STAFF EXHIBIT LIST
Inland Wetlands Commission Public Hearing June 18,2020

Applicant/Owner: **Asif Choudhry (1499 Rte. 85) and Deer Run Stables, LLC (1505 Rte. 85)**

Proposed Action: **An application for work within a regulated area in conjunction with the development of a gasoline station/convenience store.**

Public Hearing: **June 18, 2020**

Staff Exhibits:

1. Copy of legal ad published on the Town Website on March 4, 2020
2. Application with maps for Deer Run Stable, LLC for the property located at 1499 and 1505 Route 85 revised to 3/11/2020
3. Comments from the following agencies on revised 3/11/2020 plan
    a. Town Engineer
    b. Fire Marshal
    c. Building Department
    d. Uncas Health
4. Copy of Letter sent to Applicant regarding Public Hearing on May 26, 2020
5. Extension Letters from Attorney Heller to Commission dated
    a. 1-14-2020
    b. 2-18-2020
    c. 3-17-2020
6. Copy of the Legal Ad for original Public Hearing Date published on March 6, 2020 and March 13, 2020 in the Day paper
7. Copy of Letter sent to Applicant regarding Public Hearing on Feb 27, 2020
8. Cancelation notice of March 19, 2020 meeting
9. Executive order 7B Section 1- Virtual Meetings
10. Executive order 7I Section 19- Application timeline extension
11. Staff Report dated December 5, 2019

APPLICATION OF DEER RUN STABLE, LLC

APPLICANT PUBLIC HEARING EXHIBIT LIST

1. Town of Montville Inland/Wetlands Application dated November 18, 2019.

2. Inland Wetlands Application Checklist.

3. Erosion and Sediment Control Checklist.

4. List of Abutting Property Owners.

5. Narrative Description and Construction Sequence relative to the development of a commercial site on property located at 1499 and 1505 Hartford-New London Turnpike (Connecticut Route 85), Montville, Connecticut for a gasoline/convenience store facility.

6. Property owner authorization of Asif Choudhry.

7. Property owner authorization of Deer Run Stable, LLC.

8. Statewide Inland Wetlands & Watercourses Activity Reporting Form.

9. Notice to City of New London Department of Public Utilities dated November 20, 2019.

10. Notice to State of Connecticut Commissioner of Public Health dated November 20, 2019.

11. Report of Demian A. Sorrentino, Certified Planner and Soil Scientist dated November 19, 2019.

12. Project drainage analysis prepared by Angus McDonald/Gary Sharpe & Associates, Inc. dated October 1, 2019.

13. Application submittal letter to Montville Inland Wetlands and Watercourses Commission from Heller, Heller & McCoy dated November 20, 2019.

14. Site Development Plan prepared for Deer Run Stable, LLC 1499 & 1505 Hartford New London Turnpike Oakdale/Montville, Connecticut Date: January 10, 2019 Revisions: 1-23-20 Updated, 2-20-20 Updated, 2-27-20 Per Town Planner, 3-11-20.

15. Plans entitled “Underground Storage Tanks Installation Proposed Filling Station 1499 & 1505 Hartford New London Turnpike Oakdale, CT 06370” dated 12/17/2019 prepared by CMG Environmental Services Engineering Services.

16. Review letter of CLA Engineers, Inc. dated December 11, 2019.

APPLICATION OF DEER RUN STABLE, LLC

APPLICANT PUBLIC HEARING EXHIBIT LIST

17. E-mail from Mark Smith to Harry Heller dated December 18, 2019 listing the leak detection safety, monitoring and redundancy features contained in the design of the petroleum storage, transmission and dispensing system.

18. Staff Report dated December 5, 2019.

19. Letter from Heller, Heller & McCoy to Montville Inland Wetlands and Watercourses Commission dated January 14, 2020.

20. Comments from Uncas Health District dated February 11, 2020.

21. Letter from Heller, Heller & McCoy to Montville Inland Wetlands and Watercourses Commission dated February 18, 2020.

22. Review comment correspondence from CLA Engineers, Inc. dated February 17, 2020.

23. Notice of Public Hearing to be held on March 19, 2020 which was published in The Day on March 6, 2020 and March 13, 2020.

24. Correspondence from Montville Inland Wetlands and Watercourses Commission to Attorney Harry B. Heller dated February 27, 2020.

25. Notice of Public Hearing submitted by Heller, Heller & McCoy to the City of New London Department of Public Utilities dated March 2, 2020 with return receipt.

26. Notice of Public Hearing submitted by Heller, Heller & McCoy to the State of Connecticut Commissioner of Public Health dated March 2, 2020 with return receipt.

27. Letter from Heller, Heller & McCoy to Montville Inland Wetlands and Watercourses Commission dated March 17, 2020.

28. Review comments of CLA Engineers, Inc. dated March 20, 2020.

29. Notice of Public Hearing letter to State of Connecticut Commissioner of Public Health dated June 2, 2020 with return receipt.

30. Notice of Public Hearing letter to City of New London Department of Public Utilities dated June 2, 2020 with return receipt.

31. Notice of Public Hearing to be held on June 18, 2020 posted on the Montville website on June 4, 2020.

APPLICATION OF DEER RUN STABLE, LLC

APPLICANT PUBLIC HEARING EXHIBIT LIST

32. All agendas.

33. Minutes of all meetings at which the application was discussed.

34. Review comments of Uncas Health District dated April 10, 2020.

35. Building Department review comments revised February 27, 2020 and approved April 4, 2020.

36. Fire Marshal review comments dated April 30, 2020.

37. Report of Demian A. Sorrentino, Certified Planner and Soil Scientist dated June 5, 2020

38. Site Development Plan Draiange Report (6-16-20)- Developed Conditions

LEGAL NOTICE
TOWN OF MONTVILLE
INLAND WETLANDS COMMISSION
NOTICE OF PUBLIC HEARING

The Town of Montville will be utilizing a virtual GoToWebinar service for this meeting.

Please register to attend the meeting at:
https://attendee.gotowebinar.com/register/8187545628375149069
After registering, you will receive a confirmation email containing information about joining the webinar.

or by **telephone** or **VoIP**: **1 (213) 929-4212** at the time of the meeting
Access Code: **710-085-565**
Applicable toll charges may apply if connecting via telephone

or via the **GoToWebinar App** on your **smartphone** or **tablet**:
Webinar ID: **304-544-851**

On March 14, 2020 Governor Ned Lamont issued an Executive Order 7B suspending in-person open meeting requirements, and to hold such meetings or proceedings remotely by conference call, videoconference or other technology.

