



Connecticut Department of Energy & Environmental Protection

Certification of Notice Form - Notice of Application

DEEP USE ONLY
Division
Application No.

I, Mark W. Alexander, certify that (Name of Applicant)

the attached notice represents a true copy of the notice that appeared in Connecticut Post (Name of Newspaper)

on May 22, 2013 (Date)

I also certify that I have provided a copy of said notice to the chief elected municipal official listed below as required by section 22a-6g CGS.

Form with fields for Name of Official (Honorable John A. Harkins), Title of Official (Mayor), Address (2725 Main Street), City/Town (Stratford), State (CT), Zip Code (06615), Signature of Applicant (Mark W. Alexander), Date (6-21-2013), Name of Applicant (Mark W. Alexander), Title (Assistant Planning Director)



## PUBLIC NOTICES

### NOTICE OF PERMIT APPLICATION TOWN OF STRATFORD

Notice is hereby given that the State of Connecticut Department of Transportation ("the applicant") of 2800 Berlin Turnpike, Newington, CT 06131-7546, has submitted to the Department of Energy and Environmental Protection an application under section 22a-32 for a permit to conduct regulated activities in tidal wetlands; section 22a-361 to conduct work in tidal coastal or navigable waters of the state; and 33 U.S.C. 1341 (401 Water Quality Certificate) to conduct an activity which may result in a discharge to certain waters of the state.

The proposed activity will take place at Igor I. Sikorsky Memorial Airport in Stratford, CT. Specifically, the applicant proposes to undertake State Project No. 15-336, which involves construction of improvements to the Runway Safety Area (RSA) of Runway 24, relocation of a section of Main Street (State Route 113) to accommodate the RSA improvements, construction of an Engineered Materials Arresting System (EMAS) to replace the existing blast fence at the end of Runway 24, and rehabilitation of existing Runway 6-24. The proposed activity will potentially affect approximately 1.72 acres of tidal wetlands, 1.15 acres of land capable of supporting tidal vegetation, and approximately 17.4 acres of disturbance below the Coastal Jurisdiction Line (which is 5.9 feet NGVD29 & 4.8 NAVD 88 for the site).

Interested persons may obtain copies of the application from Mr. Mark Alexander, Transportation Assistant Planning Director, Connecticut Department of Transportation, 2800 Berlin Turnpike, PO Box 317546, Newington, CT 06131-7546, telephone 860-594-2931.

This application is available for inspection at the Department of Energy and Environmental Protection, Office of Long Island Sound Programs, 79 Elm Street, Hartford, CT 06106-5127, telephone 860-424-3034, from 8:30 am to 4:30 pm Monday through Friday.

State Project #15-336  
Runway Safety Area Improvements – Igor I. Sikorsky Memorial Airport  
Permit Application for Programs Administered by the CTDEEP Office of Long Island  
Sound Programs (OLISP)

**Part III:**

**1. Describe the proposed regulated work and activities in a detailed narrative, including the number and dimensions of structures.**

**Impact Summary**

All project activities will be conducted on airport and CTDOT properties. Total temporary and permanent impacts to water resources are estimated to be approximately 1.72 acres of tidal wetlands, 1.15 acres of land capable of supporting tidal vegetation, and approximately 17.4 acres of disturbance below the Coastal Jurisdiction Line (CJL) or High Tide Line (HTL), (which is 5.9 feet NGVD29 & 4.8 NAVD 88 for the site). The majority of these vegetated tidal wetland areas are of low quality and are currently maintained as mowed lawn areas, or are dominated by invasive common reed (*Phragmites australis*). However, some higher value tidal wetlands will also be impacted. For a summary of anticipated impacts to tidal wetlands and other jurisdictional resources at the site see Table 1 below.

