Sound Impact Study
Bridgehampton to Buell New 69 kV Underground Transmission Cable Project

Suffolk County, NY

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Prepared For:

PSEG Long Island
175 East Old Country Road
Hicksville, New York 11801

Prepared By:

TRC
404 Wyman Street Suite 375
Waltham, MA 0251

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1. Introduction

The following Noise Study Report has been prepared by TRC for the installation of the Bridgehampton to Buell New 69 kV Underground Transmission Cable Project (the "Preferred Alternative") proposed by PSEG Long Island (PSEG-LI) as an agent for the Long Island Lighting company d/b/a Long Island Power Authority (LIPA). The project is located in the Town of East Hampton and the Village of Sag Harbor, both in Suffolk County, New York. The Preferred Alternative does not involve the installation of any permanent major noise-producing equipment; this analysis includes an assessment of construction noise only and does not include an operational noise impact assessment. The construction methodology is described in additional detail in Section 1.2 but generally includes the use of Horizontal Directional Drilling (HDD) and open trenching, with trenchless jack-and-bore installation at specific locations along the Preferred Alternative corridor.

Sound impacts described in this analysis are evaluated as they pertain to NYSDEC and EPA guidance and best practices.

1.1 Location of Preferred Alternative

PSEG-LI is proposing the installation of a new underground 69 kilovolt (kV) transmission cable from the Bridgehampton Substation located on Bridgehampton-Sag Harbor Turnpike in the Town of Southampton to the Buell Substation located on Cove Hollow Road in the Town of East Hampton. The Preferred Alternative will take place primarily within local, county, and state road Rights-Of-Way (ROW), with the exception of a short route segment within Long Island Power Authority (LIPA) owned and/or controlled overhead ROW and a crossing of the Long Island Railroad (LIRR) ROW. The overall route is approximately 7.6 miles in length with a proposed area of disturbance of approximately 45 acres.

Specifically, the Preferred Alternative route is described as follows:

- The cable will exit from the north side of the Bridgehampton Substation, and travel 250± feet northeast to Bridgehampton-Sag Harbor Turnpike.
- The cable will continue north along Bridgehampton-Sag Harbor Turnpike (which becomes Main Street at the entrance to the Village of Sag Harbor) for 1.34± miles before turning east on Jermain Avenue.
- The cable will continue east on Jermain Avenue for 0.49± mile.
- The cable will turn south onto Madison Street for 0.28± mile.
- The cable will turn east onto Harrison Street for 0.55± mile.
- At the intersection of Harrison Street and Hampton Street (NYS Route 114), the cable will turn south and follow the latter roadway for 4.93± miles (as Hampton Street progresses south, it becomes East Hampton-Sag Harbor Turnpike).
- At the intersection of NYS Route 114 and Cove Hollow Road, the cable will cross the latter roadway ROW, travel across adjacent parcels owned by NYS and LIPA,

and then pass beneath the LIRR tracks and enter the north side of the Buell Substation, a distance of 300± feet.

1.2 Preferred Alternative Description

For the purposes of this sound impact assessment, the Preferred Alternative's construction methodology will include the following distinct major sound-producing activities: trenching, trenchless cable installation via jack-and-bore, and manhole installation. Each of these activities will utilize a different combination and configuration of sound-producing equipment, including excavators, mobile cranes, dump trucks, an auger drilling rig, a concrete truck, a vacuum truck, pumps, and generators.

HDD will be the preferred installation method along the entire 4.8-mile portion of the route along SR-114, with entry and exit pits spaced 300 feet apart along that span, for a total of 88 HDD pits. A typical HDD equipment configuration includes a drilling rig, excavator, mud pump, mobile crane, mixer truck, and generator as major sound sources. Excavator trenching will occur along the remaining 2.7-mile portion of the route and will include an excavator and dump truck as the primary sound sources. A jack-and-bore trenchless method will be used for the crossing of the LIRR right-of-way at the eastern end of the route. A typical jack-and-bore crossing equipment configuration is similar to HDD and includes a drilling rig, excavator, lubrication pump, mobile crane, and generator as major sound sources. Additionally, fifteen manholes will be installed along the route using a mobile crane. Other sound sources of lesser intensity such as light plants, light-duty trucks, and small generators may also be used along the Proposed Activity route but will not appreciably affect overall sound impact when operating nearby the other major sound sources assessed. Sound level detail for each piece of equipment assessed is included in Section 5.1.

The proposed construction and installation sites along the route include undeveloped woodlands, residential neighborhoods, and commercial uses. A mix of commercial and electric facility land uses are located near the eastern end of the Preferred Alternative route. The eastern quarter of the route also includes a single-family residential neighborhood. The center part of the route is adjacent to woodland, and the western part of the route is adjacent to woodland and low-density residential land uses. The eastern and western ends of the Preferred Alternative route are located at existing electric substations.

1.3 Open Trench Alternative Description

If HDD is not selected as the installation method along SR-114, excavator trenching will be the primary installation method along the entire 7.5-mile route and will include an excavator and dump truck as the primary sound sources. The LIRR crossing will remain as described above.

2. Concepts of Environmental Sound

Sounds are generated by a variety of sources (e.g., a musical instrument, a voice speaking, or an airplane that passes overhead). Energy is required to produce sound and this sound energy is transmitted through the air in the form of sound waves – tiny, quick oscillations of pressure just

above and just below atmospheric pressure. These oscillations, or sound pressures, impinge on the ear, creating the sound we hear. The range of sound pressures that can be detected by a person with normal hearing is very wide, ranging from about 20 micro-pascals (µPa) for very faint sounds at the threshold of hearing to nearly 10 million µPa for extremely loud sounds, such as a jet during take-off at a distance of 300 feet. Because the range of human hearing is so wide, sound levels are reported using "sound pressure levels", which are expressed in terms of decibels and abbreviated as SPL. The sound pressure level in decibels is the logarithm of the ratio of the sound pressure of the source to the reference sound pressure of 20 µPa, multiplied by 20.

Table 2.1 provides some examples of common sources of sound and their sound pressure levels. All sound levels in this assessment are provided in A-weighted decibels, abbreviated "dB(A)" or "dBA." The A-weighted sound level reflects how the human ear responds to sound, by deemphasizing sounds that occur in frequencies at which the human ear is least sensitive to sound (at frequencies below about 100 hertz and above 10,000 hertz) and emphasizing sounds that occur in frequencies at which the human ear is most sensitive to sound (in the mid-frequency range from about 200 to 8,000 hertz). In the context of environmental sound, noise is defined as "unwanted sound."

Table 2.1 Examples of Common Sound Pressure Levels

Sound Level dB(A)	Common Indoor Sounds	Common Outdoor Sounds
110	Rock Band	Jet Takeoff at 1000 feet
100	Inside NYC Subway Train	Chain Saw at 3 feet
90	Food Blender at 3 feet	Impact Hammer (Hoe Ram) at 50 feet
80	Garbage Disposal at 3 feet	Diesel Truck at 50 feet
70	Vacuum Cleaner at 10 feet	Lawn Mower at 100 feet
60	Normal Speech at 3 feet	Auto (40 mph) at 100 feet
50	Dishwasher in Next Room	Busy Suburban Area at night
40	Empty Conference Room	Quiet Suburban Area at night
25	Empty Concert Hall	Rural Area at night

Sound pressure levels are typically presented in community noise assessments utilizing the noise metrics described below and expressed in terms of A-weighted decibels.

- "L_{10}" is the sound level that is exceeded for 10 percent of the time. This metric is a measure of the intrusiveness of relatively short-duration noise events that occurred during the measurement period.
- "L_{50}" is the sound level that is exceeded for 50 percent of the measurement period.
- "L_{90}" is the sound level that is exceeded for 90 percent of the time and is a measure of the background or residual sound levels in the absence of recurring noise events.
- "L_{eq}" is the is the constant sound level which would contain the same acoustic energy as the varying sound levels during the time period and is representative of the average noise exposure level for that time period.

- "L_{MAX}" is the instantaneous maximum sound level for the time period.

It is often necessary to combine the sound pressure levels from one or more sources. Because decibels are logarithmic quantities, it is not possible to simply add the values of the sound pressure levels together. For example, if two sound sources each produce 70 dB and they are operated together, their combined impact is 73 dB – not 140 dB as might be expected. Four equal 70 dB sources operating simultaneously result in a total sound pressure level of 76 dB. In fact, for every doubling of the number of equal sources, the sound pressure level goes up another three decibels. A tenfold increase in the number of sources makes the sound pressure level increase by 10 dB, while a hundredfold increase makes the level increase by 20 dB. The logarithmic combination of *n* different sound levels is calculated by the following equation:

$$L_{total}=10*\log_{10}\left(10^{\frac{L_1}{10}}+10^{\frac{L_2}{10}}+\ldots+10^{\frac{L_n}{10}}\right)$$

Perceived changes in sound level can be slightly more subjective; the average person will not notice a change of 1-2 dB, a 3 dB increase is just barely perceptible, while a 5 dB change is clearly noticeable.

Sound power level, often abbreviated as SWL, is a metric that describes the intensity of a sound source without factoring in distance. This is used as a basis for source levels in sound propagation modeling, and is related to sound pressure level (SPL) by the following equation, where Q is a directivity factor (assumed to be 1 in this modeling) and R is the distance in meters between the sound source and location of the sound pressure level measurement:

$$SWL=SPL+\left|10*\log\left(\frac{Q}{4\pi R^2}\right)\right|$$

3. Applicable Noise Standards and Regulations

The New York State Department of Environmental Conservation's (NYSDEC) "Assessing and Mitigating Noise Impacts" provides the following guidance on proposed sound level increases in ambient sound levels by a new source:

- A 0-3 dB increase is considered to have no appreciable effects on receptors.
- A 3-6 dB increase may have potential for adverse noise impact only in cases where the most sensitive receptors are present.
- A 6+ dB increase may require a closer analysis of impact potential depending on existing sound pressure levels and the character of the surrounding land use and receptors.
- A 10+ dB increase results in a perceived doubling of sound level and deserves consideration of avoidance and mitigation measures in most cases.

The NYSDEC guidance allows for the assumption of a background sound level of 45 dBA for a quiet or rural setting. The NYSDEC guidance comments on the existence of pure tones but does not include quantitative pure tone limits.

NYSDEC guidance is not intended to establish decibel limits where otherwise not required by regulation, such as for noise generated during construction activities. NYSDEC does establish Best Management Practices (BMPs) for any noise-generating activity, including but not limited to setting time-of-day restrictions, maximizing setback distances where possible, enclosing equipment, and coordinating with local residents or other stakeholders to minimize disruption at sensitive locations or during sensitive date ranges. These BMPs and applicability are discussed further in Section 8.

4. Noise Sensitive Areas

The Proposed Activity takes place primarily in public rights-of-way nearby many noise-sensitive areas (NSAs) such as residence, schools, cemeteries, and religious institutions. Table 4.1 lists the closest NSAs and their approximate distance and direction from the proposed construction activities. These locations are also illustrated in Figures 3 and 4. The NSA identification numbers correspond to the nearest monitoring point ID, which were used to determine the baseline sound level at each NSA.

Table 4.1 Closest Noise Sensitive Areas

NSA ID	Description	Distance to Sound Sources (ft)
1-1	Residential	180
1-2	Residential	160
1-3	Commercial	80
1-4	Residential	360
2-1	Residential	410
2-2	Residential	300
2-3	Residential	300
2-4	Residential	250
2-5	Residential	550
2-6	Commercial	570
3-1	Residential	190
3-2	Industrial	390
3-3	Residential	400
3-4	Residential	420
4-1	Residential	400
4-2	Residential	520
5-1	Residential	580
5-2	Residential	440
5-3	Residential	440
5-4	Residential	290
5-5	Residential	490
6-1	Residential	250
6-2	Residential	150
6-3	Cemetery	40
6-4	Residential	430

Table 4.1 Closest Noise Sensitive Areas

NSA ID	Description	Distance to Sound Sources (ft)
6-5	Residential	290
7-1	Residential	250
7-2	Residential	70
7-3	Residential	130
7-4	Residential	90
7-5	Residential	100
7-6	Residential	260
8-1	Residential	70
8-2	Residential	50
8-3	Residential	110
8-4	Residential	70
8-5	Residential	60
8-6	Residential	120
9-1	Residential	170
9-2	Residential	100
9-3	Residential	60
9-4	Residential	100
9-5	Residential	200
9-6	Recreation	150
10-1	Residential	370
10-2	Residential	220
10-3	Commercial	120
10-4	School	270
10-5	Church	220
10-6	Residential	410
11-1	Residential	210
11-2	Residential	120
11-3	Residential	80
11-4	Residential	140
11-5	Residential	220
11-6	Commercial	80
12-1	Commercial	180

5. Short Term Ambient Sound Survey

A pre-construction ambient sound survey was completed along the Proposed Activity route on March 19th, 20th, and 21st of 2024 to characterize the existing sound environment (I.e., background) in the project area. The methodology and results of the survey are further described below.

5.1 Measurement Methodology

Short term sound level measurements were taken at various locations in the vicinity of the Proposed Activity route for approximately ten minutes at each location during multiple time periods.

The measurements were taken using a Larson Davis Model 831C sound level meter that meets the requirements of the American National Standards Institute (ANSI) Standards for Type I instruments. The sound level meter was calibrated before and after each monitoring period using a CAL200 acoustic calibrator. The microphone was positioned according to the ANSI Standard on a tripod 1.5 meters above ground. 7.5 meters from large reflecting surfaces, and at least 1.5 meters from tall trees.

Ambient sound level measurements were conducted on a weekday on a non-holiday week at 12 total measurement points and for a minimum of ten continuous minutes for each criterion. At all measuring points, data was collected in the morning (8 AM – 10 AM) and evening (4 PM – 6 PM). At three locations ambient sound level measurements were also collected at nighttime (7 PM- 9 PM).

The following measurement criteria are provided in Tables 5.1-5.4 for each measurement location and for each measurement period:

- LA_{EQ}, LA_{10}, LA_{50}, and LA_{90}
- Unweighted octave-band analysis (16, 31.5, 63, 125, 250, 500, 1K, 2K, 4K, 8K Hz)

The measurement points and location descriptions are listed below:

- MP-1: Intersection of E Hampton Sag Harbor Turnpike (SR-114) and Cove Hollow Road
- MP-2: Intersection of E Hampton Sag Harbor Turnpike (SR-114) and Harness Lane
- MP-3: Intersection of E Hampton Sag Harbor Turnpike (SR-114) and Goodfriend Drive
- MP-4: E Hampton Sag Harbor Turnpike (SR-114) at Northwest Woods Trailhead entrance
- MP-5: Intersection of E Hampton Sag Harbor Turnpike (SR-114) and Wainscott NW Road
- MP-6: E Hampton Sag Harbor Turnpike (SR-114) at Temple Adas Israel Cemetery
- MP-7: Intersection of E Hampton Sag Harbor Turnpike (SR-114) and Lighthouse Lane
- MP-8: Madison Street south of Marsden Street intersection
- MP-9: Main Street (CR-79) at parking area for Mashashimuet Park
- MP-10: Bridgehampton Sag Harbor Turnpike (CR-79) near Goldberg's Bagels
- MP-11: Intersection of Bridgehampton Sag Harbor Turnpike (CR-79) and Clay Pit Road
- MP-12: Bridgehampton Sag Harbor Turnpike (CR-79) at LIPA overhead ROW

The locations of the measurement points are illustrated on Figure 1.

5.2 Short Term Sound Monitoring Results

The results of the short-term measurements collected at the sites listed above are summarized in Table 5.1 below. Nighttime measurements were taken at three representative locations, which

were used to approximate nighttime sound levels at the other measurement locations for the calculation of Day-Night sound level (L_{dn}). The L_{dn} is an average of daytime and nighttime ambient sound levels (using the LA_{90} metric), with an added 10 dBA penalty added to the nighttime measurements to reflect heightened sensitivity to noise during nighttime hours. The L_{dn} is used by the EPA to determine limits for protecting public health and welfare.

Table 5.1 Ambient Noise Monitoring Results Summary

Site ID	L_d	L_n	L_{dn}
MP-1	52.8	32.2	50.9
MP-2	46.5	32.2*	45.3
MP-3	53.2	32.2	51.4
MP-4	51.8	32.2	50.0
MP-5	51.2	35.0*	49.7
MP-6	52.4	35.0	50.8
MP-7	54.2	35.0	52.5
MP-8	46.2	35.0	45.8
MP-9	50.2	30.8	48.4
MP-10	48.2	30.8*	46.6
MP-11	50.9	30.8	49.1
MP-12	45.9	30.8	44.6

**Nighttime measurement collected at MP-2 is representative of MP-1, MP-3, and MP-4. Nighttime measurement collected at MP-5 is representative of MP-6, MP-7, and MP-8. Nighttime measurement collected at MP-10 is representative of MP-9, MP-11, and MP-12*

During the ambient noise measurements, the TRC staff took note of persistent environmental or anthropogenic sounds that could reasonably be expected to influence sound measurements or create non-ambient conditions. Given the proximity to roadways, all sites had varying levels of noise from traffic, fluctuating with time of day. During the evening (4 PM – 6 PM) measurement at location MP-1, trains passing on the LIRR right-of-way created elevated sound levels for long enough duration to be significant to the LA_{90} results. Since this is a routine occurrence during the measurement period, this is not considered a non-ambient condition. No noise-generating activities from nearby construction projects was observed during the background measurement periods.

6. Construction Noise Modeling

This section describes the methods, assumptions, and results of the Cadna-A® noise modeling used to predict future sound levels during the various construction activities. Due to the linear nature of the Proposed Activity, representative locations along the cable route were selected for the modeling domain based on proximity to NSAs and proposed installation activities. Installation

activities taking place at specific locations, such as boring and manhole installation, were modeled at those locations based on construction design drawings provided by PSEG-LI.

