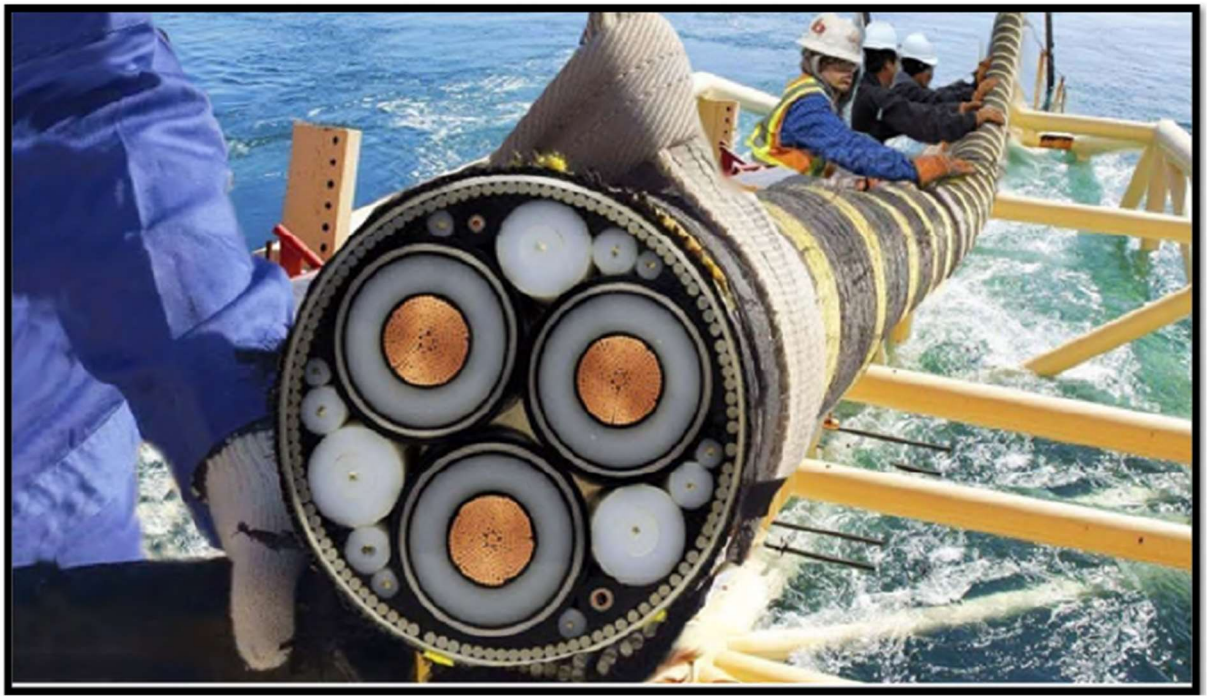
Potential Devastating Liabilities to the Great City of Atlantic City



with Atlantic Shores Proposed Cable Route

Index

Planned Route

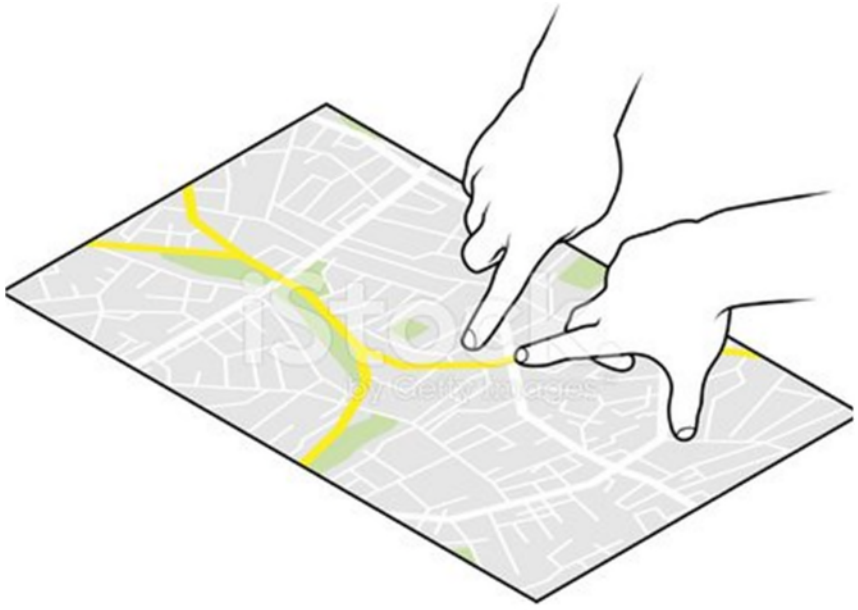
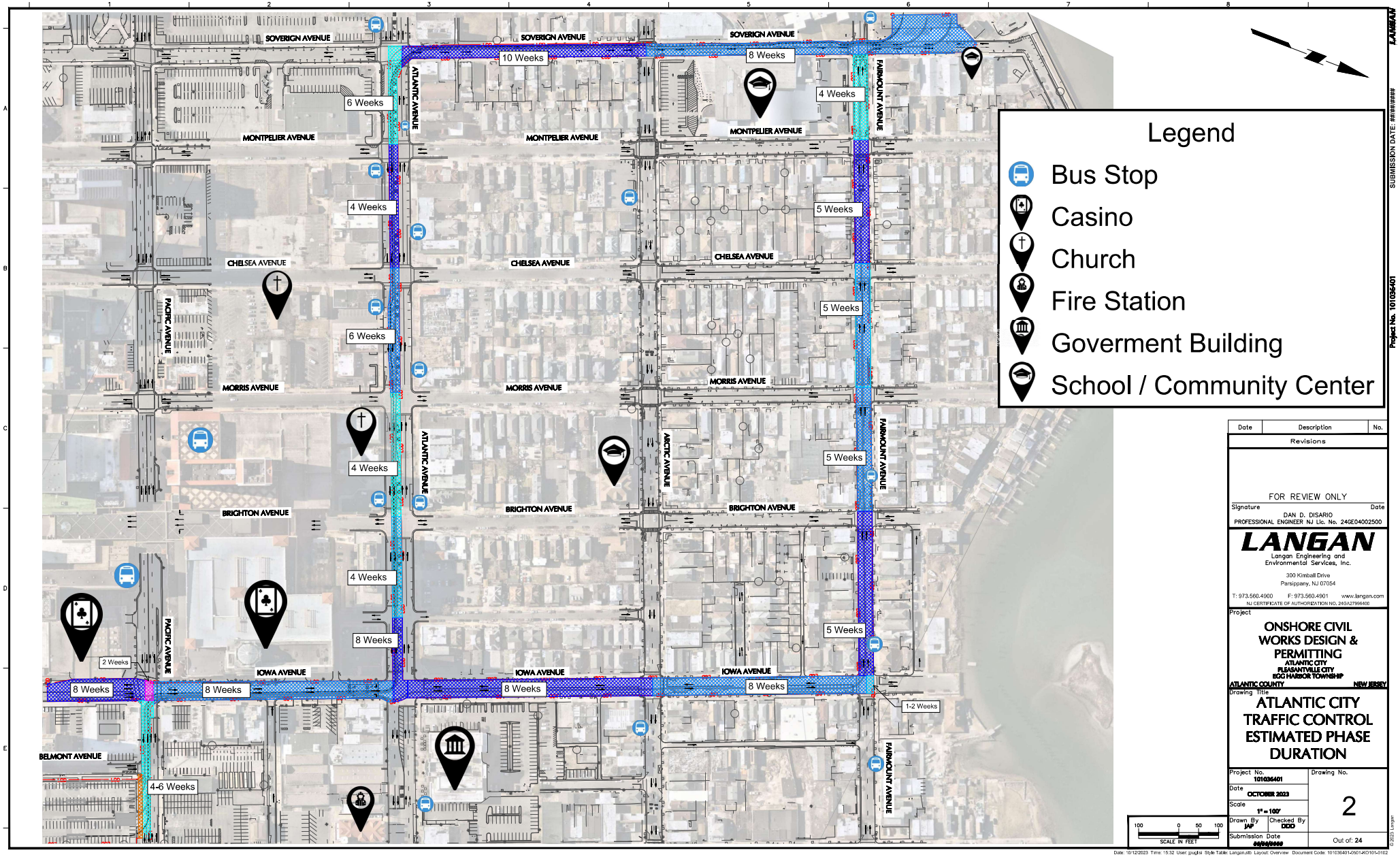


