet below ground surface, the Proposed Action will not have the potential to impact groundwater. Therefore, the Proposed Action will not have a significant adverse impact on stormwater, surface waters or groundwater.

Traffic

It is anticipated that all worker and truck parking will be accommodated near roads that access the Proposed Action area. As discussed, a maximum of eleven trucks will be utilized on any single day along the length of the Proposed Action. Based on the limited number of trucks to be utilized during construction, the temporary increase in traffic will not have the potential to result in a significant adverse impact on traffic conditions in the vicinity of the Proposed Action.

All construction equipment and staging will occur within the construction limits which will be implemented by the NYSDOT for the Road Widening project. The NYSDOT will coordinate lane shifts to ensure minimized traffic impacts during the construction of the Road Widening project.

It is not expected that there will be lane closures during the daytime travel times, or road shoulder closures during the peak rush hour times. If shoulder or lane closures are required at any time during the work due to mobilization or staging of vehicles and equipment, flagmen will be used to control traffic. In the immediate vicinity of construction activity, access to residences and businesses may be temporarily limited, but at no point completely blocked. During work shifts, a worker will be assigned to move protective barriers to allow access to properties. At all times there will be a path for emergency equipment to access all residences and businesses. At completion of all work shifts access will be returned to normal and each property will be affected temporarily.

Based on the minimal increases in vehicular trips and the utilization of NYSDOT’s traffic control plans in impacted areas, the Proposed Action’s construction activities are not expected to result in a significant adverse impact to traffic.

Air quality

Construction equipment, construction vehicles, construction worker vehicles, as well as dust generated construction activities, result in air pollutant emissions. Diesel-powered engines produce nitrogen oxides (NOx) and particulate matter (PM). Fugitive dust generated by demolition and construction activities is also a source of PM. Finally, gasoline engines produce carbon monoxide (CO) and PM. Overall, the emissions generated during construction of the Proposed Action will not be significant and will not affect New York State Implementation Plans (SIP) for attaining and maintaining National Ambient Air Quality Standards (NAAQS) for the pollutants discussed above. Furthermore, the localized increases in emissions will be temporary and will not significantly affect ambient pollutant levels at sensitive receptor locations (such as residences, schools, and publicly accessible open space or recreational areas). Sources of air pollutant emissions and measures that will be taken to the extent practicable to reduce those emissions by the Proposed Action are described below.

The trucks are not expected to operate on a continuous basis during any day, with the exception of one drill rig and one or two support trucks for the UG cable work from the I-495 to Pole #189 on the west side of NYS-112 (located approximately 515 feet north of Horseblock Road). As discussed, a maximum of eleven trucks will be utilized daily. Therefore, the air emissions generated by the operation of the construction equipment will not result in a significant air quality impact. Furthermore, construction activities will involve a relatively modest number of workers and deliveries and therefore the number of construction worker vehicle and truck trips will be small in comparison to existing traffic volumes.

Fugitive dust emissions occur as a result of soil or other fine material transport or transfer operations and traffic over unpaved areas. Actual quantities of emissions depend on the extent and nature of operations, the type of equipment employed, the physical characteristics of the underlying soil, the speed at which construction vehicles are operated, and the type of fugitive dust control methods employed. Appropriate equipment and truck idling reduction, and fugitive dust control measures, such as dust covers and rinsing for trucks will be employed to minimize emissions. Therefore, it is anticipated that there will be very low potential for a significant adverse impact from any fugitive dust generated by the Proposed Action.

Noise and vibration

Increases in noise and vibration levels during construction of the Proposed Action will result from construction equipment operation, as well as from mobile sources, i.e., trucks and worker vehicles traveling to and from the work site. Noise levels at a given receptor are dependent on the type and number of pieces of construction equipment being operated, the receptor’s distance from the work site, and any shielding effects (i.e., from structures such walls or barriers).

Noise from construction equipment is regulated by the United States Environmental Protection Agency (“EPA”) noise emission standards. These federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emission standards and construction material be handled and transported in such a manner as not to create unnecessary noise.

The HDD drilling and excavation equipment to be utilized for the Proposed Action, operate at approximately 85 dBA (when the drill is above the ground) when measuring from the area immediately next to the equipment, which is equivalent to typical truck traffic. At a distance of approximately 60 feet from the drilling equipment, the noise level would be approximately 65 dBA. The distance between any HDD drilling location and the closest residential location is 1,860 feet (0.35 miles). Therefore, there will not be any significant noise impact from HDD drilling at the residential locations. The closest commercial uses to an HDD drilling location are 45 and 70 feet, respectively. The noise level at that location may be slightly elevated during drilling and will last only approximately 2 days. Therefore, there will not be any significant adverse impact at the commercial locations given the temporary nature of the drilling work. The HDD drilling locations are illustrated on the Aerial Site Location Map – **Figure 2**.

