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January 27, 2023

Mr. Mark Wujtewicz, Planner
Town of Waterford
15 Rope Ferry Road
Waterford, CT 06385

Re: 21 Oswegatchie Rd
Planning and Zoning Application
CAM Site Plan

Dear Mr. Wujtewicz,

We are pleased to transmit herewith documents for a Planning and Zoning Coastal Site Plan application and Coastal Area Management Review Mr. Mark Sperry at 21 Oswegatchie Rd in Waterford.

Attached are 15 sets of the application with the following documents included:

- Planning and Zoning Commission Application
- Application for Coastal Area Management Site Plan Permit
- Application Narrative
- Reference & Resource Maps
- DEEP NDDDB Application and Determination
- Photographs
- Coastal Site Plan
- A2 Boundary Survey (one copy)
- Check in the amount of \$550 payable to the Town of Waterford

I trust that you will find this application complete and acceptable. We look forward to making our presentation to the Planning and Zoning Commission at their next regularly scheduled meeting. If you get a chance please forward a copy of the agenda so that we can plan our presentation accordingly.

Yours truly,
DOCKO, INC.

Keith B. Neilson, P.E.

KBN: cl
Enclosures
CC: Mr. Mark Sperry
File: 19-07-3045 SPERY

**PROJECT NARRATIVE
ALTERNATIVES ANALYSIS
SPERY SEAWALL EXTENSION
21 OSWEGATCHIE ROAD, WATERFORD
SHORELINE RESTORATION
COASTAL SITE PLAN
JANUARY 24, 2023**

The following information is provided to document the alternatives considered for the continuation of the bluff protection and stabilization stone wall to further protection for the pre-1995 home. The project, as presented, is to protect the bluff and maintain a stairway system that provides access to the shore and water for Mr. Sperry's family. Due to a DEEP enforcement issue which has been resolved, the existing wood stairs do not reach the beach but that will be remedied under the DEEP permit to be issued.

Option 1. The first alternative is to do nothing.

To do nothing basically eliminates the viability of this site as residential and will leave the steep eroding bluff property exposed to certain future damage due to wave scour at the base. To do nothing is an unrealistic unreasonable, irresponsible approach for this property owner and also for the neighbor to the north because that property will soon become threatened by the eroding bank and loss of soils as well.

Option 2. Rebuild the stairs alone.

Rebuilding the stairs alone would restore access that cannot currently be provided safely or reasonably by the "do nothing" option. The existing stair system steps short of the beach.

The disadvantage to this alternative is the same as No. 1 above since the Sperry property and adjacent properties will continue to erode and destabilize the Pipen's.

Option 3. Replace lost fill only at the toe of the bluff

To replace lost fill only without any protection against wave scour would be as inappropriate as the "do nothing" option in No. 1 above. Replaced fill will begin to erode again without some form of protection, even if fabric reinforcement is utilized because of the abrasive nature of wave born sediment and scouring actions of ice. Without wave energy attenuating and bank stabilizing stone, even heavily vegetated reinforced fill soil would be quickly eroded, and the vegetation root system would lose its holding capabilities in almost any significant high tide storm as it is now. Once the bottom cover of vegetation and soil is gone, the reinforcement fabric would be exposed to the wave and ice induced scour. The key to protecting these properties and infrastructure is some sort of armoring.

Option 4. Seawalls. A seawall or armor of some type is required

4.A. Concrete.

A concrete seawall to an elevation 10 feet above mean low water would be preferable but tough to build as a long-term option for stability of this bank and requiring a footing foundation. The foundation could be anchored to shallow ledge in the area and shaped to attenuate wave energy. The foundation work would require substantial excavation jeopardizing the stability of the bluff. The structure could be tiered and the tiers could incorporate pockets which could be vegetated. The vegetation of course would be sacrificial

and be lost in high energy storms. A stairway could be worked into this tiered approach with nice looking and functional results. Cost would be \$100,000 to \$200,000, higher than vegetation and armoring of stone.

4.B. Steel sheetpile bulkhead.

A steel sheetpile bulkhead system can be built and would probably be the best long-term solution for this site and the neighbor north, but it would require a concrete curb base, anticipating shallow ledge in such a way as to provide toe stability for the steel sheets. This system would be configured so as not to reflect wave energy toward the Pipen property. The option would require drilled anchors in to the bluff. The steel sheetpile could take a year to deliver. Sheets would have to begin with a slight overlap behind the seawall to the south with a concrete fillet to ensure against degradation of the common end conditions. The vibratory energy of driving the sheets and anchor auguring present a potential to induce sloughing in the bluff and so this option is not avoidable. A stairway could be built over the top of the bulkhead cap and reestablish beach access. Cost would be at 34 to 40 times the cost of the stone wall option proposed and is not affordable.

4.C. Living Shoreline.

A Living Shoreline consisting of armor, stone fill, gravel fill and vegetation is the most natural, low impact option available but with only limited structural capability to resist damage by the high energy wave field at the site. The stone could also be oriented so as to minimize wave reflection and preserve stability of the adjacent properties. A stairway could be worked into this approach with nice looking and functional results.

The Living Shoreline vegetation could be planted or established by seeding the gravel and topsoil fill placed in and over the stone. The use of salt tolerant beach dune type native, non-invasive grasses, such as beach grass switchgrass, and even supplemented with beach plum and/or bayberry, would establish a dune like habitat that could be replaced if storm damage warrants.

This approach is considered consistent with the CT Coastal Management Act because it uses the most natural, low impact method of protecting pre-1995 homes and infrastructure as well as neighboring property but is too costly to implement and requires rebuilding every few years due to natural damaging ice and boat wakes which are relentless on summer days.

The living shoreline would require an encroachment of 10 to 30 feet into the river would cost 20 to 30 times the budget for this opposed work.

Summary:

Something must be done to preserve this site and the pre 1980 home which exists here. The proposed stone wall is to be an extension of the wall to the south side of the stair. It represents a minimal scope of work has undergone a pre application permitting review by the DEEP and is considered to be acceptable in terms of materials, and methodology, demonstrating that it is in conformance with regulation, rules and policies of the State.

**PROJECT NARRATIVE & SUPPLEMENTAL INFORMATION
MARK SPERY
21 OSWEGATCHIE RD**

**SHORELINE RESTORATION
COASTAL SITE PLAN**

JANUARY 24, 2023

GENERAL – SITE CHARACTERISTICS

The Spery property is a coastal bluff which has been suffering from longterm erosion induced by waves and ice in the Niantic River. The lot is depicted as approximately one tenth acre. The bluff is critically steep and is eroding at the toe with sequential sloughing upslope. As owners of the bluff the owners are legal able to effectuate repairs of the damaged area. The project is to repair the eroded toe of the bluff with stone to minimize the erosion of the back along the edge of the property. The stairway which for years provided access to the shore will ultimately be rebuilt.

The shoreline face of the property is an eroding coastal bluff facing westerly into the river. A rock wall was originally built along the southerly half of his shoreline at the MHW line by Mr. Spery several years ago but work was halted by the DEEP. The work has since been authorized. This project will allow for the completion of the project previously started. It is the objective of this restoration project to supplement the shoreline, adding stone unprotected toe of the bluff then allow the bluff to revegetate and rebuild the stairway. Bluff stabilization is critical to the preservation of the Spery's pre 1980 home. The backfill work is landward of the Mean High Water and High Tide Line (US ACOE Jurisdiction) and the CT Coastal Jurisdiction line (CT DEEP Jurisdiction limit). The stone wall extension work is under final review by the CT DEEP and USACE for authorization as shown on the attached drawings. This project will require a Coastal Site Plan review and approval from the Town of Waterford because the site is in the coastal hazard zone.

This narrative is provided to describe the scope of the work and address issues raised in the Municipal Coastal Site Plan Review Form required for the Coastal Erosion Permit. In summary, there are minimal adverse environmental impacts created by the shoreline protection improvements and the protection of the shoreline is required to preserve and protect the bluff feature and soils on the site. will be a benefit, stabilizing the existing damaged conditions and the bluff habitat above. The most significant benefit to the Spery's is the preservation of their home. There are no adverse impacts created by this project and the scope of work is minimal. No mitigative measures appear to be necessary because no adverse environmental impacts.

PROJECT DESCRIPTION AND PURPOSE

This project is to piecemeal excavate 10(+/-)CY of sand, stone and gravel and replace these soils behind the shorefront protection authorized by DEEP/USACE permits over an area of 200(+/-)SF or less. The backfill will include gravel stone and soil, vegetated to support living shoreline characteristics to minimize the erosion and provide a vegetative habitat improvement along the bank along the shore. Also included will be reconstruction of the stairway down the bluff as needed for shorefront access, all landward of the Connecticut Coastal Jurisdiction line. It is intended that this project will be to restore safe access to the shore and protection of the bluff for preservation of the Spery's home. There are no issues relative to building, parking and utility work as addressed in the

subsequent application except that protection of the bluff is essential to the preservation of the Sperry's home which is permissible under the CT Coastal Management Act of 1980.

The proposed stabilization armoring an eroding shoreline is a minimal, low impact scope of work as recommended by the Town's Plan of Preservation Conservation and Development and is permissible under the Coastal Management Act. It is readily apparent from the characteristics of the bluff that this work is required as a result of the exposure to ice and coastal hydrodynamic wave forces, but especially the boat wake-induced waves associated with this location on the Niantic River. The top of the wall will be approximately 6 feet NAVD.

SOIL CONSERVATION AND EROSION SEDIMENTATION CONSIDERATIONS

The project is for soil conservation and erosion protection to preserve a pre-1980 single family residential structure. The bluff supports the house. The design rationale is to restore a stable slope. The new slope will be graded at 1 ½ to 1, more or less, a barely stable natural gravel slope suitable for planting with salt tolerant, native, non-invasive species of vegetation at the toe,, initially switch grass, which will help hold soil through the aggressive root structure and provide a protective matting affect, laying down as water flows over it for rushing waves or backwash. The stabilized toe will have very much the same profile as the previously stabilized bank toe on the south side of the stairs as shown on the topographic survey of existing conditions.

Erosion and Sedimentation Controls, although of limited need and practical extent, are set forth on the application drawings diagrammatically and by notes. This work will be undertaken by Mr. Sperry himself and thus will be accomplished incrementally in small sections.

The project will leave the bluff still steeply sloped but confined at the very bottom of the toe and with a transition graded area of approximately 30% which is the stable slope of repair for gravel. The DEEP will not allow further encroachment into the river for a more robust protection which the slope deserves.

Based on these considerations, this project is consistent with the Town's Plan of Preservation, Conservation and Development as low impact development as well as DEEP criteria.

ZONING REGULATONS OF SECTIONS 22 AND 25

Site Plan Notes as Required by Section 22.4 of the Waterford Zoning Regulations

The following notes are addressed in accordance with Section 22.4.6 site plan specifications (Waterford Zoning Regulations):

- a. All of the land owned by the applicant properties are covered by the A-2/T-2 Survey referenced in the project notes as depicted on the Site Plan submitted with this application.
- b. There is a single-family residence on the site and no changes to this structure are proposed herein.
- c. See note "b" above.
- d. See note "b" above.
- e. This project will not change or adversely affect the safe movement of pedestrians around the site. It is intended to retain and improve bluff stability against river induced erosion

- f. The driveway will be the area where construction supplies, materials and equipment will be located during the prosecution of this shoreline restoration project.
- g. 1. Property boundaries and owners names and location of adjacent properties are shown. The site is bordered by the Niantic River on the west and Oswegatchie Road on the east.
 - 2. i. Contours are at 1 interval and referenced to NAVD 88.
 - ii. There are no site improvement structures in this project. Drainage patterns are sheet flow and overland.
 - iii. There is a stone wall along the bluff toe southside of the stair in the project area.
 - iv. A single tidal wetland plant exists to the north of the stair in the project area and it will be transported as depicted in the same areas after completion of the stone work.
 - v. No habitat areas have been identified by NDDDB; any area of concern will be depicted if conditions change.
 - vi. Coastal resources subject to review under sections 25.4 are listed on the site plan.
 - vii. The Coastal Jurisdiction Line is depicted on the drawing.
 - viii. The FEMA Flood Zone Line (VE Elevation 14 NAVD 88) is shown on the site plan as determined by Mr. Fred Gunther, P.L.S., of Resource Mapping and Management. The area prone to wave scour and erosion is the beach and area at and above the restoration proposed. The property west edge of the site is subject to flooding (inundation) and wave induced scour and erosion due to ice in the river. The existing stone protects the south half of the property.
 - ix. There are no rock or ledge outcrops on the site.
 - x. The whole bluff is an of steep slope greater than 25% and is more than 50 feet in length north to south along the shoreline and those characteristics will not change.
- 3. Site access will be from the existing driveway and via the Spey bluff stairway.
- 4. Storm water drainage will remain overland sheet flow.
- 5. There are no existing utility poles along the property lines in the rear yard.
- 6. Future water supply to the site is not planned; no utilities are being installed.
- 7. There are no fire lanes or restricted parking areas on this site.
- 8. There are no sanitary sewage systems proposed for this shoreline restoration project.
- 9. There is no new development proposed and no parking spaces proposed for this shoreline restoration project.
- 10. There are no loading spaces proposed for this shoreline restoration project.
- 11. Trash from the Geotech fabric will placed in the Spey's garbage can, otherwise, there are no waste removal dumpsters proposed for this site and none are needed. Waste stone will be worked into the backfill for added structural stability of the bluff toe.
- 12. There are no signs proposed for this project.
- 13. There are no large traffic islands or barriers and no traffic flow diagrammatics for this project.
- 14. There are no proposed light standards for this site or this shoreline restoration project.
- 15. There are large trees on the shorefront work site and it is the project intent to save the small to medium trees on the bluff for continued vegetative cover.

16. The planting plan is to cover the restored lower bluff stone slope with switch grass; a detail of the plantings is included in the site plan. Plantings or seeding (such as hydroseeded or premixed seed and topsoil) will be across the toe of slope. There is a possible need to cut off a single oak tree which is falling over and currently braced. Removal may be prudent to prevent toppling which might rip out part of the bluff by the roots.
17. No screening materials are proposed as a part of this project.
18. No buildings are proposed as a part of this shoreline restoration project.
19. 15 sets of application documents are being submitted for review as required.
20. A complete Zoning Compliance Chart is included on the site plan.

SECTION 25. 1.1 EXCEPTIONS:

- a. Excavation, potential removal of a tree (vegetation), re-grading, placement of armor stone, and creation of blended soil surface and new plantings are all covered under this Site Plan submitted for approval by the Zoning Commission. The Planning Department determined that a Special Permit is required.

Other Notes Required By Section 25. 1.2 have been previously covered in the notes above.

SECTION 25. 1.4 STANDARDS

- a. There will be no processing of extracted earth materials or boulders to be utilized in the prosecution of this work and will be imported.
- b. There will be no explosives utilized in the prosecution of this work.
- c. No excavation, grading or fill shall result in dust, noise, (except between 7:00 am and 7:00 pm) weekdays and Saturdays, or hazard to children, pedestrians, adjacent properties or passing vehicles.
- d. Excavation will be limited to the line of the stone wall. In preliminary discussions with the northerly neighbor, Mr. Pepin, about this shoreline restoration project, he was supportive and offered no objections to the scope of work. All of the work will be from the Sperry property, and the property corner will be staked by a professional land surveyor for accuracy.
- e. Drainage is surface sheet flow for the entire site to allow adequate opportunity for absorption into the ground prior to reaching the shore and minimizing erosion or scouring on the coastal bluff. Trees and leaves on the bluff will not be disturbed in order to defuse rainfall impact damage and erosion to the bluff.
- f. This project is to restore the damaged eroding toe of the bluff to preserve the river bank soils and protect the foundation of the house.
- g. Topsoil and general excavation materials will be reused in the blended topsoil scope of work; none will be removed from the site. Any materials stockpiled on the driveway access point and will be ringed with appropriate erosion and sediment control hay bales, or straw wattle.
- h. When the excavation, re-grading, removal and filling operations have been completed, the affected areas and other unvegetated areas in the construction

process will be seeded with perennial rye or suitable coastal blend of grass seeds.