Figure 7.5-3A

Atlantic Landfall Site, Cardiff Onshore Interconnection Cable Route, and Onshore Substation Site
Atlantic County, New Jersey



116 Weeks = 2.23 Years under perfect conditions with NO delays.

This does not include the additional roads for the cable route. Dated 10/2023

High-rise Residential Buildings
& Hotels Affected by Cable Route

- Ritz Condominiums – 332 Units
- Ocean Club Condominiums – 726 Units
- Brighton Towers – 161 Units
- 33 S. Iowa Avenue – 31 Units
- 37 S. Iowa Avenue - 50 Units
- Chelsea Village Apartments – 261 Units

Total in High-rise Buildings – 1,561 residential units.

*** This does not include all the smaller multifamily properties and single family homes along the cable route. Nor does it include all the businesses.*

- **Tropicana Casino and Hotel**
  - 2,409 ROOMS
  - 150,000 SF of Retail

*** The Tropicana already suffered one construction tragedy with the collapse of their garage. Do you think they should suffer another one with the trench digging, noise and vibration of the cable installation?*

Alternative Route

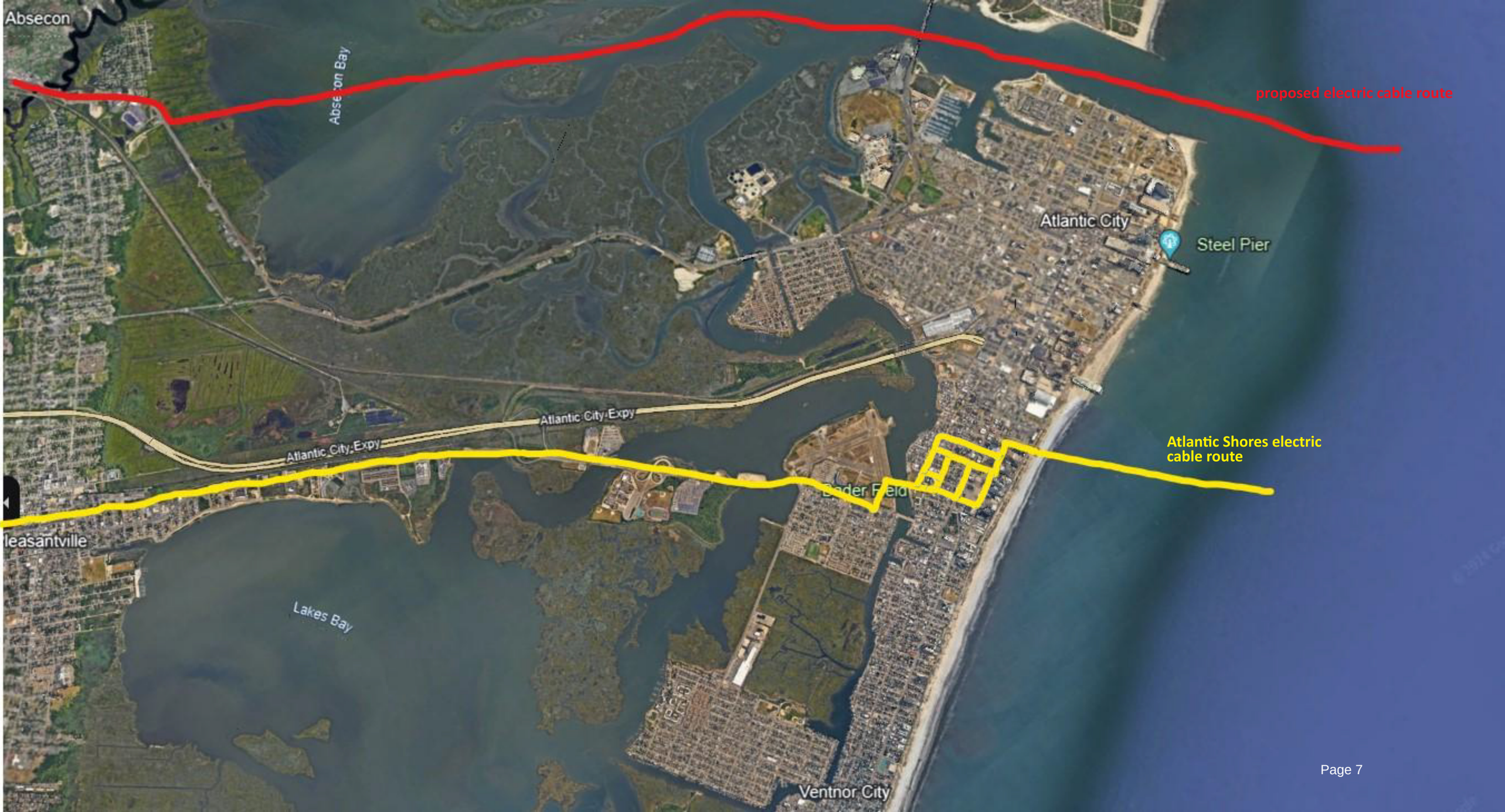
From May 2024 Construction and Operations Plan
Appendix I-G: Submarine Export and Onshore Interconnection
Cable Routes Determination, pp. 4- 5