The OH pole installation and excavation equipment has a lower noise level than the HDD equipment. Accordingly, the pole installation noise level at the residential location located closest to a pole installation (at a distance of 50 feet) will be less than 65 dBA. The distance between a pole installation location and the closest commercial location is approximately 40 feet. Other commercial uses along the Proposed Action route are at least 70 feet away from the nearest pole work. The noise level at the closest residential and commercial location may be slightly elevated during the pole installation activity but will last only approximately 2 days. Therefore, the OH work will not result in a significant noise impact on residential uses or area commercial businesses due to the temporary nature of the Proposed Action installation activity.

The Town of Brookhaven also has regulations that limit noise from construction activities between the hours of 7 PM and 6 AM the following day on weekdays, or at any time on weekends or legal holidays. PSEG-LI met with the Town of Brookhaven Councilman Michael Loguercio on April 8th, 2019 to discuss the transmission and distribution pole modifications along NYS-112 between Granny Road and Old Port Jefferson Road and the potential for night time work. Notification letters will be sent to area residents and businesses indicating the potential night time work.

In terms of vibration, for limited time periods, perceptible vibration levels may be experienced at locations immediately adjacent to the construction area. However, the operations that will result in these perceptible vibration levels will be expected to only occur for very short periods of time at any particular location. Therefore, vibration due to construction activities associated with the Proposed Action will not result in a significant adverse impact. Due to the limited amount of residential uses nearby and the nature of the construction, vibrations from construction of the Proposed Action will not result in a significant impact to nearby residential properties.

Land use and neighborhood Character

Access to businesses and residences along NYS-112 will be maintained throughout the construction period. There are three apartment complexes located along the east side of NYS-112 (with each complex located approximately 0.1 miles, 0.4 miles and 0.38 miles south of Granny Road), three low density residential uses located along the west side of NYS-112 (with two residential uses located approximately 0.04 miles north of Commercial Boulevard and one residential use located approximately 0.2 miles north of Commercial Boulevard), and five low to medium density residential uses to the east of the Proposed Action and set back from the roadway greater than 400 feet. However, all of these residential uses are located farther than 50 feet from the proposed work locations, and noise due to construction will be intermittent in these areas. There will be construction trucks and workers coming to the work site. There will also be minimally intrusive noise from operation of the construction equipment as well as trucks and other vehicles, as discussed above. These disruptions will be temporary in nature and are anticipated to have very little impact on land use within the Proposed Action area. Overall, while construction activities will be evident in close proximity to the construction area, the duration of construction as a result of the Proposed Action will not result in a significant adverse impact on local land use patterns or the character of the nearby area.

Cultural Resources

The NYSDOT Road Widening project was coordinated with the NYS Office of Parks, Recreation, and Historic Preservation (OPRHP) and was reviewed in accordance with Section 106 of the National Historic Preservation Act of 1966 which satisfies the requirements of the New York State Parks, Recreation and Historic Preservation Law, Section 14.09. OPRHP made the determination that no historic properties would be affected by the project in correspondence dated May 16, 2015. The Cultural Resources Information System (CRIS) database was reviewed for State and National historic buildings within one mile of the Proposed Action[[1]](#footnote-1). No new historic or prehistoric sites have been listed since the date of the correspondence from OPRHP. Most construction activities will occur within the construction workspace and roadwork barriers which will be installed by the NYSDOT for the Road Widening project. As such, it is anticipated that construction of the Proposed Action will not result in a significant adverse impact to cultural resources in the area.

Archeological Resources

A portion of the Proposed Action is located within an archeological sensitive area (refer to Archeological Sensitive Areas Map – **Figure 3**). The OPRHP made the determination that the NYSDOT Road Widening project will have no impact on archaeological resources listed in or eligible for the New York State National Registers of Historic Places (NYSDOT’s Final Design Report Appendix B – Environmental Information for the Reconstruction Project PIN 0016.27.101 NY 112 From I-495 to Granny Road, 2016). The construction activities for the Proposed Action will occur within the construction limits of the NYSDOT Road Widening project. Therefore, all disturbances for the Proposed Action will occur within the NYSDOT’s construction limits of disturbance and within previously disturbed franchise areas, including paved sidewalks and landscaped areas. As such, a significant adverse construction impact to archaeological resources is unlikely. In the event that intact archeological resources are identified during construction, further testing, documentation, and evaluation may be necessary and will be undertaken in consultation with OPRHP.

Architectural Resources

There are no buildings or structures listed in the State or National Register of Historic Places or over 50 years old within the footprint, or within 1 mile of the Proposed Action area (CRIS, 2019). Therefore, the Proposed Action will not result in a significant adverse impact to architectural resources.

Natural Resources

Groundwater underlying the Proposed Action site ranges from depths of 37 feet to 60 feet below ground surface, and is associated with the Magothy Aquifer, a local freshwater resource[[2]](#footnote-2). Excavation activities for the Proposed Action are not anticipated to reach these depths as the maximum depth of disturbance will be approximately 12 feet below ground surface. Since no interaction with the groundwater is anticipated to occur, no adverse construction impact to groundwater is anticipated.