6.1 Noise Model Inputs

Noise modeling was conducted to predict future sound levels at the nearby NSAs during each of the proposed construction activities. The Cadna-A model was used for this purpose. An industry standard, Cadna-A was developed by DataKustik GmbH to provide an estimate of sound levels at distances from sources considering sound power levels from stationary and mobile sources, the effects of terrain features including relative elevations of noise sources, intervening objects including buildings and sound barrier walls, and ground effects due to pavement and unpaved ground.

The International Standards Organization ("ISO") current standard for outdoor sound propagation (ISO 9613 Part 2 – "Attenuation of sound during propagation outdoors") was used within Cadna-A. This standard provides a method for calculating environmental noise in communities from a variety of sources with known emission levels. The method contained within the standard calculates the attenuation over the entire sound path under weather conditions that are favorable for sound propagation, such as for downwind propagation or "under a well-developed ground-based temperature inversion." Application of conditions that are favorable for sound propagation yields conservative estimates of operational noise levels in the surrounding area.

The existing topography along the Proposed Activity route was used to create a terrain model for the Preferred Alternative area. The inputs to the model are 1-meter contours, based on United States Geographic Survey ("USGS") 3DEP topographic data. The model conservatively assumed continuous operation of all sound sources. A search radius of 2,000 feet from each receptor was used in the model to ensure that all noise sources contributing to the predicted noise levels were modeled at each NSA.

Table 6.1 lists the modeled octave band sound power levels and activities for the proposed equipment. Equipment is assumed to be continuously operating at full load, though it is likely that sound sources will only operate simultaneously for short durations and may be intermittently idling or shut off. Sound source levels, where provided as sound pressure levels at a specified distance, have been converted to sound power levels for use in the modeling application.

Table 6.1 Equipment Octave Band Sound Power Levels

Component	Octave Band Center Frequency (Hz)										Total
	Activities	31.5	63	125	250	500	1k	2k	4k	8k	dBA
Auger Drill Rig	J&B[1]	109	105	113	113	109	109	106	103	96	113.6
HDD Rig	HDD	99	95	103	103	99	99	96	93	86	103.6
Mixer Truck	J&B, HDD	59	59	71	80	107	98	102	94	98	109.1
Mud Pump/ Lubrication Pump	J&B, HDD	95	102	103	98	96	92	88	85	73	107.1
Excavator	All	104	109	110	106	106	106	103	98	89	115.5
Hydraulic Power Unit	J&B, HDD	100	99	107	108	109	110	109	106	99	116.4
Dump Truck	All	93	92	110	98	96	95	94	91	90	110.9
Mobile Crane	J&B, HDD, Manhole	98	97	115	103	101	100	99	96	95	115.9

Sources: TRC, RCNM Construction Noise Handbook, enoisecontrol.com. [1]*Jack-and-Bore*

6.2 Noise Modeling Results

Tables 6.2, 6.3, and 6.4 summarize the predicted operational sound levels at each of the monitoring points and NSA locations, the total predicted sound levels at each location, and the predicted increase in the sound level at each location. Both HDD and trench installation methods were modeled at locations MP-1 through MP-7, though only one method will be used, to be determined at a later date. Jack-and-Bore installation was modeled at the LIRR crossing near location MP-1 and manhole installation was modeled at location MP-10 as a representative location for the sound levels associated with installation of 15 manholes proposed along the corridor.

Table 6.2 Noise Modeling Results at Monitoring Locations - Unmitigated

Location	Activity	Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
MP-1	J&B	50.9	75.8	75.8	24.9
MP-1	HDD	50.9	69.9	70.0	19.0
MP-1	Trench	50.9	62.1	62.4	11.5
MP-2	HDD	45.3	87.9	87.9	42.6
MP-2	Trench	45.3	83.9	83.9	38.6
MP-3	HDD	51.4	84.1	84.1	32.7
MP-3	Trench	51.4	78.6	78.6	27.2
MP-4	HDD	50.0	73.6	73.6	23.6
MP-4	Trench	50.0	65.5	65.6	15.6
MP-5	HDD	49.7	66.7	66.8	17.1
MP-5	Trench	49.7	60.3	60.7	11.0
MP-6	HDD	50.8	82.8	82.8	32.0
MP-6	Trench	50.8	73.2	73.2	22.4
MP-7	HDD	52.5	81.5	81.5	29.0

Table 6.2 Noise Modeling Results at Monitoring Locations - Unmitigated

Location	Activity	Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
MP-7	Trench	52.5	72.2	72.2	19.8
MP-8	Trench	45.8	88.5	88.5	42.7
MP-9	Trench	48.4	80.9	80.9	32.5
MP-10	Trench	46.6	81.9	81.9	35.3
MP-10	Manhole	46.6	54.0	54.7	8.2
MP-11	Trench	49.1	81.5	81.5	32.4
MP-12	Trench	44.6	80.3	80.3	35.7

As shown in Table 6.3 below, the results of the noise modeling predict that for the preferred installation method (HDD along SR-114 and trenching for the remainder of the route), there will be increases in unmitigated sound levels at nearby NSAs ranging from 7.9 to 29.1 dBA.

Table 6.3 Noise Modeling Results at NSAs – Unmitigated, HDD and Trenching

NSA	Sound Level (dBA)			
	Existing	Proposed Activity	Combined Level	Increase
1-1	50.9	67.7	67.8	16.9
1-2	50.9	68.4	68.5	17.5
1-3	50.9	74.3	74.3	23.4
1-4	50.9	61.7	62.0	11.1
2-1	45.3	56.6	56.9	11.6
2-2	45.3	59.4	59.6	14.2
2-3	45.3	59.8	60.0	14.6
2-4	45.3	65.0	65.0	19.7
2-5	45.3	57.7	57.9	12.6
2-6	45.3	57.3	57.6	12.2
3-1	51.4	66.6	66.7	15.4
3-2	51.4	61.0	61.4	10.1
3-3	51.4	59.3	59.9	8.6
3-4	51.4	60.5	61.0	9.6
4-1	50.0	60.6	61.0	10.9
4-2	50.0	58.3	58.9	8.9
5-1	49.7	57.0	57.7	8.0
5-2	49.7	59.8	60.2	10.5
5-3	49.7	59.9	60.3	10.6
5-4	49.7	64.0	64.2	14.5
5-5	49.7	58.5	59.0	9.3
6-1	50.8	64.2	64.4	13.6
6-2	50.8	68.9	69.0	18.2
6-3	50.8	79.9	79.9	29.1
6-4	50.8	60.2	60.7	9.9
6-5	50.8	63.4	63.6	12.8

Table 6.3 Noise Modeling Results at NSAs – Unmitigated, HDD and Trenching

NSA	Sound Level (dBA)			
	Existing	Proposed Activity	Combined Level	Increase
7-1	52.5	64.8	65.0	12.6
7-2	52.5	75.1	75.1	22.7
7-3	52.5	70.8	70.9	18.4
7-4	52.5	73.9	73.9	21.5
7-5	52.5	73.2	73.2	20.8
7-6	52.5	61.2	61.7	9.3
8-1	45.8	69.0	69.0	23.3
8-2	45.8	73.6	73.6	27.9
8-3	45.8	66.2	66.2	20.5
8-4	45.8	69.6	69.6	23.9
8-5	45.8	70.5	70.5	24.8
8-6	45.8	64.3	64.4	18.6
9-1	48.4	61.6	61.8	13.4
9-2	48.4	66.4	66.5	18.0
9-3	48.4	72.1	72.1	23.7
9-4	48.4	67.2	67.3	18.8
9-5	48.4	60.8	61.0	12.6
9-6	48.4	63.2	63.3	14.9
10-1	46.6	53.7	54.5	7.9
10-2	46.6	59.5	59.7	13.2
10-3	46.6	64.8	64.9	18.3
10-4	46.6	58.3	58.6	12.0
10-5	46.6	56.9	57.3	10.7
10-6	46.6	54.3	55.0	8.4
11-1	49.1	59.7	60.1	11.0
11-2	49.1	61.7	61.9	12.8
11-3	49.1	68.1	68.2	19.0
11-4	49.1	63.7	63.8	14.7
11-5	49.1	59.7	60.1	11.0
11-6	49.1	70.0	70.0	20.9
12-1	44.6	61.4	61.5	16.9

As shown in Table 6.4, the alternative installation method using trenching for the entirety of the route results in increases in unmitigated sound levels at nearby NSAs ranging from 3.4 to 27.9 dBA.

Table 6.4 Noise Modeling Results at NSAs – Unmitigated, Trenching Only

NSA	Sound Level (dBA)			
	Existing	Proposed Activity	Combined Level	Increase
1-1	50.9	61.0	61.4	10.5
1-2	50.9	61.1	61.5	10.6

Table 6.4 Noise Modeling Results at NSAs – Unmitigated, Trenching Only

NSA	Sound Level (dBA)			
	Existing	Proposed Activity	Combined Level	Increase
1-3	50.9	66.9	67.0	16.1
1-4	50.9	54.9	56.4	5.4
2-1	45.3	50.3	51.5	6.2
2-2	45.3	53.1	53.8	8.4
2-3	45.3	53.5	54.1	8.8
2-4	45.3	58.0	58.2	12.9
2-5	45.3	50.9	52.0	6.6
2-6	45.3	50.4	51.6	6.2
3-1	51.4	60.8	61.3	9.9
3-2	51.4	53.9	55.8	4.5
3-3	51.4	53.2	55.4	4.0
3-4	51.4	53.6	55.6	4.3
4-1	50.0	54.1	55.5	5.5
4-2	50.0	51.4	53.8	3.7
5-1	49.7	50.4	53.1	3.4
5-2	49.7	52.9	54.6	4.9
5-3	49.7	52.9	54.6	4.9
5-4	49.7	57.3	58.0	8.3
5-5	49.7	52.1	54.1	4.4
6-1	50.8	57.7	58.5	7.7
6-2	50.8	62.6	62.9	12.1
6-3	50.8	73.1	73.1	22.3
6-4	50.8	53.1	55.1	4.3
6-5	50.8	56.8	57.8	7.0
7-1	52.5	58.4	59.4	6.9
7-2	52.5	69.4	69.5	17.0
7-3	52.5	63.4	63.7	11.3
7-4	52.5	66.9	67.1	14.6
7-5	52.5	65.4	65.6	13.2
7-6	52.5	54.0	56.3	3.8
8-1	45.8	69.0	69.0	23.3
8-2	45.8	73.6	73.6	27.9
8-3	45.8	66.2	66.2	20.5
8-4	45.8	69.6	69.6	23.9
8-5	45.8	70.5	70.5	24.8
8-6	45.8	64.3	64.4	18.6
9-1	48.4	61.6	61.8	13.4
9-2	48.4	66.4	66.5	18.0
9-3	48.4	72.1	72.1	23.7
9-4	48.4	67.2	67.3	18.8
9-5	48.4	60.8	61.0	12.6
9-6	48.4	63.2	63.3	14.9

Table 6.4 Noise Modeling Results at NSAs – Unmitigated, Trenching Only

NSA	Sound Level (dBA)			
	Existing	Proposed Activity	Combined Level	Increase
10-1	46.6	53.7	54.5	7.9
10-2	46.6	59.5	59.7	13.2
10-3	46.6	64.8	64.9	18.3
10-4	46.6	58.3	58.6	12.0
10-5	46.6	56.9	57.3	10.7
10-6	46.6	54.3	55.0	8.4
11-1	49.1	59.7	60.1	11.0
11-2	49.1	61.7	61.9	12.8
11-3	49.1	68.1	68.2	19.0
11-4	49.1	63.7	63.8	14.7
11-5	49.1	59.7	60.1	11.0
11-6	49.1	70.0	70.0	20.9
12-1	44.6	61.4	61.5	16.9

These sound level increases range from values considered by NYSDEC to be “intrusive” to values considered “very objectionable.” Sound isopleths for the unmitigated modeling case are shown in Figure 2A (HDD & trenching), Figure 2B (trenching only), Figure 5 (manhole installation), and Figure 6 (jack-and-bore trenchless crossing).

7. Noise Mitigation

Construction will generally occur during daylight hours, which will significantly mitigate noise impacts to nearby NSAs. All contractors will be required to utilize sound control devices no less effective than those provided by the manufacturer and maintain equipment in accordance with manufacturer’s recommendations. No equipment will have unmuffled exhausts and equipment idling will be kept to a minimum. In addition, external sound mitigation may be used. For this impact assessment, two different barrier mitigation cases have been modeled.

7.1 Sound Barriers

Sound barriers can be constructed of a variety of materials with different reflective or absorptive properties that can reduce sound propagation from construction equipment to the surrounding area. Temporary, portable sound mitigation measures are preferred in cases where equipment is continuously moving along a linear corridor such as a transmission line route.

The noise mitigating properties of sound barriers can be described using several different metrics. Sound Transmission Class (STC) describes how well a barrier blocks sound from passing through it. Noise Reduction Coefficient (NRC) describes how well a material absorbs sound, with 0 being fully reflective and 1 being fully absorptive. A reflective barrier material like concrete can have a high STC rating without absorbing much of the sound and may be less effective for small areas (like drilling pits), as sound can be reflected between the walls.

The physical sound mitigation barriers considered in this assessment are:

- Mitigation Case 1: 8-foot-high construction site sound blanket, STC-21, NRC 0.75
- Mitigation Case 2: 16-foot-high sound curtain, STC-33, NRC 0.75

In both cases, barriers are assumed to be placed in a rectangle around the perimeter of the proposed activity, fully enclosing all noise-producing equipment.

7.2 Mitigated Noise Model Results, Case 1

The results of the Case 1 (8-ft sound blankets) mitigated noise modeling at monitoring points and NSAs are shown on Figure 3 and below in Tables 7.1, 7.2, and 7.3. Results for the preferred HDD/trenching installation method show mitigated sound level increases between 9.5 and 29.3 dBA at monitoring locations. For trenching only, increases are between 3.6 and 25.5 dBA.

Table 7.1 Modeling Results at Monitoring Locations – Mitigation Case 1

Location	Activity	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
MP-1	J&B	50.9	66.6	66.7	15.8
MP-1	HDD	50.9	59.9	60.4	9.5
MP-1	Trench	50.9	52.0	54.5	3.6
MP-2	HDD	45.3	74.6	74.6	29.3
MP-2	Trench	45.3	70.8	70.8	25.5
MP-3	HDD	51.4	72.9	72.9	21.6
MP-3	Trench	51.4	67.7	67.8	16.4
MP-4	HDD	50.0	62.7	62.9	12.9
MP-4	Trench	50.0	55.2	56.4	6.3
MP-5	HDD	49.7	59.4	59.8	10.1
MP-5	Trench	49.7	52.9	54.6	4.9
MP-6	HDD	50.8	70.5	70.5	19.7
MP-6	Trench	50.8	61.9	62.2	11.4
MP-7	HDD	52.5	69.5	69.6	17.1
MP-7	Trench	52.5	61.1	61.7	9.2
MP-8	Trench	45.8	71.2	71.2	25.5
MP-9	Trench	48.4	68.7	68.7	20.3
MP-10	Trench	46.6	69.5	69.5	23.0
MP-10	Manhole	46.6	47.0	49.8	3.2
MP-11	Trench	49.1	69.1	69.1	20.0
MP-12	Trench	44.6	68.4	68.4	23.8

As shown below, the results of the mitigated noise modeling show that for the preferred installation method (HDD along SR-114 and trenching for the remainder of the route), there will be increases

in mitigated sound levels at nearby NSAs ranging from 2.5 to 18.1 dBA when using 8-ft fences with sound blankets.

Table 7.2 Modeling Results at NSAs – Mitigation Case 1, HDD & Trenching

NSA	NSA Description	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
1-1	Residential	50.9	58.7	59.4	8.4
1-2	Residential	50.9	59.2	59.8	8.9
1-3	Commercial	50.9	64.2	64.4	13.5
1-4	Residential	50.9	54.9	56.4	5.4
2-1	Residential	45.3	49.8	51.1	5.8
2-2	Residential	45.3	52.2	53.0	7.7
2-3	Residential	45.3	54.3	54.8	9.5
2-4	Residential	45.3	55.1	55.5	10.2
2-5	Residential	45.3	49.6	51.0	5.6
2-6	Commercial	45.3	49.2	50.7	5.4
3-1	Residential	51.4	57.5	58.4	7.1
3-2	Industrial	51.4	52.7	55.1	3.7
3-3	Residential	51.4	51.2	54.3	2.9
3-4	Residential	51.4	51.1	54.2	2.9
4-1	Residential	50.0	54.2	55.6	5.6
4-2	Residential	50.0	50.4	53.2	3.2
5-1	Residential	49.7	48.5	52.2	2.5
5-2	Residential	49.7	49.8	52.8	3.1
5-3	Residential	49.7	49.8	52.8	3.1
5-4	Residential	49.7	54.5	55.7	6.0
5-5	Residential	49.7	51.0	53.4	3.7
6-1	Residential	50.8	56.5	57.5	6.7
6-2	Residential	50.8	59.9	60.4	9.6
6-3	Cemetery	50.8	68.8	68.9	18.1
6-4	Residential	50.8	51.3	54.1	3.3
6-5	Residential	50.8	55.0	56.4	5.6
7-1	Residential	52.5	57.1	58.4	5.9
7-2	Residential	52.5	65.2	65.4	13.0
7-3	Residential	52.5	60.5	61.1	8.7
7-4	Residential	52.5	63.9	64.2	11.7
7-5	Residential	52.5	63.1	63.5	11.0
7-6	Residential	52.5	54.5	56.6	4.1
8-1	Residential	45.8	60.0	60.2	14.4
8-2	Residential	45.8	62.6	62.7	16.9
8-3	Residential	45.8	55.8	56.2	10.5
8-4	Residential	45.8	59.5	59.7	13.9
8-5	Residential	45.8	60.1	60.3	14.5
8-6	Residential	45.8	54.5	55.0	9.3

Table 7.2 Modeling Results at NSAs – Mitigation Case 1, HDD & Trenching

NSA	NSA Description	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
9-1	Residential	48.4	52.9	54.2	5.8
9-2	Residential	48.4	56.6	57.2	8.8
9-3	Residential	48.4	60.9	61.1	12.7
9-4	Residential	48.4	57.3	57.8	9.4
9-5	Residential	48.4	51.0	52.9	4.5
9-6	Recreation	48.4	53.8	54.9	6.5
10-1	Residential	46.6	48.0	50.4	3.8
10-2	Residential	46.6	52.3	53.3	6.8
10-3	Commercial	46.6	55.1	55.7	9.1
10-4	School	46.6	49.4	51.2	4.7
10-5	Church	46.6	51.2	52.5	5.9
10-6	Residential	46.6	45.6	49.1	2.6
11-1	Residential	49.1	51.9	53.7	4.6
11-2	Residential	49.1	54.3	55.4	6.3
11-3	Residential	49.1	57.2	57.8	8.7
11-4	Residential	49.1	53.9	55.1	6.0
11-5	Residential	49.1	50.3	52.8	3.6
11-6	Commercial	49.1	58.9	59.3	10.2
12-1	Commercial	44.6	52.1	52.8	8.2

For the alternative installation method using trenching for the entirety of the route, increases in mitigated sound levels at nearby NSAs will range from 0.7 to 16.9 dBA.