- i. During the prosecution of the work, the fence gate will be kept closed as necessary to prevent inadvertent entry into the site. Access from the bluff face is an unlikely possibility.
- j. Truck access to the site will be scheduled and arranged so as to minimize inconvenience and/or danger to traffic or pedestrians.
- k. The completed stone wall and re-grading will not impair the use of the property.
- l. The work site premises shall be sequentially excavated, filled and re-graded in conformance with the Site Plan.
- m. All materials used as backfill will be natural earth products with no recycled debris.
- n. Backfill shall be compacted by hand tamping after placement to provide improved stability of materials and prevent settling.
- o. Unsightly piles of rocks or earth materials shall not be left onsite after completion of the project. Topsoil if needed, will be utilized in final grading uphill of the wall. Left over stone will be incorporated into the backfill.
- p. There will be no coastal beach areas excavated, filled or re-graded as a part of this project except reusing the existing beach gravel. All of the shoreline stabilization work will take place upland of the CT Coastal Jurisdiction Line.

DRAINAGE CONSIDERATIONS

This work site at the toe of the bluff is currently undeveloped and will remain so through this shore restoration project. The site is a steep, lightly wooded bank maintained by the Sperry's. The shoreline is a narrow beach and that will not change. The stone slope protection is highly pervious and will not change the site drainage characteristics and there will be no induced erosion of the bluff as a result of maintaining this feature.

The only change to the site will be that area of re-grading shown in the drawing, approximately 200(+/-)SF behind the wall which will be restored, planted with switch grass and perennial rye for soil retention and stability with a similar runoff coefficient and no impermeable areas being created. As a result, there will be no noticeable or measurable change to the amount or rate of rainfall runoff from this site and no provisions for detention are required. Rainwater from the site only reaches the waters of the river via subsurface seepage. Actual surface runoff will only reach the beach in times of heavy, prolonged rainfall. In almost all cases, the site will retain rainfall through absorption into the ground. Impact energy from rainfall is absorbed by leaf cover on the bluff.

COASTAL RESOURCE DESCRIPTION AND IMPACTS

The shoreline is characteristically a glacial deposit of gravel with stone and boulders left as a severely eroded bluff characteristic down to the stony gravelly beach, in this project site. There is no tidal wetlands on the site, only one sea myrtle plant which will be replanted. There is no submerged aquatic vegetation in the inter-tidal or shallow sub-tidal waters at the site. The site is exposed to coastal hazards of flooding and significant waves. Attached are various resource maps published by the CT DEEP. They include:

- General Resource Map

➤ Shellfish Concentration Area Resource Map

COASTAL RESOURCE IMPACTS

The proposed shoreline restoration will consist of minimal excavation and re-grading to form a shelf on subgrade, placing armor stone on a geogrid and/or geotextile fabric on the shelf and then backfilling the stone with salvaged gravel and topsoil for planting the surface new vegetation which will be salt tolerant, non-invasive dune type grass, switch grass and perennial rye. It is envisioned that this project will improve the habitat quality of the shoreline and will not have significant adverse impact on the aforementioned coastal resources. This project will involve placement of stone on the badly damaged and eroding toe of the bluff. The new stone will be infilled with salvaged soil to serve as the growth media for the vegetation and will neither diminish the character or nature of the shorefront nor will it usurp or impede resource quality or the quality of habitat along the shorefront including wildlife habitat. This fill is located at and upland of the High Tide Line, clear of the intertidal zone, and will not adversely affect the benthic community along the shoreline. The stones wall will utilize large “one man stone”, consistent with the new surface features of the adjacent southerly half of the property in this area, so the character of the shoreline will change only with regard to the new stone. Vegetation will be reestablished. Work will be situated on the Sperry property and will not impede but restore access to Public Trust Lands of the State waterward of the MHW line.

The resources and uses at the site, their condition, description, and discussion of project consistency with these policies are as follows:

APPLICABLE COASTAL RESOURCE POLICIES AND STANDARDS

This site is located within the State-Designated Coastal Zone along the shoreline of the Niantic River. The following resources are applicable based on CT DEEP Resource Maps:

- **General Resources** - It is the policy of the Coastal Management Act to preserve and enhance Coastal Resources wherever possible by conserving, improving, and protecting natural resources and the environment and to control air, land, and water pollution for the health, safety, and welfare of the people.

Consistency: This project is consistent with this general resource policy because it will help to protect, conserve and preserve the coastal bluff and will do so without creating air, water or land pollution. Only clean material will be utilized, being placed by hand on underlying geotextile erosion protection fabric. Some extent of natural erosion of fine-grained gravelly sediments from the shoreline will continue but the toe of the bluff will be preserved in profile as a minimal shoreline feature consistent with the Coastal Management Act.

- **Bluffs & Escarpments** – It is the policy of the State to manage coastal bluffs to preserve their slope and toe and to avoid activities or uses that will accelerate slope erosion or alter essential patterns and supply of sediments to a littoral transport system. This site is characterized as a bluff, but is in fact a modified bluff, armored and bordered by adjacent stone work and/or concrete seawalls to the south and a beach immediately west. There is virtually no vegetation growing at or below the damaged eroded toe of slope because of the frequent exposure to elevated water levels and ice. The shoreline vegetation directly in front of the project is sandy gravel and provides no special habitat until reaching the bluff. The

damaged face of the bluff is exposed to significant wave scour and ice erosion which vegetation alone cannot protect against.

Consistency - This project will protect but not change the wave/ice exposure, but it will substantially protect against the impacts of wave-induced erosion and damage and provide stability for new vegetative habitat and maintain positive natural rainfall runoff drainage from the grounds in extreme, heavy rainfall conditions and it is repairable and restorable without the use of heavy equipment.

- **Coastal Flood Hazards** – This site is adjacent to estuarine embayment waters of the Niantic River and is subject to flooding in accordance with climatological characteristics, especially prevailing coastal storm winds and strong frontal systems. The flooding characteristics of the river are induced by storm induced extreme tides and hydrological conditions in Long Island Sound 2 miles south of the site and the Atlantic Ocean.

The characteristics of the upland soil, according to the New London County Soil Survey, are described as a coastal bluff of steeply sloping, well-drained soil. Permeability of the soil is moderately rapid in the surface layer and subsoil and rapid in the substratum. The available water capacity is moderate. Runoff is medium to light. This soil warms up and dries out rapidly in the spring. This soil type can be used for cultivated crops, hay, or pasture except for the steep slope. Other areas are used for residential and community development, or exist as woodlands. This soil is well suited to cultivated crops. The hazard due to prevailing winter ice and boat induced wave erosion is moderate, and for hurricanes severe, as recently experienced firsthand, thus the stone protection requirement. Minimum tillage and the use of vegetative cover help to control erosion. This soil is suited to trees as well as meadow type vegetation.

This site is located in FEMA Flood Zone VE (Elevation 14 NAVD 88). Pertinent sections including 22 and 25 of the Zoning Regulations have been addressed earlier in this narrative.

It is the policy of the State to manage Coastal Hazards so as to insure that development proceeds in a manner such that hazards to life and property are minimized, to maintain natural relationships between the shoreline and the adjacent coastal waters, and minimize adverse impacts of erosion and sedimentation on coastal land uses, stating specifically that structural solutions are permissible when necessary and unavoidable and there is no less feasible, less environmentally damaging alternative. This is the case as demonstrated by the 2 to 3 foot deeper erosion to the north half of the shoreline over the south, armored section in the past 2 years.

Consistency – This project addresses the need to protect the bluff against further erosion to the extent allowable. This work proposed is essential and unavoidable. The site is already a modified bluff because previous experience at the site was that anything less would fail in the face of exposure to coastal storms, waves and ice. Vegetative measures alone are in no way be adequate for this purpose as evidenced by the continued loss of soil and of vegetation at the face of the bluff. Built up armor along the toe is most suitable, least invasive and maintainable restoration and preservation of the toe protection consistent with site characteristics and ice and storm induced wave exposure. The stable slope and shoreline

vegetation will enhance the site's habitat value and is a low impact option compared to a seawall or concrete retaining wall or bulkhead.

- **Estuarine Embayment** – The site is located on the Niantic River which is classified as estuarine embayment on the CT DEEP Coastal Resource Map.

It is the policy of the State that pollution of waters is harmful to fish, wildlife and aquatic life and impairs domestic agricultural, recreational, and other legitimate beneficial uses of the water and, therefore, pollution must be avoided.

Consistency: There are no aspects of this site restoration process that will pollute the waters of the State or adversely affect any water flow and circulation characteristics along the shore. The groundwater which comes from the bluff formation is limited and has already been substantially purged of grit and silts. Rainfall runoff is also relatively clean and uncontaminated. The stone wall will be clean, from licensed quarries, and will be placed in a manner so as not to disrupt the existing shoreline features adjacent to the work site. The work will be conducted by Mr. Sperry and so incidental damage to the property will be minimal and restored upon completion of the day's work. Minimal excavation is planned, and the stone is clean with little dust or soil. Soil or sediment erosion controls in the form of temporary matting provided by the Geotech fabric will be established at the toe of the bluff landward of the CT CJL, as shown in the drawings, to protect and retain erodible sediment, protecting the beach as well as the water quality of the river.

- **Shellfish Concentration Areas** – The Niantic River is designated as a Shellfish Concentration Area for Hardshell Clams.

It is the policy of the State to protect Shellfish Concentration Areas through municipal shellfish management programs and zoning regulations.

Consistency - The upper inter-tidal waters bottom sediments at this site were documented as typically stony to sandy in nature, which is suitable for shellfish concentrations but not so much in the upper inter-tidal zone close to shore due to the high energy of the prevailing boat wake wave field. The wave energy at this site makes it unlikely that shellfish could survive in such stressed conditions on this shore. The proposed work is landward of the High Tide Line and utilizes clean stone fill which will not degrade water quality. The area and surface composition of the site are not changing significantly in the process of stabilizing the bluff. This project will not change the soil characteristics or drainage characteristics of the site. The runoff rate will be inconsequential to the shellfish beds not changing insignificantly to the rate of rainfall runoff into the open water, therefore, this land-based project will not adversely affect shellfish resources.

APPLICABLE COASTAL USE AND ACTIVITY POLICIES AND STANDARDS

- **General Development** – It is the policy of the State to ensure that development and preservation or use of the land proceeds in a manner that is consistent with the capability of the land and water resources to support development.

Consistency – The Coastal Management Act supports municipal zoning and land use planning. The project site is a residential neighborhood and virtually all of the development in this section is residential in nature and has been since before the CMA. There are no

conflicts between residential uses, development of the property for residential purposes and protecting the adjacent shorelands and tidal waters against pollution, or adverse development. The Town of Waterford has determined zoning for this area to be residential. This project is consistent with zoning for the site and therefore this project is consistent with the requirements of the Coastal Management Act. The DEEP has also been satisfied with the shoreline wall protection work previously accomplished as demonstrated by their recent permit issuance.

- **Water-Dependent Uses** – It is the policy of the State to promote water-dependent uses along coastal features of the State, but in this case, the land is zoned residential and on private land.

Consistency - This project is consistent with resource preservation requirements for residential uses stipulated in the zoning regulations. While residential uses may not be considered water dependent by the DEEP, a change of zoning of this area would, no doubt be met with significant resistance. Protection of the shoreline, while not specifically a water-dependent use, is in fact made necessary because of the exposure to the erosive forces of the Niantic River especially during boating induced sea conditions and ice. This project is located on private property, upland of Public Trust Lands of the State designated by the MHW line and will not impede public access on Public Trust Lands. The project will maintain access to the shore for the landowner who has deeded rights. The project will not degrade water quality or any other DEEP resource but will preserve valuable land and improve habitat consistent with Coastal Bluff policies. This project is consistent with Town Zoning which is a mandate of CAM and, therefore, this project is consistent with CAM.

- **Coastal Structures and Filling** – It is the policy of the State to require that development along coastal waters be designed, constructed, and maintained to minimize adverse impacts on coastal resources, circulation, sedimentation patterns, water quality, flooding and erosion and to reduce to the maximum extent the use of fill.

Consistency - This project is made necessary to rectify the damage to the modified bluff caused by continued exposure to persistent natural and “man-made” waves and occasionally severe climatic conditions of the Niantic River. Ice and waves have dislodged soils and washed away valuable topsoil and sub-soils of the bluff, eroding and abrading the surface which lead to deterioration of the property and longstanding habitat. The restoration of bank profile; restoration of the damaged bank is designed specifically for this exposure at and above the High Tide Line and CJL. The restoration will not adversely affect public access to Public Trust Lands and Waters of the State or shoreline animal or plant habitat but is essential to the preservation of the bluff and the existing home. It is anticipated that the use of significantly angular and interlocking stone partially buried within the face of the slope, will act as minimal but suitable wave attenuation and energy dissipation feature and the backfill soils and vegetation will enhance and resource the animal and plant habitat, using plant species which historically grow on the shore. This scope of work will also be repairable and will be straightforward to replant when damaged by storms in the future.

IDENTIFICATION OF POTENTIAL ADVERSE IMPACTS ON COASTAL RESOURCES

In view of the resources and use issues addressed above, the following general summary is offered:

The proposed project will not degrade or adversely impact tidal wetlands or beaches; the work will be landward of beach features. The proposed toe protection improvements and vegetation are designed for salt water inundation and yet will not increase coastal flooding characteristics of the river. The flooding nature of the Sound is generated by storms where low pressure and adverse winds tend to either inhibit the ebbing tide cycle through "The Race" and Fishers Island Sound or accelerate the flooding cycle when the winds are strong and from the southeast. The flood levels in Long Island Sound are tidal and climatologically induced, irrespective of the coastal shoreline features and translate immediately into similar affects in the Niantic River, and this project will not in any way change these flooding characteristics. In any case this project is restoring an eroded shoreline to its previous conditions.

The project will also not adversely affect water flow and circulation patterns since the patterns of tidal exchange or shoreline characteristics below the High Tide Line will not be changed in the project. The project involves regrading work on the upland, however, the drainage patterns on the coastal bluff will not change. The wall work is permeable and so there will be no alteration to the ground water flow and recharge characteristics of the land.

This project will complement existing adjacent shoreline armoring to the south and will not change natural erosion patterns or adversely affect littoral transport of sediments to the north. The waters in front of this site are relatively active only in summer by boating and in winter by ice. Littoral sediment transport is mostly shore normal and occurs close to shore. Shore parallel littoral sediment transport at this site is minimal at this time and this work landward of the High Tide Line will not adversely affect it.

There will be almost no change to the visual quality of the shore as a result of this project. Natural views and vistas will not be significantly affected because of the limited size of the restoration work site. There are no state listed vista access points at this site. The predominant vistas are available to homeowners on the bluff looking from shoreline looking out onto waters of the river and Oswegatchie Hills beyond to the west. The proposed shoreline improvements will only really be visible at fairly close range from the water. It is not likely that the new wall will be distinguishable to a significant extent nor would it be considered a detriment. The restored site will still look natural.

Water quality should not be affected by this project. Clean stone will be utilized for the shoreline protection supplementation and the stone will not affect the chemical or physical properties of the waters of the river. The stone will be backfilled with salvaged gravel and topsoil, then planted. The amount of rainfall runoff into the river will be insignificant as it is currently, and the introduction of freshwater into the river, likewise be comparable to rainfall characteristics. The conditions of local rivers, streams and brooks nearby and adjacent to the site will not be changed.