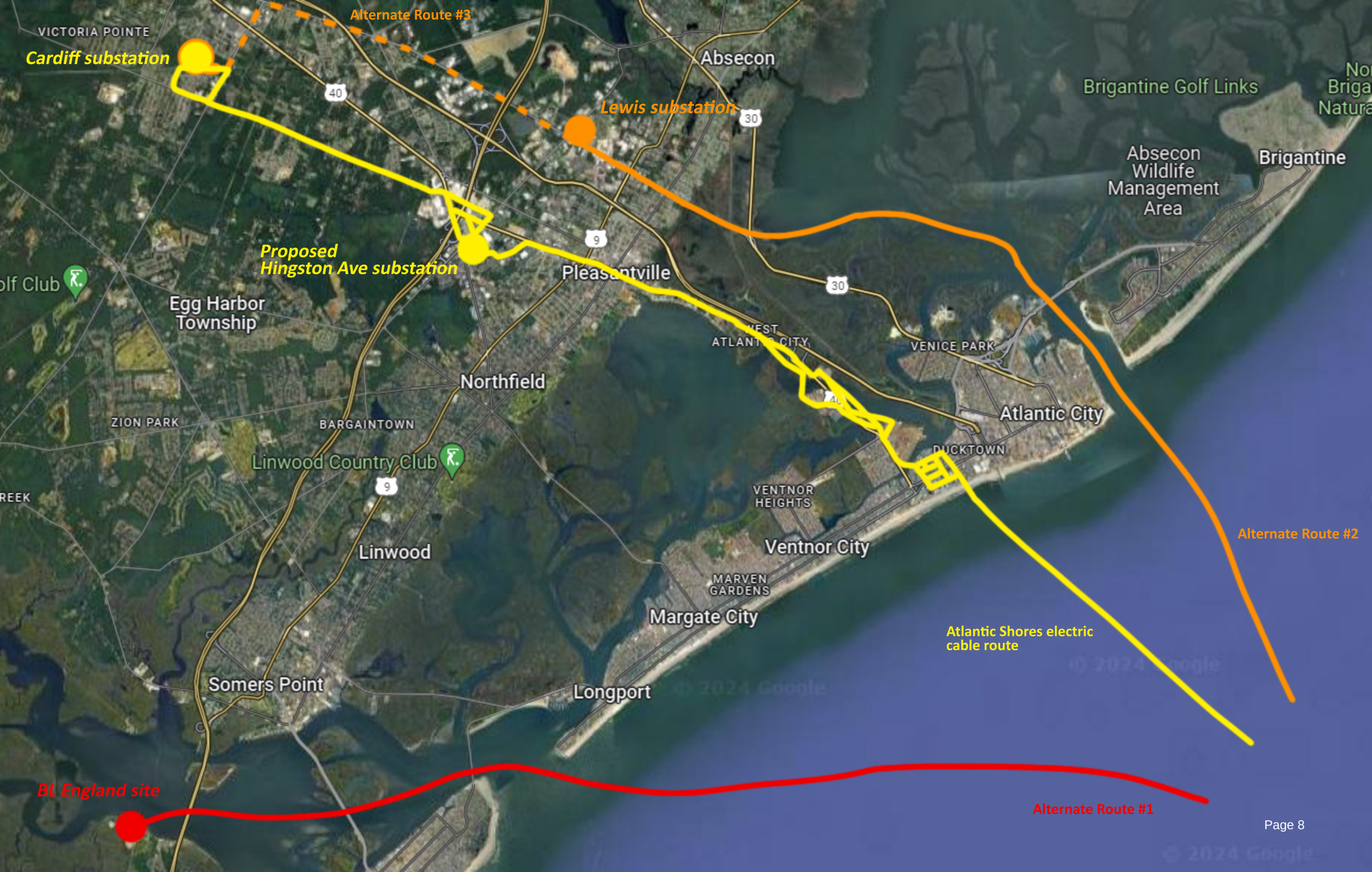
Table 2. Summary of Preliminary Onshore Routes

POI	Length (mi)	No. Hard Angle	Ecological Constraints	Land Use (Approximate Linear Distance) (mi)					Rationale for Elimination
				Residential	Commercial	Roadway	Utility ROW	Railroad	
Gowanus	14	2	Tidelands, wetlands	-	2	12	-	-	Length of cable crossing commercial land, length of route in limited access highways
Narrows	13	5	Tidelands, wetlands	-	1	12	-	-	Length of cable crossing commercial land, length of route in limited access highways
Gowanus	6	2	Tidelands	-	2	4	-	-	Length of cable crossing commercial land, limited access highways
Narrows	5	3	Tidelands	-	1	4	-	-	Length of cable crossing commercial land, limited access highways
Fresh Kills	8	8	T&E species presence, tidelands, wetlands	2	-	6	-	-	**Route selected for Windshield Study**
Fresh Kills	48	22	T&E species presence, wetlands	1.5	-	-	46.5	-	Overall length of route, number of hard angles
Larrabee	15	4	T&E species presence, tidelands, wetlands	3.25	-	12	0.25	-	Overall length of route, Length of route in roadways and residential land
Larrabee	12	13	T&E species presence, tidelands, wetlands	1	-	6.25	4.75	-	**Route selected for Windshield Study**
Larrabee	23.5	11	T&E species presence, tidelands, wetlands	3	-	7	13.5	-	Overall length of route, length of route in residential land
Oyster Creek	23	9	T&E species presence, tidelands, wetlands, SAV	3	-	7.25	12.75	-	Elimination of the POI from consideration (to be used by other developer), overall length of route, length of route crossing residential land uses, presence of SAV
Oyster Creek	24	4	T&E species presence, tidelands, wetlands, SAV	9	-	15	-	-	Elimination of the POI from consideration (to be used by other developer), overall length of route, length of route crossing
Oyster Creek	28	26	T&E species presence, tidelands, wetlands, SAV	9.5	-	6.25	12.25	-	Elimination of the POI from consideration (to be used by other developer), overall length of route, length of route crossing residential land uses, number of hard angles, presence of SAV
Oyster Creek	28.5	26	T&E species presence, tidelands, wetlands, SAV	10	-	6.25	12.25	-	Elimination of the POI from consideration (to be used by other developer), overall length of route, length of route crossing residential land, number of hard angles, presence of SAV
Lewis	8	3	T&E species presence, tidelands, wetlands	3	-	3	2	-	Limited available capacity at POI, length of route in residential land
Lewis	7	1	T&E species presence, tidelands, wetlands	-	-	7	-	-	Limited available capacity at POI, infeasible to use AC Expressway
Cardiff	13	6	T&E species presence, tidelands, wetlands	3	-	3	7	-	Length of route in residential land
Cardiff	12	3	T&E species presence, tidelands, wetlands	- ??	-	7	5	-	**Route selected for Windshield Study**
Cardiff	13	1	T&E species presence, tidelands, wetlands	0.5	-	11.5	1	-	Length of route in roadways, required use of existing Atlantic City Electric transmission corridor
BL England	7	5	T&E species presence, tidelands, wetlands	5	-	2	-	-	Elimination of the POI from consideration (to be used by other developer), length of route crossing residential land
BL England	8	5	T&E species presence, tidelands, wetlands	3	-	2.5	-	2.5	Elimination of the POI from consideration (to be used by other developer), length of route crossing residential land
BL England	11	5	T&E species presence, tidelands, wetlands	1	-	3	3	4	Elimination of the POI from consideration (to be used by other developer)
BL England	9.5	8	T&E species presence, tidelands, wetlands	-	-	1.5	-	8	Elimination of the POI from consideration (to be used by other developer)

