PREFILED JOINT WRITTEN TESTIMONY OF BILL KENNY, ALEXANDER WOJTKOWIAK, JACKSON SMITH <u>WILLIAM KENNY ASSOCIATES (WKA)</u>

PANEL

A. <u>INTRODUCTION</u>

Q. Please state your names, titles, and business addresses.

 A. Bill Kenny, Ecologist / Wetland & Soil Scientist / Professional Landscape Architect, Alexander Wojtkowiak, Project Manager & Soil Scientist, and Jackson Smith, Ecologist, all at 1899 Bronson Rd, Fairfield, CT 06824.

Q. Please describe your respective responsibilities and professional experiences.

- A. Bill Kenny: Managing member with more than 35 years of professional experience conducting ecological assessments and restorations and related local, state and federal permitting for a wide range of project types and sites throughout CT and beyond.
- A. Alexander Wojtkowiak: Project Manager & Soil Scientist per CGS §22a-38 with five years' experience at WKA. Responsible for managing Ecological Service operations at WKA. Professional experience in wetland and watercourse delineation, classification, and functional assessment analysis, second-order soil surveying, biological/ecological inventories and assessments, local, state, and federal report and permitting, and construction site monitoring.
- A. Jackson Smith: Ecologist with one year of experience at WKA. Responsible for assisting with various ecological services at WKA.

Q. Do Bill Kenny, Alexander Wojtkowiak, and Jackson Smith have resumes demonstrating their skills and experience?

A. Yes. Our respective resumes are shown in <u>Exhibit A</u>.

Q. What are your respective involvements in the proposed Project?

- A. Bill Kenny: I provided high level Project management providing guidance and direction and assuring quality standards. I also conducted a site investigation and reviewed Project methods and results.
- A. Alexander Wojtkowiak: I personally oversee the Project deliverables to the team, reviewing the portions of the *Environmental Assessment* pertaining to the ecological impacts of the Petition for Declaratory Ruling. I am also the team lead on all site work enacted by WKA for the proposed Project.
- A. Jackson Smith: I assisted with Project Site work and other Project deliverables under the supervision of Alexander Wojtkowiak and Bill Kenny.

Q. What is the purpose of your pre-filed joint written testimony?

A. Our testimony addresses the Project ecological inventory and assessment, including the wetland and watercourse delineation and the ecological impact analysis as detailed in the *Environmental Assessment* submitted with the Petition for Declaratory Ruling.

Q. Please describe your wetland delineation and impact analysis and results for the proposed Project.

A. Wetlands and watercourses at the property where the proposed Project Site is located were identified and field delineated according to state and federal definitions, and assessed by WKA on July 26 and 27, 2023. United States Army Corps of Engineers (USACE) Wetland Determination Data Forms were compiled by WKA on September 19, 2023 for portions of one wetland and watercourse system proposed to be impacted by the Project. Four wetland and watercourse systems are present. These include a small perennial stream that extends and flows east to west throughout the northern portion of the property with bordering woodland wetlands, intermittent watercourses extending and flowing east to west in the northwestern and central-western portions of the property with bordering woodland wetlands, and a woodland wetland in the southwestern portion of the property. The system for which USACE Wetland Determination Data Forms were

compiled is the small stream and bordering woodland wetland system in the northern portion of the property.

WKA was responsible for drafting the responses to the following sections of the *Environmental Assessment*: 2.2.3 Stormwater Management Plan, 3.2 Water Resources, 3.2.1 Wetlands And Watercourses, 3.2.2 Wetland Impacts, 3.2.3 Floodplain Areas, 3.3 Water Quality, 3.3.1 Groundwater, 3.3.2 Surface Water, 3.4 Habitat & Wildlife, 3.4.1 Habitat Types, 3.4.2 Core Forest Determination, 3.4.3 Wildlife, 3.5 Rare Species, 3.5.1 Natural Diversity Data Base, and 3.5.2 USFWS Consultation. Following the completion of the Project, the wetlands and watercourses on the property will exist and continue to function substantially as they do today. Disturbance to a wetland and watercourse is unavoidable and is limited to the piping of a short segment of the small stream to allow for the construction of the stream (surface water conveyance) to continue.

C. <u>INTERROGATORY SPECIFIC TESTIMONY</u>

Q. As of the date of this submission, did you respond to any interrogatories for the proposed Project from any parties?

 Yes, Petitioner received interrogatories from the Siting Council. These interrogatories and responses are attached in <u>Exhibit B</u>.