Link: https://portal.ct.gov/-/media/Office-of-the-Governor/Executive-Orders/Lamont- Executive-Orders/Executive-Order-No-7B.pdf

For all publicly broadcasted meetings, public comment on agenda items or topics in accordance with the Town charter may be submitted in writing in advance or by live audio via GoToWebinar.

Written comments must be emailed to the Town Clerks Office at townclerk@montville-ct.org at least 1 working day in advance (if the meeting is on a Monday the questions must be submitted by close of business the previous Friday).

Written comments may not be read in their entirety, but rather similar messages may be aggregated or paraphrased for submission to the Inland Wetlands Commission.

Live audio comments may be made via GoToWebinar by registering at the web address or calling from your telephone or computer mic & speakers (VoIP) noted above.

Comments will only be accepted at times designated for public comment by the Chair of the meeting. The Inland Wetlands Commission Rules of Procedure, decorum, timeliness and suitability shall be followed and enforced in the same manner as if the meeting were held in person.

The Montville Inland Wetlands Commission will hold Public Hearings on June 18, 2020 at 7:00 pm by virtual meeting on the following application:

a. **219IWC6 – 1499 & 1505 Rte. 85, (Map 5, Lot 23A & 24A) – Applicant: Deer Run Stable LLC, Owner: Asif Choudhry & Deer Run Stable LLC,** An application for work within a regulated area in conjunction with the development of a gasoline station/convenience store.

The application and map are attached to this Public Hearing Notice.

Dated at Montville, CT this 15th day of June, 2020

Douglas Brush, Chairman

To be published in the *Montville Town Clerks Office* on June 15, 2020

Inland Wetlands Commission Notice of Public Hearings

6/4/2020

LEGAL NOTICE TOWN OF MONTVILLE INLAND WETLANDS COMMISSION NOTICE OF PUBLIC HEARING for 6/18/2020. Click here for more information!

Town of Montville Inland/Wetlands Application #219IWC Co

APPLICANT INSTRUCTIONS: All applicants must complete this application form. The Commission will notify the applicant of any additional information that may be required and will schedule a Public Hearing if necessary. In addition to the information required, the applicant may submit other supporting facts or documents which may assist the Commission in its evaluation of this proposal. PLEASE SUBMIT THREE COPIES OF THE APPLICATION AND THREE COPIES OF ANY OTHER DOCUMENTS AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO THE MEETING.

I. Applicant Information

Name Deer Run Stable, LLC Address 96 Route 32, Franklin, Connecticut 06254

Phone (860) 287-7181 Cell (860) 287-7181 FAX n/a

EMAIL: asifman500@gmail.com

Interest in Property ☒Owner ☐Option Holder ☒Developer ☐Harvester ☐Other

☒ **Attach a Written Consent to the proposed activity from the owner if applicant is not the owner** ☒Required ☐Not Required

II. Owner Information

Name Asif Choudhry (1499 Hartford New London Turnpike) and Deer Run Stable, LLC (1505 Hartford New London Turnpike) Address 96 Route 32, Franklin, Connecticut 06254

Phone (860) 287-7181 Fax n/a Email asifman500@gmail.com

Cell (860) 287-7181

III. Engineer Information

Contact Stuart J. Fairbank

Firm Angus, McDonald, Gary Sharpe & Associates, Inc. Address 233 Boston Post Road, Old Saybrook, Connecticut 06475

Phone (860) 388-4671 Fax (860) 388-3962 Email almgps-sjf@snet.net

Cell n/a

IV. Attorney Information

Contact Harry B. Heller

Firm Heller, Heller & McCoy Address 736 Norwich-New London Turnpike, Uncasville, Connecticut 06382

Phone (860) 848-1248 Fax (860) 848-4003 Email hellermccoy@sbcglobal.net

Cell (860) 961-6073

RECEIVED
NOV 20 2019
By

IV. Property Information

Address of Proposed Activity 1499 and 1505 Hartford New London Turnpike (Route 85)

Assessor's Map and Lot Number Map 005, Lots 023-00A and 024-00A

Land Records/Deed Volume: 581/638 Page: 49/521 Acreage of Property 2.48 Zoning C-1

V. Provide a List of the Names and Mailing Addresses of Adjacent Property Owners (Attach Sheet)

See attached list of abutting property owners submitted herewith

VI. Wetlands and Watercourse Information

Total Acreage of Wetlands on the site 0.68 acres

Wetland Disturbance Area 0 sq ft

Upland Review Disturbance Area 16,974 sq ft

Have the Wetlands Been Flagged ☒Yes ☐No Year 2018

Name of Soil Scientist Richard Snarski

Linear Feet of Watercourse Disturbance 0 ft

Creation of New Wetlands 0 sq ft

VII. Project Description

☐Subdivision ☐ Review No Regulated Activity ☐ Permit Modification

☒Regulated Activity ☐ Permitted Use as of Right ☐ Permit Renewal

Activity will involve (Check all that apply)

☐ Alteration ☒ Construction ☐ Pollution ☒ Stormwater Discharge

☐ Deposition of Material _____cubic yards

☐ Removal of Material _____cubic yards

See attached checklist of items that are to be included on Plan and supplemental data.

A) Attach a Detailed Plan of the Proposal and indicate Plan Title and Date.

"Site Development Plan Prepared For Deer Run Stable, LLC 1499 & 1505 Hartford New London Turnpike Oakdale/Montville, Connecticut Date: July 10, 2019 Scale: 1" = 20' Sheets 1 of 7 to 7 of 7 Job No. 186333 Angus McDonald Gary Sharpe & Associates, Inc. P.O. Box 608, 233 Boston Post Road Old Saybrook, Connecticut 06475 Tel. (860) 388-4671 Fax (860) 388-3962".

B) Provide Brief Description of the Proposed Project on separate piece of paper. Instructions attached.

Property is currently improved with two (2) single family dwelling houses and appurtenant facilities as delineated on Sheet 1 of 7 of the Site Development Plan. The Applicant proposes to raze both houses and redevelop the property for a gasoline/convenience store facility, a use permitted by special permit in the C-1 Zoning District as contemplated by the Site Development Plan, Sheet 2 of 7. A more complete description of the project development and use is incorporated in the Narrative submitted with this Application.

C) List Titles and dates of all documentation which will be included and submitted with this application and attach to application. Documents should include, but are not limited to; Project Proposal, Soil Scientist Reports, and Drainage Calculations.

(i) Inland Wetlands & Watercourses Narrative for the project prepared by Demian A. Sorrentino, AICP, C.S.S. Certified Planner and Soil Scientist dated November 19, 2019.