SUMMARY

This project will not damage or significantly alter essential wildlife habitat at the base of the bluff or finfish and shellfish habitat in the shallow sub-tidal, estuarine and riverine habitat essential to the preservation of the house and adjacent waters. The composition of the damaged shoreline is not of

high habitat value nor is the site according to the New London County Soil Survey but it will be stabilized and thus improved in this project. There are no known special breeding habitats or natural species population characteristics in this area. The alterations to the shoreline are not significant but essential to the preservation of the house and property.

In summary, property protection with a minimally restored shoreline of stone, gravel and vegetation will help to reduce undermining characteristics of the site and help to maintain suitable characteristics essential for preservation of this residential homesite. The replacement stairway will restore access without damaging or degrading habitat diversity and value. This project, while small in scope, is highly justified, in fact essential to preserve the coastal bluff resource and the occupied residential establishment. This scope of work is a minimal step, the unavoidable and least invasive step required to restore some protection of the eroding bluff. There is no lesser scope of protection that I know of that would be suitable to this site and the ongoing erosion. Infact, more would be preferred but this application represents the owners preference which is agreeable to the DEEP. The work has no foreseeable significant or long-term adverse impacts and is consistent with zoning and the historical usage of the land and adjacent lands. This project is in the final stages of approval by the CT DEEP and so the balance of stabilization for the bluff has been thoroughly weighed by the Land and Water Resources Division. On this basis, all of this analysis and these findings, your approval is respectfully requested.

Respectfully submitted,
DOCKO, INC.

A handwritten signature in blue ink, appearing to read "Keith B. Neilson". The signature is fluid and cursive, with a long horizontal stroke at the end.

Keith B. Neilson, P.E.



Town of Waterford

Department of Planning and Development

www.waterfordct.org

Office Use Only

Date Submitted: _____

Processed By: _____

App. No.: _____

Total Fee: \$ _____

Electronic Submission

Waived: _____ Yes _____ No

PZC Form 1

Planning and Zoning Application

1. Type of Application(s), Use and Property Information (check all that apply)

- | | | |
|--|--|---|
| ☐ Informal Staff Review | ☐ Site Plan/Design Review | ☐ Municipal Project (CGS§8-24) |
| ☐ Special Permit/Design Review ¹ | ☐ Subdivision /Resubdivision | ☐ Lot line Adjustment |
| ☐ Zoning Map Change | ☐ Regulation Amendment(s) | ☐ New District |
| ☐ Multifamily Development | ☒ Coastal Area Management ² | ☐ Earth Excavation |
| ☐ Flood Hazard Area | ☐ Other: _____ | ☐ Other: _____ |

Specify all uses and corresponding section for which this application applies³:

Use: Coastal Site Plan Section: 25.4

Use: Erosion and Sediment Control Section: 25.5

Use: _____ Section: _____

Name of proposed development/subdivision: Not applicable If subdivision how many lots?: NA

If applicable, are roadways proposed to be private, public or both:

- ☐ Private ☐ Public ☐ Both⁴

Parcel 1

Map/Block/Lot: 102 / 5842 / _____

Street No. & Name: 21 Oswegatchie Rd

Size SF/AC: 0.11 / acres

Zoning District(s): R-20W

Parcel 2

Map/Block/Lot: _____ / _____ / _____

Street No. & Name: _____

Size SF/AC: _____ / _____

Zoning District(s): _____

¹ Include a completed list of property owners with Parcel ID, name, address and mailing address. It is the applicant's responsibility to distribute all notices certified return receipt. Evidence of mailing shall be submitted prior to the start of the hearing. Failure to do so will delay the opening of the hearing.

² Coastal Site Plan reviews under Coastal Area Management §25.4 must submit a completed PZC Form 2 in addition to this PZC Form 1.

³ The use listed must correspond to the exact use term noted within the zoning district as a permitted use allowed through site plan or special permit.

⁴ A plan must accompany the application clearly delineating the limits of public and private roads.

2. Applicant Information

Name: Mark Spery **Applicant's Authority to File Application⁵**
Title: Owner ☒ Legal Owner of Record
Company: _____ ☐ Power of Attorney
Address: 21 Oswegatchie Rd ☐ Contract to Purchase
City/State: Waterford CT ☐ Other _____
Zip Code: 06385
Telephone: 860-439-1999 Fax: _____ Email: afrish1234@aol.com

3. Agent Information; if applicable

Name: Keith Neilson, P.E. **Specify Nature of Agent**
Title: Engineer ☐ Attorney
Company: Docko, Inc. ☒ Civil Engineer
Address: PO Box 421 ☐ Land Surveyor
City/State: Mystic CT ☐ Design Professional; _____
Zip Code: 06355 ☐ Other: _____
Bar/License/Reg. No.: _____
Telephone: 860-572-8939 Fax: _____ Email: office@docko.com

4. Property Owner(s) and Parcel(s) InformationIs owner co-applicant? ☐ Yes ☒ No

Note: If landowner is an LLC, Corporation, Trust or other legal entity, attach the names, addresses and title of each member or officer, including agent(s). If same as applicant list 'Same'.

Name: _____	Name: _____
Title: _____	Title: _____
Company: _____	Company: _____
Address: _____	Address: _____
City/State: _____	City/State: _____
Zip Code: _____	Zip Code: _____
Telephone: _____	Telephone: _____
Fax: _____	Fax: _____
Email: _____	Email: _____

⁵ Applicant must submit evidence attesting to the authority to file application (i.e. deed, option for purchase, etc.)

5. Statement of Use

Attached a typed statement of use in conformance with the Zoning Regulations as described in Section 22.4.2. In addition include all hours and days of operation, size of buildings and number of stories, utilities servicing the parcel, variances received, number of employee and structures to be demolished.

6. Statement of Design Compatibility (Site Plans and Special Permits only)

Attach a statement describing how the building and site design is compatible with the neighborhood, character of Waterford and Zoning Regulations.

7. Consistency with Adopted Plan of Preservation, Conservation and Development (all applications)

Attach a statement attesting to how the proposed use, zone change, amendment or design is consistent with the most recent adopted Plan of Preservation, Conservation and Development (the Plan). Note relevant Plan section numbers and pages.

8. Natural and Cultural Resources

Yes	No		% of Property
☐	☒	a. Are inland wetlands present on site? Total SF/AC _____ / _____	_____
☐	☒	b. Are tidal wetlands present on site? Total SF/AC _____ / _____	_____
☐	☒	c. Are their known or suspected vernal pools on the property?	
☐	☒	d. CT DEEP NDDDB: Are endangered, threatened or species of special concern suspected to be located on the property? <i>Applicant must attach an 8 1/2 x 11 map of the most current CT DEEP Natural Diversity Database with site clearly identified regardless of response provided. If you answered yes to item d., attach a letter from CT DEEP stating the name of the specie(s) that are suspected to be on the property. See Section 22 of the Zoning Regulations for additional information.</i>	
☒	☐	e. Are floodplains or flood hazard areas on the property?	
		Identify: _____	
☐	☒	f. Is the property located within a local, state or national historic district?	
		If yes identify district name: _____	
☐	☒	g. Does the site possess any structures or sites listed on the local, state or national register of historic landmarks?	
		If yes, identify: _____	

9. Additional Information

Yes No

- ☒ ☐ a. Is any part of the site within 500' of the Town line? Which town: Town of East Lyme
- ☐ ☒ b. Will any egress or ingress for the property use streets within an adjoining municipality?
- ☒ ☐ c. Is any work proposed in wetlands or watercourses? Explain in Statement of Use
- ☒ ☐ d. Is any work proposed within 100 feet of a wetlands or watercourse? Explain in Statement of Use
- ☒ ☐ e. Is any work proposed within a floodplain or flood hazard area? Explain in Statement of Use
- ☐ ☒ f. Is public water available or proposed to the site? Identify: _____
- ☒ ☐ g. Are public sanitary sewers available or proposed to the site? Identify: Oswegatchie Rd
- ☐ ☒ h. Is there a utility, drainage or other easement(s) on the site? Specify: _____
- ☐ ☒ i. Is open space proposed on the property?

How much open space is proposed (SF/AC)? _____ / _____ Percent of property(s) _____

Use and purpose of open space: _____

10. Previous Land Use Permits Associated with the Property(s)Have previous permits been issued for the Property: ☒ Yes ☐ No (List singularly; attached additional pages if necessary)Date IssuedIssuing AgencyApproved Use/Activity2.2.21CT DEEPSeawall Retention2.2.21CT DEEPNew 4/40 GP Dock Facility

11. Change of Zone, Regulation Amendment or New Zoning District, if applicable

Yes No

☐☒

a. Is this application for a new zoning district and/or regulation not presently established within the Zoning Regulations? If a new zoning district, distinguish type of zone proposed:

☐

Fixed Zone

☐

Floating Zone

☐

Overlay Zone

Identify proposed zone name: _____

For new regulations, list proposed section number(s) and titles(s):

i. _____

ii. _____

iii. _____

☐☒

b. Is this application an amendment to an existing regulation? Attach proposed amendments, clearly noting any deletions, modifications or additions. List sections proposed to be modified:

i. _____

ii. _____

iii. _____

☐☒

c. Is this application for a change to a district already established within the regulations? Identify:

Supporting materials:

For new zoning districts or a change in zone provide a legal description of the land involved in the zone district change including the following:

- Location map at 1"=1000'
- Accurate description and acreage of tract(s) to be changed with existing buildings and uses
- Show existing features including but not limited to contours at two-foot intervals, wetlands and watercourses, flood plains, all improvements and structures,
- All lots or parts of lots contained in an area within 500 feet in all directions of the zone change tract
- All lots shown in this area and within the zone change tract shall contain the name and address of owners as recorded in the Assessor's records and shall show the nature of use
- North point, and distance along road from nearest road intersection.
- Scale of map(s)

12. Bulk Zoning Requirements Table

Complete the following table, which must also be included on applicable drawings:

Zoning District(s): _____		
Item	Required	Proposed
Minimum Lot Size	20,000	4000SF Estimated
Frontage	50 feet	50 feet
Front Yard		
Side Yard		
Rear Yard	50 feet	No building changes
Building Line		No change-Existing
Building Coverage		No change-Existing
Parking ⁶		No change-Existing
Landscaping	Not applicable	No change
Impermeable Coverage		No change-Existing

⁶ Attach method used to determine the number of parking spaces required.

13. Planning, Design and Engineering Team

Provide a list of all professionals responsible for the project. Additional pages attached, if necessary: ☐ Yes ☐ No

Discipline:	<u>Civil</u>	Telephone:	<u>860-572-8939</u>
Name:	<u>Keith Nielson, P.E.</u>	Fax:	<u></u>
Company:	<u>Docko, Inc.</u>	Email:	<u>office@docko.com</u>
License(s)/ Accreditations:	<u>Corp. No. 441, CT</u>	License(s)/ Accreditation No(s):	<u></u>

Discipline:	<u></u>	Telephone:	<u></u>
Name:	<u></u>	Fax:	<u></u>
Company:	<u></u>	Email:	<u></u>
Licenses and/or Accreditations:	<u></u>	License/ Accreditation No(s):	<u></u>

Discipline:	<u></u>	Telephone:	<u></u>
Name:	<u></u>	Fax:	<u></u>
Company:	<u></u>	Email:	<u></u>
Licenses and/or Accreditations:	<u></u>	License/ Accreditation No(s):	<u></u>

Discipline:	<u></u>	Telephone:	<u></u>
Name:	<u></u>	Fax:	<u></u>
Company:	<u></u>	Email:	<u></u>
Licenses and/or Accreditations:	<u></u>	License/ Accreditation No(s):	<u></u>

Discipline:	<u></u>	Telephone:	<u></u>
Name:	<u></u>	Fax:	<u></u>
Company:	<u></u>	Email:	<u></u>
Licenses and/or Accreditations:	<u></u>	License/ Accreditation No(s):	<u></u>

14. Supporting Documentation

Itemize, including additional attachments, all information provided in support of the application. Titles, dates and sheet/map numbers shall correspond exactly with the corresponding information provided.

Additional pages attached, if necessary: ☒ Yes ☐ No

DEEP Permit 202015003-COP

202015007-LISGP

15. For Informal Staff Review Use Only

Sec. 7-159b – Pre-application review of use of property. Notwithstanding any other provision of the general statutes, prior to the submission of an application for use of property under chapters 124, 126, 440 and 541 or any other provision of the general statutes authorizing an authority, commission, department or agency of a municipality to issue a permit or approval for use of such property, such authority, commission, department or agency or authorized agent thereof may separately, jointly, or in any combination, conduct a pre-application review of a proposed project with the applicant at the applicant's request. Such pre-application review and any results or information obtained from it may not be appealed under any provision of the general statutes, and shall not be binding on the applicant or any authority, commission, department, agency or other official having jurisdiction to review the proposed project.

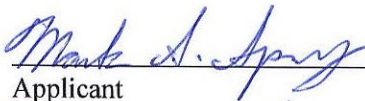
I have read and understand the above provision of the Connecticut General Statutes and understand and agree that whatever discussion, comments and/or recommendations are made through this review are non-binding upon the parties.

Further, I acknowledge and agree that this pre-application review meeting is being conducted prior to and in anticipation of a formal application to the Waterford Planning and Zoning Commission or Conservation Commission to obtain feedback and response to the proposal or design, as it exists on this date, in the interest of preparing an application consistent with the Subdivision, Zoning or Wetlands regulations of the Town of Waterford as the case may be.

Signature

Printed Name

Date


Applicant

Mark Sperry

Jan 26, 2023


Agent

Keith Neilson, P.E

February 4, 2023

Land Owner

Land Owner

16. Technical Assistance Review Fee

In accordance with the Waterford Code of Ordinance Chapter 16.08, the Commission may require third party technical assistance review for the evaluation of applications associated with but not limited to site plans, special permits, zone change and regulation amendments and may collect payment for costs associated with the review. This includes but is not limited to civil engineering, architecture, legal assistance, traffic engineering and environmental protection.

17. Acknowledgements; All applications

Application Content

The undersigned hereby acknowledges that this application and statements submitted herewith are true to the best of my knowledge and approval of the application is contingent upon compliance with all requirements of said regulations.

Right of Entry and Inspection

The undersigned hereby authorizes the Waterford Planning and Zoning Commission or its agents, to enter the subject property for the purposes of inspection and enforcement for the said Zoning Regulations until receipt of final Certificate of Occupancy and Certificate of Zoning Compliance.

Electronic Data Accuracy and Transmission

If applicable, the undersigned hereby acknowledges that all electronic data submitted as part of this application is an accurate and true representation of all paper transmissions provided as part of this application and may be transmitted publically when requested and all applicable fees are paid in full by the requesting party.

Signature

Printed Name

Date

Applicant

Mark Spery

Agent

Keith Neilson, P.E.

Land Owner

Land Owner



Town of Waterford

Building, Conservation, Planning and Zoning

www.waterfordct.org

Office Use Only

Date Submitted: _____

Processed By: _____

App. No.: _____

Rev: 07/24/14

PZC Form 2:

Application for Coastal Area Management Site Plan Permit

Property Address: 21 Oswegatchie Rd

1. General

- a. This form must be submitted in conjunction with *PZC Form 1: Planning and Zoning Application* or, in the case of minor activities and if permitted by the Zoning Enforcement Officer, *Zoning Compliance Permit*.
- b. This form does not supersede or take the place of any state or federal permits. The applicant shall consult with the necessary agencies to review the possibility of additional permits, including general or individual permits that may be required for specific activities.

2. Authority

Consistent with Connecticut General Statutes, Chapter 444, Secs. 22a-90 to 22a-113j, Waterford's Planning and Zoning Commission, acting in the capacity of the Town's Zoning Commission, regulates certain activities upon properties which lie completely or partially within the coastal area as defined by CGS §22a-94(b). Specifically, the Commission's is authorized, cited in part, by the following:

Sec. 22a-105. Coastal site plan reviews. (a) Coastal municipalities shall undertake coastal site plan reviews in accordance with the requirements of this chapter.