Impact quantities in square feet and acres are listed in Table 2 below and detailed descriptions of impacts to each tidal wetland follow. The total permanent tidal wetland area impacts are 1.44 acres. A total of 0.28 acres of temporary tidal wetland impacts are also anticipated. Approximately 0.48 acres of the 1.44 permanent impact area will be to tidal wetlands dominated by common reed, and thus are of low value. Also, approximately 0.26 acres of the 1.44 acres of permanent impact will occur to tidal wetlands dominated by cool season grasses (i.e., maintained lawn area in fill soils with minimal tidal influence and therefore low value). In total, 0.74 acres of the 1.44 acres of permanent impact to tidal wetlands are to low value tidal wetlands.

The following text describes in detail each tidal wetland impact area associated with the proposed BDR runway safety area project. The type and purpose of work for each tidal wetland impact area is also included in this section.

There are six tidal wetland areas that will be disturbed by the runway safety improvement activities as described below. Permanent and temporary impacts to tidal wetland resources are anticipated at Wetlands A and D; permanent impacts only are

anticipated at Wetlands B and C; and temporary impacts only are anticipated at Wetland S. See Table 2 for temporary and permanent impact areas for each tidal wetland.

**Table 1: Sikorsky Runway Safety Area Project Water Resource Impacts.**

Impact Areas	Temporary Impacts (acres)	Permanent Impacts (acres)	Total Impacts (acres)
<b>Coastal Jurisdiction Line /High Tide Line Areas (TW up to elev. 5.9)</b>			
Pavement	0.56	2.55	3.11
Upland of Tidal Vegetation Line	6.0	8.28	14.29
<i>Subtotal</i>	<i>6.56</i>	<i>10.83</i>	<i>17.4</i>
<b>Tidal Wetland (TW) Areas</b>			
Tidal Vegetated Wetlands	0.25	1.34	1.59
Tidal Open Water	0.03	0.09	0.12
Tidal Riprap Shore	0.0	0.01	0.01
<i>Subtotal</i>	<i>0.28</i>	<i>1.44</i>	<i>1.72</i>
<b>Land Capable of Supporting Tidal Wetland Line Areas (elev. 5.9 to 6.9)</b>			
Upland of CJL/HTL Line	0.05	1.1	1.15
<b>Grand Total</b>	<b>6.89</b>	<b>13.37</b>	<b>20.26</b>

Note: Impacts include runway and roadway work

### Detailed Wetland Impact Descriptions

The following text describes the type and purpose of work in each tidal wetland impact area. Table 3 provides detailed information on the volume of proposed fill material within each tidal wetland impact area by material type. See Plates TV-1, TV-2, and TV-3 in Attachment I for the locations of all tidal wetland impact areas.

#### Impact Area A-1

Impact Area A-1 is depicted on Plate TV-1, PRO 42, PRO 43 and PRO 45 in Attachment I and consists of permanent impacts to tidal wetlands. Work within Impact Area A-1 will consist of 0.43 acres of permanent impacts to tidal vegetation due to the excavation necessary to construct the tidal channel, excavation for construction of the maintenance path for the tidal channel, construction of a proposed drainage system, stormwater outfall, construction of the proposed cross culvert and headwall under the realigned roadway, construction of the proposed roadway and construction of the proposed shared use bike path. Additional work includes excavation for the placement of all

underground utilities, which will be located within the footprint of the proposed roadway, and excavation for the removal of all existing underground utilities.

The northern end of Impact Area A-1 is maintained by BDR through mowing and is dominated by cool-season grasses such as Kentucky bluegrass (*Poa pratensis*) and tall fescue (*Schedonorus arundinacues*), with scattered clumps of switchgrass (*Panicum virgatum*) and seaside goldenrod (*Solidago sempervirens*). Its lower fringes also have scattered individuals of marsh elder (*Iva frutescens*). The southern portion of Impact Area A-1 is dominated by common reed, with smaller clumps of seaside goldenrod, black grass, and marsh elder. A portion of open water and its banks associated with the existing tidal channel will also be impacted by the proposed activities in Impact Area A-1. As shown in Table 2, the following principal functions will be impacted: floodflow alteration, sediment shoreline stabilization, and wildlife habitat. A secondary function of endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