Table 7.3 Modeling Results at NSAs – Mitigation Case 1, Trenching Only

NSA	NSA Description	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
1-1	Residential	50.9	51.4	54.2	3.3
1-2	Residential	50.9	51.8	54.4	3.5
1-3	Commercial	50.9	57.0	58.0	7.0
1-4	Residential	50.9	47.6	52.6	1.7
2-1	Residential	45.3	42.6	47.2	1.9
2-2	Residential	45.3	44.8	48.1	2.8
2-3	Residential	45.3	47.1	49.3	4.0
2-4	Residential	45.3	48.4	50.1	4.8
2-5	Residential	45.3	42.0	47.0	1.7
2-6	Commercial	45.3	41.5	46.8	1.5
3-1	Residential	51.4	50.9	54.1	2.8
3-2	Industrial	51.4	45.3	52.3	1.0
3-3	Residential	51.4	44.0	52.1	0.7
3-4	Residential	51.4	44.0	52.1	0.7

Table 7.3 Modeling Results at NSAs – Mitigation Case 1, Trenching Only

NSA	NSA Description	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
4-1	Residential	50.0	45.8	51.4	1.4
4-2	Residential	50.0	42.9	50.8	0.8
5-1	Residential	49.7	42.1	50.4	0.7
5-2	Residential	49.7	43.1	50.6	0.9
5-3	Residential	49.7	43.0	50.5	0.8
5-4	Residential	49.7	47.3	51.7	2.0
5-5	Residential	49.7	43.4	50.6	0.9
6-1	Residential	50.8	50.1	53.5	2.7
6-2	Residential	50.8	53.6	55.4	4.6
6-3	Cemetery	50.8	62.2	62.5	11.7
6-4	Residential	50.8	43.8	51.6	0.8
6-5	Residential	50.8	48.5	52.8	2.0
7-1	Residential	52.5	50.6	54.6	2.2
7-2	Residential	52.5	58.9	59.8	7.3
7-3	Residential	52.5	53.7	56.1	3.7
7-4	Residential	52.5	56.7	58.1	5.6
7-5	Residential	52.5	55.6	57.3	4.9
7-6	Residential	52.5	47.6	53.7	1.2
8-1	Residential	45.8	60.0	60.2	14.4
8-2	Residential	45.8	62.6	62.7	16.9
8-3	Residential	45.8	55.8	56.2	10.5
8-4	Residential	45.8	59.5	59.7	13.9
8-5	Residential	45.8	60.1	60.3	14.5
8-6	Residential	45.8	54.5	55.0	9.3
9-1	Residential	48.4	52.9	54.2	5.8
9-2	Residential	48.4	56.6	57.2	8.8
9-3	Residential	48.4	60.9	61.1	12.7
9-4	Residential	48.4	57.3	57.8	9.4
9-5	Residential	48.4	51.0	52.9	4.5
9-6	Recreation	48.4	53.8	54.9	6.5
10-1	Residential	46.6	48.0	50.4	3.8
10-2	Residential	46.6	52.3	53.3	6.8
10-3	Commercial	46.6	55.1	55.7	9.1
10-4	School	46.6	49.4	51.2	4.7
10-5	Church	46.6	51.2	52.5	5.9
10-6	Residential	46.6	45.6	49.1	2.6
11-1	Residential	49.1	51.9	53.7	4.6
11-2	Residential	49.1	54.3	55.4	6.3
11-3	Residential	49.1	57.2	57.8	8.7
11-4	Residential	49.1	53.9	55.1	6.0
11-5	Residential	49.1	50.3	52.8	3.6
11-6	Commercial	49.1	58.9	59.3	10.2

Table 7.3 Modeling Results at NSAs – Mitigation Case 1, Trenching Only

NSA	NSA Description	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
12-1	Commercial	44.6	52.1	52.8	8.2

7.3 Mitigated Noise Model Results, Case 2

The results of the Case 2 (16-ft sound barriers) mitigated noise modeling at monitoring points and NSAs are shown on Figure 3 and below in Tables 7.1, 7.2, and 7.3. Results for the preferred HDD/trenching installation method show mitigated sound level increases between 5.1 and 23.8 dBA at monitoring locations. For trenching only, increases are between 1.3 and 20.2 dBA.

Table 7.4 Modeling Results at Monitoring Locations – Mitigation Case 2

Location	Activity	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
MP-1	J&B	50.9	60.1	60.6	9.7
MP-1	HDD	50.9	54.5	56.1	5.2
MP-1	Trench	50.9	65.2	65.2	19.9
MP-2	HDD	45.3	69.1	69.1	23.8
MP-2	Trench	45.3	61.0	61.4	10.1
MP-3	HDD	51.4	66.1	66.2	14.9
MP-3	Trench	51.4	49.5	52.8	2.8
MP-4	HDD	50.0	57.1	57.9	7.8
MP-4	Trench	50.0	46.9	51.5	1.8
MP-5	HDD	49.7	53.2	54.8	5.1
MP-5	Trench	49.7	56.0	57.1	6.3
MP-6	HDD	50.8	64.6	64.8	14.0
MP-6	Trench	50.8	55.1	57.0	4.5
MP-7	HDD	52.5	63.5	63.8	11.4
MP-7	Trench	52.5	88.5	88.5	42.7
MP-8	Trench	45.8	62.6	62.8	14.3
MP-9	Trench	48.4	63.5	63.6	17.0
MP-10	Trench	46.6	46.4	52.2	1.3
MP-10	Manhole	46.6	42.4	48.0	1.4
MP-11	Trench	49.1	63.1	63.3	14.2
MP-12	Trench	44.6	62.1	62.2	17.6

Table 7.5 Modeling Results at NSAs – Mitigation Case 2, HDD & Trenching

NSA	NSA Description	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
1-1	Residential	50.9	52.7	54.9	4.0

Table 7.5 Modeling Results at NSAs – Mitigation Case 2, HDD & Trenching

NSA	NSA Description	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
1-2	Residential	50.9	53.2	55.2	4.3
1-3	Commercial	50.9	57.8	58.6	7.7
1-4	Residential	50.9	48.9	53.0	2.1
2-1	Residential	45.3	46.5	49.0	3.6
2-2	Residential	45.3	48.9	50.5	5.2
2-3	Residential	45.3	48.4	50.1	4.8
2-4	Residential	45.3	49.5	50.9	5.6
2-5	Residential	45.3	44.2	47.8	2.5
2-6	Commercial	45.3	43.9	47.7	2.4
3-1	Residential	51.4	51.7	54.5	3.2
3-2	Industrial	51.4	46.6	52.6	1.3
3-3	Residential	51.4	45.7	52.4	1.0
3-4	Residential	51.4	45.4	52.3	1.0
4-1	Residential	50.0	46.9	51.8	1.7
4-2	Residential	50.0	44.7	51.2	1.1
5-1	Residential	49.7	43.1	50.6	0.9
5-2	Residential	49.7	44.7	50.9	1.2
5-3	Residential	49.7	44.8	50.9	1.2
5-4	Residential	49.7	48.7	52.2	2.5
5-5	Residential	49.7	44.8	50.9	1.2
6-1	Residential	50.8	51.0	53.9	3.1
6-2	Residential	50.8	54.0	55.7	4.9
6-3	Cemetery	50.8	62.3	62.6	11.8
6-4	Residential	50.8	46.2	52.1	1.3
6-5	Residential	50.8	49.1	53.0	2.2
7-1	Residential	52.5	51.2	54.9	2.4
7-2	Residential	52.5	58.7	59.6	7.2
7-3	Residential	52.5	54.7	56.7	4.3
7-4	Residential	52.5	57.3	58.5	6.1
7-5	Residential	52.5	56.6	58.0	5.6
7-6	Residential	52.5	49.2	54.1	1.7
8-1	Residential	45.8	53.3	54.0	8.3
8-2	Residential	45.8	56.4	56.8	11.0
8-3	Residential	45.8	50.0	51.4	5.6
8-4	Residential	45.8	53.0	53.8	8.0
8-5	Residential	45.8	53.8	54.4	8.7
8-6	Residential	45.8	48.9	50.6	4.9
9-1	Residential	48.4	47.0	50.8	2.3
9-2	Residential	48.4	50.3	52.5	4.0
9-3	Residential	48.4	55.0	55.9	7.4
9-4	Residential	48.4	51.0	52.9	4.5
9-5	Residential	48.4	45.5	50.2	1.8

Table 7.5 Modeling Results at NSAs – Mitigation Case 2, HDD & Trenching

NSA	NSA Description	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
9-6	Recreation	48.4	47.6	51.1	2.6
10-1	Residential	46.6	42.3	47.9	1.4
10-2	Residential	46.6	46.4	49.5	2.9
10-3	Commercial	46.6	48.9	50.9	4.3
10-4	School	46.6	43.4	48.3	1.7
10-5	Church	46.6	45.1	48.9	2.3
10-6	Residential	46.6	40.3	47.5	0.9
11-1	Residential	49.1	46.1	50.9	1.8
11-2	Residential	49.1	48.4	51.8	2.7
11-3	Residential	49.1	51.4	53.4	4.3
11-4	Residential	49.1	47.9	51.6	2.4
11-5	Residential	49.1	44.7	50.4	1.3
11-6	Commercial	49.1	53.1	54.6	5.5
12-1	Commercial	44.6	46.0	48.4	3.8

For the alternative installation method using trenching for the entirety of the route, increases in sound levels at nearby NSAs using the 16-foot barrier mitigation will range from 0.7 to 16.9 dBA.

Table 7.6 Modeling Results at NSAs – Mitigation Case 2, Trenching Only

NSA	NSA Description	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
1-1	Residential	50.9	45.4	52.0	1.1
1-2	Residential	50.9	46.0	52.1	1.2
1-3	Commercial	50.9	50.7	53.8	2.9
1-4	Residential	50.9	41.9	51.4	0.5
2-1	Residential	45.3	39.7	46.4	1.0
2-2	Residential	45.3	42.1	47.0	1.7
2-3	Residential	45.3	41.7	46.9	1.6
2-4	Residential	45.3	42.8	47.3	1.9
2-5	Residential	45.3	36.9	45.9	0.6
2-6	Commercial	45.3	36.5	45.9	0.5
3-1	Residential	51.4	45.2	52.3	0.9
3-2	Industrial	51.4	39.6	51.6	0.3
3-3	Residential	51.4	38.9	51.6	0.2
3-4	Residential	51.4	38.6	51.6	0.2
4-1	Residential	50.0	39.7	50.4	0.4
4-2	Residential	50.0	37.5	50.3	0.2
5-1	Residential	49.7	36.8	49.9	0.2
5-2	Residential	49.7	38.1	50.0	0.3
5-3	Residential	49.7	38.1	50.0	0.3
5-4	Residential	49.7	41.8	50.4	0.7

Table 7.6 Modeling Results at NSAs – Mitigation Case 2, Trenching Only

NSA	NSA Description	Mitigated Sound Level (dBA)			
		Existing	Proposed Activity	Combined Level	Increase
5-5	Residential	49.7	37.9	50.0	0.3
6-1	Residential	50.8	44.9	51.8	1.0
6-2	Residential	50.8	47.7	52.5	1.7
6-3	Cemetery	50.8	56.0	57.1	6.3
6-4	Residential	50.8	38.8	51.1	0.3
6-5	Residential	50.8	42.8	51.4	0.6
7-1	Residential	52.5	44.9	53.2	0.7
7-2	Residential	52.5	52.7	55.6	3.1
7-3	Residential	52.5	47.8	53.7	1.3
7-4	Residential	52.5	50.5	54.6	2.1
7-5	Residential	52.5	49.2	54.1	1.7
7-6	Residential	52.5	42.2	52.9	0.4
8-1	Residential	45.8	53.2	53.9	8.2
8-2	Residential	45.8	56.4	56.8	11.0
8-3	Residential	45.8	49.9	51.3	5.6
8-4	Residential	45.8	53.0	53.8	8.0
8-5	Residential	45.8	53.7	54.3	8.6
8-6	Residential	45.8	48.9	50.6	4.9
9-1	Residential	48.4	47.0	50.8	2.3
9-2	Residential	48.4	50.3	52.5	4.0
9-3	Residential	48.4	55.0	55.9	7.4
9-4	Residential	48.4	51.0	52.9	4.5
9-5	Residential	48.4	45.4	50.2	1.7
9-6	Recreation	48.4	47.5	51.0	2.6
10-1	Residential	46.6	42.3	47.9	1.4
10-2	Residential	46.6	46.4	49.5	2.9
10-3	Commercial	46.6	48.9	50.9	4.3
10-4	School	46.6	43.4	48.3	1.7
10-5	Church	46.6	45.1	48.9	2.3
10-6	Residential	46.6	40.3	47.5	0.9
11-1	Residential	49.1	46.1	50.9	1.8
11-2	Residential	49.1	48.4	51.8	2.7
11-3	Residential	49.1	51.4	53.4	4.3
11-4	Residential	49.1	47.9	51.6	2.4
11-5	Residential	49.1	44.7	50.4	1.3
11-6	Commercial	49.1	53.1	54.6	5.5
12-1	Commercial	44.6	46.0	48.4	3.8

8. Summary and Recommendations

The results of this sound impact assessment show that the Proposed Activity will result in localized, temporary, and transient impacts to surrounding receptors. Ambient sound levels in the vicinity of the Proposed Activity were similar during morning and evening commute times, ranging from 47.4 to 56.9 dBA in the morning and from 42.4 to 56.5 dBA in the evening. Measured nighttime sound levels were predictably lower, ranging from 30.8 to 35.0 dBA. Traffic and wind noise were the major contributing sources, with some train activity observed at location MP-1 near the Buell substation.

The HDD, trenching, and jack-and-bore activities are the primary sound sources for the Proposed Activity and would create unmitigated sound levels as much as 30 dBA above ambient levels at the closest noise sensitive receptors. The use of acoustical barriers can reduce this sound level by up to 10-20 dBA, which represents a significant change in the perceived sound and associated impacts at these receptors. Additional best management practices recommended by NYSDEC that could be adopted during construction Project activities to further reduce noise impacts could include limiting noise-generating activities to daytime hours where practicable and coordinating with abutters about the date and duration of work near sensitive receptors and around public areas and events.

9. References

eNoise Control, 2024. Sound Barrier Datasheets Model UNC-XT-2 and Model CSSB-2. Accessed March 2024 via eNoiseControl.com

New York State Department of Environmental Conservation, 2001. Program Policy, “Assessing and Mitigating Noise Impacts”, Issued October 6, 2000, Revised February 2, 2001

PSEG Long Island, 2022. Draft Environmental Impact Statement for Bridgehampton to Buell New 69kV Underground Transmission Cable.

Paulus, Sokolowski, and Sartor Engineering, 2021. Appendix T: Sound Impact Evaluation and Assessment.