D. <u>PUBLIC COMMENT SPECIFIC TESTIMONY</u>

- Q. Are you aware of any public comments or comments from any parties for the proposed Project?
- A. Yes.

Q. Did any of the public comments touch upon your analysis for the proposed Project?

A. Yes. Twenty-seven residents, two state representatives, the Town of Bolton, and the Town of Manchester submitted comments. Only one of the 27 residents abuts the proposed Project Site.

Q. Please summarize the nature of the public comments that touch upon your analysis.

A. The topics addressed in the public comments included:

1. Tree Clearing – Concerns regarding tree clearing and potential impacts on core forests.

2. Potential Wildlife Impacts – Concerns about land clearing and potential impacts to wildlife.

3. Stormwater Runoff – Potential stormwater runoff impacts from the proposed Project.

4. Noise - Concerns about potential noise from proposed Project equipment.

5. Wetland Impacts – Potential impacts to wetlands located on the Host Parcel.

6. Use of Chemicals, Herbicides, and/or Pesticides – Concerns regarding the potential use and/or leakage of chemicals, herbicides, or pesticides on the proposed Project Site.

Q. Do you have any comments regarding these public comments?

A. Yes.

Q. Please explain.

A. 1. <u>Tree Clearing</u> – Approximately seven acres of Core Forest according to the CT DEEP 2020 Connecticut Forest Plan Priority Areas Map is proposed to be cleared for the Project. However, the Forestland Habitat Impact Map, recommended by the CT DEEP in their Permit Information For Solar Projects an Environmental Permitting Fact Sheet, indicates that no forestland habitat impacts would result from the proposed Project. Nonetheless, with regard to determining which of these resources should be used to assess impacts to Core Forests, tree clearing will occur to develop the Project. As stated in § 3.4.1 Habitat Types Red Oak-Sugar Maple Transition Forest of the Environmental Assessment, "the southeastern portion of the property appears to have been in agricultural land in 1934" and was abandoned in the late 1900's. This southeastern portion of the property generally overlaps with the area of proposed development. As mentioned in the Environmental Assessment, and as observed through site investigations, in the

southeastern portion of the Site, many trees have fallen, creating many canopy gaps that have allowed for the growth of a dense shrub layer that consists of native spicebush and invasive Japanese barberry as well as herbaceous plants such as native wood nettle, and invasive garlic mustard. Invasive oriental bittersweet vines are also prevalent within this portion of the forest and ensnare standing deadwood and remaining trees. This portion of the overall Red Oak-Sugar Maple Transition Forest is a more disturbed and invasive vegetation-dominated portion of the overall forest than throughout the remainder of the property. Trees present are young and of low density relative to other forest onsite. As such, the Project design minimizes the quantity and quality of trees to be removed. The primary impact remains that the clearing of vegetation within this area will result in greater runoff potential, which has been addressed in the Project's *Stormwater Management Report*. The area will be revegetated with a native grassland following Project completion, which will provide additional habitat value to wildlife species within this area, specifically, potentially present state listed-species such as eastern box turtles, that use these habitats during various stages of their lives.

2. <u>Potential Wildlife Impacts</u> – The potential impacts to wildlife from land clearing stem from anthropogenic disturbances during construction. During the Project's construction, noise, light pollution and other anthropogenic activities may temporarily disrupt or displace wildlife. However, any wildlife disrupted or displaced during the short construction period (approximately 4-8 months), are expected to naturally move to adjacent forested habitat such as the 2,500-acres of forest to the southwest of the Project site.

The primary concern with land clearing for the Project stems from the potential for incidental take of the state-listed specie, the eastern box turtle. The eastern box turtle is active and most detectable between April 1 and November 1 of the year. Outside of this time period, the turtles enter a state of brumation in shallow burrows in the upland soil that are practically undetectable. As such, during the turtle's active season, the site will be secured, preventing the ingress of any additional turtles. Before any land clearing occurs in the site, with the assistance of a qualified herpetologist, turtles within the site will be located as best as possible and removed from the area. While land clearing and grading occurs, as given in § 3.5.1 Natural Diversity Data Base of the *Environmental Assessment*, measures required by the CT DEEP will be followed by all parties responsible to ensure that no incidental take of this state-listed specie of special concern occurs during the Project's development.