** 2.25 miles of high density residential

** The 2.25 miles does not even include the Chelsea Heights, West Atlantic City, Pleasantville, Cardiff, or English Creek residential sections of the cable route. **


Absecon
proposed electric cable route
Atlantic City
Steel Pier
Atlantic City Expy
Atlantic City Expy
Atlantic Shores electric cable route
Lakes Bay
Ventnor City


Alternate Route #3
VICTORIA POINTE
Cardiff substation
Absecon
Lewis substation
Brigantine Golf Links
Absecon Wildlife Management Area
Brigantine
Proposed Hingston Ave substation
Pleasantville
Egg Harbor Township
VENICE PARK
Northfield
ZION PARK
BARGAINTOWN
Atlantic City
Linwood Country Club
DUCKTOWN
VENTNOR HEIGHTS
Ventnor City
Linwood
MARVEN GARDENS
Margate City
Alternate Route #2
Atlantic Shores electric cable route
Somers Point
Longport
BL England site
Alternate Route #1

Liabilities & Risks

Potential Liabilities with Current Cable Route

Sovereign Avenue School Disruption

- Student Pick-up/Drop-off
- Standardized Testing
- On-site parking issues
- School Recreation/Physical Education
- Potential Utility Interruption

Constructability

- Beach Access
- Community Recreation
- Noise
- Staging of Materials
- Current Infrastructure & Utilities (from the 1890s)
- High Water Table
- Soil Movement and Soil Liquefaction
- Potential Underground Streams
- Foundation Stability of Homes and High-rises
- Damage to Historic Buildings and Properties (especially masonry and load bearing properties).
- Material Deliveries To and From the Staging Areas.
- Inability of Ground Penetrating Radar to Guide Construction at 6 feet.
- Contamination of the Watershed

Health Effects

- Magnetic fields affecting the health and safety of neighborhood schools, parks, and homes.
- Constant noise and vibrations round the clock for multiple years.
- Contamination of the Kirkwood-Cohansey Aquifer (*Because it is so shallow, it is easily polluted…. Also, over-pumping or excessive withdrawals of fresh water harms wetlands and unique plant and animal species that rely on the special characteristics of pure Kirkwood-Cohansey water.)*

NOISE

Noise References from Atlantic Shores Documents

- The table on page 8-10 in the **Atlantic Shores Noise Report** shows that their HDD will reach 117 decibels. This is the equivalent of a jet engine taking off 50 feet from you. At 2923 Sunset Avenue (2900 feet away from the California Ave construction site), the decibel levels are estimated to reach 77 decibels. This is the sound of a police siren 50 feet away.

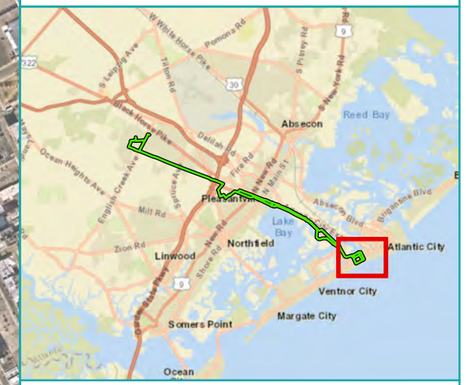
Equipment	Sound Power Level (dBA)
Excavator	117
Drill rig	117
Pump	109

Receptor	Sound Level (dBA)
2923 Sunset Ave	77
403 E Main St	61
24 S California Ave	67
43 N Stenton Pl	59

- Another table in the same document can be found on page 8-8. It shows that as trenches are dug through the Chelsea neighborhood, 96 decibels will be reached. This is the measurement at 25 feet (much farther than most houses along the cable route are to the utility ROW).

Reference: **Atlantic Shores Appendix II-U, Onshore Noise Report**
https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/2024-05-01_Appendix%20II-U_Onshore%20Noise%20Report.pdf

ATLANTIC SHORES offshore wind



0 0.1 0.2 Miles

0 0.1 0.2 Kilometers

N W E S

Map Projection: NAD 1983 UTM Zone 18N
Basemap: Nearmap Aerial, March 2020

LEGEND

- Residential Buildings
- Cardiff Onshore Interconnection Cable Route Options
- Atlantic Landfall Site
- Municipality

Predicted Sound Level (dBA)

- 50
- 55
- 60
- 65

From Atlantic Shores South COP
Appendix II-U Onshore Noise Report p. 47

www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/2024-05-01_Appendix%20II-U_Onshore%20Noise%20Report.pdf

BADER FIELD

Chelsea Harbor

PETE PALLITTO FIELD

40

FAIRMOUNT AVE

N. MONTPELIER AVE

ARCTIC AVE

IOWA AVE

CALIFORNIA AVE

SOVEREIGN AVE

PACIFIC AVE

BELMONT AVE

S. CALIFORNIA AVE

Atlantic Landfall Site

Figure 8-1

Sound Levels During HDD – Atlantic Landfall Site
Atlantic County, New Jersey

**** This image neglects to include the NOISE from HDD equipment and construction that will take place at Pete Pallitto Field. ****

Table 8-1 Reference Sound Levels of Construction Equipment at 50 feet

Phase Number	Phase Description	Max. Sound Level (dBA) at 50 feet
1	Ground Clearing	84
2	Excavation	88
3	Foundations	88
4	Erection	79
5	Finishing	84

Table 8-2 Maximum Sound Levels of Construction Phases Extrapolated to Additional Distances

Phase Number	Phase Description	Sound Level (dBA) at Distance (ft)					
		25	50	100	250	500	1000
1	Ground Clearing	90	84	78	70	64	58
2	Excavation	94	88	82	74	68	62
3	Foundations	94	88	82	74	68	62
4	Erection	85	79	73	65	59	53
5	Finishing	90	84	78	70	64	58

In general, the sound levels from construction activities will be dominated by the loudest piece of equipment operating at the time. Therefore, at any given point in the work area, the loudest piece of equipment will be the most representative of the expected sound levels in that area. Construction equipment is generally not operated continuously at maximum load but runs with significant variation in power and usage. Actual received sound levels would fluctuate, depending on the construction activity, equipment type, and separation distances between source and receiver. Other factors such as terrain and obstacles such as buildings will act to further limit the impact of construction noise levels.