(ii) Plans entitled "Site Development Plan Prepared For Deer Run Stable, LLC 1499 & 1505 Hartford New London Turnpike Oakdale/Montville, Connecticut Date: July 10, 2019 Scale: 1" = 20' Sheets 1 of 7 to 7 of 7 Job No. 186333 Angus McDonal Gary Sharpe & Associates, Inc. P.O. Box 608, 233 Boston Post Road Old Saybrook, Connecticut 06475 Tel. (860) 388-4671 Fax (860) 388-3962"

(iii) Project Overview, Soils Classification, General Procedures, Construction Sequencing, Maintenance Schedule and Delineation of No Feasible and Prudent Alternative Narrative for the redevelopment of property at 1499 and 1505 Hartford New London Turnpike, Montville, Connecticut for a gasoline/convenience store facility.

(iv) Statewide Inland Wetlands & Watercourses Reporting Form.

(v) Authorization for Representation.

(vi) Drainage Report entitled "Drainage Analysis 1499 and 1505 Hartford-New London Turnpike Montville, Connecticut Prepared For Deer Run Stable, LLC. Date: October 1, 2019" prepared by Angus McDonald Gary Sharpe & Associates, Inc.

(vii) Notification to the State of Connecticut Health Department and the City of New London Department of Public Utilities for activities within a public water supply watershed.

VIII. Other Information

1. Does the application involve an activity in a regulated area that is within 500 ft of another municipality?

☐ Yes ☒ No

- If YES, then a copy of the application and all material is to be submitted to said Town and a copy of the transmittal form is to be provided to the Commission.

2. Is the property located within a Flood Hazard Area?

☐ Yes ☒ No

-If YES, then please provide additional material showing the location of the area.

3. Is the regulated activity within a Public Water Supply Aquifer or Watershed?

☒ Yes ☐ No

- If YES, then a copy of the application and all material is to be submitted to the State Department of Health as well as the appropriate Water Company. See attached instructions for the Notification Process for the State Health Department. A copy of the transmittal forms shall be provided to the Commission.

4. Does the application require approval from Uncas Health District?

☒ Yes ☐ No

- If YES, then a copy of the approval is to be provided to the Commission.

5. Does the application require approval from the Public Works Dept?

☐ Yes ☒ No

- If YES, then a copy of the approval is to be provided to the Commission.

6. Does the application require approval from the Town of Montville WPCA?

☐ Yes ☒ No

- If YES, then a copy of the approval is to be provided to the Commission.

7. Does the application require permits from the following agencies?

			Submission Info
Army Corps of Engineers	☐ Yes	☒ No	Date _____
Department of Environmental Protection	☐ Yes	☒ No	Date _____
Department of Transportation	☒ Yes	☐ No	Date To be submitted

- If YES, then a copy of the application and all material is to be submitted to said Agency and a copy of the transmittal form is to be provided to the Commission.

8. Does this permit require a State Water Diversion Permit? ☐ Yes ☒ No

9. Does this permit require a State Dam Permit? ☐ Yes ☒ No

10.

11. Is this property subject to a Conservation Restriction and/or a Preservation Restriction?

- If YES, attach a copy of certified notice. ☐ Yes ☒ No

12. If the application is a renewal or modification of an existing permit, is a copy of the original approval included in the documentation package? ☐ Yes ☒ No

The undersigned applicant hereby consents to necessary and proper inspections of the above mentioned property by agents of the Montville Inland Wetlands Commission at reasonable times, both before and after the permit in question has been granted by the Commission.

APPLICANT
DEER RUN STABLE, LLC

By: _____ Date: November 18, 2019
Asif Choudhry, its Member

OWNER
DEER RUN STABLE, LLC

By: _____ Date: November 18, 2019
Asif Choudhry, its Member

_____ Date: November 18, 2019
Asif Choudhry, individually

APPLICATION OF DEER RUN STABLE, LLC TO TOWN OF MONTVILLE INLAND WETLANDS AND WATERCOURSES COMMISSION

NARRATIVE DESCRIPTION AND CONSTRUCTION SEQUENCE RELATIVE TO THE DEVELOPMENT OF A COMMERCIAL SITE ON PROPERTY LOCATED AT 1499 AND 1505 HARTFORD-NEW LONDON TURNPIKE (CONNECTICUT ROUTE 85), MONTVILLE, CONNECTICUT FOR A GASOLINE/CONVENIENCE STORE FACILITY

PROJECT OVERVIEW

Asif Choudhry is the owner of real property located at 1499 Hartford-New London Turnpike, Montville, Connecticut. This property consists of 1.26 acres of land, more or less, and is located on the northeasterly side of Connecticut Route #85. The property of Deer Run Stable, LLC, abuts the property of Asif Choudhry to the west and consists of 1.22 acres of land, more or less, each as shown on a plan entitled "Showing Existing Conditions Improvement Location Survey Prepared For Deer Run Stable, LLC 1499 & 1505 Hartford New London Turnpike Oakdale/Montville, Connecticut Date: January 10, 2019 Scale: 1" = 20'" prepared by Angus McDonald Gary Sharpe & Associates, Inc. (the "Existing Conditions Plan"). Asif Choudhry has authorized Deer Run Stable, LLC to file an application with the Town of Montville Inland Wetlands and Watercourses Commission for the combined redevelopment of its real property with that owned of record by Deer Run Stable, LLC (collectively, the "Property") for a proposed gasoline/convenience store facility. In conjunction with the redevelopment of these combined properties, the applicant, Deer Run Stable, LLC (hereinafter the "Applicant") is filing an application for a permit to conduct regulated activities in upland review areas adjacent to inland wetlands with the Town of Montville Inland Wetlands and Watercourses Commission.

The inland wetlands on the Applicant's properties have been designated by Wetland Flags 1 – 8 (to the east of the division line between the properties located at 1499 and 1505 Hartford-New London Turnpike) and 1 – 13 (to the west of the division line between the properties known as 1499 and 1505 Hartford-New London Turnpike) as designated on the Existing Conditions Plan. The wetland limits on the properties were initially flagged by Richard Snarski on February 15, 2018 and September 27, 2018. The location of the limits of inland wetlands on the application parcels was verified by field inspection by Demian A. Sorrentino, Certified Planner and Soil Scientist on August 30, 2019.

The Property is currently improved with two single family dwelling houses. The Property is located in a C-1 Commercial Zoning District pursuant to the zoning map promulgated by the Town of Montville Inland Wetlands and Watercourses Commission. Single family residences are non-permitted uses in the C-1 Zoning District and are currently legally non-conforming. The Applicant proposes to raze all improvements currently located on the Property and to re-develop the Property for a modern gasoline/convenience store facility, a use permitted by special permit in the C-1 Zoning District. The improvements on the Property will be served by an on-site well and an on-site septic system.