US Dept. of Transportation Federal Highway Administration, 2006. Construction Noise Handbook. Final Report August 2006. Accessed March 2024 via fwha.dot.gov

Appendix A: Sound Level Measurement Data

Table A.1 Ambient Measurement Data

Site ID	LA_{EQ}	LA_{10}	LA_{50}	LA_{90}
Morning (8am – 10am)				
MP-1	67.9	72.2	65.4	52.6
MP-2	67.3	72.5	59.1	48.1
MP-3	70.0	73.3	66.1	49.9
MP-4	70.6	74.7	67.9	50.5
MP-5	66.6	70.1	60.6	49.0
MP-6	69.9	74.6	65.8	54.0
MP-7	63.0	65.1	60.7	56.9
MP-8	55.0	58.9	52.0	47.4
MP-9	67.1	72.0	62.3	51.1
MP-10	72.8	77.5	64.8	50.6
MP-11	68.7	74.0	61.4	50.9
MP-12	69.9	74.8	63.9	49.4
Evening (4pm – 6pm)				
MP-1	72.6	72.3	64.0	52.9
MP-2	67.4	72.1	59.2	44.9
MP-3	69.5	72.9	66.5	56.5
MP-4	67.5	71.5	64.3	53.1
MP-5	64.7	68.6	62.7	53.3
MP-6	69.8	73.6	66.7	50.8
MP-7	59.2	62.1	57.6	51.5
MP-8	63.0	64.2	53.1	44.9
MP-9	64.7	69.8	59.0	49.3
MP-10	69.6	74.3	62.6	45.7
MP-11	69.5	74.1	64.2	50.9
MP-12	69.5	74.9	56.7	42.4
Night (7pm – 9pm)				
MP-2	58.5	61.9	40.8	32.2
MP-5	57.1	61.8	45.5	35.0
MP-10	61.3	64.8	39.1	30.8

Table A.2 Ambient Measurement Octave Band Data

Site ID	Octave Band Center Frequency (Hz)									
	16	31.5	63	125	250	500	1000	2000	4000	8000
Morning (8am-10am)										
MP-1	63.1	61.7	67.1	62.4	59.0	58.0	60.4	54.9	45.8	37.9
MP-2	55.3	55.8	59.3	57.2	56.0	56.2	60.3	53.7	45.6	39.6
MP-3	62.0	60.7	63.4	62.9	60.3	63.1	61.4	57.5	47.2	39.0
MP-4	62.5	59.8	64.1	60.8	58.9	59.4	62.9	59.4	49.5	38.8
MP-5	62.7	57.2	62.6	62.5	60.9	57.8	58.1	53.1	44.8	37.7
MP-6	64.7	60.1	63.1	61.1	58.0	59.5	62.5	57.5	46.7	38.2
MP-7	68.6	62.7	61.8	61.5	55.8	53.2	54.2	48.8	44.2	34.9
MP-8	58.5	56.3	56.8	57.9	51.6	46.8	44.7	41.5	35.5	30.8
MP-9	68.8	63.3	61.4	58.9	58.6	56.6	60.3	52.4	43.3	39.5
MP-10	60.1	63.7	61.4	65.8	63.6	64.9	65.6	58.9	50.2	44.7
MP-11	68.4	63.7	65.0	60.5	59.5	58.9	61.9	53.6	43.5	36.6
MP-12	70.8	65.7	65.7	63.3	61.7	59,3	62.8	56.7	46.5	40.4
Evening (4pm-6pm)										
MP-1	67.4	66.0	78.0	72.7	62.9	59.5	59.9	57.5	56.5	58.3
MP-2	57.1	55.4	58.5	57.6	59.2	60.2	60.3	52.4	41.0	34.5
MP-3	64.3	63.2	69.7	65.3	63.6	62.6	61.0	56.2	46.8	40.0
MP-4	67.8	60.7	63.7	63.0	62.1	59.8	58.8	53.1	43.2	35.8
MP-5	61.5	59.7	62.4	59.6	58.8	57.3	56.2	50.9	40.3	35.1
MP-6	64.6	62.4	73.9	64.9	61.8	61.4	62.6	54.2	45.4	40.5
MP-7	60.8	57.6	60.6	60.0	53.7	49.4	50.6	45.1	40.1	34.6
MP-8	56.3	59.2	72.2	68.7	64.4	54.1	48.0	44.9	43.7	35.8
MP-9	60.0	60.7	58.0	59.1	57.3	56.6	58.2	46.9	37.7	31.8
MP-10	60.4	57.3	61.9	60.6	58.4	59.5	63.5	54.5	45.4	41.1
MP-11	60.4	61.5	66.1	62.4	62.5	61.6	62.5	54.5	45.4	38.1
MP-12	65.3	57.7	60.3	60.7	62.1	61.6	63.6	51.0	43.0	37.2
Night (7pm – 9pm)										
MP-2	49.0	46.8	49.9	47.0	49.2	49.9	52.8	44.8	32.2	23.4
MP-5	53.7	49.2	53.9	55.6	50.8	50.6	49.4	42.6	32.2	22.8
MP-10	63.1	61.7	67.1	62.4	59.0	58.0	60.4	54.9	45.8	37.9

LEGEND

- MONITORING LOCATION
- INTERCONNECTION POINT
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:30,000
1" = 2,500'

0 2,500 5,000 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
OVERVIEW & MONITORING LOCATIONS

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		**FIGURE 1**
DATE:	JULY 2024		

TRC

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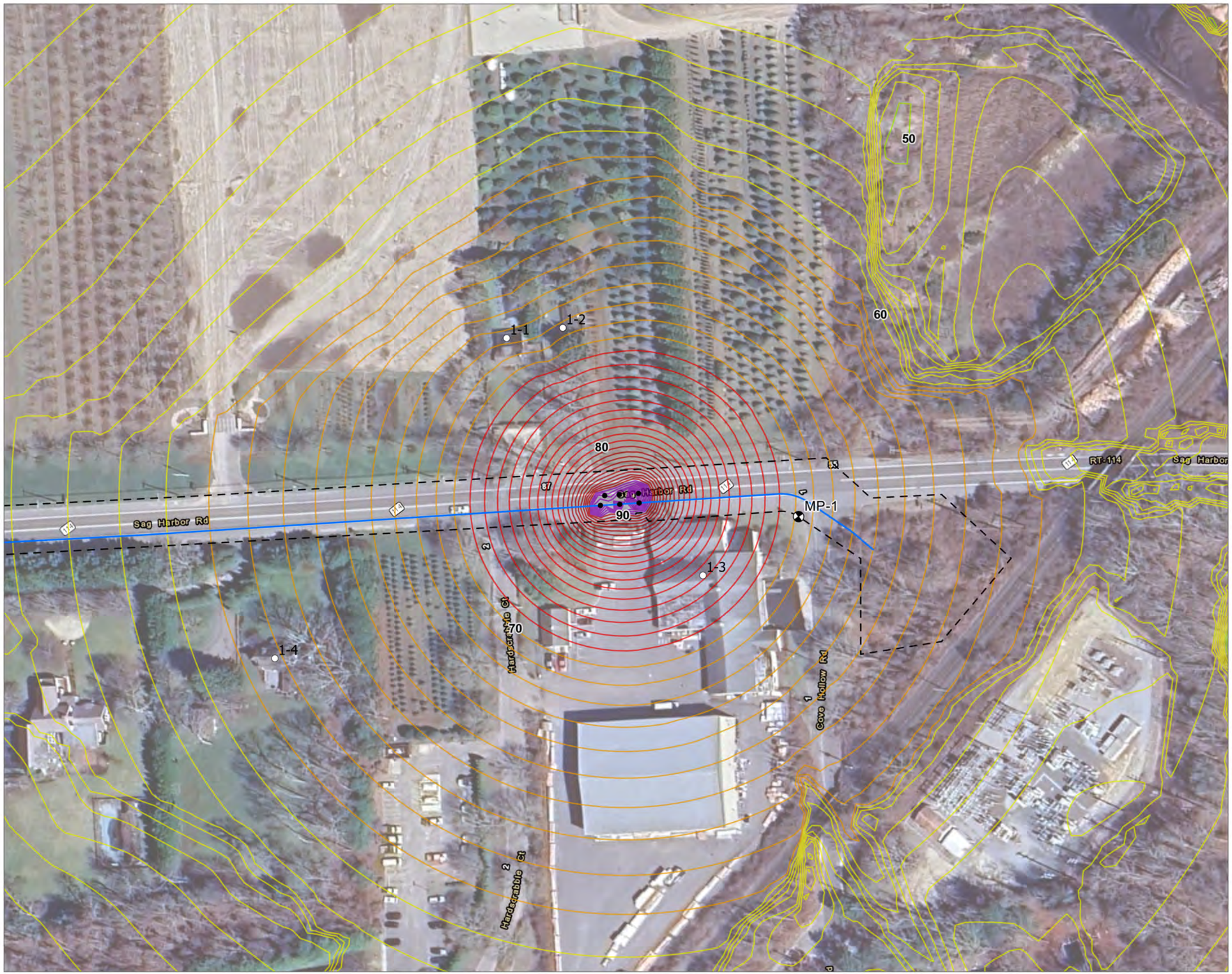


LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

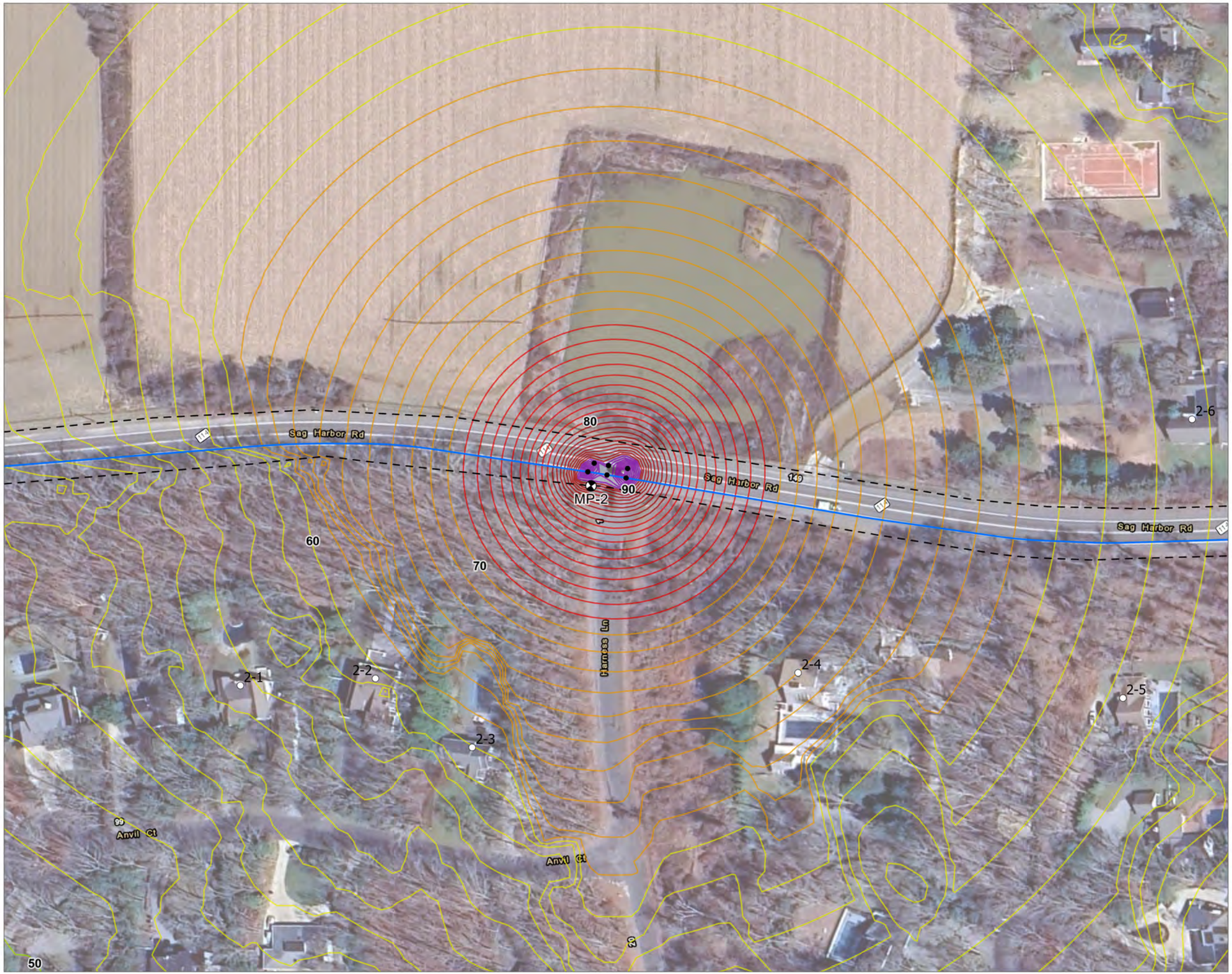
PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 2A**	
APPROVED BY:	M. ERNSTING	**SHEET 1 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx



LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
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- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 2A**	
APPROVED BY:	M. ERNSTING	**SHEET 2 OF 12**	
DATE:	JULY 2024		

TRC

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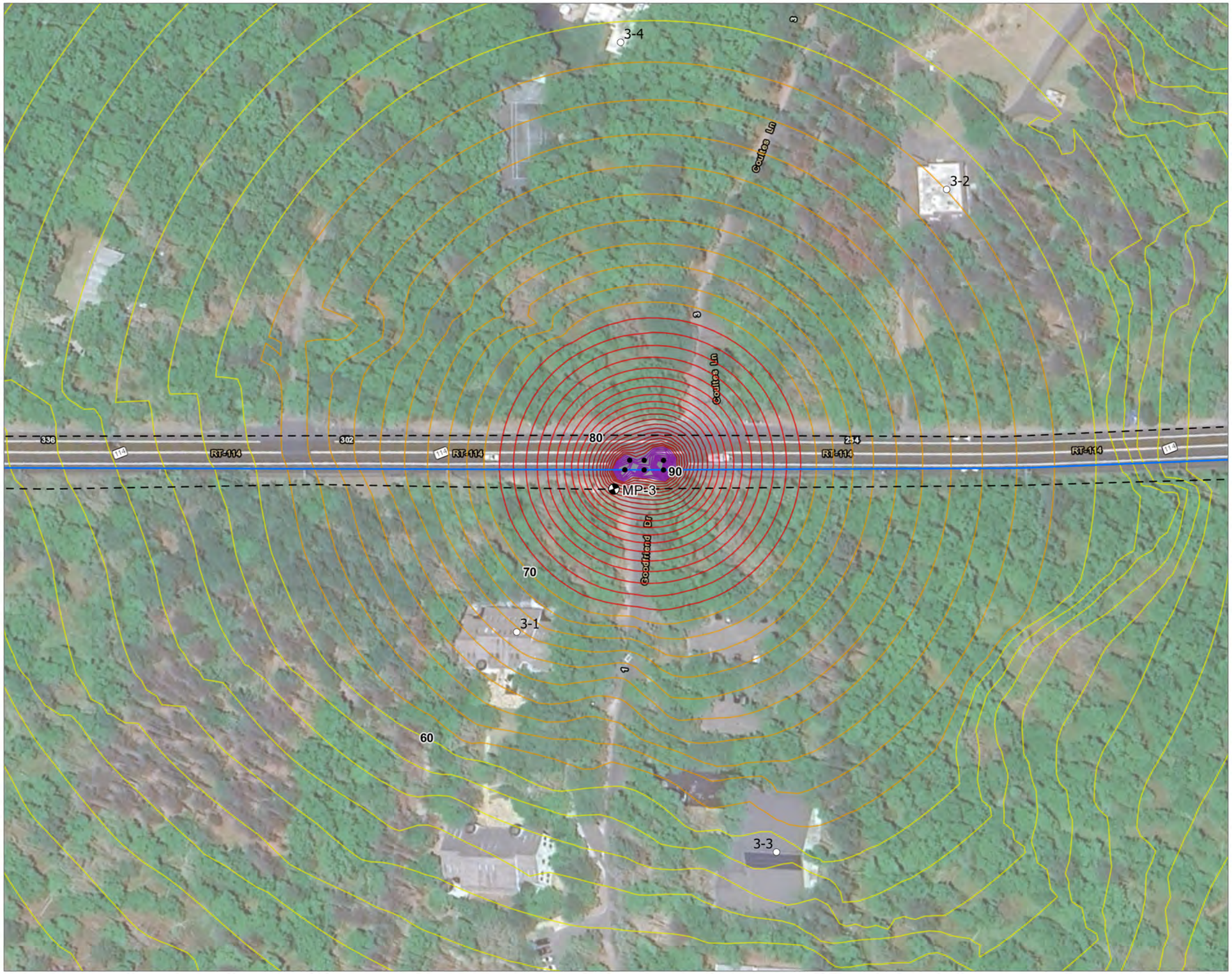

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 2A**	
APPROVED BY:	M. ERNSTING	**SHEET 3 OF 12**	
DATE:	JULY 2024		

TRC

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'
0 100 200 FEET

PROJECT: PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK	
TITLE: MODEL RESULTS - UNMITIGATED HDD/TRENCH INSTALLATION	
DRAWN BY: M. ERNSTING	PROJ. NO.: 592499
CHECKED BY: M. PROKO	FIGURE 2A
APPROVED BY: M. ERNSTING	SHEET 4 OF 12
DATE: JULY 2024	