3. <u>Stormwater Runoff</u> – According to Solli Engineering, the Project's engineers, the Project's *Stormwater Management Report* provided as *Exhibit C* to the Council indicates that the Project will result in 11,115 square feet or 0.25-acres of impervious/gravel surfaces. This is an increase from undeveloped existing conditions. As such, stormwater management features were designed in accordance with the *Connecticut Stormwater Quality Manual* (Effective Date: March 30, 2024) and other applicable state and federal regulations as referenced in the Introduction of the *Stormwater Management Report*. It is

the conclusion of the Project engineer from following all applicable state and federal regulations, that the designed stormwater management measures as shown on the *Civil Plan Set* and referenced in the *Stormwater Management Report*, will ensure that post-development peak discharges of stormwater runoff to waters of the State of Connecticut will be less than pre-development peak discharges for the 2-, 10-, 25-, 50-, and 100-year storm events. Please refer to the pre-filed written testimony submitted Solli Engineering for additional information regarding stormwater runoff.

4. <u>Noise</u> – As stated for <u>Potential Wildlife Impacts</u>, the Project will result in noise pollution during construction from the use of machinery and other related equipment. As stated in § 3.12 Noise of the *Environmental Assessment*, noise from the construction of a solar panel facility is exempted under Connecticut regulations for the control of noise. As further stated in the document *Petitioner Responses to Interrogatories from Council*, dated April 23, 2024, Exhibit C, *Revised Sections of the Environmental Assessment;* it is expected, during construction, the highest levels of noise will be approximately 88 decibels at source. At the end of Project construction, noise levels will be minimal. The max noise levels omitted during operational hours of the facility will be 35.8 decibels from the nearest property boundary. This is compliant with CT DEEP Noise Standards, and the Project will not result in any noise outside of operational hours.

5. Wetland Impacts – The proposed Project will result in the unavoidable disturbance of approximately 1,100 square feet of inland wetland and watercourse. This is to construct an access drive from Carter Street to the proposed developable portion of the property. To allow for the drive and for maintaining the primary function of the wetland and watercourse (surface water conveyance), a short segment of a stream will be piped. The stream extends and flows east to west along the northern property boundary. The proposed area of impact includes the narrowest onsite segment of the system, where the system includes steep confined banks. Adverse impacts associated with the construction of this crossing will be minimized to the greatest extent practicable using stream-crossing best management practices. Work within the stream is proposed during low-flow conditions and water handling measures to pump and divert upstream water around the construction area are proposed to be implemented to protect downstream areas. The crossing is a proposed 42-inch diameter, high-density polyethylene pipe embedded 12 inches into the stream substrate. The crossing follows the primary goals of the Army Corps of Engineers Stream Crossing Best-Management Practices with regard to pipe sizing, slope and substrate.

6. <u>Use of Chemicals, Herbicides, and/or Pesticides</u> – The use of chemicals, herbicides, and/or pesticides with the Project is limited to herbicides proposed to manage vegetation at the Project site. No other chemicals, including pesticides, are proposed to be used with the proposed Project. The solar modules chosen to be used for the Project have a sealed back sheet to prevent the leaching of chemicals from the modules. The panels themselves would be the only other source of chemical substances at the Project site. The use of herbicide can be omitted from the *Operations and Maintenance (O&M) Plan* for

managing the proposed grassland habitat within and surrounding the solar array field post-construction if need be. Please refer to the pre-filed written testimony of Warren Horton for additional information.

Q. Did you receive any comments from the Town of Manchester that touch upon your analysis?

A. Yes. The topics included:

1. Tree Clearing – Concerns regarding tree clearing, impacts to core forest, the creation of a new habitat edge the alters wildlife elements and changes tree growth habits and plant species, and the impacts to a forest that could become an old-growth forest.

2. Pollinator Habitat – Concerned that the proposed seed mix is not a native mix including an exceptional variety of pollinator-friendly species and that mowing and herbicide impacts to pollinators

3. Potential Wetland Impacts – Concerns regarding impacts to wetlands on the proposed Project Site.

4. Potential Wildlife Impacts – Worried that the perimeter fence will create an obstacle for wildlife and potential impacts to the Box Turtle and Northen Long Eared Bat

5. Noise – Concerns about the noise resulting from the proposed Project Site.

6. Potential Impacts to Groundwater – Concerned about potential impacts to groundwater from the proposed Project.

7. Decommissioning Process – Asked for an inventory of pre-existing conditions before TRITEC commences construction and for the proposed basin to become a habitat for Box Turtles upon the proposed Project's decommissioning. The Town also expressed concerns regarding long-term maintenance to restore the proposed Project Site to its pre-existing conditions.