#### Impact Area A-2

Impact Area A-2 is depicted on Plate TV-1, PRO 43 and PRO 45 in Attachment I and consists of 0.132 acres of temporary impacts to tidal wetlands. Work within Impact Area A-2 will cause temporary impacts to tidal vegetation due to disturbance beyond the cut/fill limits for equipment access for roadway construction, construction of a proposed drainage system stormwater outfall, construction of the proposed shared use bike path, utility installation, new tidal channel construction, soil remediation, and cross-culvert and headwall installation. Vegetation in Impact Area A-2 is dominated by common reed, with smaller clumps of seaside goldenrod, black grass, and marsh elder. This temporary impact area will be ~~re-graded~~ restored to existing elevations after construction activities have been completed, with a layer of ~~standard topsoil~~ organic soil material (see wetland soil criteria in Wetland Creation specification in Attachment M9 – Mitigation Checklist), and seeded with the ~~Shoreline Conservation~~ Seed Mixture (see specification in Attachment M9 - Mitigation Checklist). As shown in Table 2, the following principal functions will be impacted: floodflow alteration, sediment shoreline stabilization, and wildlife habitat. A secondary function of endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

#### Impact Area A-3

Impact Area A-3 is depicted on Plate TV-1 and PRO-45 in Attachment I and consists of 0.01 acres of temporary impacts to tidal wetlands. Work within Impact Area A-3 will cause temporary impacts to tidal vegetation due to disturbance beyond the cut/fill limits for equipment access for construction of the new tidal channel. Vegetation in

Impact Area A-3 is dominated by common reed. This temporary impact area will be re-~~graded~~stored to existing elevations after construction activities have been completed, with a layer of organic soil material (see wetland soil criteria in Wetland Creation specification in Attachment M9 – Mitigation Checklist)~~standard topsoil~~, and seeded with the Shoreline–Conservation Seed Mixture (see specification in Attachment M9 – Mitigation Checklist). As shown in Table 2, the following principal functions will be impacted: floodflow alteration, sediment shoreline stabilization, and wildlife habitat. A secondary function of endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

#### Impact Area A-4

Impact Area A-4 is depicted on Plate TV-1 and PRO-45 in Attachment I and consists of 0.056 acres of permanent impacts to tidal wetlands. Work within Impact Area A-4 will consist of permanent impacts to tidal vegetation due to the excavation necessary to construct the tidal channel, excavation for construction of the maintenance path for the tidal channel, and installation of rounded stone rip rap in the bottom of the channel. Vegetation in Impact Area A-4 is dominated by common reed. As shown in Table 2, the following principal functions will be impacted: floodflow alteration, sediment shoreline stabilization, and wildlife habitat. A secondary function of endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

#### Impact Area A-5

Impact Area A-5 is depicted on Plate TV-1 and PRO-45 in Attachment I and consists of 0.005 acres of temporary impacts to tidal wetlands. Work within Impact Area A-5 will cause temporary impacts to tidal vegetation due to disturbance beyond the cut/fill limits for equipment access for construction of the new tidal channel. Vegetation in Impact Area A-5 is dominated by common reed. This temporary impact area will be re-~~graded~~stored to existing elevations after construction activities have been completed, with a layer of organic soil material (see wetland soil criteria in Wetland Creation specification in Attachment M9 – Mitigation Checklist)~~standard topsoil~~, and seeded with the Shoreline–Conservation Seed Mixture (see specification in Attachment M9 – Mitigation Checklist). As shown in Table 2, the following principal functions will be impacted: floodflow alteration, sediment shoreline stabilization, and wildlife habitat. A secondary function of endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