TRC

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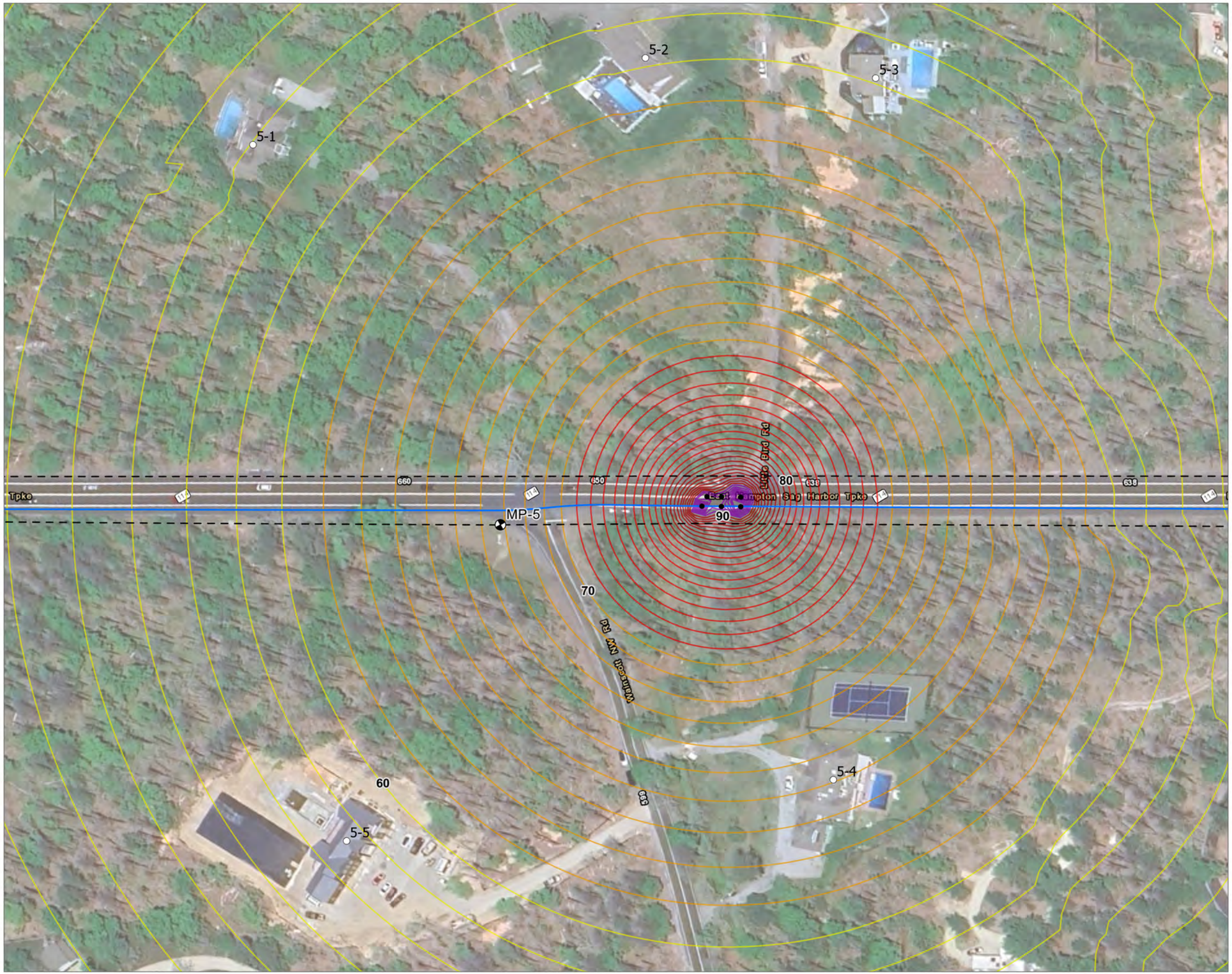

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
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- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 2A**	
APPROVED BY:	M. ERNSTING	**SHEET 5 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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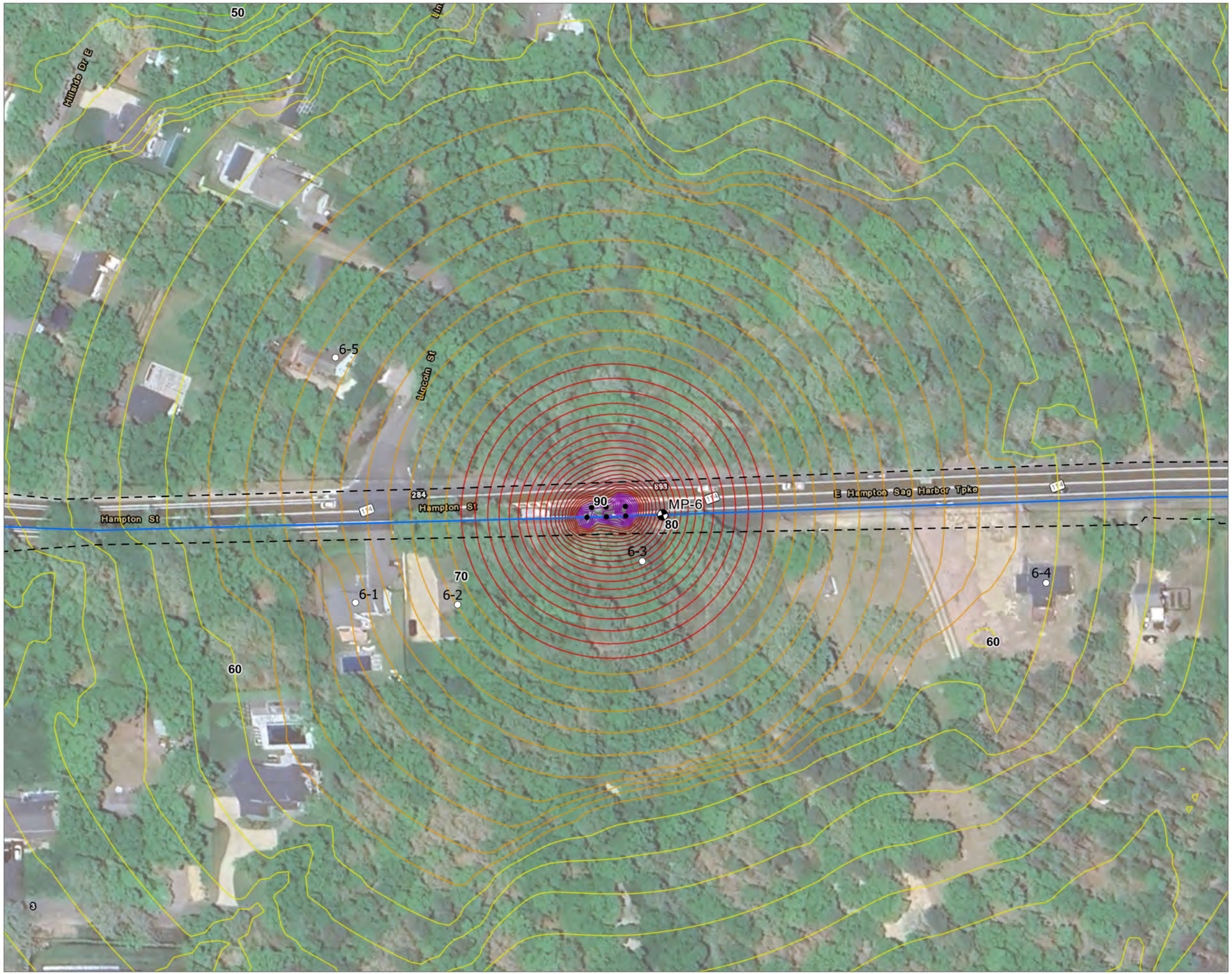

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 2A**	
APPROVED BY:	M. ERNSTING	**SHEET 6 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
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DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'
0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 2A**	
APPROVED BY:	M. ERNSTING	**SHEET 7 OF 12**	
DATE:	JULY 2024		

TRC

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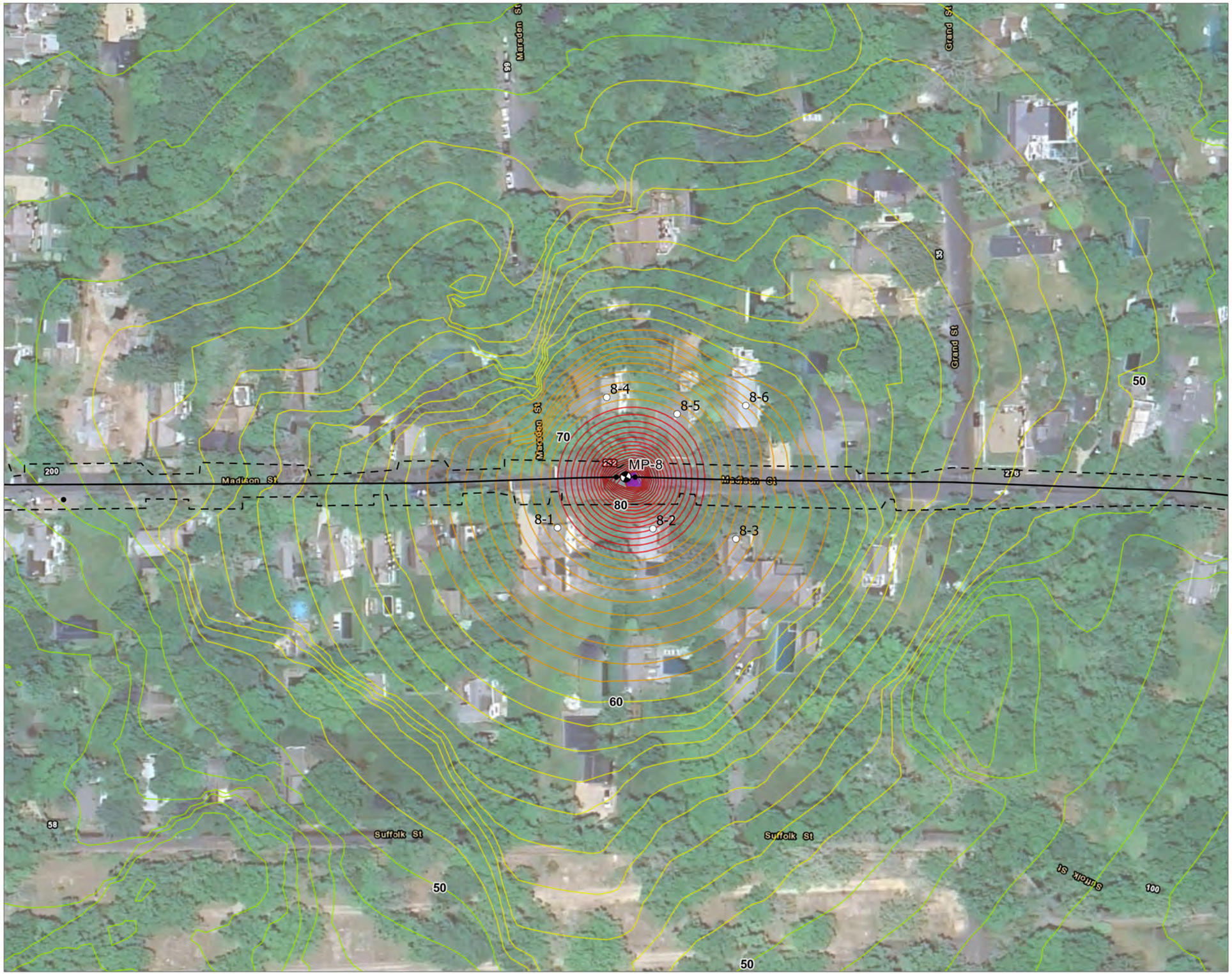


LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 2A**	
APPROVED BY:	M. ERNSTING	**SHEET 8 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

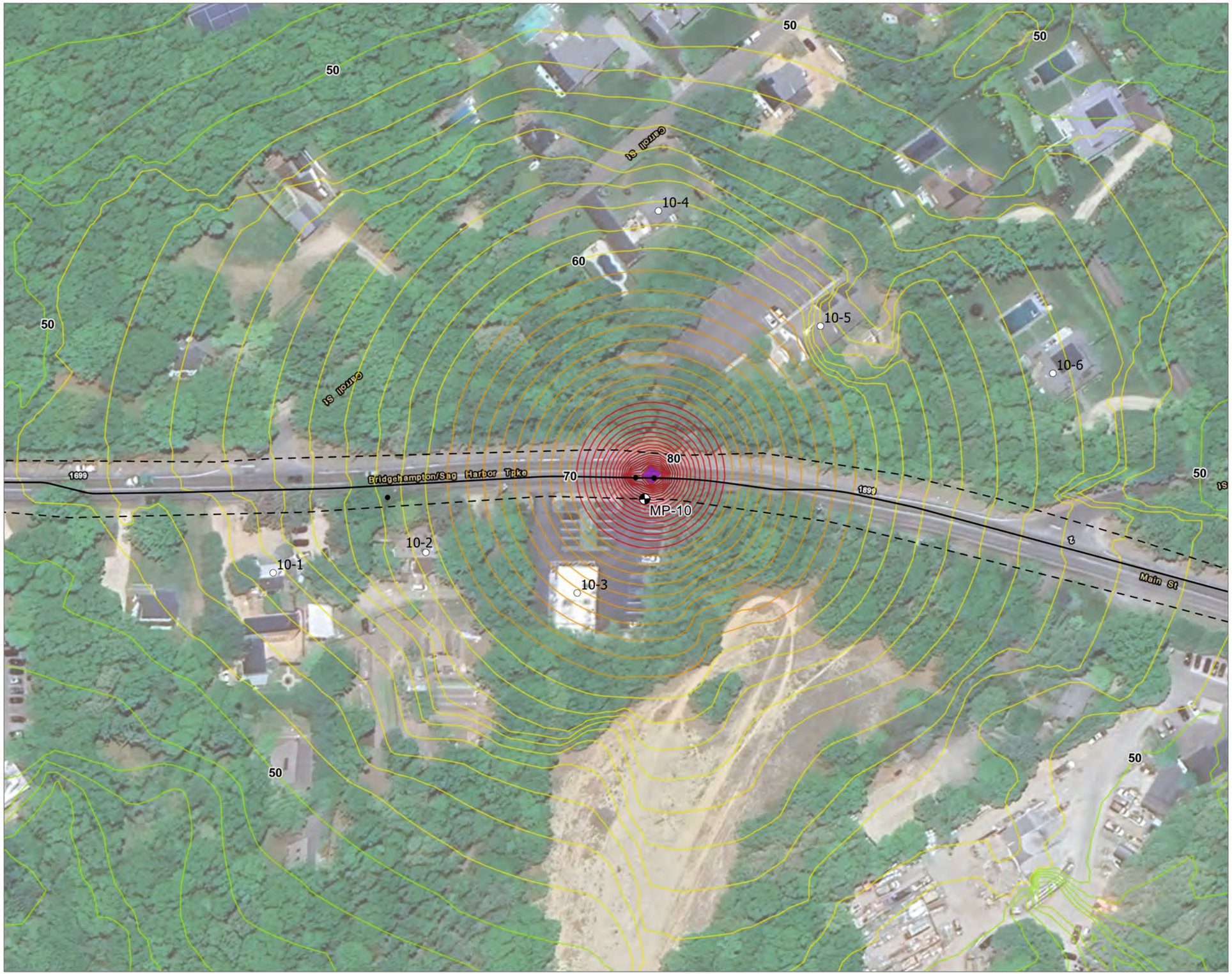
PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		**FIGURE 2A**
APPROVED BY:	M. ERNSTING		**SHEET 9 OF 12**
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx



LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 2A**	
APPROVED BY:	M. ERNSTING	**SHEET 10 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 2A
SHEET 11 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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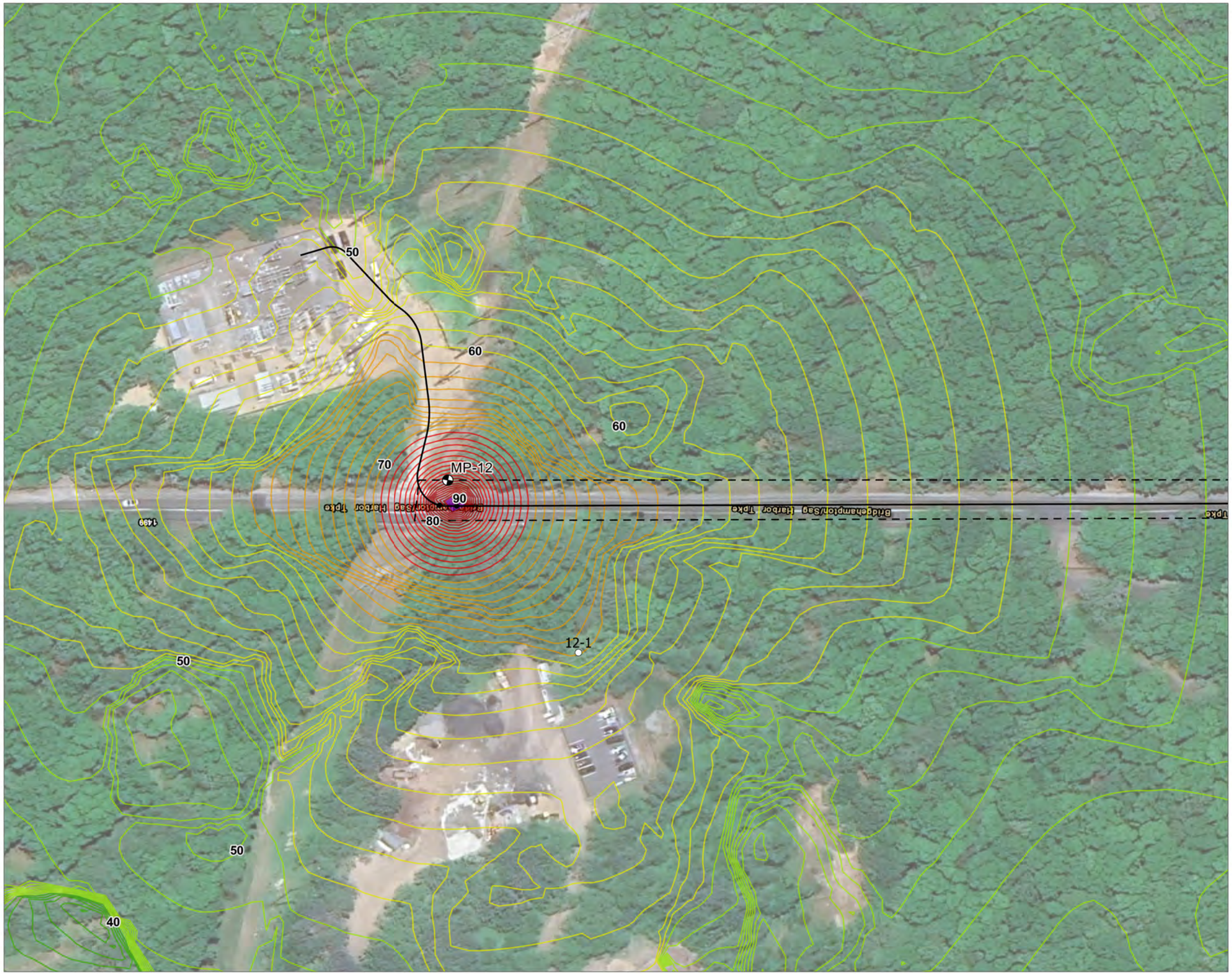


LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

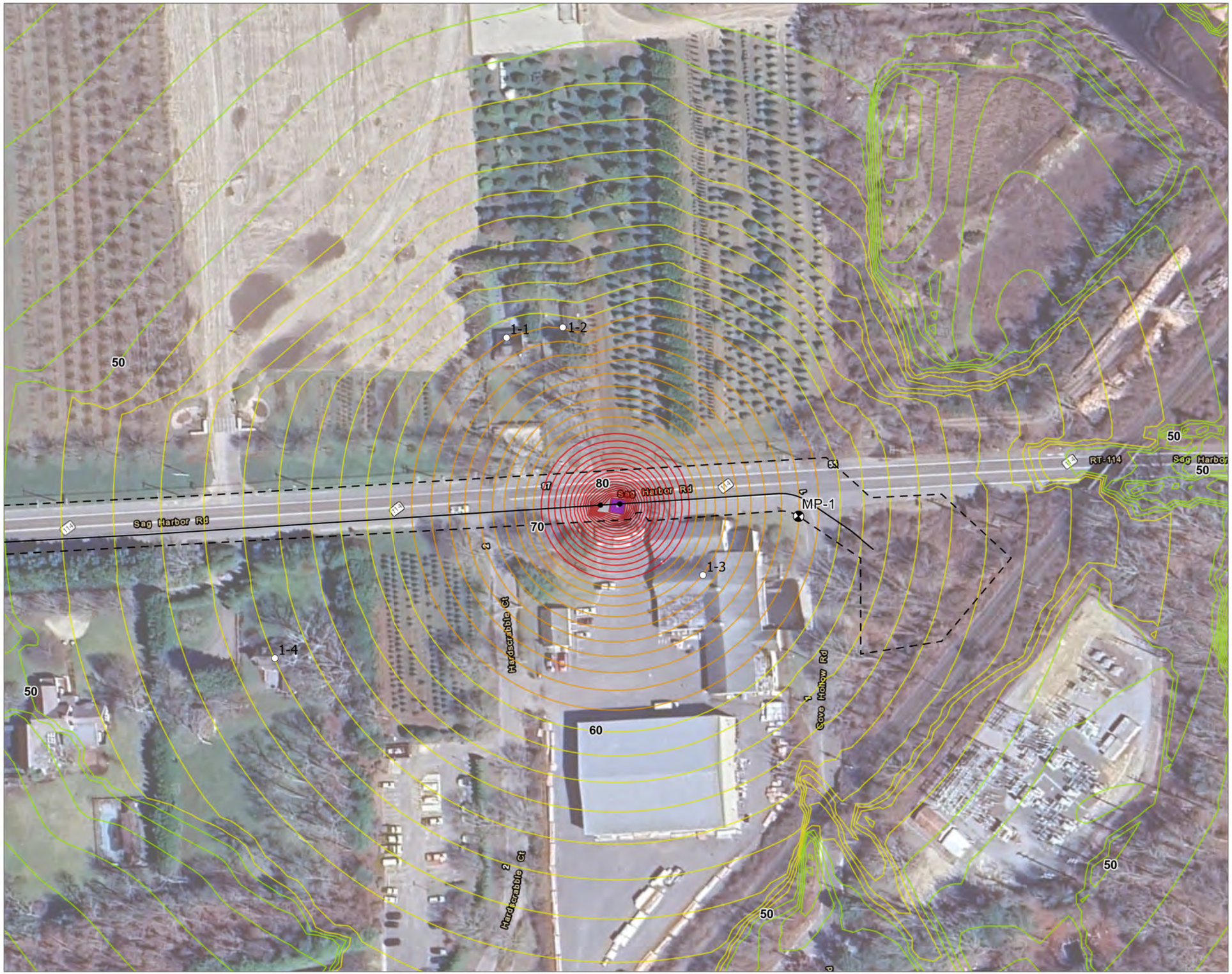
TITLE:
MODEL RESULTS - UNMITIGATED
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 2A
SHEET 12 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx



LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		**FIGURE 2B**
APPROVED BY:	M. ERNSTING		**SHEET 1 OF 12**
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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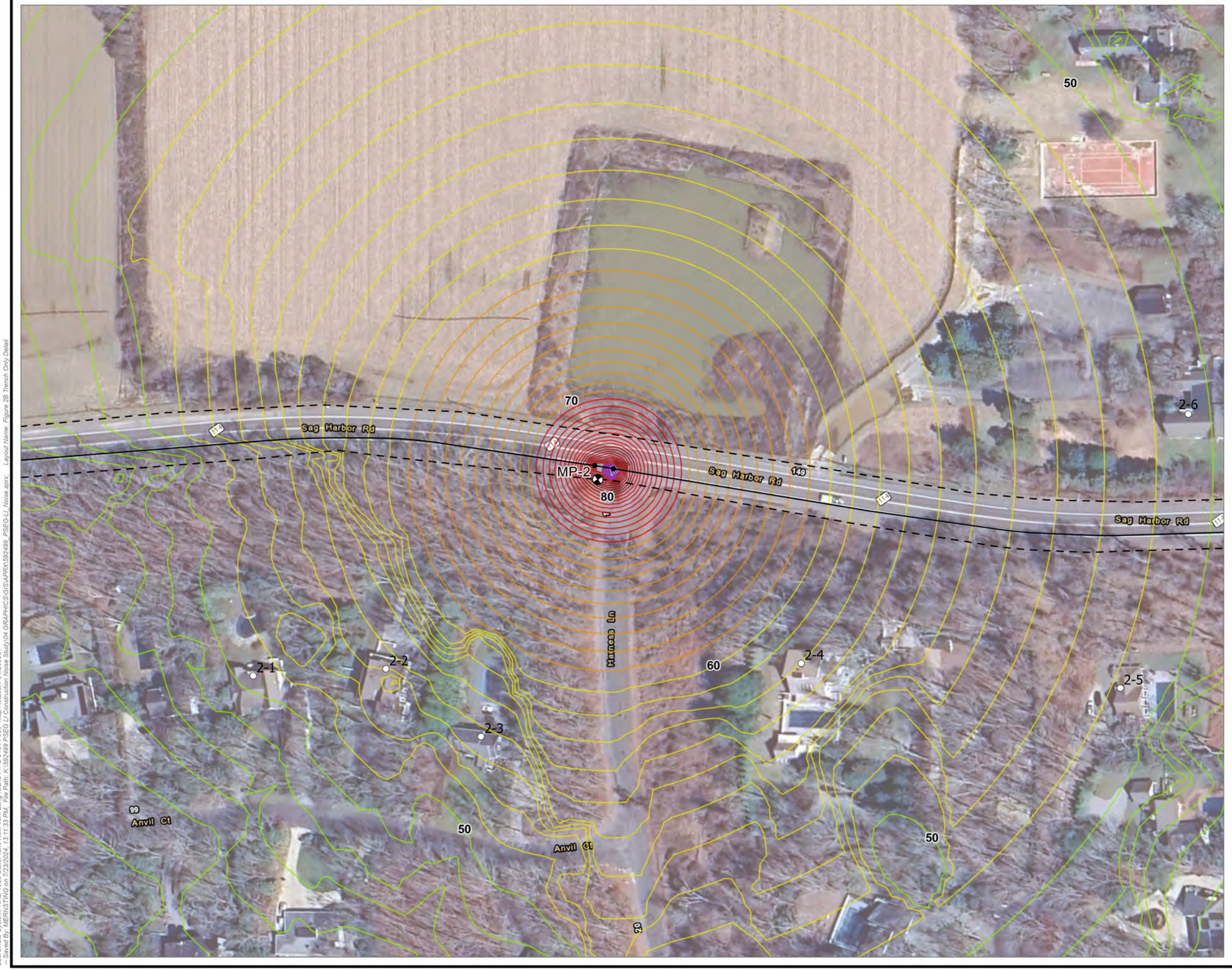

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 2B**	
APPROVED BY:	M. ERNSTING	**SHEET 2 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet; Map Rotation: 34.200001
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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 2B**	
APPROVED BY:	M. ERNSTING	**SHEET 3 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 2B
SHEET 4 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 2B
SHEET 5 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 2B
SHEET 6 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		**FIGURE 2B**
APPROVED BY:	M. ERNSTING		**SHEET 7 OF 12**
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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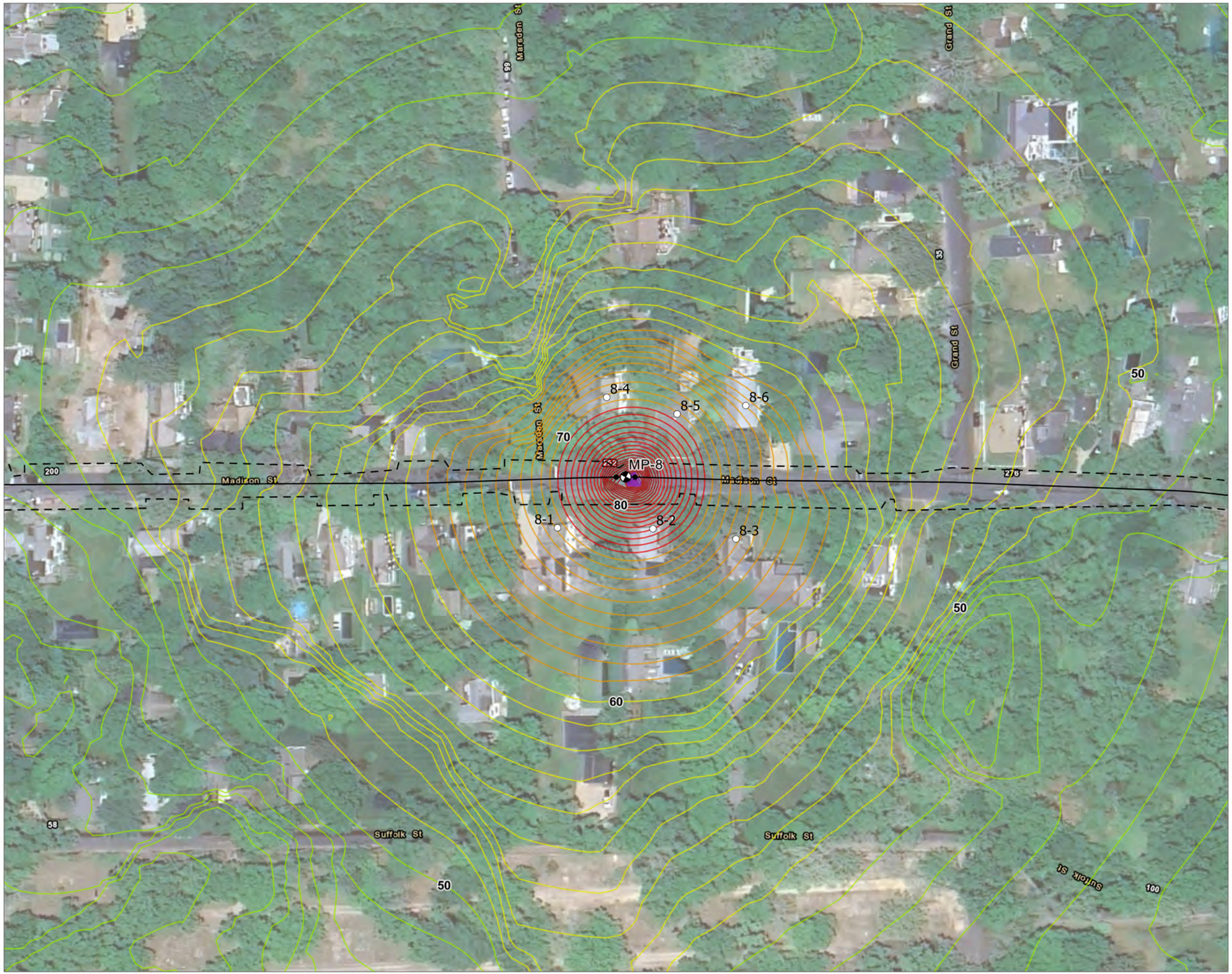

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 2B
SHEET 8 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet; Map Rotation: 62.200001
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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
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DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

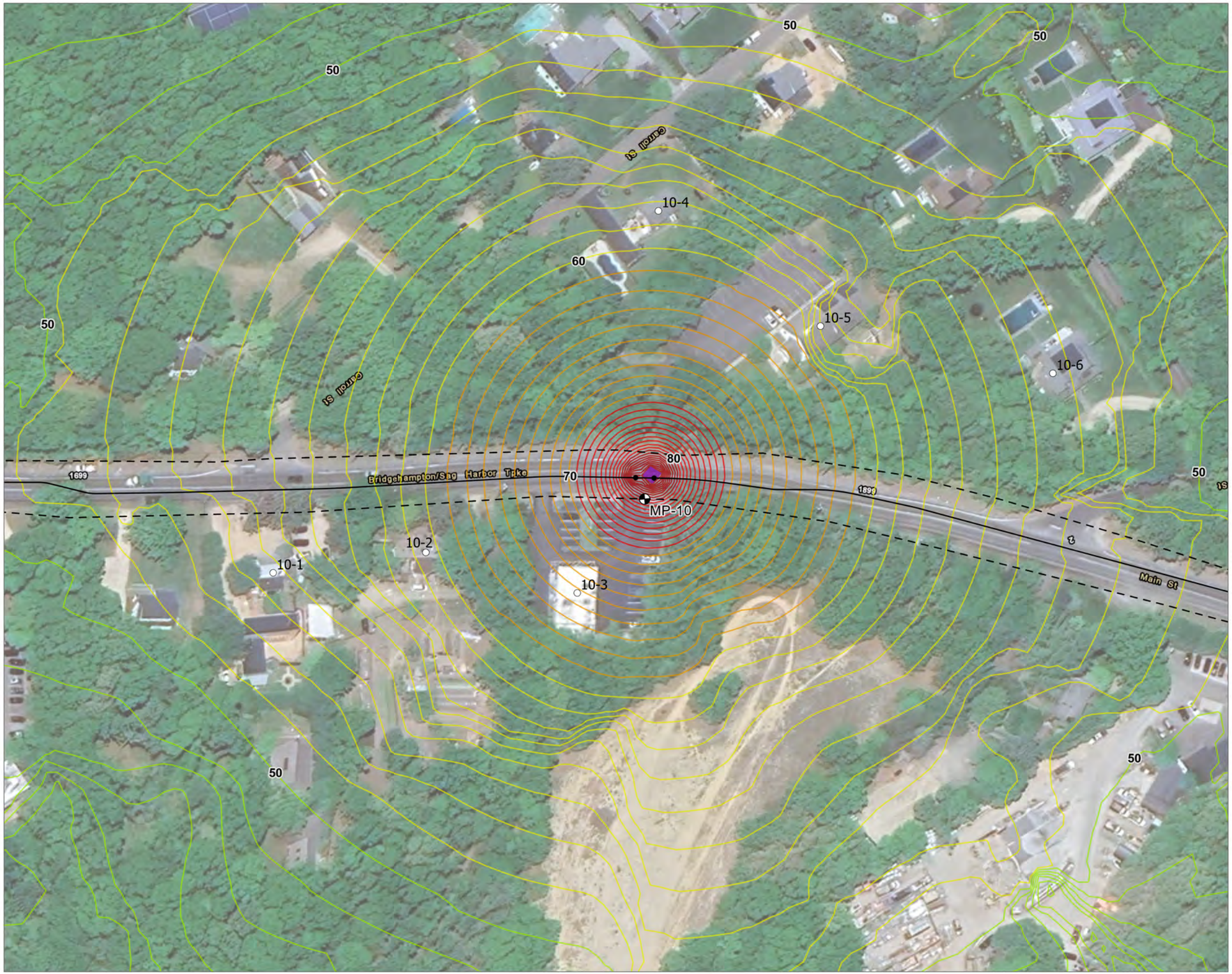
TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 2B
SHEET 9 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx



LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
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DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 2B
SHEET 10 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 2B
SHEET 11 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet, Map Rotation: 274.200012
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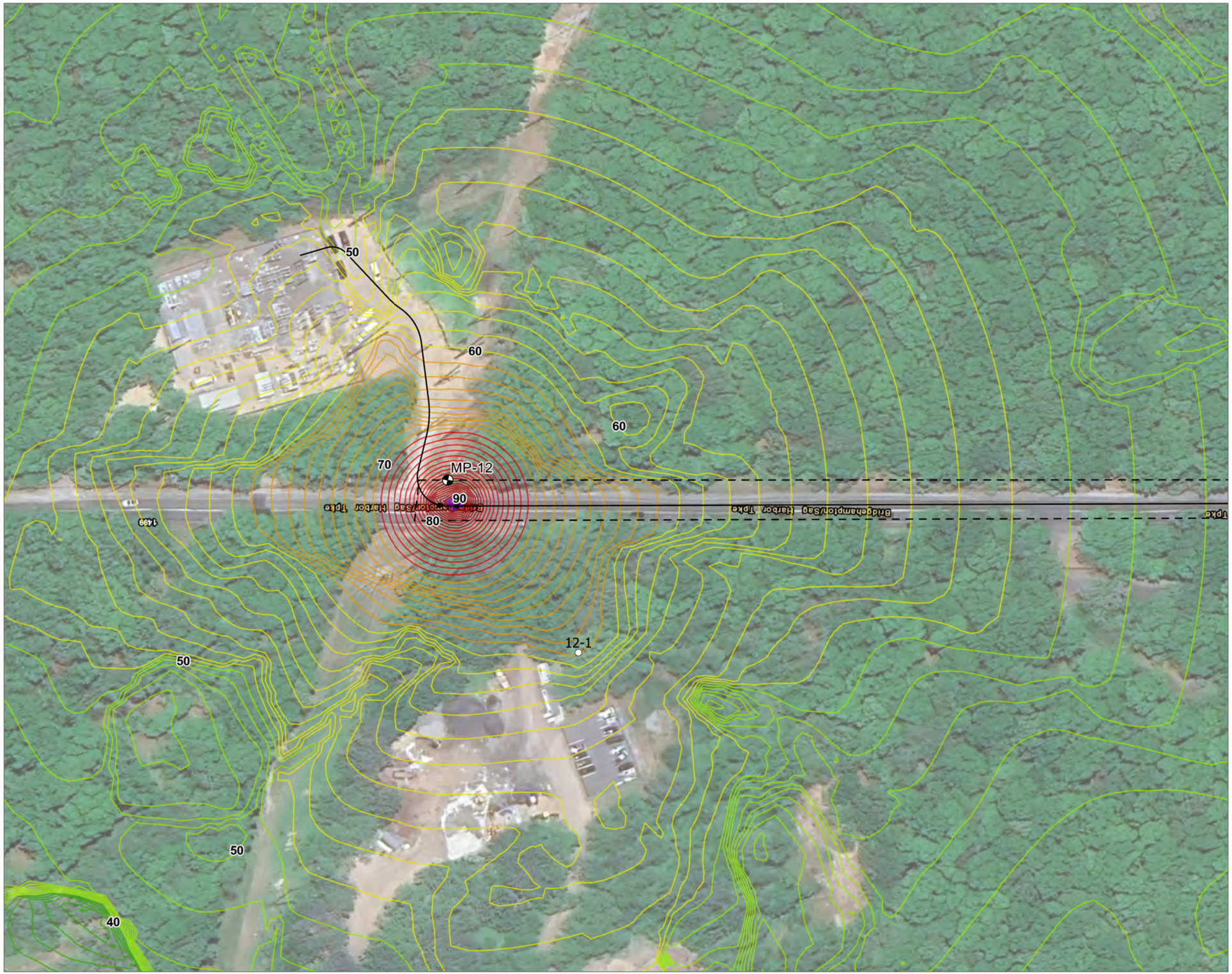