(b) The following site plans, plans and applications for activities or projects to be located fully or partially within the coastal boundary and landward of the mean high water mark shall be defined as "coastal site plans" and shall be subject to the requirements of this chapter: (1) Site plans submitted to a zoning commission in accordance with section 22a-109; (2) plans submitted to a planning commission for subdivision or resubdivision in accordance with section 8-25 or with any special act; (3) applications for a special exception or special permit submitted to a planning commission, zoning commission or zoning board of appeals in accordance with section 8-2 or with any special act; (4) applications for a variance submitted to a zoning board of appeals in accordance with subdivision (3) of section 8-6 or with any special act, and (5) a referral of a proposed municipal project to a planning commission in accordance with section 8-24 or with any special act.

3. Coastal Resources and Policies

- a. By placing a check mark in the appropriate box(es), identify the coastal resources and their policies for each that is located on and adjacent to the property or that may be influenced by the activities associated with the application. Note: A resources may be located on site, adjacent and be off-site but influenced by the activities. Refer to CGS §22a-92(a) for General Coastal Resource Policy, CGS§221-92(b)(2) and CGS §22a-93(7) for definitions of each corresponding policy's coastal resource.

Coastal Resource	On-site	Adjacent	Off-site but within Influence
General Coastal Resources	X	X	NA
Beaches and Dunes	X	X	NA
Bluffs & Escarpments	X	X	NA
Coastal Hazard Area	X	X	NA
Coastal Waters, Estuarine Embayments, Nearshore Waters, Offshore Waters	X	X	NA
Development Shorefront	X	X	NA
Freshwater Wetlands and Watercourses	NONE	NONE	NA
Intertidal Flats	NONE	NONE	NA
Islands	NONE	NONE	NA
Rocky Shorefront	X	X	NA
Shellfish Concentration Area	NONE	X	NA
Shorelands	NONE	NA	NA
Coastal Hazard Area ID Type (i.e. VE, A, etc.)	VE	NA	NA
Base Flood Elevation	14NAVD	NA	NA
Tidal Wetlands	NONE	NONE	NONE

- b. Consistency with Coastal Resources and Policies.

Attached a typed and briefly statement of how the resources checked are consistent or inconsistent with coastal resource policies.

c. Identification of Potential Adverse Impacts on Coastal Resources

Please complete this section for all projects. Identify the adverse impact categories below that apply to the proposed project or activity. The applicable column must be checked if the proposed activity has the potential to generate any adverse impacts as defined in CGS Section 22a-93(15). If an adverse impact may result from the proposed project or activity, please use Part VIII to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

<u>Potential Adverse Impacts on Coastal Resources</u>	<u>Applicable</u>	<u>Not Applicable</u>	<u>Mitigation Proposed</u>
i. Degrading tidal wetlands, beaches and dunes, rocky shorefronts, and bluffs and escarpments through significant alteration of their natural characteristics or functions	☐	☒	☐
ii. Increasing the hazard of coastal flooding through significant alteration of shoreline configurations or bathymetry, particularly within high velocity flood zones - CGS Section 22a-93(15)(E)	☐	☒	☐
iii. Degrading existing circulation patterns of coastal water through the significant alteration of patterns of tidal exchange or flushing rates, freshwater input, or existing basin characteristics and channel contours	☐	☒	☐
iv. Degrading natural or existing drainage patterns through the significant alteration of groundwater flow and recharge and volume of runoff	☐	☒	☐
v. Degrading natural erosion patterns through the significant alteration of littoral transport of sediments in terms of deposition or source reduction	☐	☒	☐
vi. Degrading visual quality through significant alteration of the natural features of vistas and view points	☐	☒	☐
vii. Degrading water quality through the significant introduction into either coastal waters or groundwater supplies of suspended solids, nutrients, toxics, heavy metals or pathogens, or through the significant alteration of temperature, pH, dissolved oxygen or salinity	☐	☒	☐
viii. Degrading or destroying essential wildlife, finfish, or shellfish habitat through significant alteration of the composition, migration patterns, distribution, breeding or other population characteristics of the natural species or significant alterations of the natural components of the habitat	☐	☒	☐

4. Coastal Use and Activities Policies and Standards

- a. Identify all coastal policies and standards in or referenced by CGS Section 22a-92 applicable to the proposed project or activity:

- | | |
|--|--|
| ☒ General Development | ☐ Sewer and Water Lines |
| ☐ Water-Dependent Uses | ☐ Energy Facilities |
| ☐ Ports and Harbors | ☐ Fuel, Chemicals and Hazardous Materials |
| ☒ Coastal Structures and Filling | ☐ Transportation |
| ☐ Dredging and Navigation | ☐ Solid Waste |
| ☒ Boating | ☐ Dams, Dikes and Reservoirs |
| ☐ Fisheries | ☐ Cultural Resources |
| ☐ Coastal Recreation and Access | ☐ Open Space and Agricultural Lands |

- b. Consistency With Applicable Coastal Use Policies And Standards

Attach an explanation of how the proposed activity or use is consistent with all of the applicable coastal use and activity policies and standards identified in Part V. For projects proposed at waterfront sites (including those with tidal wetlands frontage), particular emphasis should be placed on the evaluation of the project's consistency with the water-dependent use policies and standards contained in CGS Sections 22a-92(a)(3) and 22a-92(b)(1)(A) -- also see adverse impacts assessment in Part VII.B below:

5. Mitigation of Adverse Impacts and Overall Consistency *(all applications)*

Attach a summary addressing each of the following:

- a. Describe the methods proposed to mitigate any adverse impacts.
- b. Explain why adverse impacts are not being mitigated, if applicable.
- c. Summarize why the project as proposed is consistent with the Connecticut Coastal Management Act

6. Potential Adverse Impacts on Water-dependent Uses (for project or activity is proposed at a waterfront site)

- a. Identification of existing and/or proposed Water-dependent Uses: Attach a description of the features or characteristics of the proposed activity or project that qualify as water-dependent uses as defined in CGS Section 22a-93(16). If general public access to coastal waters is provided, please identify the legal mechanisms used to ensure public access in perpetuity, and describe any provisions for parking or other access to the site and proposed amenities associated with the access (e.g., boardwalk, benches, trash receptacles, interpretative signage, etc.):
- b. Identify the adverse impact categories below that apply to the proposed project or activity. The applicable column must be checked if the proposed activity has the potential to generate any adverse impacts as defined in CGS Section 22a-93(17). If an adverse impact may result from the proposed project or activity, use Part VIII to describe what project design features may be used to eliminate, minimize, or mitigate the potential for adverse impacts.

<i>Potential Adverse Impacts on Future Water-dependent Development Opportunities and Activities</i>	<i>Applicable</i>	<i>Not Applicable</i>	<i>Mitigation Proposed</i>
i. Locating a non-water-dependent use at a site physically suited for or planned for location of a water-dependent use	☐	☒	☐
ii. Replacing an existing water-dependent use with a non-water dependent use	☐	☒	☐
iii. Siting a non-water-dependent use which would substantially reduce or inhibit existing public access to marine or tidal waters	☐	☒	☐

7. Acknowledgements; All applications

Application Content

The undersigned hereby acknowledges that this application and statements submitted herewith are true to the best of my knowledge and approval of the application is contingent upon compliance with all requirements of said regulations.

Signature

Printed Name

Date

Mark S. Sperry
Applicant

Mark Sperry

Jan. 26, 2023

Dorcas Inc, Keith B. Nelson
Agent

Keith Neilson, P.E.

February 1, 2023

Mark S. Sperry
Land Owner

Mark Sperry

Jan. 26, 2023

Land Owner

October 29, 2021

Keith Neilson PE
Docko Inc
PO Box 421
Mystic CT 06355
office@docko.com

Project: Shorefront Modifications, 21 Oswegatchie Rd, Waterford, CT
NDDDB Determination No.: 202111189

Dear Mr. Neilson,

I have reviewed Natural Diversity Database (NDDDB) maps and files regarding the area of work provided for the proposed construction and completion of a scour protection stone wall at 21 Oswegatchie Road in Waterford, Connecticut. I do not anticipate negative impacts to State-listed species (RCSA Sec. 26-306) resulting from your proposed activity at the site based upon the information contained within the NDDDB. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits. This determination is good for two years. Please re-submit a new NDDDB Request for Review if the scope of work changes or if work has not begun on this project by October 29, 2023.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey, cooperating units of DEEP, landowners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDDB should not be substitutes for on-site surveys necessary for a thorough environmental impact assessment. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the database as it becomes available.

Please contact me if you have further questions at (860) 424-3378, or karen.zyko@ct.gov. Thank you for consulting the Natural Diversity Database.

Sincerely,



Karen Zyko
Environmental Analyst



Connecticut Department of
Energy & Environmental Protection
Bureau of Natural Resources
Wildlife Division

CPPU USE ONLY

App #: _____

Doc #: _____

Check #: No fee required

Program: Natural Diversity Database
Endangered Species

Hardcopy _____ Electronic _____

Request for Natural Diversity Data Base (NDDB) State Listed Species Review

Please complete this form in accordance with the instructions (DEEP-INST-007) to ensure proper handling of your request.

There are no fees associated with NDDB Reviews.

Part I: Preliminary Screening & Request Type

Before submitting this request, you must review the most current Natural Diversity Data Base "State and Federal Listed Species and Significant Natural Communities Maps" found on the DEEP website. These maps are updated twice a year, usually in June and December.

Does your site, including all affected areas, fall in an NDDB Area according to the map instructions:

☒ Yes ☐ No Enter the date of the map reviewed for pre-screening: June 2021

This form is being submitted for a :

☒ New NDDB request

☐ Renewal/Extension of a NDDB Request, **without** modifications and within **two years** of issued NDDB determination (no attachments required)

[CPPU Use Only - NDDB-Listed Species Determination # 1736]

Enter NDDB Determination Number for Renewal/Extension:

☐ New **Safe Harbor Determination** (optional) must be associated with an application for a GP for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

☐ Renewal/Extension of an existing Safe Harbor Determination

☐ With modifications

☐ Without modifications (no attachments required)

[CPPU Use Only - NDDB-Safe Harbor Determination # 1736]

Enter Safe Harbor Determination Number for Renewal/Extension:

Part II: Requester Information

If the requester is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. If applicable, the name shall be stated **exactly as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at the Secretary of the State's database CONCORD. (www.concord-sots.ct.gov/CONCORD/index.jsp)*

If the requester is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).

If there are any changes or corrections to your company/facility or individual mailing or billing address or contact information, please complete and submit the Request to Change company/Individual Information to the address indicated on the form.

1. Requester*

Company Name: **Docko, Inc.**

Contact Name: **Keith B Neilson, P. E.**

Address: **P.O. Box 421**

City/Town: **Mystic**

State: **CT**

Zip Code: **06355**

Business Phone: **860-572-8939**

ext.

E-mail: **office@docko.com

**By providing this email address you are agreeing to receive official correspondence from the department, at this electronic address, concerning this request. Please remember to check your security settings to be sure you can receive emails from "ct.gov" addresses. Also, please notify the department if your e-mail address changes

a) Requester can best be described as:

☐ Individual ☐ Federal Agency ☐ State agency ☐ Municipality ☐ Tribal

☒ *business entity (* if a business entity complete i through iii):

i) Check type ☒ corporation ☐ limited liability company ☐ limited partnership

☐ limited liability partnership ☐ statutory trust ☐ Other:

ii) Provide Secretary of the State Business ID #: **0194033** This information can be accessed at the Secretary of the State's database (CONCORD). (www.concord-sots.ct.gov/CONCORD/index.jsp)

iii) ☐ Check here if your business is **NOT** registered with the Secretary of State's office.

b) Acting as (Affiliation), pick one:

☐ Property owner ☐ Consultant ☒ Engineer ☐ Facility owner ☐ Applicant

☐ Biologist ☐ Pesticide Applicator ☐ Other representative:

2. List Primary Contact to receive Natural Diversity Data Base correspondence and inquiries, if different from requester.

Company Name:

Contact Person:

Title:

Mailing Address:

City/Town:

State:

Zip Code:

Business Phone:

ext.

**E-mail:

Part III: Site Information

This request can only be completed for one site. A separate request must be filed for each additional site.

1. SITE NAME AND LOCATION

Site Name or Project Name: **Shorefront Modifications**

Town(s): **Waterford**

Street Address or Location Description: **21 Oswegatchie Road**

Size in acres, or site dimensions: **0.11 Acres**

Latitude and longitude of the center of the site in decimal degrees (e.g., 41.23456 -71.68574):

Latitude: **41°21'58.1"N**

Longitude: **72°11'23.1"W**

Method of coordinate determination (check one):

☐ GPS ☐ Photo interpolation using CTECO map viewer ☒ Other (specify): **Google Earth**

2a. Describe the current land use and land cover of the site.

The site is zoned residential. This site is an eroding bluff with coniferous trees down to the intertidal zone. Saplings are common but not profuse.

b. Check all that apply and enter the size in acres or % of area in the space after each checked category.

☐ Industrial/Commercial _____	☒ Residential <u>50%</u>	☐ Forest _____
☐ Wetland _____	☒ Field/grassland <u>50%</u>	☐ Agricultural _____
☐ Water _____	☐ Utility Right-of-way _____	
☐ Transportation Right-of-way _____	☐ Other (specify): _____	

Part IV: Project Information

1. PROJECT TYPE:

Choose Project Type: Choose Type From Dropdown List , If other describe: **Seawall and Dock Construction**

2. Is the subject activity limited to the maintenance, repair, or improvement of an existing structure within the existing footprint? ☒ Yes ☐ No If yes, explain.

This proposed project is for completion of a stone seawall which was started several years ago. The work remaining is approximately 25 feet long and will be 2 feet wide and 3 feet high.

Part IV: Project Information (continued)

3. Give a detailed description of the activity which is the subject of this request and describe the methods and equipment that will be used. Include a description of steps that will be taken to minimize impacts to any known listed species.

This proposed project is to construct 26+/-LF of scour protection stone wall approximately 30+/-CY over 150+/-SF waterward of the CT Coastal Jurisdiction line and High Tide line.

All work and transport of material will be by hand.

4. If this is a renewal or extension of an existing Safe Harbor request *with* modifications, explain what about the project has changed.

This is not a Safe Harbor request or modification.

5. Provide a contact for questions about the project details if different from Part II primary contact.

Name:

Phone:

E-mail:

Part V: Request Requirements and Associated Application Types

Check *one* box from either Group 1, Group 2 or Group 3, indicating the appropriate category for this request.

Group 1. If you check one of these boxes, complete Parts I – VII of this form and submit the required attachments A and B.

- ☐ Preliminary screening was negative but an NDDB review is still requested
- ☐ Request regards a municipally regulated or unregulated activity (no state permit/certificate needed)
- ☐ Request regards a preliminary site assessment or project feasibility study
- ☐ Request relates to land acquisition or protection
- ☐ Request is associated with a *renewal* of an existing permit or authorization, with no modifications

Group 2. If you check one of these boxes, complete Parts I – VII of this form and submit required attachments A, B, and C.

- ☒ Request is associated with a *new* state or federal permit or authorization application or registration
- ☐ Request is associated with modification of an existing permit or other authorization
- ☐ Request is associated with a permit enforcement action
- ☐ Request regards site management or planning, requiring detailed species recommendations
- ☐ Request regards a state funded project, state agency activity, or CEPA request

☐ **Group 3.** If you are requesting a **Safe Harbor Determination**, complete Parts I-VII and submit required attachments A, B, and D. Safe Harbor determinations can only be requested if you are applying for a GP for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

If you are filing this request as part of a state or federal permit application(s) enter the application information below.