#### Impact Area A-6

Impact Area A-6 is depicted on Plate TV-1 and PRO-46 in Attachment I and consists of 0.118 acres of permanent impacts to tidal wetlands. Work within Impact Area A-6 will consist of permanent impacts to tidal vegetation due to the excavation necessary to construct the tidal channel, excavation for construction of the maintenance path for the tidal channel, and installation of rounded stone rip rap in the bottom of the channel. The eastern portion of this impact area consists of the connection point of the proposed new tidal channel to the Marine Basin. Impact Area A-6 is dominated by cool-season grasses such as Kentucky bluegrass (*Poa pratensis*) and tall fescue (*Schedonorus arundinacues*), with scattered clumps of switchgrass (*Panicum virgatum*), and seaside goldenrod (*Solidago sempervirens*). The eastern portion of Impact Area A-6 is located along the fringe of the Marine Basin, and a small shelf saltmarsh cordgrass (*Spartina alterniflora*) (approximately 129 sf) will be permanently impacted. However, the proposed new tidal channel will provide a greater area for re-colonization by spartina, offsetting this impact.

As shown in Table 2, the following principal functions will be impacted: floodflow alteration, sediment shoreline stabilization, and wildlife habitat. A secondary function of endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

#### Impact Area A-7

Impact Area A-7 is depicted on Plate TV-1 and PRO-46 in Attachment I and consists of 0.05 acres of temporary impacts to tidal wetlands. Work within Impact Area A-7 will cause temporary impacts to tidal vegetation due to disturbance beyond the cut/fill limits for equipment access for construction of the new tidal channel. Work will also include small areas of temporary disturbance within the Marine Basin at the point where the proposed new tidal channel connects to the Marine Basin, for equipment access. The vegetation in Impact Area A-7 is the same as vegetation with Impact Area A-6 above. A small shelf of saltmarsh cordgrass (approximately 180 sf) will also be temporarily impacted in the Marine Basin. This temporary impact area will be restored to meet existing grades within the non-open water areas after construction activities have been completed, with a layer of organic soil material (see wetland soil criteria in Wetland Creation specification in Attachment M9 – Mitigation Checklist) standard topsoil, and seeded with the Shoreline Conservation Seed Mixture (see specification in Attachment M9 - Mitigation Checklist). Spartina plugs will also be provided in this area between an elevation of 0.0 and the MHW elevation. Within the open water area of temporary impact (below MLW), the Marine Basin bottom will be restored to meet existing grades; no topsoil or plantings will be provided, as it is anticipated that this area will re-colonize over time with sub-tidal species. As shown in Table 2, the following principal functions will be impacted: floodflow alteration, sediment shoreline

stabilization, and wildlife habitat. A secondary function of endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

#### Impact Area A-8

Impact Area A-8 is depicted on Plate TV-1 and PRO-60 in Attachment I and consists of 0.079 acres of temporary impacts to tidal wetlands. Work within Impact Area A-8 will cause temporary impacts to tidal vegetation due to disturbance beyond the cut/fill limits for equipment access for removal of the existing driveway culvert, excavation and removal of an existing, non-functioning driveway culvert, and hand removal of a thin layer of fill material from existing tidal wetlands on either side of the existing driveway. The vegetation in Impact Area A-8 along the side of the driveway and on the channel bank is dominated by black grass and common reed. The majority of the wetland impact is within open water and existing non-vegetated driveway area.

As shown in Table 2, the following principal functions will be impacted: floodflow alteration, sediment/shoreline stabilization, and wildlife habitat. A secondary function of endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions. The small vegetated areas to be impacted by the culvert removal and channel bank re-grading will likely re-establish with tidal vegetation in the post-condition due to the low elevations of these areas (see Plate PRO-60). A layer of organic soil material (see wetland soil criteria in Wetland Creation specification in Attachment M9 – Mitigation Checklist) will be placed in the channel and seeded with the Conservation Seed Mixture (see specification in Attachment M9 - Mitigation Checklist). The hand-raking within the existing vegetated tidal wetlands to either side of the driveway will not impact the tidal vegetation – the intent of this work is to rake out driveway material that has “spilled over” into the adjacent wetlands during previous driveway maintenance grading. This raking will not remove or disturb the existing vegetation or soil, just “uncover” it so it will function again.