As depicted on the Existing Conditions Plan, the southerly portion of the Property is relatively flat, enjoying an elevation of approximately 208 feet above mean sea level. The northerly portion of the Property slopes to the northwest and the northeast with a change of elevation to approximate elevation 193 feet above mean sea level, the approximate elevation of the delineated inland wetland boundary as depicted on the Existing Conditions Plan.

In order to establish a viable commercial use on the Property, it is necessary to grade within the 50' upland review area adjacent southwesterly and southerly of the inland wetland systems located on the Property. In order to avoid any direct impacts to inland wetlands, the Applicant proposes to retain the northerly and northeasterly periphery of the improved site with a retaining wall which will effectively segregate the improved portion of the project site at elevation 207 +/- from the upland area adjacent southwesterly and southerly of the wetland systems at approximate elevation 194.

In addition, the Applicant is proposing to discharge treated stormwater from the improved area of the project site to a rip rap plunge pool located adjacent westerly of Wetland Flag 5 as depicted on the Existing Conditions Plan. The Applicant's design engineer has incorporated a robust water quality renovation plan into the vernacular of the proposed commercial project to insure that a highly renovated stormwater is discharged from the project site to the environment.

PROPOSED REGULATED ACTIVITIES

1. Construction of a concrete retaining wall to retain the improved portion of the commercial site within the upland review area adjacent southwesterly to Wetland Flags 3-1 and 1-7.

2. Maintenance of an improved commercial site within the upland review area adjacent southwesterly to Wetland Flags 5-1 and 1-7, including a dumpster pad, a 10' x 12' shed, fuel pumping points (no storage), paved areas, stormwater treatment structures and site improvements.

3. Discharge of renovated stormwater to a rip rap plunge pool adjacent westerly to Wetland Flags 4-5.

SOILS

UPLAND SOILS

Agawam Fine Sandy Loam

The Agawam series consists of well drained soils that formed in glacial outwash. Agawam soils are found on stream terraces and outwash plains. Slopes range from 0-3%. The Agawam soils are found in a drainage sequence on the landscape with moderately well drained Ninigret soils. They are near excessively drained Hinckley soils, somewhat excessively drained

Merimack soils, well drained Haven, Canton and Charlton soils and poorly drained Raypol and Walpole soils. The typical stratification of the Agawam soils is as follows:

0" – 9"	Dark brown fine sandy loam; weak medium granular structure; very friable; few fine roots; 5% course fragments; strongly acid; abrupt wavy boundary.
9" – 19"	Dark yellowish brown fine loam; weak medium subangular blocky structure; very friable; few fine roots; 5% course fragments; strongly acid; gradual wavy boundary.
19" – 24"	Dark yellowish brown fine sandy loam; weak medium subangular blocky structure; very friable; few fine roots; 5% course fragments; medium acid; abrupt wavy boundary.
24" – 32"	Light olive brown sand; massive; very friable; few fine roots; 15% course fragments; medium acid; abrupt wavy boundary.
32" – 60"	Light olive brown very gravelly course sand; single grain; loose; 55% course fragments; medium acid.

Hinckley Loamy Sand

This Hinckley soil consists of excessively drained soils that formed in glacial outwash. Hinckley soils are found on outwash plains, stream terraces, kames and eskers. The Hinckley soils are found near excessively drained Windsor soils, somewhat excessively drained Merimack soils, well drained Agawam and Haven soils, moderately well drained Sudbury soils, poorly drained Walpole soils and very poorly drained Scarboro soils. Hinckley soils have a greater content of gravel than Merimack, Agawam, Haven and Windsor soils.

The typical soil stratification of the Hinckley soil is as follows:

0" – 7"	Dark brown gravelly sandy loam; weak fine granular structure; very friable; many fine roots; 20% course fragments; medium acid; abrupt wavy boundary.
7" – 14"	Yellowish brown gravelly loamy sand; single grain; lose; few fine roots; 25% course fragments; medium acid; gradual wavy boundary.
14" – 22"	Yellowish brown gravelly loamy sand; single grain; loose; few fine roots; 40% course fragments; strongly acid; clear wavy boundary.
22" – 60"	Brownish yellow very gravelly course sand; single grain; loose; 60% course fragments; medium acid.

WETLAND SOILS

Scarboro Soils

The Scarboro soil consists of very poorly drained soil that formed in water-sorted sand and gravel. Scarboro soils are found on outwash plains and stream terraces. Slopes range from 0-3%. The Scarboro soils are found on the landscape near excessively drained Hinckley and Windsor soils, somewhat excessively drained Merimack soils, well drained Haven and Agawam soils, moderately well drained Sudbury soils, poorly drained Walpole and Raypol soils and very poorly drained Adrian and Palms soils.

The typical stratification for the Scarboro soil is as follows:

0" – 5"	Black muck; less than 5% fiber unrubbed and rubbed; massive; very friable; many fine roots; medium acid; clear wavy boundary.
5" – 36"	Gray loamy sand; common medium prominent yellowish red mottles and common medium distinct strong brown mottles; massive; friable; medium acid; clear wavy boundary.
36" – 60"	Grayish brown sand; common medium prominent strong brown mottles; massive; friable; medium acid.

PROPOSED REGULATED ACTIVITIES

1. Construction of a retaining wall within the upland review area adjacent to wetlands.

2. Grading and commercial development in the retained area of the project site which is located in the upland review area adjacent to inland wetlands.

3. Stormwater discharge in an upland review area adjacent to inland wetlands.

GENERAL PROCEDURES

1. Prior to conducting any construction activities on the Property, the Applicant, and its contractor, shall meet with the Montville Wetlands Enforcement Officer and the Montville Zoning Enforcement Officer to discuss and agree upon the method of installation and maintenance of erosion and sediment control measures during construction as well as a construction inspection schedule (the "Preconstruction Meeting").

2. Subsequent to the Preconstruction Meeting, the Applicant's surveyor shall delineate in the field the limits within which construction activities shall occur and shall further delineate the location for the installation of all erosion and sediment control measures as depicted on a plan entitled "Site and Erosion Control Plan Site Development Plan

Prepared For Deer Run Stable, LLC 1499 & 1505 Hartford New London Turnpike Oakdale/Montville, Connecticut Date: July 10, 2019 Scale: 1" = 20' Sheets 4 of 10 and 5 of 10 Job No. 186333 Angus McDonald Gary Sharpe & Associates, Inc. P.O. Box 608, 233 Boston Post Road Old Saybrook, Connecticut 06475 Tel. (860) 388-4671 Fax (860) 388-3962" (the "Erosion Control Plan").