Permitting Agency and Application Name(s):

DEEP Structures and Dredging

Related State DEEP Permit Number(s), if applicable: **pending**

State DEEP Enforcement Action Number, if applicable: _____

State DEEP Permit Analyst(s)/Engineer(s), if known: **Mr. Micheal Grzywinski; Kevin Zawoy**

Is this request related to a previously submitted NDDB request? ☐ Yes ☒ No

If yes, provide the previous NDDB Determination Number(s), if known: _____

Part VI: Supporting Documents

Check each attachment submitted as verification that *all* applicable attachments have been supplied with this request form. Label each attachment as indicated in this part (e.g., Attachment A, etc.) and be sure to include the requester's name, site name and the date. **Please note that Attachments A and B are required for all new requests and Safe Harbor renewals/extensions with modifications.** Renewals/Extensions with no modifications do not need to submit any attachments. Attachments C and D are supplied at the end of this form.

☒ Attachment A:	Overview Map: an 8 1/2" X 11" print/copy of the relevant portion of a USGS Topographic Quadrangle Map clearly indicating the exact location of the site.
Attachment B:	Detailed Site Map: fine scaled map showing site boundary and area of work details on aerial imagery with relevant landmarks labeled. (Site and work boundaries in GIS [ESRI ArcView shapefile, in NAD83, State Plane, feet] format can be substituted for detailed maps, see instruction document)
☒ Attachment C:	Supplemental Information, Group 2 requirement (attached, DEEP-APP-007C) ☒ Section i: Supplemental Site Information and supporting documents ☐ Section ii: Supplemental Project Information and supporting documents
☐ Attachment D:	Safe Harbor Report Requirements, Group 3 (attached, DEEP-APP-007D)

Part VII: Requester Certification

The requester *and* the individual(s) responsible for actually preparing the request must sign this part. A request will be considered incomplete unless all required signatures are provided.

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief."	
Signature of Requester (a typed name will substitute for a handwritten signature)	Date
Christina Lopes	Project Administrator
Name of Requester (print or type)	Title (if applicable)
Signature of Preparer (if different than above)	Date
Name of Preparer (print or type)	Title (if applicable)

Note: Please submit the completed Request Form and all Supporting Documents to:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CT 06106-5127

Or email request to: deep.nddbrequest@ct.gov

Attachment C: Supplemental Information, Group 2 requirement

Section i: Supplemental Site Information

1. Existing Conditions

Describe all natural and man-made features including wetlands, watercourses, fish and wildlife habitat, floodplains and any existing structures potentially affected by the subject activity. Such features should be depicted and labeled on the site plan that must be submitted. Photographs of current site conditions may be helpful to reviewers.

This site is located at the north end of the Niantic River which is an estuarine embayment subject to coastal flood hazards as well as heavy wave action due to boat activity. According to the DEEP Natural Diversity Data Base Map, there are state and federal listed species & significant natural communities present in the area, however, there are no tidal wetlands on the site and no submerged aquatic vegetation in the shallow near-shore water. There are no shellfish concentrations documented in the area of the wall and small dock facility.

☒ Site Photographs (optional) attached

☒ Site Plan/sketch of existing conditions attached

2. Biological Surveys

Has a biologist visited the site and conducted a biological survey to determine the presence of any endangered, threatened or special concern species ☐ Yes ☐ No

If yes, complete the following questions and submit any reports of biological surveys, documentation of the biologist's qualifications, and any NDDB survey forms.

Biologist(s) name: _____

Habitat and/or species targeted by survey: _____

Dates when surveys were conducted: _____

☐ Reports of biological surveys attached

☐ Documentation of biologist's qualifications attached

☐ NDDB Survey forms for any listed species observations attached

Section ii: Supplemental Project Information

1. Provide a schedule for all phases of the project including the year, the month and/or season that the proposed activity will be initiated and the duration of the activity.

It is anticipated that the project will take place as soon as all approvals are received, most likely beginning in the fall of 2021 or winter of 2022.

2. Describe and quantify the proposed changes to existing conditions and describe any on-site or off-site impacts. In addition, provide an annotated site plan detailing the areas of impact and proposed changes to existing conditions.

There are no anticipated significant adverse impacts associated with this project. The seawall will be constructed by hand, no machinery will be needed.

☐ Annotated Site Plan attached

Attachment D: Safe Harbor Report Requirements

Submit a report, as Attachment D, that synthesizes and analyzes the information listed below. Those providing synthesis and analysis need appropriate qualifications and experience. A request for a safe harbor determination shall include:

- 1. Habitat Description and Map(s), including GIS mapping overlays, of a scale appropriate for the site, identifying:**
 - wetlands, including wetland cover types;
 - plant community types;
 - topography;
 - soils;
 - bedrock geology;
 - floodplains, if any;
 - land use history; and
 - water quality classifications/criteria.
- 2. Photographs** - The report should include photographs of the site taken from the ground and also all reasonably available aerial or satellite photographs and an analysis of such photographs.
- 3. Inspection** - A visual inspection(s) of the site should be conducted, preferably when the ground is visible, and described in the report. This inspection can be helpful in confirming or further evaluating the items noted above.
- 4. Biological Surveys** - The report should include all biological surveys of the site where construction activity will take place that are reasonably available to a registrant. A registrant shall notify the Department's Wildlife Division of biological studies of the site where construction activity will take place that a registrant is aware of but are not reasonably available to the registrant.
- 5. Based on items #1 through 4 above, the report shall include a Natural Resources Inventory of the site of the construction activity.** This inventory should also include a review of reasonably available scientific literature and any recommendations for minimizing adverse impacts from the proposed construction activity on listed species or their associated habitat.
- 6. In addition, to the extent the following is available at the time a safe harbor determination is requested, a request for a safe harbor determination shall include and assess:**
 - Information on Site Disturbance Estimates/Site Alteration information
 - Vehicular Use
 - Construction Activity Phasing Schedules, if any; and
 - Alteration of Drainage Patterns

Natural Diversity Data Base Areas

WATERFORD, CT

December 2018

-  State and Federal Listed Species & Significant Natural Communities
-  Town Boundary

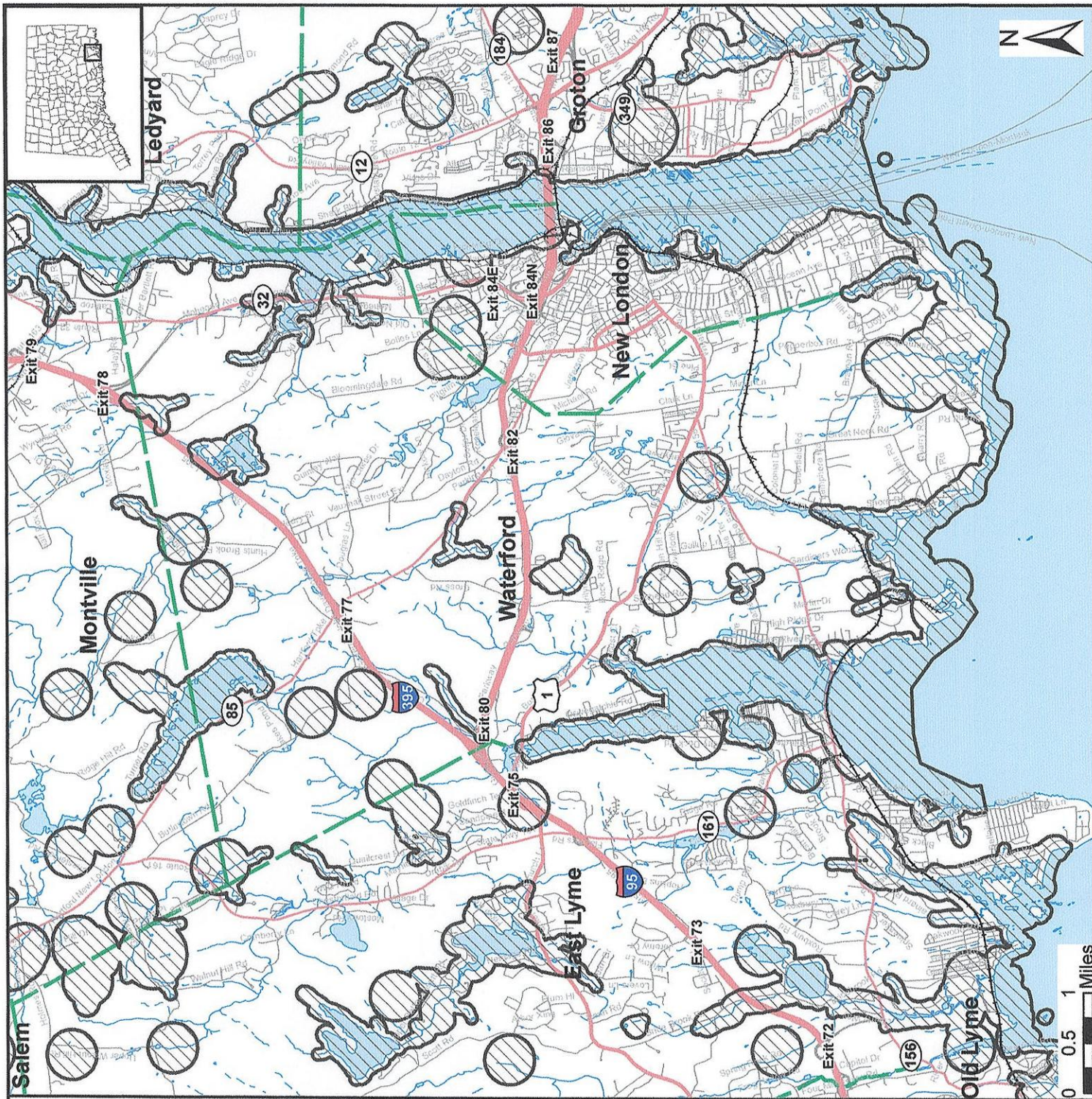
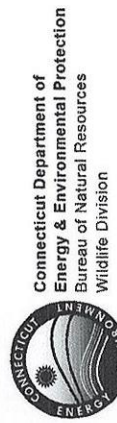
NOTE: This map shows general locations of State and Federal Listed Species and Significant Natural Communities. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDDB) from a number of data sources. Exact locations of species have been buffered to produce the general locations. Exact locations of species and communities occur somewhere in the shaded areas, not necessarily in the center. A new mapping format is being employed that more accurately models important riparian and aquatic areas and eliminates the need for the upstream/downstream searches required in previous versions.

This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas. If the project is within a shaded area there may be a potential conflict with a listed species. For more information, complete a Request for Natural Diversity Data Base Listed Species Review form (DEP-APP-007), and submit it to the NDDDB along with the required maps and information. More detailed instructions are provided with the request form on our website.

www.ct.gov/deep/nddbrequest

Use the CTECO Interactive Map Viewers at www.cteco.uconn.edu to more precisely search for and locate a site and to view aerial imagery with NDDB Areas.

QUESTIONS: Department of Energy and Environmental Protection (DEEP)
79 Elm St., Hartford CT 06106
Phone (860) 424-3011



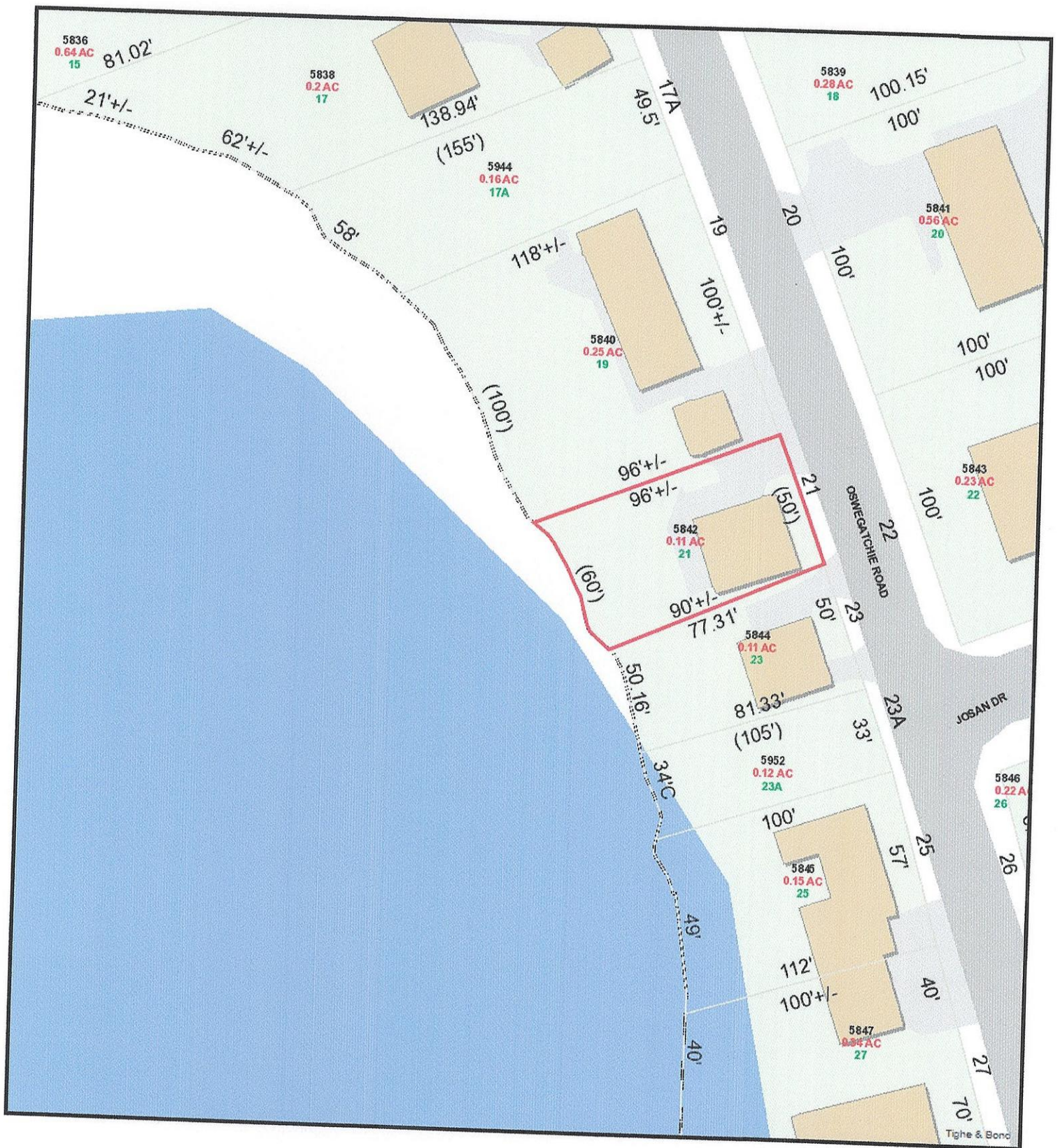
6/27/2019

Google Maps

Google Maps



Imagery ©2019 Google, Map data ©2019 50 ft



6/27/2019 9:59:57 AM

Scale: 1"=50'