8.1.3 Proposed Cardiff Onshore Substation and/or Converter Station Construction Sound Level Impacts—Fire Road Site

An estimate of construction sound levels by phase at the two nearby ambient sound level measurement locations presented in Section 5 is provided in Table 8-3. For additional reference, residences are generally scattered around the Fire Road Site. Based on a review of aerial imagery, the closest residence is roughly 23 feet (7 m) to the Fire Road Site.

Table 8-5 Reference Sound Levels of Construction Equipment at Arbitrary Distances

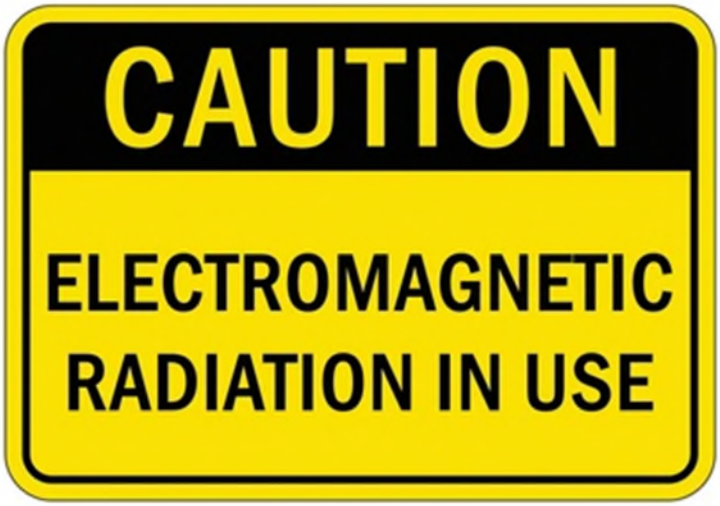
Equipment	Sound Level [dBA] at Distance [ft]					
	25	50	100	250	500	1000
Mobile Crane (duct bank and manhole installation)	91	85	79	71	65	59
Pavement Saw (trench excavation)	96	90	84	76	70	64
Asphalt Paver (manhole installation, street restoration)	91	85	79	71	65	59
Pneumatic Hammer (trench excavation)	91	85	79	71	65	59
Mounted Impact Hammer (Hoe Ram) (trench excavation if ledge)	96	90	84	76	70	64
Backhoe (trench excavation)	86	80	74	66	60	54
Dump Truck (manhole installation, trench excavation)	90	84	78	70	64	58
Generator *(cable pulling and splicing)*	88	82	76	68	62	56
Air Conditioning *(cable splicing)*	42	36	30	22	< 20	< 20

Construction equipment is generally not operated continuously at maximum load, with significant variation in power and usage. Actual received sound levels would fluctuate depending on the construction activity, equipment type, and separation distances between source and receiver. Other factors, such as terrain and obstacles such as buildings, will act to further limit the impact of construction-period noise levels.

Trench excavation and manhole installation are typically the loudest phases of construction. Under normal trenching conditions (i.e., no ledge, no excessive underground utilities), the construction crews involved in trench excavation are expected to progress at an average rate of approximately 100 feet (30.5 m) to 200 feet (61 m) per day for an average duration of approximately seven days at any one location. If rock is encountered during construction, equipment such as a hoe ram will be used, which would temporarily increase noise levels.

In general, cable pulling and splicing phases are not expected to generate significant noise. Once adjacent cable sections are installed, they will be spliced together inside the manholes. Splicing high-voltage solid-dielectric transmission cable is a complex operation; splicing activities will not be continuous but will take place over four or five extended workdays at each manhole location. The splicing operation requires a splicing van and a generator, and an air conditioning unit may be used to control the moisture content in the manhole. A portable generator will provide electrical power for the splicing van and air conditioning unit and will be muffled to minimize noise; this technique has been used successfully in locations with sensitive receptors. Typically,

EMFs



CABLES

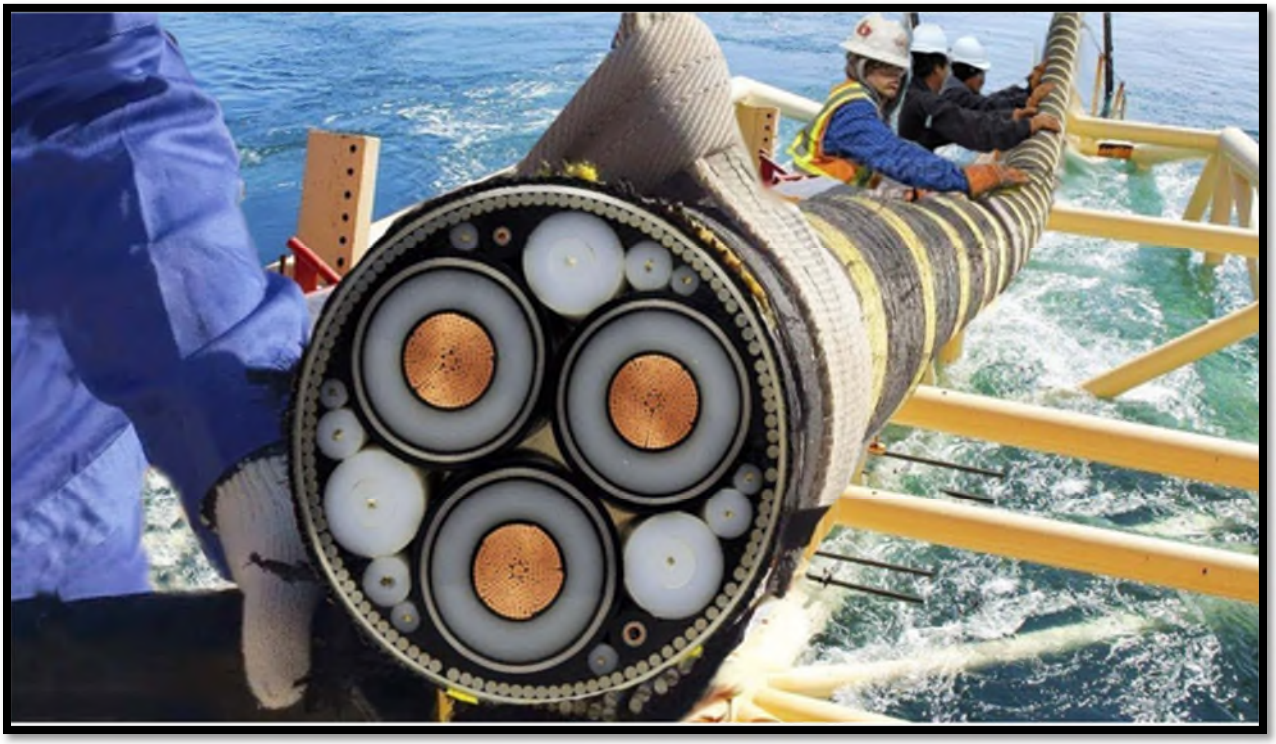
Details about the cables can be found in multiple Atlantic Shores Documents. We will just highlight a few of these locations but this is easily accessible information.