3. Upon agreement of the Montville Wetlands Enforcement Officer and the Montville Zoning Enforcement Officer, the Applicant shall clear (but not grub) the area required for the installation of erosion and sediment control measures as delineated on the Erosion Control Plan.

4. Once clearing of the areas for the installation of erosion and sediment control measures has been accomplished, the Applicant (or its contractor) shall install the erosion and sediment control measures as delineated on the Erosion Control Plan. In no event shall grubbing or soil disturbance (other than that required for the clearing associated with the installation of erosion and sediment control measures) occur until such time as all erosion and sediment control measures have been installed and inspected, as hereinafter provided.

5. At such time as all erosion and sediment control measures have been installed in accordance with the Erosion Control Plan and in accordance with the requirements of the Montville Wetlands Enforcement Officer and the Montville Zoning Enforcement Officer enunciated at the Preconstruction Meeting, the Applicant shall contact the Montville Wetlands Enforcement Officer and the Montville Zoning Enforcement Officer to perform an on-site inspection of the installation of said erosion and sediment control measures. In no event shall actual construction activities be commenced either with respect to the demolition of the existing buildings on the Property, the construction of infrastructure for the project or any new improvements on the Property, until such time as the Montville Wetlands Enforcement Officer and the Montville Zoning Enforcement Officer have reviewed and approved the installation of all applicable erosion and sediment control measures.

6. Construction debris (i.e. resulting from the demolition of the existing dwellings on the Property and including stumps and/or branches) shall be removed to an area approved, in advance, by the Montville Zoning Enforcement Officer at a location which is removed from the project site. In no event shall stumps or construction debris be buried on site.

7. All erosion and sediment control measures shall be inspected at least twice weekly while construction is ongoing and after every storm event resulting in the deposition of in excess of one-tenth of one (0.10") inch of precipitation and repaired and maintained as necessary.

8. If any erosion and sediment control measure fails or is not installed or maintained in accordance with the Erosion Control Plan or the directives of the Montville Wetlands Enforcement Officer or the Montville Zoning Enforcement Officer enunciated at the Preconstruction Meeting, the Applicant shall be required to cease all construction activities with respect to the development of the proposed gasoline/convenience store

facility until such time as said erosion and sediment and control measures have been installed in accordance with the Erosion Control Plan and/or the directives of the Montville Wetlands Enforcement Officer or the Montville Zoning Enforcement Officer and approval of the same has been certified, in writing, by the Montville Wetlands Enforcement Officer and the Montville Zoning Enforcement Officer.

9. During the stabilization period (after construction has been completed, but prior to certification of approval thereof by the Montville Wetlands Enforcement Officer and the Montville Zoning Enforcement Officer for removal of erosion and sediment control measures) all erosion and sediment control measures shall be maintained in proper working order and condition. Unless notice otherwise is provided to the Montville Wetlands Enforcement Officer and the Montville Zoning Enforcement Officer, Asif Choudhry, 96 Route 32, Franklin, Connecticut 06254, (860) 287-7181, asifman500@gmail.com shall be the responsible party for compliance with all erosion and sediment control measures and requirements in conjunction with construction activities on the Property. All erosion and sediment control measures shall be inspected, maintained and/or repaired, as necessary, as set forth above.

10. Subject to permitting requirements, it is anticipated that the construction of the proposed gasoline/convenience store facility shall commence in the spring of 2020. It is further anticipated that project construction completion will occur by the fall of 2020.

11. During the stabilization period, any erosion which occurs shall be immediately repaired by the Applicant, reseeded with the seeding mixes set forth in the Construction Sequencing section of this Narrative and re-stabilized.

12. Once complete site stabilization has been achieved, and certification thereof obtained, in writing, from the Montville Wetlands Enforcement Officer and the Montville Zoning Enforcement Officer, all erosion and sediment control measures shall be removed by the Applicant.

CONSTRUCTION SEQUENCING

1. The Applicant shall clear the area for site development. No grubbing shall occur until subsequent to the installation and inspection of erosion and sediment control measures.

2. The Applicant shall install silt fence around the entire down gradient area of the construction site in the location depicted on the Erosion Control Plan. The silt fence shall be installed in accordance with the "Silt Fence" detail delineated on Sheet 4 of 10 of the project plans.

3. The Applicant shall remove surface soil and install an anti-tracking apron at the construction interface of the access road to the Property with the Hartford-New London Turnpike (Connecticut Route 85), constructed in accordance with the "Anti-Tracking Pad Detail" as depicted on Sheet 5 of 10 of the project plans.

4. Upon completion of installation of erosion and sediment control measures, the Applicant shall contact the Montville Wetlands Enforcement Officer and the Montville Zoning Enforcement Officer to perform an inspection of the installation of erosion and sediment control measures. In no event shall demolition activities or mass soil disturbance and/or grubbing occur on the project site until such time as the installation of erosion and sediment control measures has been approved by the Montville Wetlands Enforcement Officer and the Montville Zoning Enforcement Officer.

5. The Applicant's contractor shall disconnect all utility systems from the existing dwelling houses located on the Property. Demolition activities shall only occur between the hours of 7:00 a.m. and 5:00 p.m. on Monday through Friday, excluding any holidays recognized in the State of Connecticut. Security fence shall be maintained around the demolition area until demolition has been completed and cellar holes or other obvious hazards have been removed. Upon completion of demolition, security fencing shall be removed.

6. Upon approval of the installation of erosion and sediment control measures, the two (2) existing single family dwelling houses located on the Property shall be demolished with construction equipment. All construction debris generated from the demolition of the dwelling houses shall be loaded into dumpsters and removed from the Property to an authorized receiver of construction debris.

7. The northeasterly and easterly periphery of the improved project site will be retained, effectively segregating the improved project site vertically from that portion of the upland review area below the base of the retaining wall adjacent to the wetland systems depicted by Wetland Flags 1-8 and 1-13 as depicted on the site development plan. The Applicant's contractor shall strip the surface soil from the area for the construction of the retaining wall to a depth at which structural material has been encountered in order to support the construction of the retaining wall. The retaining wall concrete footing shall be formed and poured in place. Once the footing has cured, forms shall be removed and the concrete retaining wall shall be formed and poured in place. Footing wall construction shall be accomplished in accordance with the "Retaining Wall Cross Section" detail delineated on Sheet 7 of 10 of the project plans. The installation of the retaining wall shall effectively segregate the construction site from the wetland systems located to the northeast and north of the improved project site as well as from the upland review area adjacent to such wetland systems located southwesterly and southerly of said wetland systems.