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 2B**	
APPROVED BY:	M. ERNSTING	**SHEET 12 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet; Map Rotation: 258.200012
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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 3B**	
APPROVED BY:	M. ERNSTING	**SHEET 1 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 3B**	
APPROVED BY:	M. ERNSTING	**SHEET 2 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
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- 61 - 70
- 71 - 80
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NOTES:

SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 3B**	
APPROVED BY:	M. ERNSTING	**SHEET 3 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
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SOUND LEVEL (DBA)

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NOTES:

SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

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2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

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1" = 100'

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 3B**	
APPROVED BY:	M. ERNSTING	**SHEET 4 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
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- SOUND BARRIER
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NOTES:

SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 3B**	
APPROVED BY:	M. ERNSTING	**SHEET 5 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
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NOTES:

SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

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2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

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1" = 100'

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 3B**	
APPROVED BY:	M. ERNSTING	**SHEET 6 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
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SOUND LEVEL (DBA)

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NOTES:

SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1 TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 3B**	
APPROVED BY:	M. ERNSTING	**SHEET 7 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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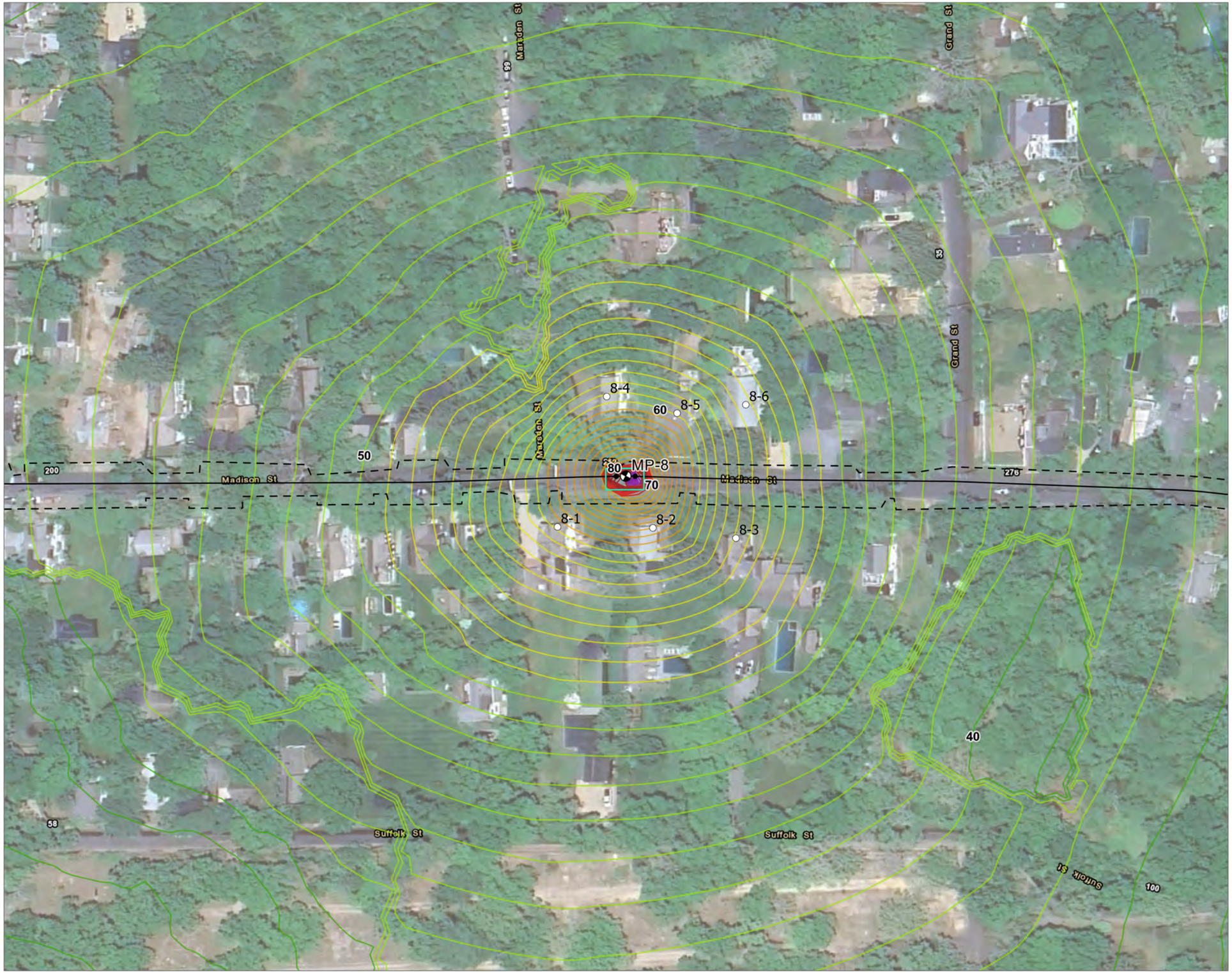

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
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SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
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3. TRC, MONITORING LOCATIONS, MARCH 2024

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1" = 100'

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 3B**	
APPROVED BY:	M. ERNSTING	**SHEET 8 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
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- SOUND BARRIER
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SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
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3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1 TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 3B
SHEET 9 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
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NOTES:

SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1 TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 3B**	
APPROVED BY:	M. ERNSTING	**SHEET 10 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		**FIGURE 3B**
APPROVED BY:	M. ERNSTING		**SHEET 11 OF 12**
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

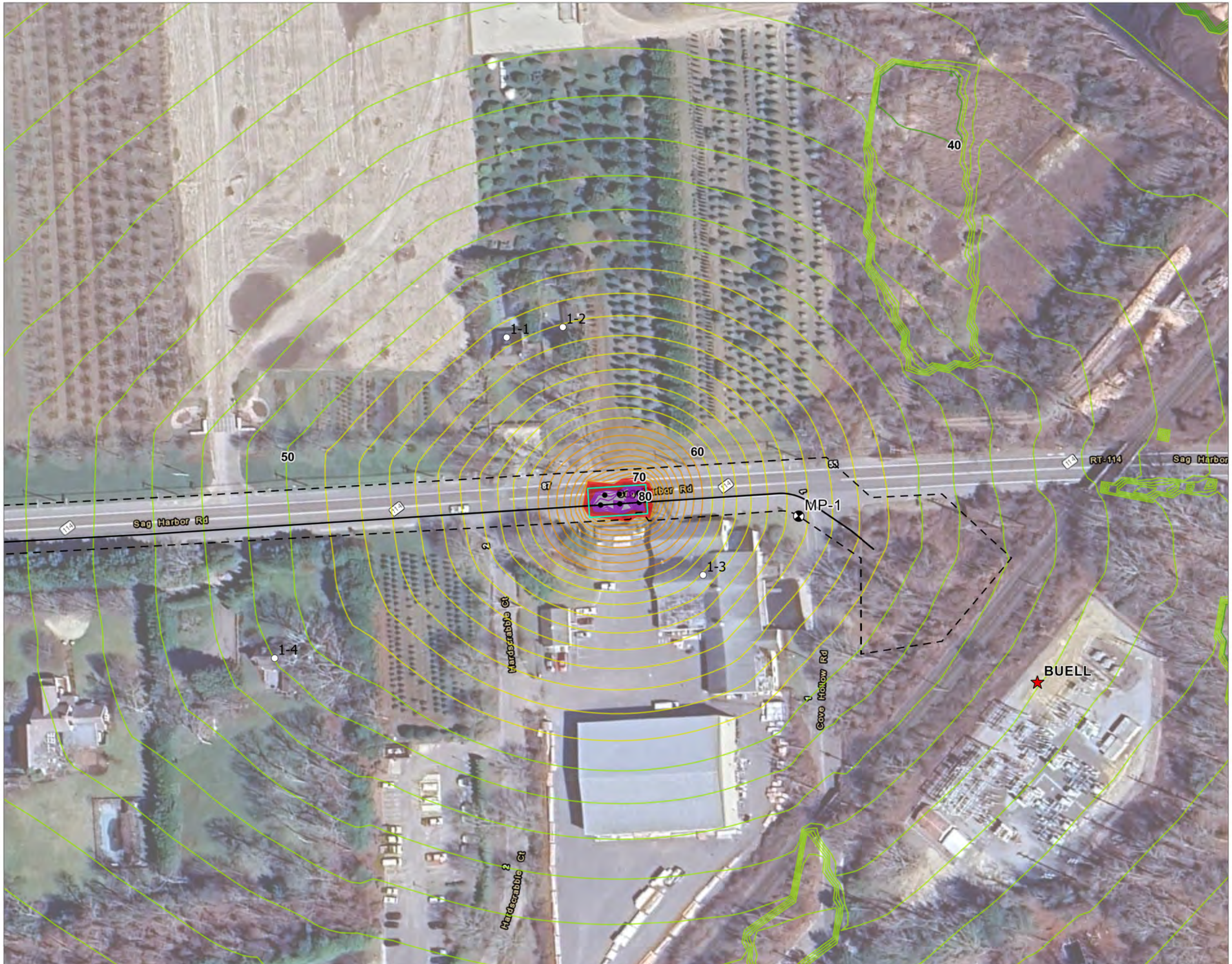
PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1 TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 3B**	
APPROVED BY:	M. ERNSTING	**SHEET 12 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx



LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'
0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4A**	
APPROVED BY:	M. ERNSTING	**SHEET 1 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4A**	
APPROVED BY:	M. ERNSTING	**SHEET 2 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
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NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 4A
SHEET 3 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
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- 61 - 70
- 71 - 80
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NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

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2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

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1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4A**	
APPROVED BY:	M. ERNSTING	**SHEET 4 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

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- ≤ 30
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NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

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2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
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1:1,200
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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4A**	
APPROVED BY:	M. ERNSTING	**SHEET 5 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2 HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 4A
SHEET 6 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet; Map Rotation: 19
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Layout Name: Figure 4A HDD & Trench Mitigation 2

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

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2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4A**	
APPROVED BY:	M. ERNSTING	SHEET 7 OF 12	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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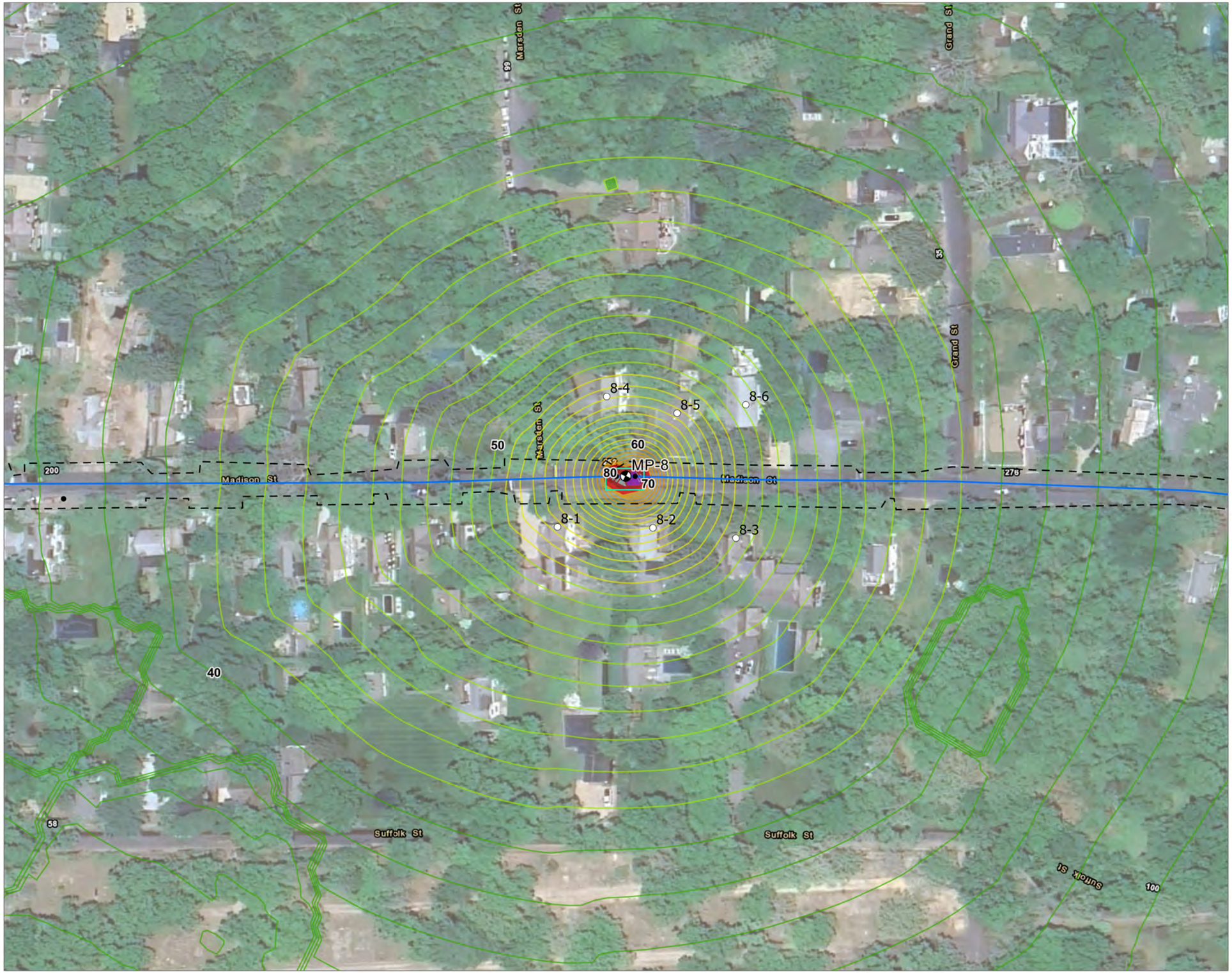

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
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NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

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3. TRC, MONITORING LOCATIONS, MARCH 2024

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4A**	
APPROVED BY:	M. ERNSTING	**SHEET 8 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
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SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2 HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 4A
SHEET 9 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

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SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2 HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4A**	
APPROVED BY:	M. ERNSTING	**SHEET 10 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- CABLE ROUTE - HDD
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

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NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2 HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		**FIGURE 4A**
DATE:	JULY 2024		**SHEET 11 OF 12**

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
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SOUND LEVEL (DBA)

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DATA SOURCES:

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1" = 100'

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
HDD/TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4A**	
APPROVED BY:	M. ERNSTING	**SHEET 12 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
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SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