Scale is approximate

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

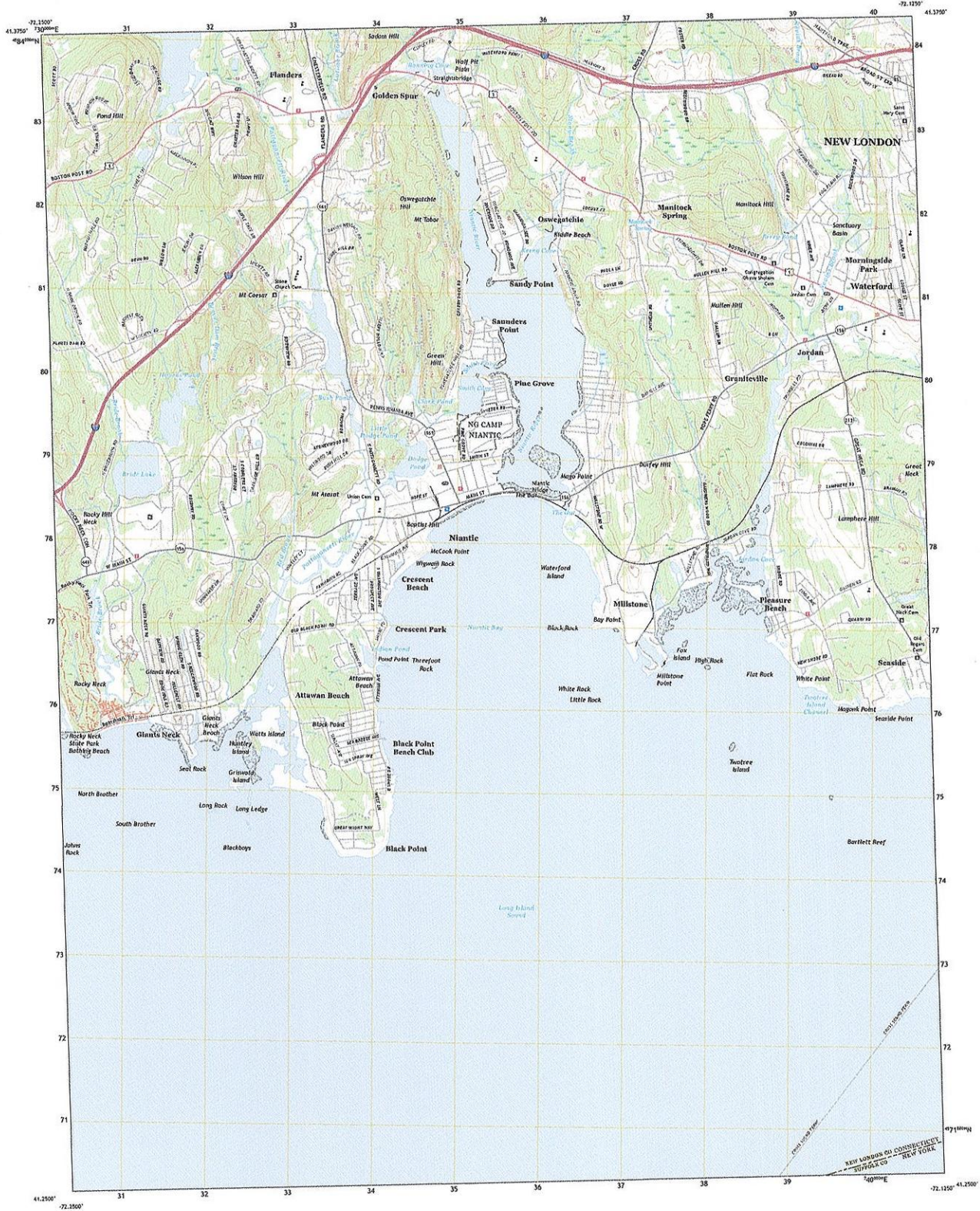




U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

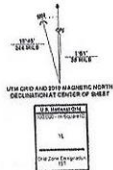


NIANTIC QUADRANGLE
CONNECTICUT - NEW YORK
7.5-MINUTE SERIES



Produced by the United States Geological Survey
Niantic Island and Sound of 1883 (1883)
World Geodetic System of 1983 (WGS84)
This map is not a legal document. Boundary lines are
generalized for this map scale. Private lands within government
jurisdiction may not be shown. Obtain permission before
entering private lands.

Wetlands: FWS National Wetlands Inventory 2010



SCALE 1:24 000

1 000 500 0 500 1000
1000 0 1000 2000 3000 4000 5000 6000
1000 0 1000 2000 3000 4000 5000 6000

CONTOUR INTERVAL IS FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
This map was produced to conform with the
National Geospatial Program US Topo Product Standard.



1	2	3	4	5	6	7	8
1	2	3	4	5	6	7	8

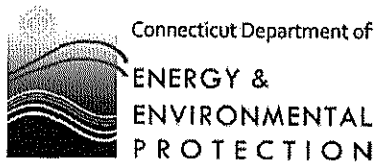
ADDITIONAL QUADRANGLES

ROAD CLASSIFICATION

Expressway
Secondary Hwy
Twp
Interstate Route
US Route
State Route

Local Connector
Local Road
and
US Route
State Route

NIANTIC, CT, NY
2021



Connecticut Department of

ENERGY &
ENVIRONMENTAL
PROTECTION

Bureau of Water Protection and Land Reuse
Land & Water Resources Division

79 Elm Street • Hartford, CT 06106-5127

www.ct.gov/deep

Affirmative Action/Equal Opportunity Employer

Connecticut Department of Energy and Environmental Protection License*

Certificate of Permission

General Permit for Minor Coastal Structures (DEEP-OLISP-GP-2015-01) - Approval of Registration

Licensee(s): Mark Sperry

Licensee Address(s): 21 Oswegatchie Road
Waterford, CT 06385

License Number(s): 202015003-COP 202015007-LISGP

Municipality: Town of Waterford

Project Description: Retain a Pre-1995 stone seawall and install a 4/40 dock for flood
& erosion control and residential boating access

Project Address/Location: 21 Oswegatchie Road

Waters: Niantic River

Authorizing CT Statute(s) CGS Section 22a-359 to 363g; CGS Section 22a-90 to 112; CGS
and/or Federal Law: Section 22a-28 to 35

Applicable Regulations of 22a-426-1 to 9, 22a-30-1 to 17
CT State Agencies:

Agency Contact: Land & Water Resources Division,
Bureau of Water Protection & Land Reuse, 860-424-3019

License Expiration: #202015003-COP expires on the date of issuance of this license.
#202015007-LISGP expires five (5) years from the date of
issuance of this license.

Project Site Plan Set: *New General Permit Dock and Stone Seawall Retention*, 4 sheets,
prepared by Keith B. Neilson, PE dated May 26, 2020.

License Enclosures: LWRD General Conditions ; Land Record Filing ; LWRD Work
Commencement Form ; LWRD Compliance Certification Form ;
Site Plan Set

*Connecticut's Uniform Administrative Procedure Act defines License to include, "the whole or part of any agency permit, certificate, approval, registration, charter or similar form of permission required by law . . ."

Authorized Activities:

The Licensee is hereby authorized to conduct the following work as described in applications # 202015003-COP and 202015007-LISGP and as depicted on any site plan sheets / sets cited herein:

1. Retain 30 linear feet of pre-1995 stone masonry seawall with a top elevation of 5.8' MLW, and consisting of approximately 30 cubic yards over 150 square feet.
2. Install a new 4/40 dock, consisting of:
 - a. a 4' wide by 11' long fixed, pile supported pier with utilities and a deck elevation of 8.7' MLW;
 - b. a 2.5' wide by 8' ft. long set of stairs with rails, extending northerly off the fixed pier;
 - c. a 3.5' wide by 26' long hinged access ramp with rails, suspension beam and hoist;
 - d. a 30 square foot landing float;
 - e. an 8' wide by 12.5' long float with four (4) tie-off piles and float suspension cables;
 - f. an approximately 16' wide by 16' long batter braced pile supported boat lift and boarding platform; and
 - g. Five (5) tie off piles.

Failure to comply with the terms and conditions of this license shall subject the Licensee and / or the Licensee's contractor(s) to enforcement actions and penalties as provided by law.

This license is subject to the following Terms and Conditions:

1. **License Enclosure(s) and Conditions.** The Licensee shall comply with all applicable terms and conditions as may be stipulated within the License Enclosure(s) listed above.
2. Prior to the commencement of any work authorized by this general permit or any approval of registration, the licensee shall download a copy of the General Permit for Minor Coastal Structures DEEP-OLISP-GP-2015-01 from the Department website (<https://portal.ct.gov/DEEP/Permits-and-Licenses/Land-and-Water-Resource-Division-LWRD-Applications>) and provide such copy and any applicable approval of registration to any contractor employed to conduct such work and shall make such documents available for inspection at the site whenever work is being performed at the site.
3. The Licensee shall maintain the float a minimum of 18" above the substrate at all times.

Issued under the authority of the Commissioner of Energy and Environmental Protection on:

February 2, 2021
Date



Brian P. Thompson
Division Director
Land & Water Resources Division

License Number(s): 202015003-COP-COP
202015007-LISGP-LISGP

Page 3 of 3



LWRD General Conditions

1. **Land Record Filing (for Structures Dredging & Fill, Tidal Wetlands, Certificate of Permission, and Long Island Sound General Permit Licenses only).** The Licensee shall file the Land Record Filing on the land records of the municipality in which the subject property is located not later than thirty (30) days after license issuance pursuant to Connecticut General Statutes (CGS) Section 22a-363g. A copy of the Notice with a stamp or other such proof of filing with the municipality shall be submitted to the Commissioner no later than sixty (60) days after license issuance. If a Land Record Filing form is not enclosed and the work site is not associated with an upland property, no filing is required.
2. **Contractor Notification.** The Licensee shall give a copy of the license and its attachments to the contractor(s) who will be carrying out the authorized activities prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The Licensee's contractor(s) shall conduct all operations at the site in full compliance with the license and, to the extent provided by law, may be held liable for any violation of the terms and conditions of the license. At the work site, the contractor(s) shall, whenever work is being performed, have on site and make available for inspection a copy of the license and the authorized plans.
3. **Work Commencement¹.** Not later than two (2) weeks prior to the commencement of any work authorized herein, the Licensee shall submit to the Commissioner, on the Work Commencement Form attached hereto, the name(s) and address(es) of all contractor(s) employed to conduct such work and the expected date for commencement and completion of such work, if any.
 - For water diversion activities authorized pursuant to 22a-377(c)-1 of the Regulations of Connecticut State Agencies, the Licensee shall also notify the Commissioner in writing two weeks prior to initiating the authorized diversion.
 - For emergency activities authorized pursuant Connecticut General Statutes Section 22a-6k, the Licensee shall notify the Commissioner, in writing, of activity commencement at least one (1) day prior to construction and of activity completion no later than five (5) days after conclusion.
4. **For Coastal Licenses Only - License Notice.** The Licensee shall post the first page of the License in a conspicuous place at the work area while the work authorized therein is undertaken.
5. **Unauthorized Activities.** Except as specifically authorized, no equipment or material, including but not limited to, fill, construction materials, excavated material or debris, shall be

¹ The Work Commencement condition and the need for a Work Commencement Form is not applicable to Flood Management Certification approvals.

deposited, placed or stored in any wetland or watercourse on or off-site. The Licensee may not conduct work within wetlands or watercourses other than as specifically authorized, unless otherwise authorized in writing by the Commissioner. Tidal wetlands means "wetland" as defined by section 22a-29 and "freshwater wetlands and watercourses" means "wetlands" and "watercourses" as defined by section 22a-38.

6. Unconfined Instream Work. Unless otherwise noted in a condition of the license, the following conditions apply to projects in non-coastal waters:

- Unconfined instream work is limited to the period June 1 through September 30.
- Confinement of a work area by cofferdam techniques using sand bag placement, sheet pile installation (vibratory method only), portadam, or similar confinement devices is allowed any time of the year. The removal of such confinement devices is allowed any time of the year.
- Once a work area has been confined, in-water work within the confined area is allowed any time of the year.
- The confinement technique used shall completely isolate and protect the confined area from all flowing water. The use of silt boom/curtain or similar technique as a means for confinement is prohibited.

7. For State Actions Only - Material or Equipment Storage in the Floodplain. Unless approved by a Flood Management Exemption, the storage of any materials at the site which are buoyant, hazardous, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life, below the elevation of the five-hundred (500) year flood is prohibited. Any other material or equipment stored at the site below said elevation by the Licensee or the Licensee's contractor must be firmly anchored, restrained or enclosed to prevent flotation. The quantity of fuel stored below such elevation for equipment used at the site shall not exceed the quantity of fuel that is expected to be used by such equipment in one day. In accordance with the licensee's Flood Contingency Plan, the Licensee shall remove equipment and materials from the floodplain during periods when flood warnings have been issued or are anticipated by a responsible federal, state or local agency. It shall be the Licensee's responsibility to obtain such warnings when flooding is anticipated.

8. Temporary Hydraulic Facilities for Water Handling. If not reviewed and approved as a part of the license application, temporary hydraulic facilities shall be designed by a qualified professional and in accordance with the *Connecticut Guidelines for Soil Erosion and Sediment Control*, the *2004 Connecticut Stormwater Quality Manual*, or the *Department of Transportation's ConnDOT Drainage Manual*, as applicable. Temporary hydraulic facilities may include channels, culverts or bridges which are required for haul roads, channel relocations, culvert installations, bridge construction, temporary roads, or detours.

9. Excavated Materials. Unless otherwise authorized, all excavated material shall be staged and managed in a manner which prevents additional impacts to wetlands and watercourses.

10. Best Management Practices. The Licensee shall not cause or allow pollution of any wetlands or watercourses, including pollution resulting from sedimentation and erosion. In constructing

or maintaining any authorized structure or facility or conducting any authorized activity, or in removing any such structure or facility, the Licensee shall employ best management practices to control storm water discharges, to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and other waters of the State. For purposes of the license, "pollution" means "pollution" as that term is defined by CGS section 22a-423. Best Management Practices include, but are not limited, to practices identified in the *Connecticut Guidelines for Soil Erosion and Sediment Control* as revised, *2004 Connecticut Stormwater Quality Manual*, Department of Transportation's *ConnDOT Drainage Manual* as revised, and the Department of Transportation Standard Specifications as revised.

11. **Work Site Restoration.** Upon completion of any authorized work, the Licensee shall restore all areas impacted by construction, or used as a staging area or accessway in connection with such work, to their condition prior to the commencement of such work.
12. **Inspection.** The Licensee shall allow any representative of the Commissioner to inspect the project location at reasonable times to ensure that work is being or has been conducted in accordance with the terms and conditions of this license.
13. **Change of Use. (Applies only if a use is specified within the License "Project Description")**
 - a. The work specified in the license is authorized solely for the purpose set forth in the license. No change in purpose or use of the authorized work or facilities as set forth in the license may occur without the prior written approval of the Commissioner. The Licensee shall, prior to undertaking or allowing any change in use or purpose from that which is authorized by this license, request permission from the Commissioner for such change. Said request shall be in writing and shall describe the proposed change and the reason for the change.
 - b. A change in the form of ownership of any structure authorized herein from a rental/lease commercial marina to a wholly-owned common interest community or dockominium may constitute a change in purpose as specified in paragraph (a) above.
14. **De Minimis Alteration.** The Licensee shall not deviate from the authorized activity without prior written approval from the Commissioner. The Licensee may request a de minimis change to any authorized structure, facility, or activity. A de minimis alteration means a change in the authorized design, construction or operation that individually and cumulatively has minimal additional environmental impact and does not substantively alter the project as authorized.
 - For diversion activities authorized pursuant to 22a-377(c)-2 of the Regulations of Connecticut State Agencies, a de minimis alteration means an alteration which does not significantly increase the quantity of water diverted or significantly change the capacity to divert water.
15. **Extension Request.** The Licensee may request an extension of the license expiration date. Such request shall be in writing and shall be submitted to the Commissioner at least thirty (30) days prior to the license expiration. Such request shall describe the work done to date, what work still needs to be completed, and the reason for such extension. It shall be the Commissioner's sole discretion to grant or deny such request.