8. Surface soil stripped from the project site shall be stockpiled in a surface soil stockpile area as depicted on the Erosion Control Plan. Surface soil stockpiles shall have a slope not exceeding 4:1, and shall be stabilized by seeding with a perennial ryegrass mix and mulch. The perennial ryegrass mix shall be applied at a rate of 40 pounds per acre. Mulch shall be applied at the rate of 80 pounds per 1,000 square feet, and shall be spread by hand or with a mulch blower. Silt fence or staked hay bales shall be installed along the down gradient periphery of each surface soil stockpile location.

9. The Applicant's contractor shall install the rip rap plunge pool outlet to accommodate the discharge of stormwater from the underground stormwater detention system. The plunge pool shall be constructed in accordance with the "Plunge Pool" detail as depicted on Sheet 5 of 10 of the project plans.

10. The stormwater outlet pipe and flared end section shall be installed to interconnect the subsurface stormwater detention system with the rip rap plunge pool outlet structure.

11. The subsurface stormwater detention system shall be installed in accordance with the project plans as well as other subsurface installations depicted on the site development plan including, but not limited to, underground fuel storage tanks and associated piping and containment systems as well as stormwater drainage and treatment systems including, but not limited to, the two oil water separators incorporated into the stormwater treatment train for the project. Subsurface installation shall be installed as compacted fill is being placed on the project side of the retaining wall, sequentially as compacted structural material is placed to the elevation at which such installations are to occur as depicted on the site development plan.

12. Building construction and other site development, including the installation of fueling islands and other structures shall proceed. Sequentially, the subsurface stormwater collection system shall be installed. As catch basins are installed in conjunction with the site development of the Property, silt sacks or their equivalent shall be installed in each catch basin in order to prevent the introduction of sediment from an unstabilized site into the stormwater collection, storage and discharge system.

13. The northwesterly portion of the project site shall be graded in accordance with the site development plan.

14. The northwesterly embankment slope shall be stabilized by spreading stockpiled surface soil at a thickness of not less than 4". Areas to be seeded will be prepared by spreading ground lime stone equivalent to 50% calcium plus magnesium oxide applied at a rate of 50 pounds per 1,000 square feet. Fertilizer (10-10-10) is to be applied at a rate of 7.5 pounds per 1,000 square feet. Following the initial application of lime and fertilizer, there are to be no periodic applications of lime and fertilizer.

15. The northerly embankment slope shall be stabilized by the installation of North American Green S150 or approved equal erosion control blanket installed in accordance with the Erosion Control Blanket Slope Installation detail as depicted on Sheet 5 of 10 of the site development plan.

16. The maneuvering aisles and parking areas shall be prepared for bearing coat application by installing not less than 12" of compacted bankrun gravel subbase, covered by not less than 6" of compacted processed gravel base material and thereafter finished with a 2 coat application of 3" of compacted class 2 bituminous concrete placed in 1.5" lifts in accordance with the driveway/parking pavement section detail delineated on Sheet 7 of the 10 of the project plans.

17. Bituminous concrete lip curbing shall be installed in the areas depicted on the site development plan.

18. Disturbed areas of the site not proposed for pavement, and specifically excluding the northwesterly embankment slope, shall be stabilized by spreading stockpiled surface soil over these areas at a thickness of not less than 4". These areas shall be prepared for seeding by spreading ground lime stone equivalent to 50% calcium plus magnesium oxide applied at a rate of 50 pounds per 1,000 square feet. Fertilizer (10-10-10) is to be applied at a rate of 7.5 pounds per 1,000 square feet. Following the initial application of lime and fertilizer, there are to be no periodic applications of lime and fertilizer. These areas will be seeded with a seeding mix of Kentucky Bluegrass applied at a rate of 100 pounds per acre, Creeping Red Fescue applied at a rate of 100 pounds per acre and perennial Ryegrass applied at a rate of 20 pounds per acre for a total application of 220 pounds per acre. A hydroseed mix using comparable cultivars shall be a suitable substitute. In the event that a hydroseed mix is not utilized, after seeding, the areas seeded shall be stabilized with hay mulch immediately applied at a rate of 70 pounds per 1,000 square feet and anchored by tracking. Seeding shall only occur between April 15 and June 15 and August 15 to October 1.

19. Once all disturbed areas have been thoroughly stabilized, erosion and sediment control measures shall be removed, including the removal of all silt sacks from catch basins within the project area.

MAINTENANCE SCHEDULE

The Applicant incorporates the following maintenance schedule into any permit or license granted by the Montville Inland Wetlands and Watercourses Commission in conjunction with the development, use or operation of the proposed gasoline/convenience store facility located at 1499 and 1505 Hartford-New London Turnpike (Connecticut Route 85) in order to insure that the stormwater collection and water quality measures incorporated into the project design comply with or exceed the 2004 water quality guidelines promulgated by the State of Connecticut Department of Energy and Environmental Protection are maintained throughout the life of the project.

Construction Period Maintenance.

1. Silt fence and/or wood chip berms shall be inspected in accordance with the General Procedures section of this Narrative and repaired and maintained as necessary. At any time that sediment reaches 1/3 the height of the silt fence or the wood chip berm, the sediment shall be removed and utilized as site fill in fill areas on the project site.

2. As the subsurface stormwater collection and detention system is being installed, and as site fill is being placed in conjunction with the grading of the retained project site, the stormwater collection and detention system shall be inspected after each storm event resulting in the deposition of in excess of 0.10" of precipitation and cleaned as necessary.

3. Silt sacks shall be inspected weekly and after every storm event resulting in the deposition of more than 0.10" of precipitation and cleaned as necessary. If any inspection discloses any breach in a silt sack, the silt sack shall be replaced immediately.

Permanent Maintenance Schedule

1. All parking areas, roadways, sidewalks, driveways and other impervious areas (other than rooftops) shall be swept clean of sand, litter and other possible pollutants twice each year, once between November 14 and December 15 (after leaf fall has concluded) and once during the month of April (after the possibility of further sanding has ended). All material accumulated as a result of the sweeping activities shall be disposed of in accordance with law.

2. All catch basin sumps shall be inspected twice yearly and shall be cleaned when the level of sediment reaches 1' below the invert of the discharge pipe from the catch basin. Any removed sediment shall be treated as regulated waste and disposed of in accordance with law by a duly authorized regulated waste hauler.

3. Each oil water separator shall be inspected twice annually during the period November 15 – December 15 and April 15 – May 15 and cleaned as necessary. Any material removed from the oil water separators shall be disposed of in accordance with law. The oil water separators shall be cleaned by a licensed environmental waste management company.