No areas of the Proposed Action area are located within the 100-year floodplain (the area with a 1 percent probability of flooding each year). Therefore, the Proposed Action will not result in an adverse impact with regards to flood levels, flood risk, or the flow of flood waters.

One pole replacement, Pole #299 located approximately 650 feet north of Wincoram Way/Skips Road in Coram, is located within a DEC Freshwater regulated wetlands adjacent area, and as such requires submission of a site-specific Notice of Commencement (NOC) to the NYSDEC pursuant to PSEG-LI’s Wetlands General Permit (GP-1-9901-00011/00026). The area of disturbance will be located within a well-maintained grass shoulder, and within a curb line that lies between the pole area and the wetland. The NOC was submitted to the NYSDEC on January 17, 2019. Silt fence will be installed to prevent migration to the freshwater wetland and limit erosion in the area of the soil disturbance. Due to the nature and location of the work, the Proposed Action will not have adverse impacts to the Wetlands area. There are no federally jurisdictional Unites States Army Corps of Engineers (“USACE”) or NYSDEC regulated tidal wetlands or regulated adjacent areas (300 feet) within or adjacent to the Proposed Action area. Therefore, construction of the Proposed Action will not result in adverse impacts to wetlands.

The Proposed Action area is within the habitat range of the Northern Long Eared Bat (“NLEB”, *Myotis septentrionalis*) a Federally Threatened species, and within the habitat range of the Tiger Salamander, listed as Endangered in New York State. Based on review of the New York Natural Heritage Program (NYNHP) Response Letter as part of the NYSDOT Road Widening project request for information as part of the NYSDOT’s environmental review, there are no known hibernacula within 0.25 mile of the Proposed Action site and there are no known reported roost sites within approximately 6 miles of the site (NYSDOT Road Widening project, Final Design Report, Environmental Information, 2016). Tree trimming will be required for safety clearances along the rights of way of the utility corridor. Although there are areas in the vicinity of the Proposed Action that are forested which may be a suitable habitat for the NLEB, the tree trimming will occur along the active and well-developed rights of way of the NYS-112 roadway, and this trimming will be minor in nature. There are no known Tiger Salamanders within 0.25 miles of the Proposed Action site and there are no waterbodies or vegetated areas present at the site that would serve as Tiger Salamander habitat. The nearest reported habitat suitable for the Tiger Salamander is the Pitch Pine Oak Heath Woodland which is located over 2,000 feet (over 0.3 miles) northeast of the site. Therefore, it is anticipated that the Proposed Action will not result in any adverse impact to the NLEB or Tiger Salamander.

According to the NYNHP Response Letter as discussed above, the Proposed Action area is within the vicinity of the Trinerved White Boneset (scientific name *Eupatorium album var. subvenosum*), a vascular plant that is listed in New York State as Threatened. The plant was recorded as occurring within the property of the Holy Sepulchre Cemetery (“cemetery property”) in September 6, 1985, specifically within dry oak woods areas. Since the soil disturbances for the Proposed Action will be located within mowed grassy roadside areas along the existing utility rights of way, no significant adverse impact on this plant species are anticipated.

Based on the area of disturbance and limited ecological value of the public road rights of way, there will be no potential for adverse impacts to terrestrial ecological communities and vegetation resulting from construction of the Proposed Action. Construction activities will not eliminate or significantly impact high quality or valuable habitat for wildlife and will not adversely affect urban-adapted species that may occur in the Proposed Action area.

Other federal- or state-listed rare, threatened, or endangered species or significant habitats that are considered to have the potential to occur in the adjacent areas of the Proposed Action are not likely to be in the Proposed Action area due to the immediate proximity of the busy roadway and limited vegetation for potential habitat space. Therefore, construction of the Proposed Action is not anticipated to result in an adverse impact to rare, threatened, or endangered species and significant habitats or any other natural resources.

Based on the above, the Proposed Action will not result in a significant adverse impact to natural resources.

hazardous materials

No hazardous materials will be utilized for the Proposed Action. Also, a search of the New York State Department of Environmental Conservation (NYSDEC) Environmental Remediation Databases indicated that there are currently no open NYSDEC remediation programs along or adjacent to the Proposed Action site. The NYSDEC Spill Incident database indicated that 72 spills have occurred adjacent to or near the Proposed Action and 8 spills have occurred along NYS-112 roadway since to 1978. NYSDEC has closed all of these spill incidences as having been remediated or not requiring remediation, and therefore they are not a risk to human health. Therefore, the Proposed Action will not result in exposure to, or mobilization of, hazardous materials.

1. CRIS. 2019. Cultural Resources Information System database for New York State. Available online: https://cris.parks.ny.gov/. Accessed 4/4/2019. [↑](#footnote-ref-1)
2. USGS. 2018. Depth-to-Water tool for Long Island, NY, 2010. Available online: <https://ny.water.usgs.gov/maps/li-dtw10/>. Accessed 11/21/2018. [↑](#footnote-ref-2)