- 16. Compliance Certification.** Not later than 90 days after completion of the authorized work, the Licensee shall prepare and submit to the Commissioner the attached Compliance Certification Form. Such Compliance Certification shall be completed, signed, and sealed by the Licensee and a Connecticut Licensed Design Professional. If non-compliance is indicated on the form, or the Commissioner has reason to believe the activities and/or structures were conducted in non-compliance with the license, the Commissioner may require the Licensee to submit as-built plans as a condition of this license.
- 17. Maintenance.** The Licensee shall maintain all authorized structures or work in optimal condition or shall remove such structures or facility and restore the affected waters to their pre-work condition. Any such maintenance or removal activity shall be conducted in accordance with applicable law and any additional approvals required by law.
- 18. No Work After License Expiration.** Work conducted after the license expiration date is a violation of the license and may subject the licensee to enforcement action, including penalties, as provided by law.
- 19. License Transfer.** The license is not transferable without prior written authorization of the Commissioner. A request to transfer a license shall be submitted in writing and shall describe the proposed transfer and the reason for such transfer. The Licensee's obligations under the license shall not be affected by the passage of title to the license site to any other person or municipality until such time as a transfer is approved by the Commissioner.
- 20. Document Submission.** Any document required to be submitted to the Commissioner under the license or any contact required to be made with the Commissioner shall, unless otherwise specified in writing by the Commissioner, be directed to:

Regulatory Section
Land & Water Resources Division
Department of Energy and Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127
860-424-3019
- 21. Date of Document Submission.** The date of submission to the Commissioner of any document required by the license shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under the license, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three (3) days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in the license, the word "day" as used in the license means calendar day. Any document or action which is required by the license to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or a Connecticut or federal holiday.
- 22. Certification of Documents.** Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under the license shall be signed by the Licensee and by the individual or individuals responsible for actually preparing such

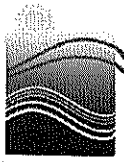
document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense."

- 23. Accuracy of Documentation.** In evaluating the application for the license, the Commissioner has relied on information and data provided by the Licensee and on the Licensee's representations concerning site conditions, design specifications and the proposed work, including but not limited to representations concerning the commercial, public or private nature of the work or structures, the water-dependency of said work or structures, its availability for access by the general public, and the ownership of regulated structures or filled areas. If such information proves to be false, deceptive, incomplete or inaccurate, the license may be modified, suspended or revoked, and any unauthorized activities may be subject to enforcement action.
- 24. Limits of Liability.** In granting the license, the Commissioner has relied on all representations of the Licensee, including information and data provided in support of the Licensee's application. Neither the Licensee's representations nor the issuance of the license shall constitute an assurance by the Commissioner as to the structural integrity, the engineering feasibility or the efficacy of such design.
- 25. Reporting of Violations.** In the event that the Licensee becomes aware that they did not or may not comply, or did not or may not comply on time, with any provision of this license or of any document incorporated into the license, the Licensee shall immediately notify the agency contact specified within the license and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the agency contact, the Licensee shall provide, for the agency's review and written approval, a report including the following information:
- a. the provision(s) of the license that has been violated;
 - b. the date and time the violation(s) was first observed and by whom;
 - c. the cause of the violation(s), if known;
 - d. if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;
 - e. if the violation(s) has not ceased, the anticipated date when it will be corrected;
 - f. steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented; and
 - g. the signatures of the Licensee and of the individual(s) responsible for actually preparing such report.

If the violation occurs outside of normal business hours, the Licensee shall contact the Department of Energy and Environmental Protection Emergency Dispatch at 860-424-3333. The Licensee shall comply with any dates which may be approved in writing by the

Commissioner.

- 26. Revocation/Suspension/Modification.** The license may be revoked, suspended, or modified in accordance with applicable law.
- 27. Other Required Approvals.** License issuance does not relieve the Licensee of their obligations to obtain any other approvals required by applicable federal, state and local law.
- 28. Rights.** The license is subject to and does not derogate any present or future property rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.
- 29. Condition Conflicts.** In the case where a project specific special condition listed on the license differs from, or conflicts with, one of the general conditions listed herein, the project specific special condition language shall prevail. It is the licensee's responsibility to contact the agency contact person listed on the license for clarification if needed prior to conducting any further regulated activities.



Land Record Filing*

To: DO NOT FILE

Signature and

NOTE: Due to the electronic delivery of this license and the legal requirement to have a live signature on this document, the "Land Record Filing" as detailed in General Condition #1 will be sent to the Licensee via U.S. Mail for the Licensee to file with the city/town clerk.

Date:

Subject: _____

License # _____

If you have any questions pertaining to this matter, please contact the Land & Water Resources Division at 860-424-3019.

Return to:

~~Land & Water Resources Division
State of Connecticut
Department of Energy & Environmental Protection
79 Elm Street
Hartford, CT 06106-5127~~

*The Licensee shall file the Land Record Filing on the land records of the municipality in which the subject property is located not later than thirty (30) days after license issuance pursuant to Connecticut General Statutes (CGS) Section 22a-363g. A copy of the Notice with a stamp or other such proof of filing with the municipality shall be submitted to the Commissioner no later than sixty (60) days after license issuance.



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

79 Elm Street • Hartford, CT 06106-5127

www.ct.gov/deep

**Bureau of Water Protection & Land Reuse
Land & Water Resources Division**

Affirmative Action/Equal Opportunity Employer

LWRD Work Commencement Form

To: Regulatory Section
Department of Energy and Environmental Protection
Land & Water Resources Division
79 Elm Street
Hartford, CT 06106-5127

Licensee Name: Mark Sperry
Municipality in which the project is occurring: Town of Waterford
DEEP License No(s): 202015003 and 202015007

CONTRACTOR(s):

1 Name: _____
Address: _____
Telephone: _____
E-mail: _____

2 Name: _____
Address: _____
Telephone: _____
E-mail: _____

3 Name: _____
Address: _____
Telephone: _____
E-mail: _____

**Date Contractor(s) received a copy
of the license and approved plans:** _____

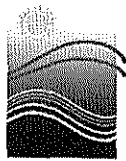
EXPECTED DATE OF COMMENCEMENT OF WORK: _____

EXPECTED DATE OF COMPLETION OF WORK: _____

LICENSEE:

(Signature)

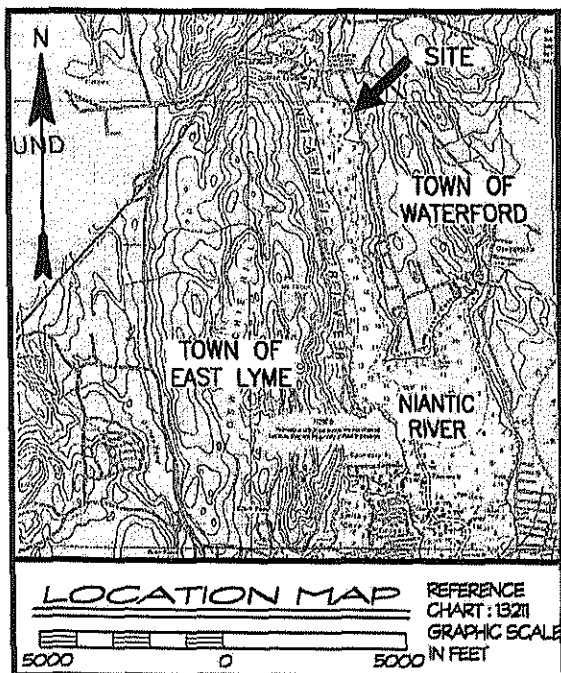
(Date)



Compliance Certification Form

The following certification must be signed by the licensee working in consultation with a Connecticut-licensed design professional and must be submitted to the address indicated at the end of this form within ninety (90) days of completion of the authorized work.

1. Licensee Name: <u>Mark Sperry</u>	
DEEP License Number(s): <u>Town of Waterford</u>	
Municipality in which project is occurring: <u>202015003 and 202015007</u>	
2. Check one:	
(a) ☐ "I certify that the final site conditions and / or structures are in general conformance with the approved site plans". Identify and describe any deviations and attach to this form.	
(b) ☐ "The final site conditions and / or structures are not in general conformance with the approved site plans. The enclosed "as-built" plans note the modifications".	
3. "I understand that any false statement in this certification is punishable as a criminal offence under section 53a-157b of the General Statutes and under any other applicable law."	
_____ Signature of Licensee	_____ Date
_____ Name of Licensee (print or type)	
_____ Signature of CT-Licensed Design Professional	_____ Date
_____ Name of CT-Licensed Design Professional (print or type)	
_____ Professional License Number (if applicable)	Affix Stamp Here
- As-built plans shall include: elevations or tidal datums, as applicable, and structures, including any proposed elevation views and cross sections included in the approved license plans. Such as-built plans shall be the original ones and be signed and sealed by an engineer, surveyor or architect, as applicable, who is licensed in the State of Connecticut. - The Licensee will be notified by staff of the Land and Water Resources Division (LWRD) if further compliance review is necessary. Lack of response by LWRD staff does not imply compliance.	
Submit this completed form to : Regulatory Section Department of Energy and Environmental Protection Land & Water Resources Division 79 Elm Street Hartford, CT 06106-5127	

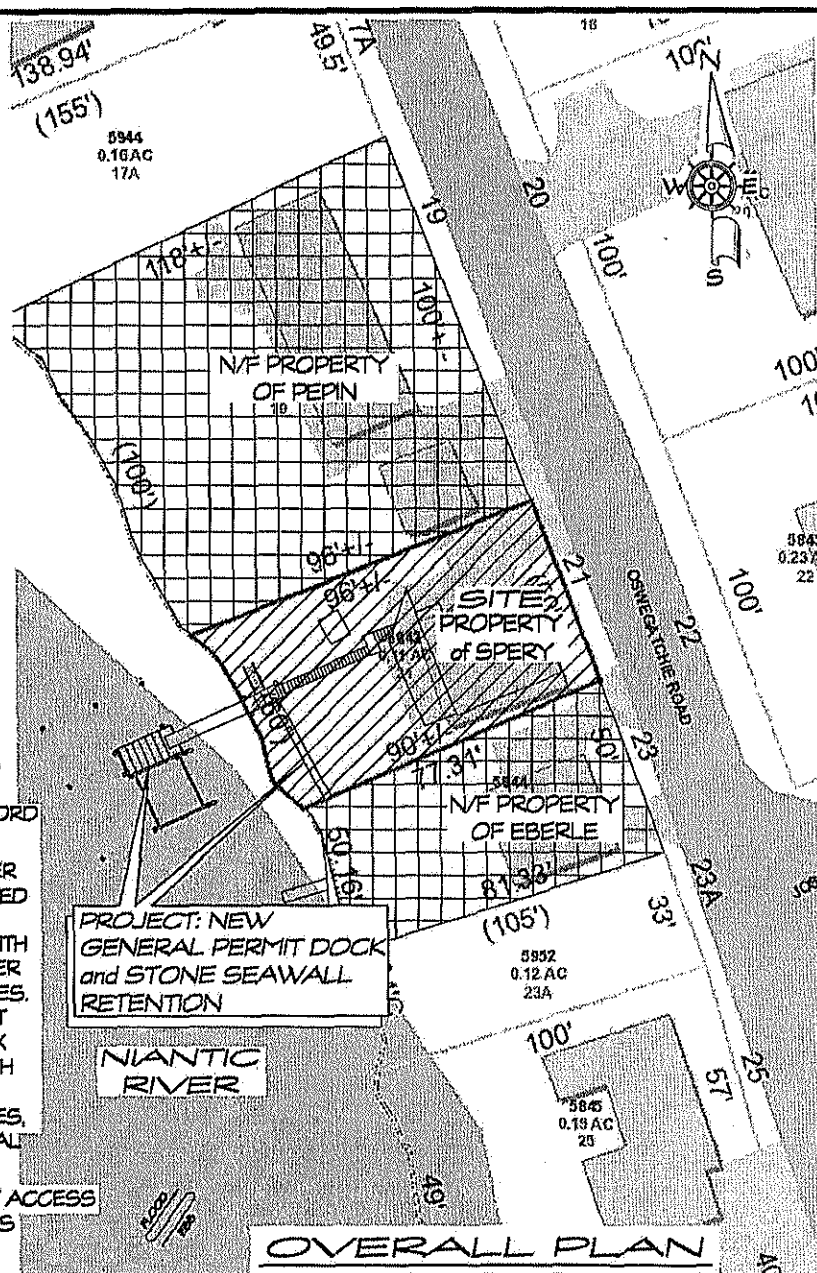


NOTES:

- ELEVATION DATUM IS MEAN LOW WATER (MLW).
- TIDE DATA IS TAKEN FROM 2020 NOAA TIDE TABLES
REFERENCE: NIAN TIC RIVER. C.J.L. IS TAKEN FROM THE COASTAL JURISDICTIONAL LINE FACT SHEET: WATERFORD
- PROJECT DESCRIPTION: RETAIN 30± LF OF SCOUR PROTECTION STONE WALL APPROXIMATELY 15± CY OVER 100± SF. CONSTRUCT A 4-FT WIDE X 11± LF PILE SUPPORTED PIER OF WHICH 9± LF IS WATERWARD OF THE COASTAL JURISDICTION LINE. CONSTRUCT 25-FT WIDE STAIRS WITH RAILS TO THE BEACH LANDWARD OF MEAN HIGH WATER AND WATERWARD OF THE COASTAL JURISDICTION LINES. INSTALL A BATTER BRACED PILE SUPPORTED BOAT LIFT WITH A BOARDING PLATFORM, INSTALL AN 8-FT WIDE X 12.5-LF FLOAT WITH ASSOCIATED RESTRAINT PILES WITH FLOAT SUSPENSION CABLES, A 30-SF RAMP LANDING FLOAT, A HINGED ACCESS RAMP AND FIVE TIE-OFF PILES, WATERWARD OF THE MEAN HIGH WATER AND COASTAL JURISDICTION LINES.
- PROJECT PURPOSE: THE DOCK IS FOR WATERFRONT ACCESS AND RECREATIONAL BOATING THE SEAWALL PROTECTS PRIVATE PROPERTY.
- THESE APPLICATION DRAWINGS REPRESENT A COMPILED OF SURVEYS FOR ENVIRONMENTAL PERMIT PURPOSES. THEY ARE NOT CONSTRUCTION CONTRACT DOCUMENTS. A TOWN BUILDING PERMIT MAY BE REQUIRED.

6. ADJOINING PROPERTY OWNERS:

NORTH:	SOUTH:
WILLIAM B PEPIN	BARBARA H EBERLE
19 OSWEGATCHIE ROAD	23 OSWEGATCHIE ROAD
WATERFORD, CT 06385	WATERFORD, CT 06385



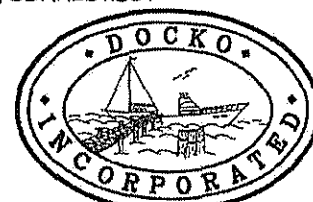
NOTE THE SHORELINE SHOWN ON THIS DRAWING IS BASED ON TOWN GIS PLANIMETRIC INFORMATION AND MAY NOT REFLECT THE CURRENT TIDE LINE LOCATIONS OR FEATURES.