4. During the first two (2) years subsequent to the completion of the project, after every storm event resulting in the deposition of in excess of 1" of rainfall, the Applicant shall inspect the northwesterly embankment slope for channelization. Thereafter, after each storm event equaling or exceeding the two (2) year storm event, the Applicant shall inspect the northwesterly embankment slope for channelization. If channelization is occurring, the Applicant shall immediately retain the services of a certified soil and erosion control specialist in order to design remedial measures to diffuse the flow causing the channelization and shall forthwith implement the remedial measures designed by the soil and erosion control specialist.

DELINEATION OF NO FEASIBLE AND PRUDENT ALTERNATIVES

In the event that the Town of Montville Inland Wetlands and Watercourses Commission deems the proposed development of the gasoline/convenience store facility as delineated on the site development plan, as an activity which could have a significant impact on wetlands and watercourses, it is the obligation of the Applicant to demonstrate to the Montville Inland Wetlands Agency that no feasible and prudent alternative exists to the proposed regulated activities which the Applicant intends to conduct in upland review areas adjacent to wetlands in conjunction with the development, use and operation of the project.

As defined in Connecticut General Statutes §22a-38(17) "feasible" means able to be constructed or implemented consistent with sound engineering principles. As defined in §22a-38(18) of the Connecticut General Statutes, "prudent" means economically or otherwise reasonable in light of the social benefits to be derived from the proposed regulated activity provided cost may be considered in deciding what is prudent and further provided a mere showing of expense will not necessarily show an alternative is imprudent.

As delineated in the Application to the Montville Inland Wetlands and Watercourses Commission, the project site, for development, will require the combination of two (2) existing separate and distinct tracts or parcels of land, commonly known and designated as 1499 Hartford-New London Turnpike owned of record by Asif Choudhry and 1505 Hartford-New London Turnpike owned of record by Deer Run Stable, LLC. Both parcels contain approximately 1 acre in size. Municipal water and municipal sewer are not available to foster development in the Connecticut Route 85 corridor.

As depicted on the site development plan, nearly 50% of the easterly parcel is encumbered by inland wetland soils. In addition, the northwesterly corner of the westerly parcel is also encumbered by inland wetland soils. Pursuant to the zoning regulations and zoning map promulgated by the Town of Montville Planning and Zoning Commission, these combined properties have been designated as properties zoned for commercial use. The Hartford-New London Turnpike (Connecticut Route 85) is an arterial highway system within the Town of Montville and an area designated by the Town of Montville Plan of Conservation and Development as an area where commercial development should be encouraged.

Commercial development on the easterly parcel, in and of itself, is not feasible due to the limited area of the site available for development without incurring direct impacts to the inland wetland system located in the northerly area of that lot. It is only by combining the two lots into one singular tract or parcel of land that commercial development becomes feasible giving due consideration to the fact that it is necessary for the site to accommodate an on-site septic system and potable water supply well which conforms to the requirements of the Connecticut Public Health Code.

It is not feasible to propose development of these properties for a use which is not permitted in the C-1 Zoning District. It is only by a combination of the two separate and distinct parcels that the parcels attain sufficient upland area in order to make commercial development viable. Due to the limited availability of upland area on the combined parcels, coupled with the need to accommodate an on-site subsurface sewage disposal system, potable water supply well and parking, there are few commercial uses which are economically viable on such limited developable area. However, a gasoline/convenience store facility does fit and has economic viability on an arterial road. It is the very type of limited use for this property which meets the "prudent" test. The Applicant, and its consulting engineer and environmental consultant, have formulated a site development methodology which results in no direct impact to inland wetlands on and adjacent to the property being developed. The Applicant's engineer has considered other development methodologies, such as, but not limited to, grading of the entire site rather than retaining the northeasterly portion of the site. However, all other development methodologies would result in direct impacts to inland wetlands.

By retaining the improved site, the Applicant's engineer has effectively segregated the developed area, both during construction, and after completion of construction during commercial operation, from the adjacent wetland systems to the northeast and north. The retained development site will be vertically at an elevation 6' or more higher than that of the adjacent wetland systems and the site will be graded in order to prevent flow of untreated stormwater off of the improved project site to the adjacent wetland system. The stormwater collection system incorporates into the treatment train for the stormwater falling on the site three separate and distinct methodologies to accomplish stormwater treatment. First, all catch basins incorporated into the project design will have deep sumps to capture sand, sediment and other debris and retain the same in the treatment train.

Second, the design engineer has incorporated into the treatment train two (2) oil water separators in order to capture any pollutants which may fall or spill on the paved parking and maneuvering lane areas of the project site and retain the same for disposal in accordance with the maintenance schedule. Third, the design engineer has placed the rip rap plunge pool for stormwater discharge in a location which will attain vegetative treatment of the discharged stormwater before the stormwater reaches the adjacent wetlands system. It should be noted that while the rip rap plunge pool is specified for installation adjacent westerly to Wetland Flag 5, the direction of flow of stormwater outletting the rip rap plunge pool will be in the direction of Wetland Flag 7-8, thereby attaining significant ground and vegetation contact before reaching the wetland system.

It should also be noted that the regulations governing the installation and use of underground storage tanks and the pumping and piping of petroleum products from the underground storage tanks to the fuel dispensers are required to contain redundant safeguards to prevent an uncontrolled discharge of petroleum product to the environment, including, but not limited to, the requirement that all underground storage tanks be double walled with interstitial sensors which will shut down the system if there is a breach of either the inner or outer wall as well as automated leak detection sensors in the piping and dispensing system which again, will automatically shut the system down if any leak is detected.

The design of the project, including the construction of the project retaining wall as the first element of construction of the project (subsequent to demolition) effectively segregates the improved project site from the adjacent wetland vertically during the entire construction process, thereby providing a level of protection which cannot be attained by the utilization of customary soil and erosion control devices. The vertical separation of the improved project site from the adjacent wetland, and the capture of stormwater runoff on the impervious portions of the project site, including the direction of the same through a redundant stormwater treatment train will prevent the discharge of untreated stormwater to the adjacent wetland systems. Finally, the utilization of regulatorily required best management practices for the installation of petroleum storage and dispensing facilities will insure that there will be no discharge of petroleum products or related pollutants to the environment.

John U. Faulise, Jr., L.S.
Jacob S. Faulise, E.I.T.

David C. McKay, P.E.
Demian A. Sorrentino, AICP, C.S.S.