#### Impact Area B-1

Impact Area B-1 is depicted on Plate TV-1 and 42 in Attachment I and consists of 0.049 acres of permanent impacts to tidal wetlands. Work within Impact Area B-1 will consist of permanent impacts to tidal vegetation due to construction of the new tidal channel on the south side of the proposed realignment of Route 113, construction of the proposed roadway, installation of three new 22"x36" RCP Arch stormwater pipes and an endwall (see Plate PRO-42 in Attachment I), removal of the existing roadway embankment, and excavation for the removal of existing underground utilities. The vegetation within Impact Area B-1 is dominated by common reed and sparse areas of

black grass. A small area of open water will also be impacted by the proposed activities in Impact Area B-1.

Wetland B supports sub-populations of the state-endangered salt pond grass (*Leptochloa fusca* spp. *Fascicularis*) and the state species of special concern orache (*Atriplex glabriuscula*), however these sub-populations are not located within Impact Area B-1, and will not be impacted. As shown in Table 2, the following principal functions will be impacted: floodflow alteration and wildlife habitat. Secondary functions of sediment/toxicant retention and endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

#### Impact Area B-2

Impact Area B-2 is depicted on Plate TV-1, PRO-42 and PRO-44 in Attachment I and consists of 0.301 acres of permanent impacts to tidal wetlands. Work within Impact Area B-2 will consist of permanent impacts to tidal vegetation due to construction of the new tidal channel on the south side of the proposed realignment of Route 113, construction of the proposed cross culvert under the roadway, construction of the proposed roadway, removal of the existing roadway embankment, installation of a new security fence, and excavation for the removal of existing underground utilities. The vegetation within Impact Area B-2 is dominated by common reed, with smaller-remnant areas of smooth cordgrass close to the ditch and saltmeadow cordgrass (*Spartina patens*) further from the ditch. As shown in Table 2, the following principal functions will be impacted: floodflow alteration and wildlife habitat. Secondary functions of sediment/toxicant retention and endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

Wetland B supports sub-populations of the state-endangered salt pond grass (*Leptochloa fusca* spp. *Fascicularis*) and the state species of special concern orache (*Atriplex glabriuscula*). One of these sub-populations is located within Impact Area B-2, along the edge of existing Route 113, and will not be impacted by the project.

#### Impact Area C-1

Impact Area C-1 is depicted on Plate TV-2, PRO-17 and PRO-59 in Attachment I and consists of 0.062 acres of permanent impacts to tidal wetlands. Work within Impact Area C-1 will consist of permanent impacts to tidal vegetation due to grading and filling to eliminate open water ponding in the RSA, and to provide a base material sufficient to support an aircraft within the RSA. Vegetation in Impact Area C-1 is dominated by chairmaker's rush (*Scirpus americana*) [also *Schoenoplectus pungens*]. It is the single

most dominant species in this wetland, occupying as a near monotypic dominant. As shown in Table 2, the following principal function will be impacted: groundwater recharge. Secondary functions of wildlife habitat and endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

#### Impact Area D-1

Impact Area D-1 is depicted on Plate TV-2, PRO-16 and PRO-58 in Attachment I and consists of 0.418 acres of permanent impacts to tidal wetlands. Work within Impact Area D-1 will consist of permanent impacts to tidal vegetation due to the excavation necessary to remove existing bituminous pavement from Runway 6-24, and grading and filling to eliminate open water ponding in the RSA, and to provide a base material sufficient to support an aircraft within the RSA. Vegetation within Impact Area D-1 is dominated by chairmaker's rush (*Scirpus americana*) [also *Schoenoplectus pungens*]. It is the single most dominant species in this portion of the wetland, occupying as a near monotypic dominant. Other species within Impact Area D-1, or along its periphery, include: bent grass (*Agrostis palustris*) [also *Agrostis stolonifera*]; cypress panicgrass (*Dichanthelium dichotomum*); path rush (*Juncus tenuis*); tapertip rush (*Juncus acuminatus*); lance-leaved violet (*Viola lanceolata*); marsh seedbox (*Ludwigia palustris*); umbrella sedge (*Cyperus* sp.). As shown in Table 2, the following principal functions will be impacted: floodflow alteration and wildlife habitat. Secondary functions of sediment toxicant retention and endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