8. Operations & Maintenance Plan – Asked TRITEC to revise the Operations and Maintenance (O&M) Plan to reflect feedback from the Department of Energy and Environmental Protection ("DEEP") regarding potential impacts to Box Turtles and the latest DEEP Guidelines. Also, the Town asked TRITEC to clearly post O&M information at the proposed Project Site for future maintenance contractors. The Town also asked TRITEC to review the parking and turnaround area to ensure there's enough room for O&M contractors to prevent parking along Carter Street.

Q. Do you have any comments regarding these public comments?

A. Yes.

Q. Please explain.

1. Tree Clearing - Approximately seven acres of Core Forest according to the CT DEEP A. 2020 Connecticut Forest Plan Priority Areas Map is proposed to be cleared for the Project. However, the Forestland Habitat Impact Map, recommended by the CT DEEP in their Permit Information For Solar Projects an Environmental Permitting Fact Sheet, indicates that no forestland habitat impacts would result from the proposed Project. Nonetheless, with regard to determining which of these resources should be used to assess impacts to Core Forests, tree clearing will occur to develop the Project. As stated in § 3.4.1 Habitat Types Red Oak-Sugar Maple Transition Forest of the Environmental Assessment, "the southeastern portion of the property appears to have been in agricultural land in 1934" and was abandoned in the late 1900's. This southeastern portion of the property generally overlaps with the area of proposed development. As mentioned in the Environmental Assessment, and as observed through site investigations, in the southeastern portion of the Site, many trees have fallen, creating many canopy gaps that have allowed for the growth of a dense shrub layer that consists of native spicebush and invasive Japanese barberry as well as herbaceous plants such as native wood nettle, and invasive garlic mustard. Invasive oriental bittersweet vines are also prevalent within this portion of the forest and ensnare standing deadwood and remaining trees. This portion of the overall Red Oak-Sugar Maple Transition Forest is a more disturbed and invasive vegetation-dominated portion of the overall forest than throughout the remainder of the property. Trees present are young and low density relative to other forest onsite. As such, the Project design minimizes the quantity and quality of trees to be removed. The primary impact remains that the clearing of vegetation within this area will result in greater runoff potential, which has been addressed in the Project's Stormwater Management Report. The area will be revegetated with a native grassland following Project completion, as such there will be a creation of new forest edge habitat. This addition of edge habitat will provide a similar habitat as that currently present within the gas line corridor. Due to the routine vegetation management that will be needed within the Project area to limit the growth of shrubs and trees that could potentially shade out the panels, there will be changes to tree growth habitats. However, following the decommission of the proposed Project, over time, the area will naturally succeed back to a woodland.

We do not believe that these forest clearing activities are impacting a forest that could become an old growth forest. According to the CT DEEP old growth forests are those which have never been directly affected by intensive human land use. As can be seen through historic aerial photographs, a majority of the Project area was cleared and farmed during the 1900's, an intensive human land use. The majority of the forest proposed to be cleared could be classified as a second-growth young forest, while the majority of forest proposed to remain could be classified as a second-growth maturing forest. 2. Pollinator Habitat – The seed mix proposed to revegetate the Project site following completion includes ERNMX-147 "Fuzz & Buzz Mix" for final stabilization of the solar array and ERNMX-610 "Northeast Solar Pollinator Buffer Mix" for areas outside the fence line and non-array areas. "New England Erosion Control/Restoration No Mow Mix" is proposed for the stormwater basin. In comparing the percentage of native vegetation within the seed mixes (save for the mix used for the stormwater basin), approximately 40 percent of the species in ERNMX-147 are native and 100 percent of the species in ERNMX-610 are native. Approximately 95 percent of the species within ERNMX-147 are pollinator-friendly species and 100 percent of the species within ERNMX-610 are pollinator-friendly. It is our professional opinion, that the seed mixes proposed will add a diversity of groundcover species at the site and property and provide additional pollinator benefits to the species currently present at the property and additional species that may colonize the site. Groundcovers under existing conditions are low in diversity and primarily dominated by fern species which only provide pollinator benefits in regard to cover and shelter for insects. The proposed seed mixes will benefit the diversity and abundance of insect species and therefore benefit other wildlife like avian species.

According to the *Operations and Maintenance (O&M) Plan* provided as *Exhibit D*, vegetation maintenance of the re-vegetated areas will consist of "mow, clear, and/or apply herbicides or pre-emergent (where allowed by applicable laws and regulations) to manage site vegetation." The application of herbicides can be omitted from the *Operations and Maintenance (O&M) Plan*.