You can start here, with Volume 1:

https://www.boem.gov/renewable-energy/state-activities/atlantic-shores-offshore-wind-construction-and-operations-plan

P. 171, 4.8.3 Cable Design and Construction Activities

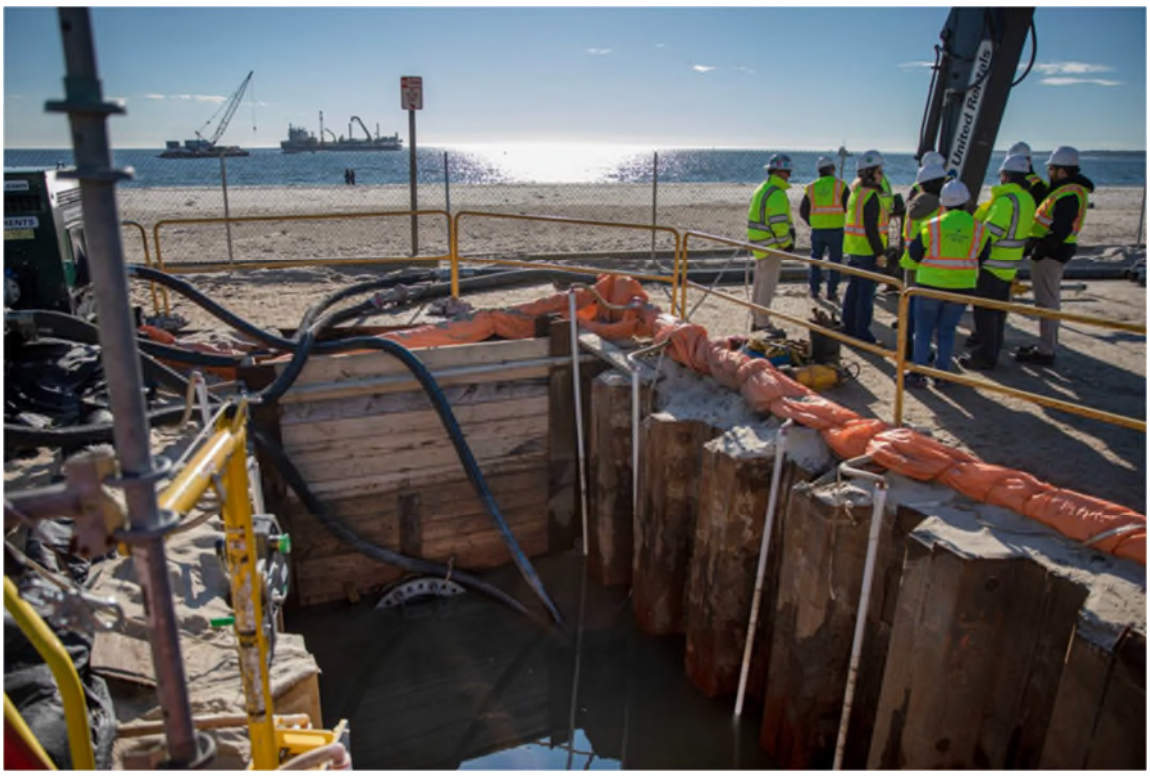
- **HVAC** – High Voltage Alternating Current cables
  - Between 230,000 and 275,000 VOLTS
- **HVDC** – High Voltage Direct Current Cables
  - Between 320,000 and 525,000 VOLTS



p. 126 – 130, 4.5 Offshore Cables

- **HVAC** cables will have a maximum outer diameter of **12.6 inches**.
- **HVDC** cables will have a maximum outer diameter of **14.2 inches**.

CABLES COMING ON OUR SHORE



Source: Vineyard Wind Project, https://www.wbur.org/news/2023/01/19/vineyard-wind-2050-massachusetts-zero-emissions

Neighborhood EMF Exposure

Electromagnetic fields (EMF) radiate around natural or man-made electric current as it passes through matter. EMFs are subdivided into electric fields and magnetic fields and exposure to them ranges from entirely harmless to fatal. In this case, the harm described will focus entirely on magnetic fields as Atlantic Shores claims the electric field put off by their underground cable will not be felt at surface level (Appendix II-I, 3).

The magnitude of magnetic fields depends on four factors: wavelength, field strength, distance, and duration of exposure. The magnitude of the magnetic field is expressed as magnetic flux density, which is measured in milligauss or microteslas (μT). For context, inside the average American home is an internal magnetic field magnitude of 0.11 μT.[i] This level, even over extremely long durations, is considered safe.

Given how the general population does not encounter prolonged exposure to high magnitude magnetic fields, household appliances have long been the focus of epidemiologists and other researchers studying magnetic field exposure over long durations. The International Agency for Research on Cancer (IARC) has identified the following household devices and their magnetic field magnitude at three feet away (the distance of the Atlantic Shores underground cable to the surface level): television (0.7 μT), vacuum (.16 μT), microwave (.37 μT), dishwasher (.23 μT) computer (.04 μT), and fluorescent light (.03 μT) (IARC vol. 80, 56).[ii] The literature is clear that these levels of exposure, even over prolonged periods, carry no additional risk to humans.

However, **Atlantic Shores is not proposing to put a dishwasher three feet under a residential neighborhood. They propose running over a dozen extra-high voltage cables handling tens of thousands of amperes under three schools, several ballfields and playgrounds, and 2000+ residences.** This massive amount of electrical current running under Chelsea will be **three times** the annual output of the now-shuttered Oyster Creek Nuclear Generating Station.

In the company's EMF Study Report, they use guidelines published in 2010 by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) to establish a magnetic field exposure maximum with which they comply.[iii] [iv] For a frequency of 60 hertz, such as electric current running through this cable, the maximum is 160 A/m (a measure of magnetic field strength). And at 53 locations along the cable's route, the magnetic field strength at surface level falls below that reading (Appendix II-I, 16). When we take a closer look at the specific case of the onshore cabling under residential Atlantic City (case 46), the surface level reading is expected to be 50 A/m (Appendix II-I, 80). For context, on page 819 of the underlying ICNIRP report, the commission provides a helpful equation to convert A/m (magnetic field strength) to μT (magnetic flux density). That equation is T (teslas) = magnetic permeability * A/m. Plugging in $4\pi * 10^{-7}$ as the relative constant for magnetic permeability (safe assumption given the matter permeated most at surface level is air), the magnetic field magnitude felt at surface level will be 63 μT.

Past epidemiological studies analyzing whole countries often did not consider prolonged residential exposures above 1 μT because the incidence rate was so low.[v] **The 63 μT exposure that Atlantic Shores proposes for the Chelsea neighborhood would be literally off the charts.**

The same, most recently published ICNIRP report found that "epidemiological studies have consistently found that everyday chronic low-intensity (above 0.3–0.4 μT) power frequency magnetic field exposure

is associated with an increased risk of childhood leukemia" (ICNIRP, 830). 63 µT is over **150 times more** than the intensity of long-term chronic exposure that has been associated with childhood leukemia. This duration of exposure also won't be in microseconds as measured in the ICNIRP report. It won't even be in weeks or months, which epidemiologists consider prolonged exposure. Rather, this cabling will be constantly exposing the children and families of the Chelsea neighborhood to a high intensity magnetic field for 30 years.