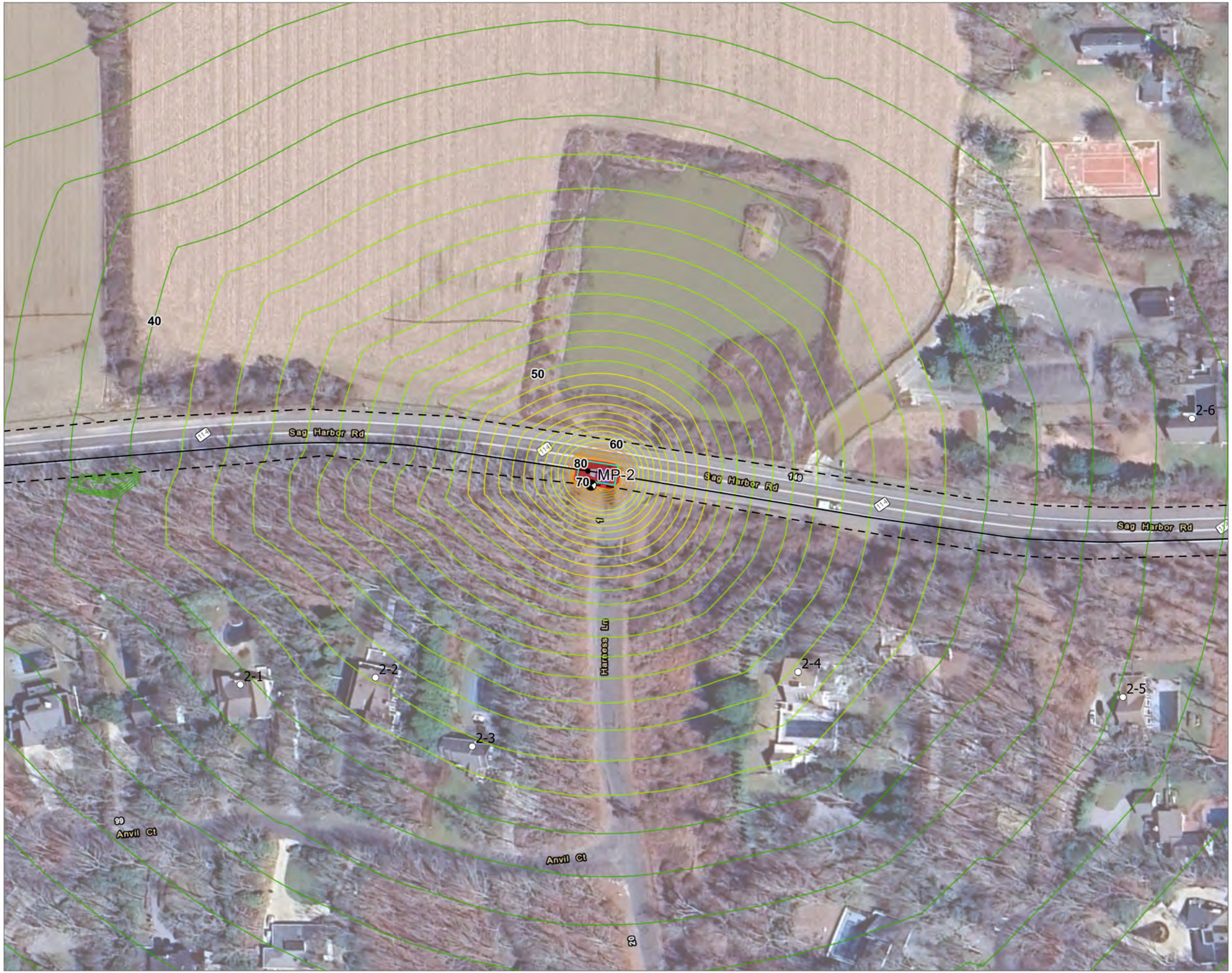
TITLE:
MODEL RESULTS - MITIGATION CASE 2 TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 4B
SHEET 1 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx



LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
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SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2 TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 4B
SHEET 2 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

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SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

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2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

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1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2 TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 4B
SHEET 3 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

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- ≤ 30
- 31 - 40
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NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2 TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4B**	
APPROVED BY:	M. ERNSTING	**SHEET 4 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
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- SOUND BARRIER
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SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 4B
SHEET 5 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4B**	
APPROVED BY:	M. ERNSTING	**SHEET 6 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
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SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2 TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4B**	
APPROVED BY:	M. ERNSTING	**SHEET 7 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

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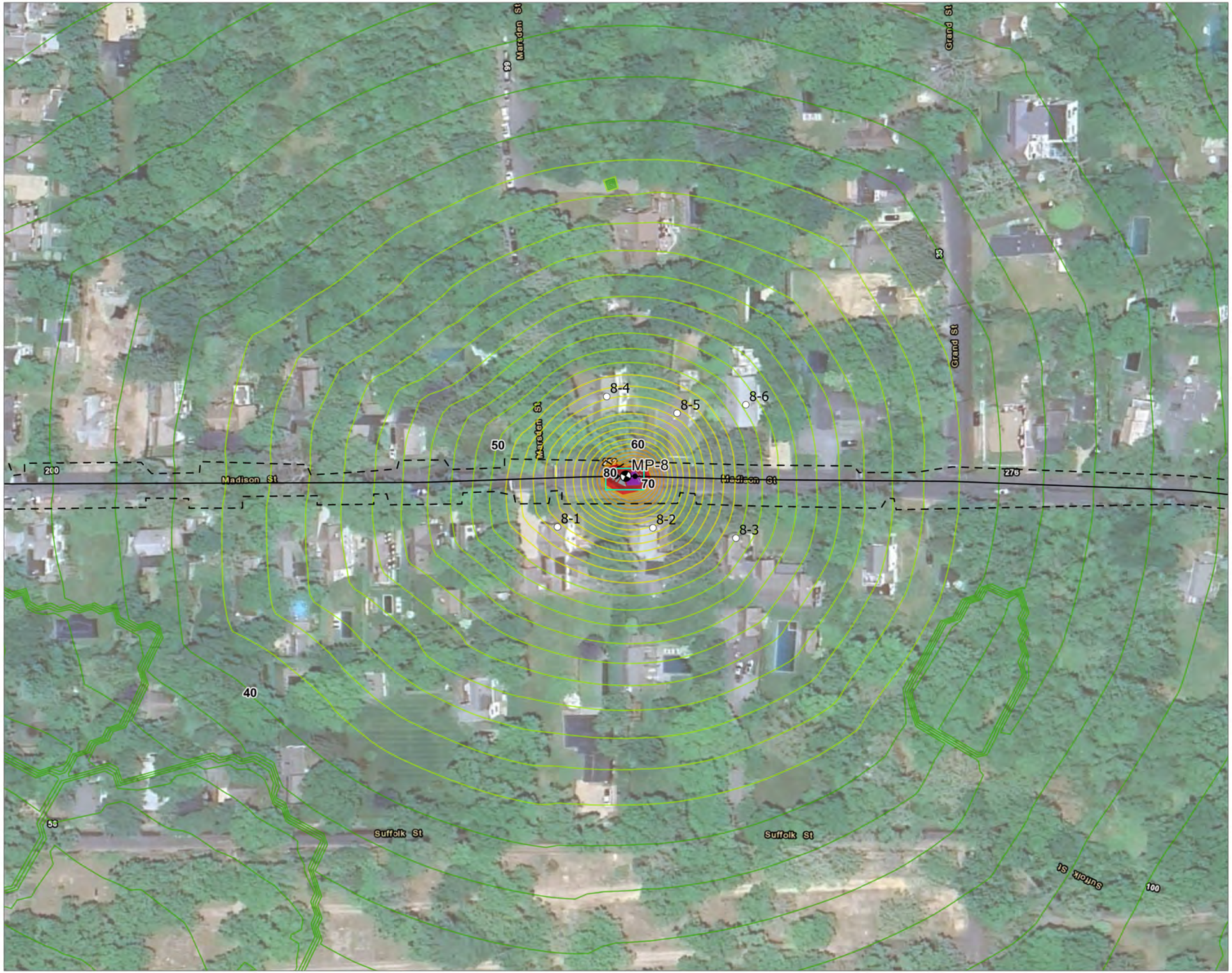

LEGEND

- EQUIPMENT SOURCE
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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 4B
SHEET 8 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet. Map Rotation: 62.200001
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LEGEND

- EQUIPMENT SOURCE
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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2 TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 4B
SHEET 9 OF 12

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
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SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

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PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2 TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4B**	
APPROVED BY:	M. ERNSTING	**SHEET 10 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet. Map Rotation: 275.99988
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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		**FIGURE 4B**
DATE:	JULY 2024		**SHEET 11 OF 12**

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- SOUND BARRIER
- CABLE ROUTE - TRENCH
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-33 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
TRENCH INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 4B**	
APPROVED BY:	M. ERNSTING	**SHEET 12 OF 12**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- CABLE ROUTE
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED MANHOLE INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO		
APPROVED BY:	M. ERNSTING		
DATE:	JULY 2024		

FIGURE 5
SHEET 1 of 3

TRC

FILE: 592499_PSEG-LI_Noise.aprx

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet. Map Rotation: 275.299988
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LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- CABLE ROUTE
- SOUND BARRIER
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 8FT HIGH TEMPORARY FENCE WITH STC-21 SOUND BLANKETS (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 1 MANHOLE INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 5**	
APPROVED BY:	M. ERNSTING	**SHEET 2 OF 3**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- CABLE ROUTE
- SOUND BARRIER
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

NOTES:

SOUND BARRIER CONSISTS OF 16FT HIGH TEMPORARY BARRIER WITH STC-32 SOUND CURTAIN (SEE APPENDIX B)

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

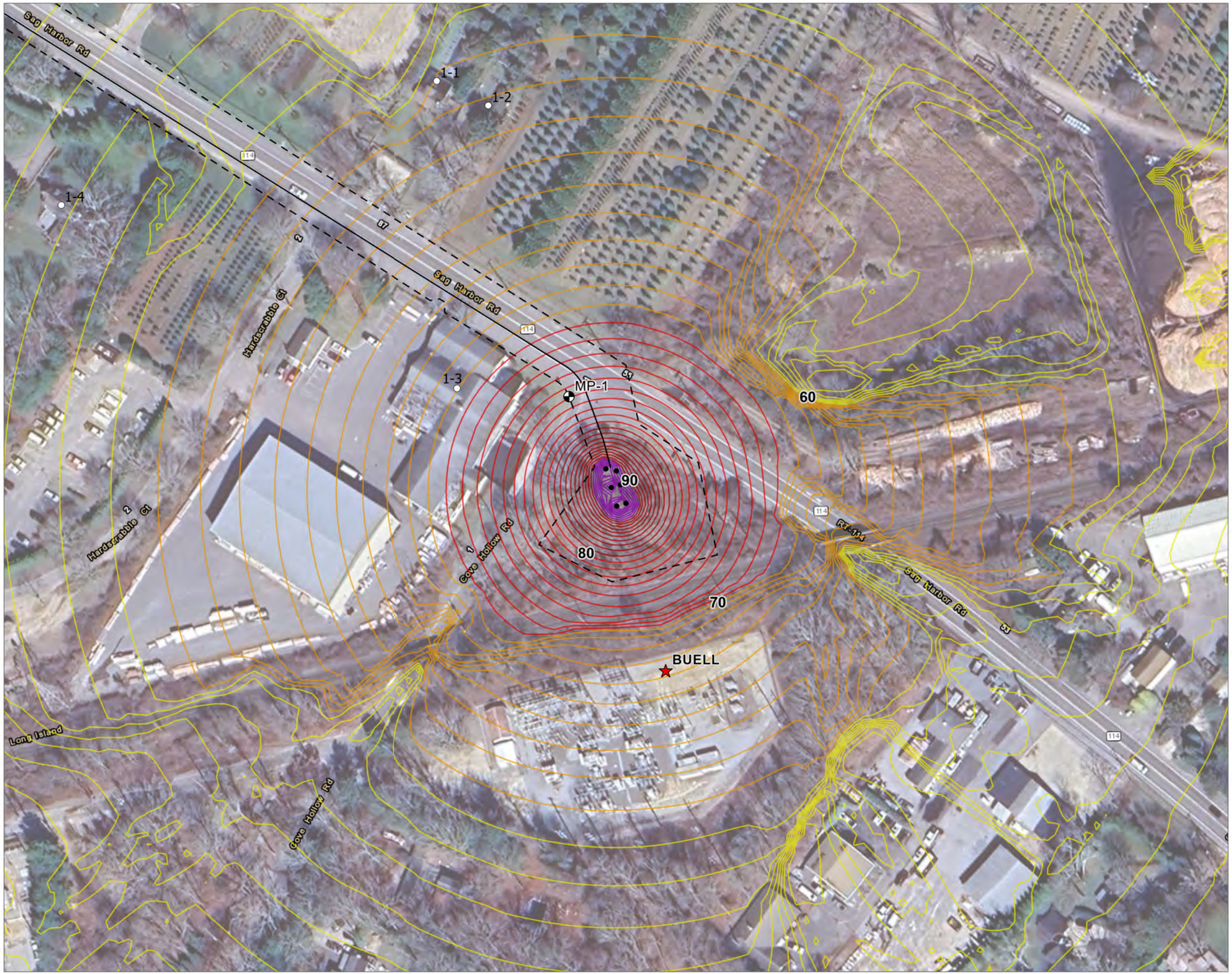
PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
MANHOLE INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 5**	
APPROVED BY:	M. ERNSTING	**SHEET 3 OF 3**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx



LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- CABLE ROUTE
- LIMIT OF DISTURBANCE

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

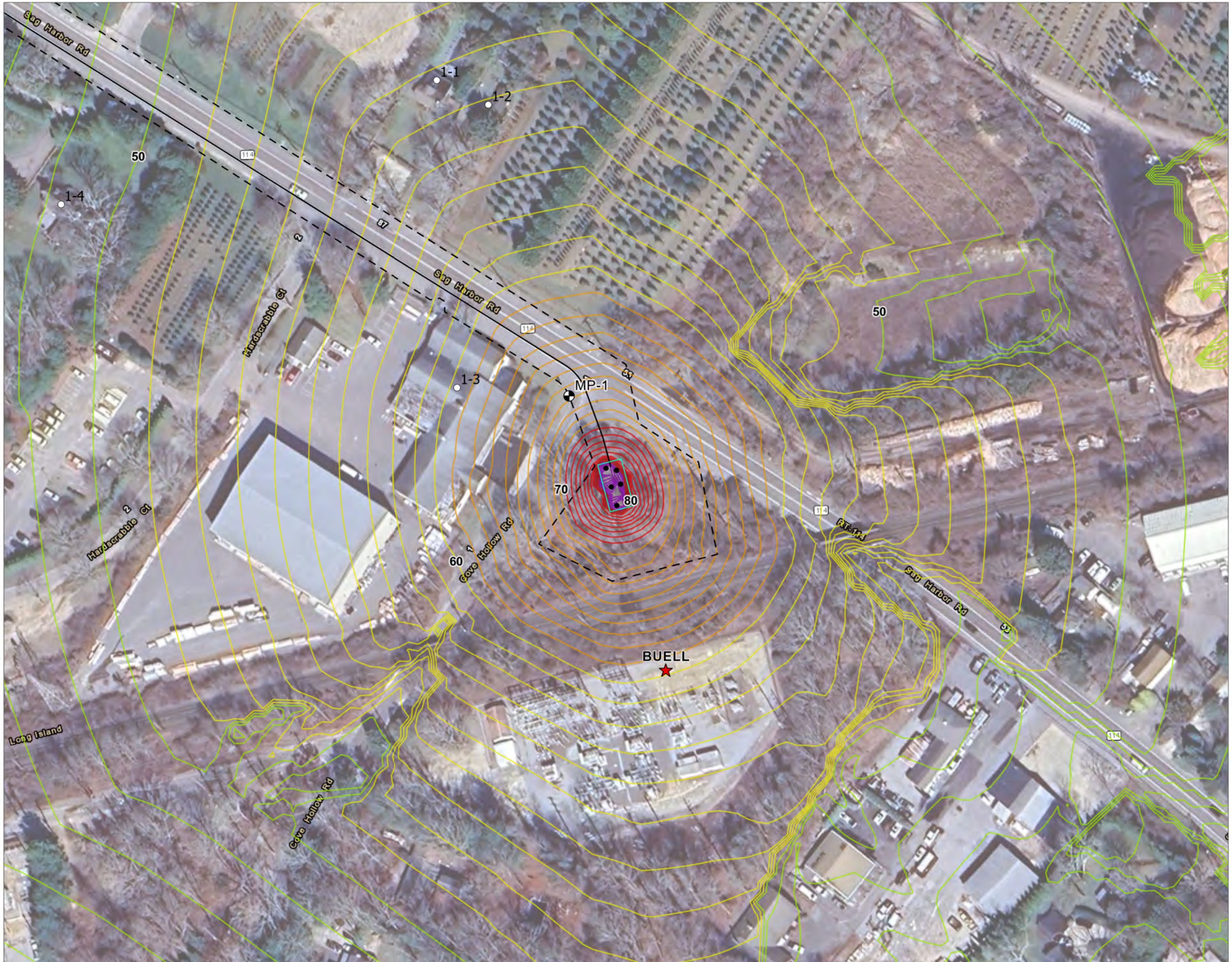
PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - UNMITIGATED JACK-AND-BORE INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 6**	
APPROVED BY:	M. ERNSTING	**SHEET 1 of 3**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx



LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- CABLE ROUTE
- LIMIT OF DISTURBANCE
- SOUND BARRIER

SOUND LEVEL (DBA)

- ≤ 30
- 31 - 40
- 41 - 50
- 51 - 60
- 61 - 70
- 71 - 80
- 81 - 90
- ≥ 91

DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'
0 100 200 FEET

PROJECT: PSEG-LI BRIDGEHAMPTON TO BUELL 69KV SUFFOLK COUNTY, NEW YORK

TITLE: MODEL RESULTS - MITIGATION CASE 1 JACK-AND-BORE INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	FIGURE 6	
APPROVED BY:	M. ERNSTING	SHEET 2 of 3	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

LEGEND

- EQUIPMENT SOURCE
- NOISE SENSITIVE AREA
- MONITORING LOCATION
- INTERCONNECTION POINT
- CABLE ROUTE
- LIMIT OF DISTURBANCE
- SOUND BARRIER

SOUND LEVEL (DBA)

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DATA SOURCES:

1: ESRI, AERIAL IMAGERY AND WORLD STREET MAP, 2024
2: SITE LAYOUT, PSEG-LI, FEBRUARY 2024
3. TRC, MONITORING LOCATIONS, MARCH 2024

1:1,200
1" = 100'

0 100 200 FEET

PROJECT:
PSEG-LI BRIDGEHAMPTON TO BUELL 69KV
SUFFOLK COUNTY, NEW YORK

TITLE:
MODEL RESULTS - MITIGATION CASE 2
JACK-AND-BORE INSTALLATION

DRAWN BY:	M. ERNSTING	PROJ. NO.:	592499
CHECKED BY:	M. PROKO	**FIGURE 6**	
APPROVED BY:	M. ERNSTING	**SHEET 3 of 3**	
DATE:	JULY 2024		

TRC

FILE: 592499_PSEG-LI_Noise.aprx

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet. Map Rotation: 0
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