3. <u>Potential Wetland Impacts</u> – The proposed Project will result in the unavoidable disturbance of approximately 1,100 square feet of inland wetland and watercourse. This is to construct an access drive from Carter Street to the proposed developable portion of the property. To allow for the drive and for maintaining the primary function of the wetland and watercourse (surface water conveyance), a short segment of the steam will be piped. The stream extends and flows east to west along the northern property boundary. The proposed area of impact includes the narrowest onsite segment of the system, where the system includes relatively steep confined banks. Adverse impacts associated with the construction of this crossing will be minimized to the greatest extent practicable using stream-crossing best management practices. Work within the stream is proposed during low-flow conditions and water handling measures to pump and divert upstream water around the construction area are proposed to be implemented to protect downstream areas. The crossing is a proposed 42-inch diameter, high-density polyethylene pipe embedded 12 inches into the stream substrate. The crossing follows the primary goals of the Army Corps of Engineers Stream Crossing Best-Management Practices with regard to pipe sizing, slope and substrate.

4. <u>Potential Wildlife Impacts</u> – To satisfy the state requirement of enclosing the facility with fencing, wildlife-friendly fencing will be used. This fencing, with a six-inch gap at the bottom, will allow a vast majority of wildlife to freely enter and exit the proposed

Grassland at any location. As such, a majority of wildlife species will not be affected by the fencing. The largest of Connecticut's wildlife species, such as the American black bear or white-tailed deer will be deterred by the fencing. While these species will lose out on the opportunity to bed or forage within the proposed Grassland, the proposed Project has nearly 2,500 acres of nearby forest for these species' use. As such, the sufficient quantity of quality habitat nearby to the Project Site can be used by these species to satisfy their need for foraging, bedding or travel.

In regard to the state-listed eastern box turtle, the Project's fencing will not exclude the eastern box turtles from the proposed grassland of the solar array. The primary concern with land clearing during construction stems from the potential for incidental take of the state-listed species, the eastern box turtle. The eastern box turtle is active between April 1 and November 1 of the year, and during this time period, all ground disturbance work will be conducted in accordance with pre-construction, construction, and post construction measures required by the CT DEEP to protect these detectable turtles. These measures are outlined in § 3.5.1 Natural Diversity Data Base of the *Environmental Assessment*. The Project's groundwork will not begin during the turtle's dormant season as the turtles will be in a state of brumation in shallow undetectable burrows and would be unable to escape construction machinery due to being dormant.

In regard to the state-listed northern long-eared bat (NLEB), the CT DEEP did not identify the NLEB as having the potential to be present at the subject property. This is noted within the NDDB Assessment Letter. Additionally, according to the CT DEEP, no known hibernacula of the NLEB are present within the Town of Manchester. The nearest known NLEB hibernacula is located in the town of East Granby, 16 miles northwest of the site, and the nearest known summer roost site is located in the town of Salem, approximately 17.5 miles southeast of the site.

5. <u>Noise</u> – The Project will result in noise pollution during construction from the use of machinery and other related equipment. As stated in § 3.12 Noise of the *Environmental Assessment*, noise from the construction of the solar panel facility is exempted under Connecticut regulations for the control of noise. As further stated in the document *Petitioner Responses to Interrogatories from Council*, dated April 23, 2024, Exhibit C, *Revised Sections of the Environmental Assessment;* it is expected, during construction, the highest levels of noise will be approximately 88 decibels at source. At the end of Project construction, noise levels will be minimal. The max noise levels omitted during operational hours of the facility will be 35.8 decibels from the nearest property boundary. This is compliant with CT DEEP Noise Standards and the Project will not result in any noise outside of operational hours.

6. <u>Potential Impacts to Groundwater</u> – The unconfined, regional, and perennial groundwater at the Project Site is well below the Project construction activities and, as such, this groundwater will not be affected by them or the Project. Some of the shallow, perched, and intermittent ground water at the property will be managed by the Project's stormwater management system. This shallow, perched, and intermittent groundwater is

present due to the onsite soils and glacial till deposits that include a relatively impervious hardpan that begins two to three feet below the ground surface. Intermittent shallow subsurface groundwater flows, primarily driven by seasonal and precipitation events, move atop the hardpan and are the primary reason for the onsite seepage areas. The proposed Project will allow existing east to west flows of perched, intermittent, shallow subsurface ground water to continue through the proposed field before being captured by the proposed drainage swale. The drainage swale will convey this water to a proposed basin where it will be discharged to the west. Perched, intermittent, shallow subsurface groundwater flows west of the Project site will be reduced in the south and increased in the north.