PROJECT: NEW GENERAL PERMIT DOCK and STONE SEAWALL RETENTION
LOCATION: TOWN OF WATERFORD
NEW LONDON COUNTY, CONNECTICUT
WATERWAY: NIAN TIC RIVER
DATE: MAY 26, 2020
APPLICANT: MARK SPERY

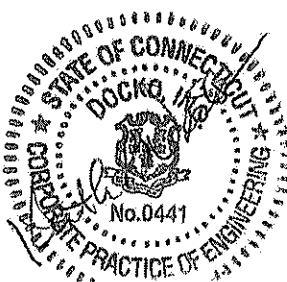
AGENT: SHEET 1 OF 4

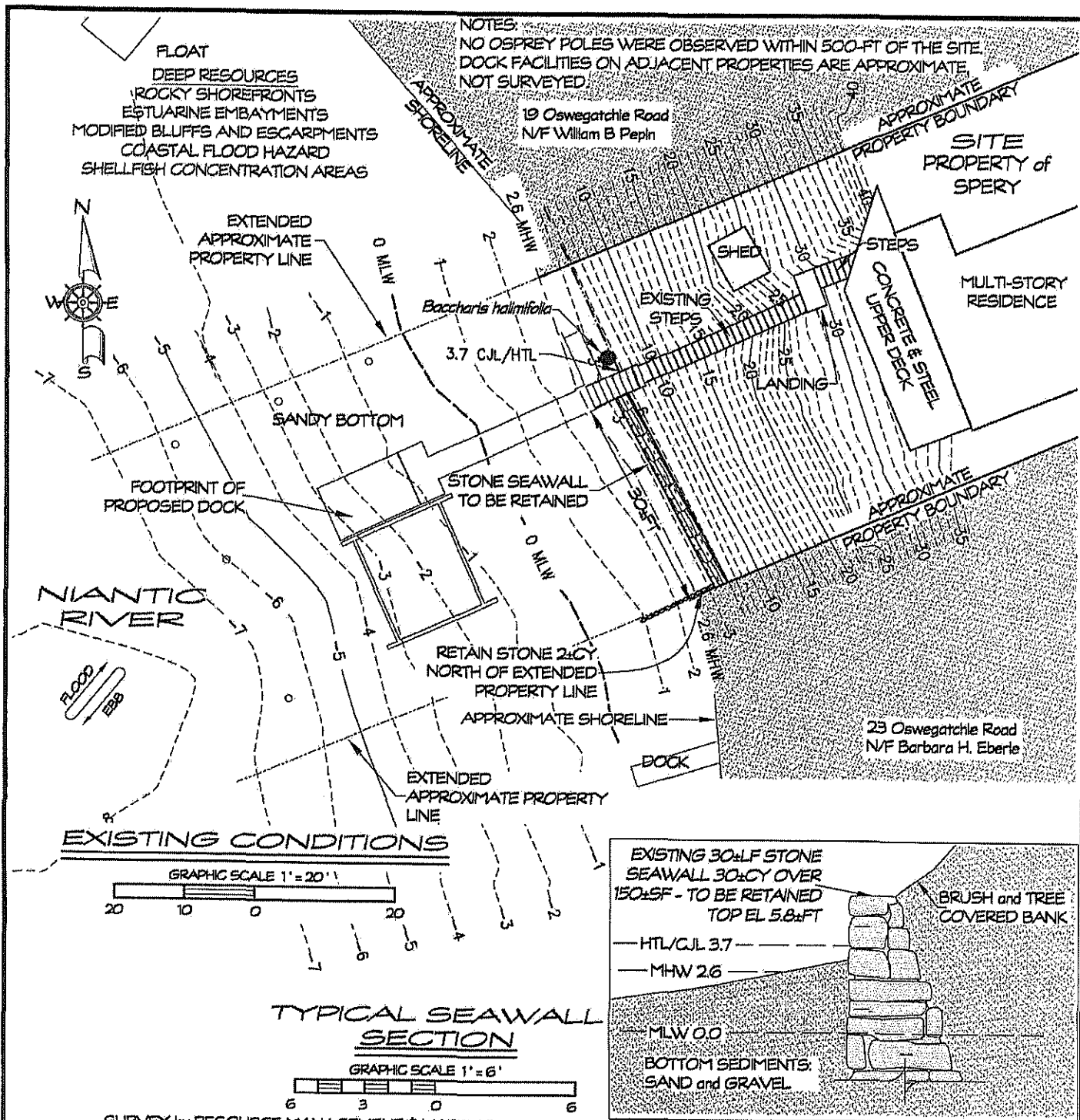
DOCKO, INC.

Keith B. Nelson, PE
Mystic, CT 06355
860 572 8939 FAX 860 572 7569
EMAIL: permits@docko.com

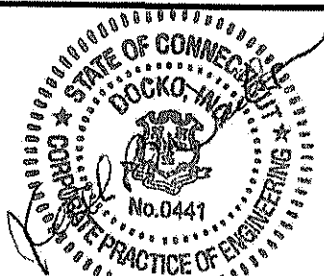


DWG 19-07-3045



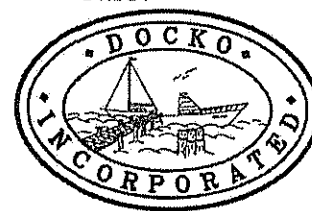


SURVEY by RESOURCE MANAGEMENT & MAPPING
ELEVATIONS ARE BASED ON MEAN LOW WATER (MLW)

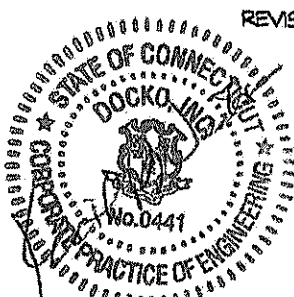
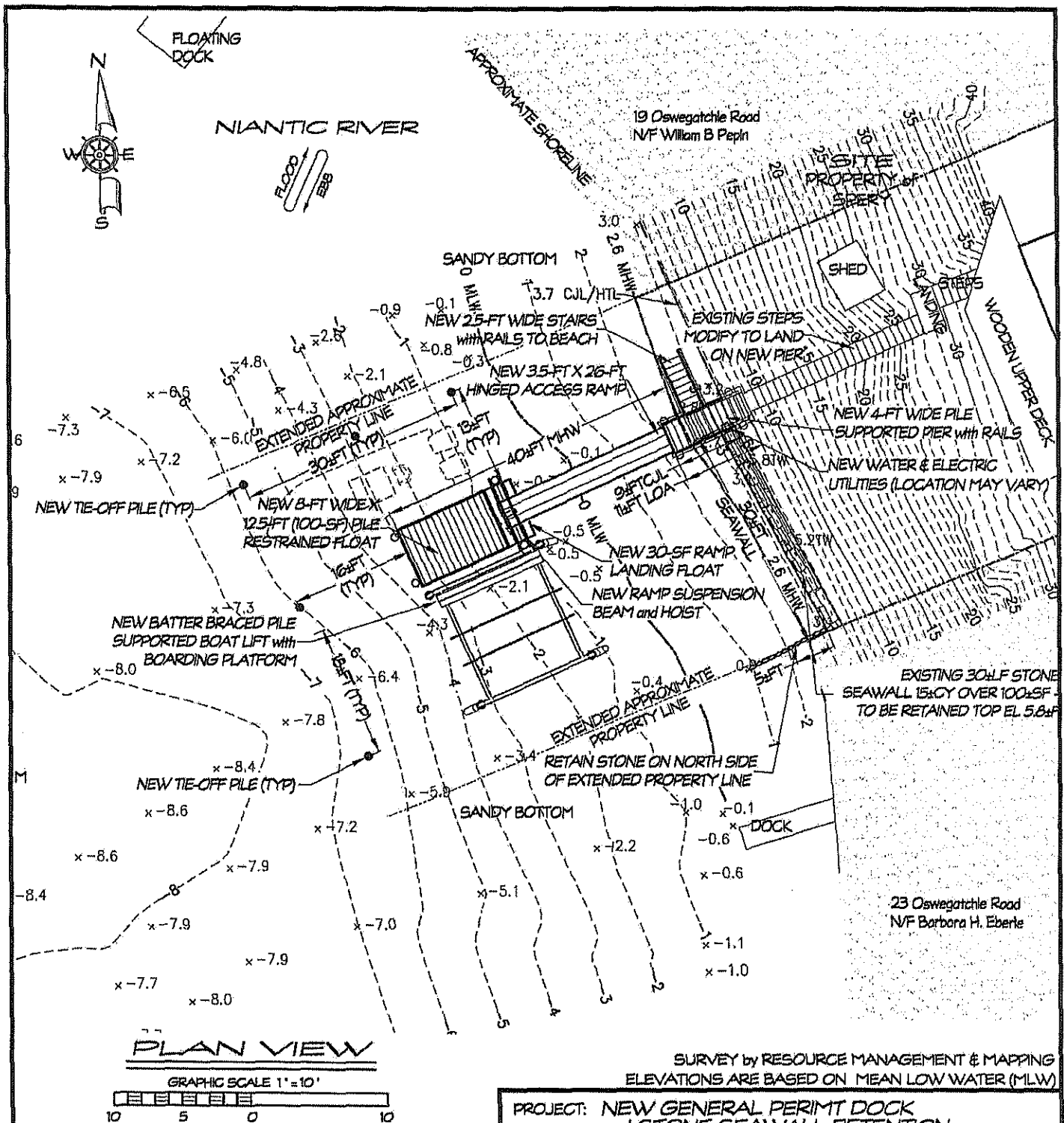


PROJECT: NEW GENERAL PERMIT DOCK
and STONE SEAWALL RETENTION
LOCATION: TOWN OF WATERFORD
NEW LONDON COUNTY, CONNECTICUT
WATERWAY: NIANTIC RIVER
DATE: MAY 26, 2020
APPLICANT: MARK SPERY

AGENT: SHEET 2 OF 4
DOCKO, INC.
Keith B. Neilson, PE
Mystic, CT 06355
860 572 8939 FAX 860 572 7569
EMAIL: office@docko.com



DWG 19-07-3045

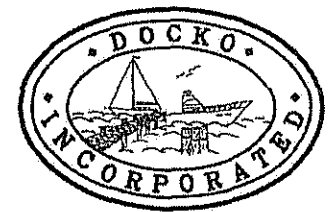


REVISED 12-18-20 DEEP
CALLOUT

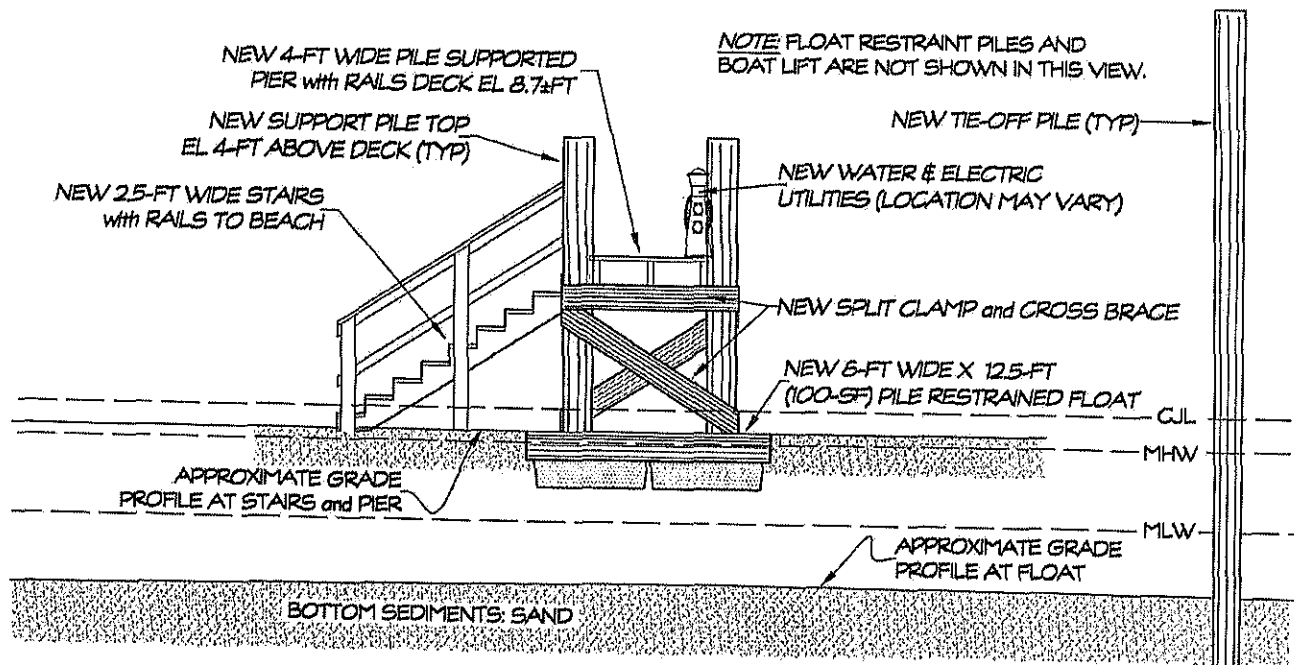
SURVEY by RESOURCE MANAGEMENT & MAPPING
ELEVATIONS ARE BASED ON MEAN LOW WATER (MLW)

PROJECT: NEW GENERAL PERMIT DOCK
and STONE SEAWALL RETENTION
LOCATION: TOWN OF WATERFORD
NEW LONDON COUNTY, CONNECTICUT
WATERWAY: NIAN TIC RIVER
DATE: MAY 26, 2020
APPLICANT: MARK SPERY

AGENT: SHEET 3 OF 4
DOCKO, INC.
Keith B. Nelson, PE
Mystic, CT 06355
860 572 8939 FAX 860 572 7569
EMAIL: office@docko.com

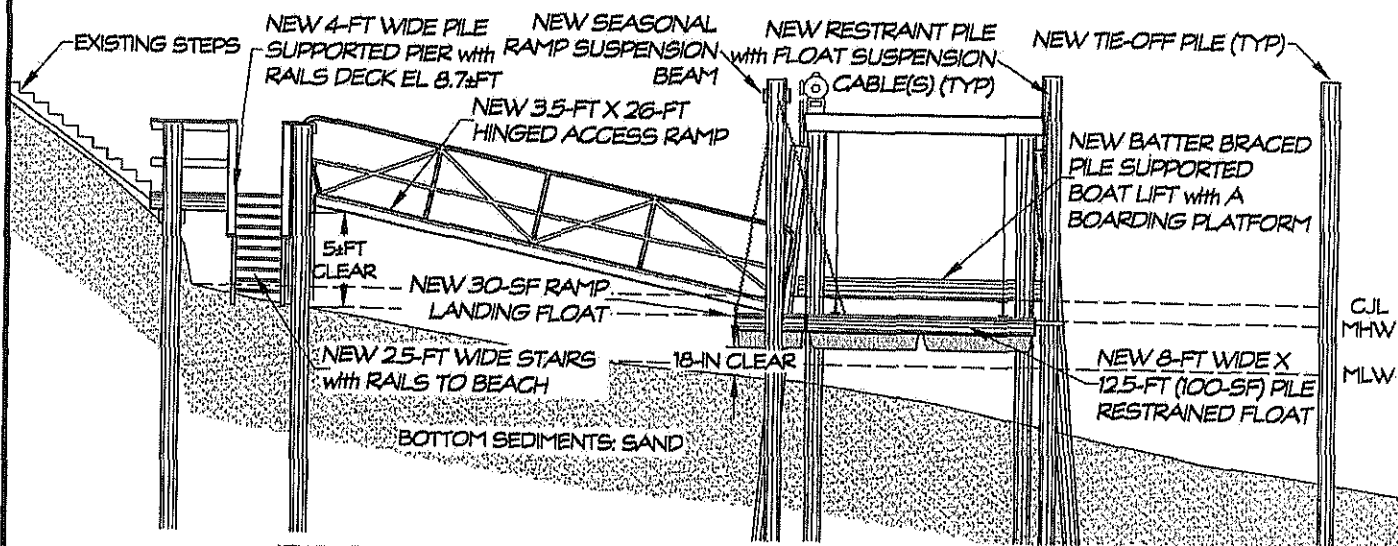
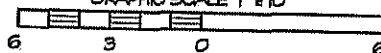


DWG 19-07-3045



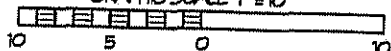
END VIEW

GRAPHIC SCALE 1" = 10'



PROFILE

GRAPHIC SCALE 1" = 10'



ELEVATIONS ARE BASED ON MEAN LOW WATER (MLW)

PROJECT: NEW GENERAL PERMIT DOCK and STONE SEAWALL RETENTION

LOCATION: TOWN OF WATERFORD
NEW LONDON COUNTY, CONNECTICUT

WATERWAY: NANTIC RIVER

DATE: MAY 26, 2020

APPLICANT: MARK SPERY

AGENT: SHEET 4 OF 4
DOCKO, INC.

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DWG 19-07-3045