Atlantic Shores's expert witness, Dr. William Bailey, was hired by the company to testify at a recent City Council meeting and he cited the ICNIRP as an organization presenting "reliable, valuable information" and that City Council should "trust the agencies that have spent the time and money to look into this in great detail". Dr. Bailey similarly praised and cited the International Agency for Research of Cancer (IARC) and their 2002 report on the health effects of low frequency EMF exposure.[vi] He later testified that "none of these health agencies have concluded that the field levels at what we encounter in our communities, including from most cables, have any adverse effect on public health." This may be true, but it's not what's being disputed here. The magnitude of the proposed Atlantic Shores cabling is nothing like "what we encounter in our communities"; instead, it is orders of magnitude more intense than "most cables".

That same 2002 IARC report, in which Dr. Bailey is listed as a participating researcher, found that the association between childhood leukemia and high levels of magnetic fields is "unlikely to be due to chance" and concluded that "extremely low-frequency (ELF) magnetic fields are *possibly carcinogenic to humans*" (IARC, 332, 338). Although a causal link in humans could not be established, the same study highlighted in its conclusion that in laboratory studies "extremely strong ELF magnetic fields (> 50 µT) have caused adverse genetic effects" among tested rodents (IARC, 338). The study also reviewed the prevailing science on safe levels of magnetic versus electric field exposure:

> *"In one pooled analysis based on nine well conducted studies, no excess risk was seen for exposure to ELF magnetic fields below 0.4 µT and* ***a twofold excess risk was seen for exposure above 0.4 µT****. The other pooled analysis included 15 studies based on less restrictive inclusion criteria and used 0.3 µT as the highest cut-point.* ***A relative risk of 1.7 for exposure above 0.3 µT was reported****. The two studies are closely consistent. In contrast to these results for ELF magnetic fields, evidence that electric fields are associated with childhood leukaemia is inadequate for evaluation."* [emphasis added] (IARC, 332)

Some have called into question the continued relevance of these studies—even though they are the exact same studies cited by Dr. Bailey and Atlantic Shores in their testimony and reports, respectively—but the IARC believes the results are still relevant. For 22 years up to the present day, they have maintained the "possibly carcinogenic" label on prolonged exposure to ELF-EMF. When asked for an even more recent comprehensive report on the state of research into low-frequency EMF exposure, Dr. Bailey suggested reading the 2015 report by the European Commission Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR).[vii] In that study, the Committee identified again that "**new epidemiological studies are consistent** with earlier findings of an increased risk of childhood leukaemia with estimated daily average exposures above 0.3 to 0.4 µT" [emphasis added] (SCENIHR, 7).

Lastly in his testimony, Dr. Bailey referred to the US National Institute of Health's National Cancer Institute as an authoritative voice on ELF-EMF exposure and public health. On its website covering

"Electromagnetic Fields and Cancer", the Institute to this day cites the same previously mentioned, credible findings by other groups, calling those groups "expert organizations".[viii]

A direct, causal link or biological mechanism has yet to be identified that explains this statistically significant increase in childhood cancer rates. Nevertheless, numerous studies have been conducted since 2002 on this subject and the findings remain largely the same. These studies also note that people with medical implants, such as pacemakers and cochlear implants, are even more susceptible to high intensity magnetic fields in their lived environment than the general population.

There has never been a 30-year experiment on humans of low frequency, high intensity magnetic field exposure similar to what Atlantic Shores proposes Atlantic City conduct on its own population. Nowhere in the United States has this immense amount of electrical current been run this close to homes through a high-density residential neighborhood where many residences have a 0-foot setback. Why put the residential population of Chelsea at risk when other cable routes exist?

References:

[i] "Electromagnetic Fields and Public Health: Exposure to Extremely Low Frequency Fields." World Health Organization. Accessed August 30, 2024. https://www.who.int/teams/environment-climate-change-and-health/radiation-and-health/non-ionizing/exposure-to-extremely-low-frequency-field.

[ii] *Non-Ionizing Radiation, Part 1: Static and Extremely Low-Frequency (ELF) Electric and Magnetic Fields*. Vol. 80. IARC Monographs on the Identification of Carcinogenic Hazards to Humans. International Agency for Research on Cancer, 2002. https://publications.iarc.fr/Book-And-Report-Series/Iarc-Monographs-On-The-Identification-Of-Carcinogenic-Hazards-To-Humans/Non-ionizing-Radiation-Part-1-Static-And-Extremely-Low-frequency-ELF-Electric-And-Magnetic-Fields-2002.

[iii] Atlantic Shores Offshore Wind. *Construction and Operations Plan -- Appendix II-I: Offshore Wind Electromagnetic Frequency (EMF) Study Report*. 2024. https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Appendix-II-I-Electric-and-Magnetic-Fields-EMF-Report.pdf.

[iv] International Commission on Non-Ionizing Radiation Protection. *ICNIRP Guidelines for Limiting Exposure to Time-Varying Electric and Magnetic Fields (1Hz-100kHz)*. Vol. 99. The Health Physics Society, December 2010. https://www.icnirp.org/cms/upload/publications/ICNIRPLFgdl.pdf.

[v] Swanson, J. *Residential Power-Frequency Electric and Magnetic Fields: Sources and Exposures*. Vol. 83. Issue 1-2. Radiation Protection Dosimetry, June 1999. https://academic.oup.com/rpd/article-abstract/83/1-2/9/1661575.

[vi] *Non-Ionizing Radiation, Part 1: Static and Extremely Low-Frequency (ELF) Electric and Magnetic Fields*. Vol. 80. IARC Monographs on the Identification of Carcinogenic Hazards to Humans. International Agency for Research on Cancer, 2002. https://publications.iarc.fr/Book-And-Report-Series/Iarc-Monographs-On-The-Identification-Of-Carcinogenic-Hazards-To-Humans/Non-ionizing-Radiation-Part-1-Static-And-Extremely-Low-frequency-ELF-Electric-And-Magnetic-Fields-2002.

[vii] Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR). *Opinion on Potential health effects of exposure to electromagnetic fields (EMF).* European Commission, January 2015. https://ec.europa.eu/health/scientific_committees/emerging/docs/scenihr_o_041.pdf

[viii] "Electromagnetic Fields and Cancer." NIH National Cancer Institute. Accessed August 30, 2024. https://www.cancer.gov/about-cancer/causes-prevention/risk/radiation/electromagnetic-fields-fact-sheet.