7. <u>Decommissioning Process</u> –As outlined in sections 3.2.1 and 3.4.1 of the *Environmental Assessment*, each habitat was assessed for its abundance and diversity of existing native and non-native flora. Within the environmental assessment, existing conditions of the site are noted in regard to vegetation density, canopy coverage, existing structures, wetland locations, wildlife species observed, and natural drainage patterns. Following decommission of the site, the grassland area will not be maintained. As such, over time, the proposed native vegetated grassland will succeed into scrub shrub habitat and eventually into forested habitat. WKA recommends that after decommission the stormwater basin be filled to match the surrounding landscape. For several years after decommission the area will provide herbaceous vegetation in nearly full sunlight with soft sandy soils for box turtle egg laying habitat. Please refer to the pre-filed written testimony of Warren Horton for additional information.

8. <u>Operations & Maintenance Plan</u> – WKA will assist Petitioner where necessary to revise the Operations and Maintenance (O&M) Plan to reflect feedback from the CT DEEP. Please refer to the pre-filed written testimony of Warren Horton for additional information.

E. <u>TESTIMONY CONCLUSION</u>

- Q. Based on your analyses and your pre-filed written testimony addressing ecological inventory and assessment, including the wetland and watercourse delineation and the ecological impact analysis as detailed in the *Environmental Assessment* submitted with the Petition for Declaratory Ruling, is it your expert opinion that the proposed Project will not create any substantial adverse environmental effects and should be approved by the Siting Council?
- A. Yes.

Mr. William L. Kenny has more than 30 years of experience in site and environmental assessments, planning, and construction. Mr. Kenny is a Professional Landscape Architect, Certified Professional Wetland Scientist, and a Soil Scientist.

Education

University of Massachusetts, 1993-1995. Postgraduate studies in soil science.

Yale University, MEM, 1992. Master of Environmental Management. Concentration and thesis work in ecosystem ecology, hydrology, and restoration.

University of Connecticut, BS, 1987. Bachelor of Science Degree in Landscape Design.

Representative Work Experience

Site Planning and Landscape Architecture

Mr. Kenny has more than 30 years of experience with site planning and landscape architectural projects either as the primary designer and project manager, a collaborating design professional, or construction contractor. Mr. Kenny has design and management experience with all project phases: from master planning and conceptual design to construction and bid document preparation and construction observation.

Wetland Delineation, Assessment, and Impact Mitigation

Mr. Kenny has extensive experience with tidal and inland wetland and watercourse delineation, assessment, and impact mitigation projects and obtaining related regulatory approvals as a project scientist and manager. Project work has included approval and construction documents for residential, commercial, recreational, and institutional developments. Specific tasks Mr. Kenny has completed include: (1) wetland delineations and functional assessments in Connecticut and New York in accordance with federal, state, and local requirements; (2) development planning and design consultation to minimize wetland impacts; (3) impact assessments and wetland construction mitigation designs; and (4) hydrologic evaluations for inland and tidal wetland restoration and creation projects.

Water Resource Management

Mr. Kenny has a wide range of experience with water resource management projects and attaining related development approvals and permits as a project manager and scientist. Project work has included stormwater pollution prevention plan preparation in accordance with New York City, New York State, and Connecticut requirements; stormwater treatment Best Management Practices design; stormwater pollutant loading and BMP effectiveness modeling; groundwater modeling for subsurface sanitary disposal systems, and erosion and sediment control plan preparation for residential, commercial,

recreational, and institutional developments.

Ecological Inventories and Impact Assessments

Mr. Kenny has broad experience with preparing ecological inventories and impact assessments and attaining related development approvals and permits as a project manager and scientist. Project work included Environmental Impact Statement (EIS) preparation to fulfill New York State requirements. Specific management or technical responsibilities included mapping and assessing existing conditions and potential impacts to bedrock and surficial geology, soils, vegetative communities, wetlands, surface and groundwater bodies, and wildlife and their habitat.

Regulatory Agency Consulting

Mr. Kenny has been retained by Connecticut municipalities to conduct analyses and prepare reports regarding inland wetlands and watercourses permit applications to be heard by local agencies. This work includes the review of wetland boundary delineations.

Public Speaking

CT Audubon – Recurring annual lecture since 2015 regarding native plants and communities.

Yale University – Lecturer regarding sustainable and ecological landscape design. UConn – Advanced Master Gardener Program – Lecturer regarding innovative strategies for wetland restoration and management.

CT ASLA – Lecturer regarding innovative strategies for wetland restoration and management.

Connecticut Association of Conservation & Inland Wetlands Commissions - Lecturer regarding innovative strategies for wetland restoration and management.

New York Botanical Garden – Lecturer regarding innovative strategies for wetland restoration and management.