#### Impact Area D-2

Impact Area D-2 is depicted on Plate TV-2 and PRO-58 in Attachment I and consists of 0.002 acres of temporary impacts to tidal wetlands. Work within Impact Area D-2 will cause temporary impacts to tidal vegetation due to disturbance beyond the cut/fill limits for equipment access for re-grading of the RSA. Vegetation within Impact Area D-2 is the same as vegetation within Impact Area D-1 above. This temporary impact area will be re-graded to existing elevations after construction activities have been completed, with a layer of organic soil material (see wetland soil criteria in Wetland Creation specification in Attachment M9 – Mitigation Checklist) standard topsoil, and seeded with the Shoreline Conservation Seed Mixture (see specification in Attachment M9 - Mitigation Checklist). As shown in Table 2, the following principal functions will be impacted: floodflow alteration and wildlife habitat. Secondary functions of sediment toxicant retention and endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

### Impact Area S-1

Impact Area S-1 is depicted on Plate TV-3 and PRO-30 in Attachment I and consists of 0.004 acres of temporary impacts to tidal wetlands. Work within Impact Area S-1 will cause temporary impacts to tidal vegetation due to disturbance beyond the cut/fill limits for equipment access for removal of existing bituminous pavement from Taxiway H. Vegetation within Impact Area S-1 is dominated by yellow nutsedge, green bulrush, and mowed goldenrod. Other species include black willow, and redosier dogwood. This temporary impact area will be re-graded to existing elevations after construction activities have been completed, with a layer of organic soil material (see wetland soil criteria in Wetland Creation specification in Attachment M9 - Mitigation Checklist) ~~standard topsoil~~, and seeded with the Shoreline Conservation Seed Mixture (see specification in Attachment M9 - Mitigation Checklist). As shown in Table 2, the following principal functions will be impacted: floodflow alteration, sediment shoreline stabilization, and wildlife habitat. A secondary function of endangered species will also be impacted. More detail in wetland functions and values impacts is provided following the detailed wetland impact descriptions.

### Summary of Wetland Type and Functions and Values Impacted

Wetland classifications for each wetland impact area are listed in Table 2. The dominant wetland type is estuarine intertidal emergent (E2EM) for all wetland impact areas. Therefore, all wetland impacts, temporary and permanent (1.72 acres), will occur to E2EM class wetland resources.

Of the 13 functions and values in the U.S. Army Corps of Engineers (Corps) Highway Methodology Supplement (1999), ~~six~~ five (5) functions will be impacted within the project wetlands: groundwater recharge/discharge, floodflow alteration, sediment/toxicant retention, sediment/shoreline stabilization and wildlife habitat. One (1) of the wetland values was observed within the project wetlands: threatened or endangered species habitat. The principal (in bold) and secondary functions and values for each wetland impact area are listed in Table 2.

The principal functions and values of the wetland impact areas were tabulated and the total permanent impact areas of each function were determined for the project. Of the four principal functions, permanent impacts to the wildlife habitat and floodflow alteration functions were the greatest, with 1.37 ac distributed. Impacts to sediment/shoreline stabilization functions were the second highest with 0.6 acres disturbed. The groundwater recharge/discharge function had lowest impact of 0.06 ac of impact.

The combined project impacts to wetlands will be mitigated through restoration and enhancement of two wetland mitigation areas, where a greater range of wetland functions-values can be sustained in perpetuity. This mitigation plan has been developed to address the impacts to tidal wetlands and their corresponding functions and values. The Mitigation Checklist in Attachment M9 provides greater detail on the proposed mitigation for this project.