Atlantic City is OLD

Old Infrastructure

Atlantic City is OLD and So Is Its Infrastructure

- The city was incorporated in 1854 and below-ground infrastructure dating back to the 1890s is still in use today.
- For example, cast iron and even terra cotta sewer and water lines service the oldest extant neighborhoods in the city.
- When the Walk was redeveloped in the 1990s, construction workers discovered that certain areas in the Ducktown neighborhood were still being serviced by wooden water mains.
- The Chelsea and Ducktown neighborhoods are the city's oldest, most intact neighborhoods from the early 20th century.
- The average home is 100+ years old.
- The streets are so congested under the surface by ancient infrastructure that old trolley and rail lines still run below the pavement along Fairmount and Atlantic Avenues.
- Although this project proposes underground electric cabling, all of Atlantic City's residential electric utility connections are above ground.
- There may be some electrical wires underground servicing the casinos; however, there is nothing currently being run through the city even approximating this scale.

If you don't believe us regarding this, ***we suggest you consult with you Public Works Department who can properly advise you*** *on the risks of digging trenches and installing these massive cables through the City, especially the very old Chelsea area.*

TRENCHES

Details about the TRENCHES can be found in multiple Atlantic Shores Documents. We will just highlight a few of these locations but this is easily accessible information.

You can start here, with Volume 1:

https://www.boem.gov/renewable-energy/state-activities/atlantic-shores-offshore-wind-construction-and-operations-plan

P. 156-157 & 171-172

4.7.1 Landfall Site Construction Activities

4.8.3 Cable Design and Construction Activities

- **SPLICE VAULT** – 9 ft wide x 30 ft long x 10 ft deep
- **EXCAVATION PIT** – 10 ft wide x 13 ft deep
- **CABLE DUCT BANK** – 15 ft wide x 12 ft deep
- **TRANSITION VAULTS** – 11.5 ft wide x 46 ft long x 14.8 ft deep

Tourism

&

Job Loss

Jobs Gained or Lost by Offshore Wind

- Job numbers in permit applications for O&M building at Farley Marina are for only AC - 80 jobs
- 80 job estimate in CAFRA permit application for O&M building at Farley Marina njdep-asow-compliance-statement-and-site-plans.pdf PDF page 114
- Not sure if guaranteed O&M job numbers in NJPBU solicitation PPA document are only for AC or for all of NJ. - **88 jobs**
- Jobs in section 7-21, 7-22 are throughout the state of **NJ**
- **88 job guarantee** reference in NJBPU PPA solicitation #2 NJBPU PDF page 21 - Guarantee of Economic Impact (https://www.nj.gov/bpu/pdf/boardorders/2021/20210630/ORDER%20Solicitation%202%20Board%20Order%20-%20ASOW%20C.pdf)
- Most of the construction jobs **will be foreign labor** - this is stated right in Atlantic Shores Construction and Operations Plan

The job claims by Atlantic Shores do not specify which will be NJ sourced jobs and which will be foreign workers. According to the Atlantic Shores South DEIS (Atlantic Shores Offshore Wind South Draft Environmental Impact Statement: Chapters 1-4 (boem.gov), the BVG Associates Limited study (BVG 2017) concluded that the US sourced jobs during initial implementation - until 2030 - of US offshore wind projects would range from 35 -55 %. The construction for the Atlantic Shores South and North projects will end in 2028. Therefore, 45% - 65% of the jobs listed in Atlantic Shores workforce tables may be outsourced to foreign workers. Whether the wages are paid to foreign workers temporarily located in New Jersey or the workers are located outside of the state or country is unknown.

Reference: https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/AtlanticShoresSouth_Volume%20II_AffectedEnvironment_05-01-2024_rev1.pdf

Additional Report which is an in-depth analysis from multiple published information from New Jersey Tourism, Atlantic Shores, BOEM, among other reputable sources.

https://defendbrigantinebeach.org/wp-content/uploads/2024/08/Atlantic-Shores-Offshore-Wind-NJ-Economic-Impact-Jobs-and-GDP-August-2024-rev1.pdf

Tourism Report is prepared for the State of NJ every year:

Economic Impact (visitnj.org) – The report is found here:

https://visitnj.org/sites/default/files/2023-05/2022_Tourism_Economic_Impact_Study.pdf

Data by County is on PDF pages, 19-23

Please note that the County data represents coastal communities and other communities in each county.

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Tourism loss for LBI coastal communities is in this report. This report was also used to calculate tourism losses for Atlantic County coastal community tourism loss:

Potential Economic Losses of Reduced Tourism Attributable to Proposed Wind Turbines in Long Beach Island, NJ (March 2024).

PowerPoint Presentation (pashmanstein.com):

https://www.pashmanstein.com/assets/htmldocuments/TE%20-%20Wind%20Turbine%20Visitation%20EI%20Report%20Final%2003-26-2024.pdf

- LBI coastal community had 10.3 million visitors and $5.4 billion in total visitor spending in 2022.
- Economic Consultant used 25% loss in tourism visitors in LBI communities because of "visual disamenities". (see pdf page 5 - Literature Review)
- This is a loss of:
    - 835,000 visitors
    - $450.2 million in spending
    - 5300 in lost direct jobs, 6700 total job loss
    - economic loss of $668.2 million
    - $47.6 million reduced state and local taxes.

See PDF page 4,5.

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These numbers were extrapolated for **Atlantic County Coastal Communities**

Atlantic County Coastal Community **Losses** Due to Offshore Wind are estimated to be as follows:

- 1.85 million annual visitors
- $648.4 million in annual spending
- 10,232 in lost annual direct jobs, 12,177 total job loss
- annual economic loss of $962.4 million
- $79.5 million reduced annual state and local taxes.

Concerns with Atlantic Shores Construction and Operations Plan (COP)

https://www.boem.gov/renewable-energy/state-activities/atlantic-shores-offshore-wind-construction-and-operations-plan

Concerns with Final Green Acres Diversion Application

https://atlanticshoreswind.com/project-1-njdep-green-acres-diversion-application-2024/

Brooks W. Garrison, RA

Registered Architect

1991 Masters of Architecture
University of Utah

1988 Bachelors of Arts
Denison University

Brooks Garrison is a second-generation architect, principal and partner at GARRISON ARCHITECTS. He has 40 years of experience focusing primarily on public projects in South Jersey from Ocean County to Cape May County. Since he Represents over 60 school districts in South Jersey, Brooks particularly understands the balance between phased construction, cost and minimizing construction liabilities on communities and specifically education.

Brooks' love for the environment and the ocean has inspired life-long learning and exploration. He is a PADI certified Rescue Diver with over 600 logged dives. He has recently completed the Rutgers University IFISSH and Coastal Stewardship Course. Brooks is the member of the American Littoral Society. As a member of the Ocean City Marlin & Tuna Club for decades, and the Ocean City Yacht Club, Brooks spends much time on, in and under the water.

You can learn more about Brooks at Garrisonarch.com.

204 15th Street North
Brigantine, NJ 08203
610-804-4187
BWG@GarrisonArch.com