Professional Training

OSHA 24-hour HAZWOPER Training Organic Land Care CT DEP Master Wildlife Conservationist Program Pond Management Wetland Construction Wetland Functional Assessment Techniques Urban Stormwater Management Practices Erosion and Sediment Control Soil Sciences Computer Aided Drafting

Publications

Kenny, W.L. 1995. The West River salt marsh: past and present. In *Proceedings of the West River Symposium*, ed. By E. McDiarmid, P.K. Barten, and C.J. Genshlea, 33-40. New Haven, CT: Center for Coastal and Watershed Systems, Yale School of Forestry and Environmental Studies.

Barten, P.K. and W.L. Kenny, 1997, The hydrologic structure and function of the West River marsh. In *Bulletin Number 100, Restoration of an Urban Salt Marsh: An Interdisciplinary Approach*, Bulletin Number 100, vol. ed. by D.G. Casagrande and bul. series ed. by J. A. Miller and J. Cappock, 103-122. New Haven, Connecticut: Yale School of Forestry and Environmental Studies.

Contributing graduate student author to:

Bormann, F.H., D. Balmori, and G.T. Geballe, 1993. *Redesigning the American lawn: a search for environmental harmony*. Yale University Press, New Haven and London.

Professional Affiliations and Registrations

Flood & Erosion Control Board, Fairfield, Connecticut (Member 2011- 2015) Shellfish Commission, Fairfield, Connecticut (Member 1995 - 2006, Chairman 1996 -2005) Connecticut Association of Wetland Scientist (Member 1999-present, Secretary 2001 -2010) Society of Soil Scientist of Southern New England (Associate Member 1995-2004, Professional Member 2004 -present) Society of Wetland Scientists (Member 2001-present) Certified Professional Wetland Scientist (#1372), Society of Wetland Scientists (2003present) Professional registration, Landscape Architecture #664, State of Connecticut (1990-present) #001869, State of New York (2003-present) American Society of Landscape Architects (Member 2001-2010, 2013-present) Ecological Society of America (Member 2020-2021) Northeast Organic Farming Association (2004-present) Certified Organic Land Care Professional (2005-present)

Alexander D. Wojtkowiak Project Manager Soil Scientist

Mr. Alexander D. Wojtkowiak has over four years of experience serving as an environmental professional in the land development sector. Specializing as a wetland scientist and ecologist, he has consulted clients of a variety of projects throughout various development phases and assisted in helping them obtain the regulatory agency approvals needed for their ventures.

Education

B.S. Natural Resource Science *Environmental Science & Management*, University of Rhode Island, Kingston, R.I., 2018.

Representative Work Experience

William Kenny Associates LLC, Fairfield, CT	July 15, 2019 – Present
Soil Scientist	July 15, 2019 – April 6, 2023
Project Manager	April 7, 2023 – Present

<u>Wetland and Watercourse Delineations, Functional Assessments and Soil Surveys</u> Experienced in conducting inland and tidal wetland and watercourse delineations in Connecticut and New York according to various local, state and federal regulations. Experienced in conducting second order soil surveys of project sites per the principles and practices noted in the USDA *Soil Survey Manual* (2017).

Experienced in assessing the functional capacity of wetlands and watercourses and comparing impacts to such systems pre- and post- site development per the hydrogeomorphic classification system established by Normandeau Associates, Inc., *A Rapid Procedure for Assessing Wetland Functional Capacity* (1998) as well as the evaluation methods described in the USACE *Highway Methodology Workbook Supplement* (2015).

Ecological Inventories and Assessments

Experienced in conducting ecological inventories and assessments of vegetative communities, wildlife, and their associated habitats. Assessments evaluate the developmental impacts to these resources and means to mitigate these impacts, both direct and indirect, in the short- and long-term.

Experienced in conducting vernal pool assessments per the Connecticut Association of Wetland Scientists' Vernal Pool Monitoring Program protocol and evaluations of these critical habitats based on *Best Development Practices Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States* (2002).

Local, State, and Federal Permitting

Experienced in report preparation for, and permit application to, a variety of local, state and federal regulatory agencies for a variety of land use projects. Reports detail existing and proposed ecological conditions at project sites, the impacts to natural resources, and the means to mitigate intentional and inadvertent impacts to these resources such as vegetative communities, wildlife and their associated habitats, listed species and critical habitats, wetlands, surface and groundwater resources, and soils and surficial geology.

Site Monitoring of Soil Erosion and Sediment Control Plans

Experienced in the routine monitoring of various construction projects as they relate to maintaining permit compliance with local and state guidelines. Projects are monitored to remain in compliance with approved plans and the standard practices described within the 2002 CT Guidelines for Soil Erosion and Sediment Controls and 2004 CT Stormwater Quality Manual.

Professional Certifications and Training

OSHA 40-hour HAZWOPER OSHA 10-hour Construction & General Industry

Professional Affiliations and Registrations

Soil Science Society of America (Member 2019 - present) Society of Soil Scientists of Southern New England (Basic Member 2019 - present) Society of Wetland Scientists New England Chapter (Member 2020 - present) Connecticut Association of Wetland Scientists (Associate Member 2020 - present) Soil and Water Conservation Society Southern New England Chapter (Member 2022 present) Ecological Society of America (Member 2022 - present) Connecticut Botanical Society (Member 2022 - present) Experience assisting with numerous environmental services, including delineating inland and coastal wetland and watercourse boundaries, assessing the quality and functionality of various coastal and inland ecosystems, evaluating the potential biological and environmental impacts of proposed projects, and monitoring soil erosion and sediment control measures during project construction. During undergraduate studies, research experience included studying the overwintering habits of migratory birds, field testing behavioral responses of shrews and red squirrels, developed a study to determine how various northern New England landscape uses affect survival rates of the endangered Blanding Turtle. Attended several workshops and seminars hosted by the Soil Scientists of Southern New England (SSSNE) and the Connecticut Association of Wetland Scientists (CAWS).

Education

B.S. Wildlife Ecology, *Wildlife Science and Management* University of Maine, Orono, ME, 2023.

Representative Project Experience

Wetland Delineation

Acted as a project ecologist to assist with tidal and wetland and watercourse delineations in Connecticut and New York. Completed delineation in accordance with federal, state and local standards. Developed abilities to complete pre-investigation desktop analysis, identify field indicators (i.e., soil, hydrology, obligate wetland vegetation) and record as well as defend wetland boundary determinations.

Wetland Assessment and Impact Mitigation

Experience assessing the impacts of proposed projects on the surrounding ecosystem. Project work includes assisting with. Completed functional assessments of tidal and inland wetlands in Connecticut and New York in accordance with federal, state, and local standards; (2) impact assessments for coastal and inland projects; (3) environmental assessments for large-scale (60-180 acre) solar array development projects.

Reports

Assisted with attaining approval and construction documents for residential, commercial, recreational, and intuitional developments via co-authoring various reports to local, state, and federal agencies/authorities. Reports include but are not limited to:

- Ecological Assessment Reports: inventoried onsite vegetation, wildlife and wetlands to produce a comprehensive ecological assessment detailing existing ecological conditions and assessing potential impacts to onsite wildlife, habitats and vernal pools under proposed conditions. Projects include various land use categories such as warehouse development, multi-building residential development, solar array development, and other various commercial or intuitional developments.
- Wetland Impact Assessment Report: Assessed wetland functions and values under current and proposed site conditions. Produced reports determining potential adverse or beneficial effects to wetlands or watercourses. Determinations made based upon

proposed measures to protect wetlands from direct and indirect short-term adverse impacts such as soil and sedimentation or temporary wetland disturbance, as well as direct and indirect long-term adverse impacts such as stormwater runoff changes or deliberate wetland disturbance/elimination.

• Coastal Action Management Plan: Identified and assessed current coastal resources, evaluated and recommended management techniques to prevent adverse impacts to these resources.

Site Monitoring of Soil Erosion and Sediment Control Plans

Experience assisting with various local (town) site monitoring inspections and reports for residential and intuitional projects regarding the efficacy of soil erosion and sediment control measures outlined within civil engineering plan sets associated with, and in conjunction with conditions outlined in permits obtained via local inland wetland, conservation, and environmental protection departments/agencies/ commissions. Understanding of soil erosion and sediment Controls) and temporary stormwater management measures (based on 2004 & 2024 CT Stormwater Quality Manual).

Site Monitoring of Wetland Mitigation/Restoration Plans

Experience assisting with various site monitoring inspections and reports for residential and commercial projects regarding the efficacy of approved wetland mitigation and restoration plans. Determinations made on proper property invasive vegetation control/removal, property planting locations and success of plantings. Provided additional recommendations to property owners for continued success mitigation and restoration areas.

Professional Affiliations and Registrations

Society of Wetland Scientists New England Chapter (Member 2024 – present) Connecticut Association of Wetland Scientists (Associate Member 2024 – present) Connecticut Botanical Society (Member 2024 – present)