CIVIL ENGINEERING LAND SURVEYING LAND USE PLANNING SOIL SCIENCE
BOUNDARIES

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November 19, 2019

Town of Montville
Inland Wetlands & Watercourses Commission
Attn: Mr. Douglas K. Brush, Chair
310 Norwich-New London Tpk.
Uncasville, CT 06382

RE: Inland Wetlands & Watercourses Narrative
Location: 1499 & 1505 Hartford-New London Tpk. (CT Route #85), Oakdale, CT
Owner/Applicant: Deer Run Stable, LLC
Delineating Soil Scientist: Richard Snarski (New England Environmental Services)
Proposal: Gasoline Station & Convenience Store

Dear Commissioners,

On or about August 15, 2019 the undersigned was contacted by Legal Counsel representing Deer Run Stable, LLC to provide a written narrative to accompany an Application to Conduct Regulated Activities to be submitted to the Montville Inland Wetlands & Watercourses Commission. The subject properties, identified as 1499 and 1505 Hartford-New London Turnpike, had been previously delineated by Richard Snarski, Soil Scientist and Professional Wetland Scientist, on February 15, 2018 and September 27, 2018. The undersigned was not asked to re-delineate the wetlands and watercourses, but only to inspect the prior delineation and prepare the narrative provided hereunder.

The undersigned performed an inspection of the subject properties on Friday, August 30, 2019 and located Mr. Snarski's delineation flags, which appear to accurately represent the limits of Connecticut regulated wetlands and watercourses. Those flags that remained were supplemented with additional bright pink plastic flagging with the words "WETLAND DELINEATION" printed upon it, and those that were not remaining were rehung in their approximated original location(s) with new flagging with "WF6±" and "WF7±" written thereon. This new flagging is not intended to redefine Mr. Snarski's delineation, but rather to aid Town staff, consulting professionals and IW&WC members in wayfinding and identifying the delineated edge of the regulated resources as marked by Mr. Snarski.

Mr. Snarski's delineation is depicted on a survey plan entitled "Improvement Location Survey, Prepared for Deer Run Stable, LLC, 1499 & 1505 Hartford New London Turnpike, Oakdale/Montville, Connecticut,

Date: January 10, 2019, Scale: 1"=20', Sheet 1 of 10" Prepared by Angus McDonald, Gary Sharpe & Associates, Inc.

Soil Types Present

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey for the State of Connecticut, the soils located upon the subject property, and within the project area, are as follows:

29A	Agawam Fine Sandy Loam, 0-3% slopes
38E	Hinckley Loamy Sand, 15-45% slopes
15*	Scarboro Muck, 0-3% slopes

* Denotes Connecticut Inland Wetland Soil Type

A copy of the Web Soil Survey Report is attached to this correspondence.

Natural Diversity Database Preliminary Screening

The subject properties are not located within a potential Natural Diversity Database Area as identified on the Connecticut Department of Energy & Environmental Protection, Natural Diversity Database Area Map for Montville, Connecticut, dated June 2019.

Delineation Methodology and Delineated Inland Wetlands & Watercourses

Inland wetlands and watercourses on the subject property were delineated by Richard Snarski in accordance with the State of Connecticut statutory definitions as described in Section 22a-38(15-16) of the Connecticut General Statutes, a/k/a the Inland Wetlands & Watercourses Act, which are as follows:

(15) "Wetlands" means land, including submerged land, not regulated pursuant to sections 22a-28 to 22a-35, inclusive, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey, as may be amended from time to time, of the Natural Resources Conservation Service of the United States Department of Agriculture.

(16) "Watercourses" means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon this state or any portion thereof, not regulated pursuant to sections 22a-28 to 22a-35, inclusive. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation.

Descriptions of delineated resources are provided here:

WF#1 – WF#8 on 1499 Hartford-New London Tpk., and
WF#1 – WF#6 on 1505 Hartford-New London Tpk.

These flag series represent the southwesterly limit of a large forested wetland complex meeting definitive criteria for classification as a regulated inland wetland. This wetland is hydrologically connected to the southerly and westerly sides of Davis Pond, which is located approximately 600' northeasterly of 1499 Hartford-New London Turnpike. Surface water flows southwesterly from Davis Pond through this forested wetland complex and onto property N/F of Miner-Deer Run, LLC. The delineation line extends further upgradient than the edge of standing water, likely due to groundwater discharge that occurs at or near the surface where the topographic relief breaks from a steep to shallow slope. A considerable amount of refuse is present along the edge of this resource including barrels, household waste, furniture and construction debris. Applicable Functions/Values of this resource are: Groundwater Recharge/Discharge; Floodflow Alteration; Fish and Shellfish Habitat; Wildlife Habitat; Visual Quality/Aesthetics. Primary Functions/Values of this resource are: Groundwater Recharge/Discharge; Wildlife Habitat.

WF#10 – WF#13 on 1505 Hartford-New London Tpk.,

This flag series delineates the southerly line of a pond that meets definitive criteria for classification as a perennial watercourse, and likely has a small area of regulated inland wetland soils immediately adjacent to it. This pond was likely created by impoundment due to the construction of Deer Run, a private road that borders 1505 Hartford-New London Turnpike to the west. Surface water flows into this pond via a culvert under a woods road on property N/F of Miner-Deer Run, LLC, and out through another culvert under Deer Run to the west. Water quality appears good with aquatic vegetation present and no apparent algal blooms. A considerable amount of refuse is present along the edge of this resource also, including construction debris, household waste, and a discarded boat. Applicable Functions/Values of this resource are: Groundwater Recharge/Discharge; Floodflow Alteration; Fish and Shellfish Habitat; Wildlife Habitat; Visual Quality/Aesthetics. Primary Functions/Values of this resource are: Floodflow Alteration; Fish and Shellfish Habitat.

Proposed Regulated Activity

The proposal to be reviewed by the Montville Inland Wetlands & Watercourses Commission consists of a new gasoline station and convenience store to be constructed upon the combined area of 1499 and 1505 Hartford New London Turnpike, as depicted on a survey plan entitled "Site Development Plan Prepared for Deer Run Stable, LLC, 1499 & 1505 Hartford new London Turnpike, Oakdale/Montville, Connecticut, Date: July 10, 2019, Scale: 1"=20', Sheet 3 of 10" Prepared by Angus McDonald, Gary Sharpe & Associates, Inc.

Approximately 1/4 of the total development area lies within the Montville IW&WC's established 50' Upland Review Area (URA). The proposed improvements, including buildings, filling pumps and overhead canopies, parking, circulation drives and refuse disposal areas, cover the majority of the

available upland area of the properties, as is commonplace for this type of commercial development situated on a State Highway.

Stormwater from the convenience store building, paved parking and circulation drives will be collected via a series of catch basins, piped through a Vortechs 4000 hydrodynamic separator and into an underground stormwater infiltration system designed by the project engineer. Stormwater generated from the gasoline and diesel filling canopies will be first treated by an oil-water separator prior to combining with the rest of the site stormwater and flowing into the aforementioned hydrodynamic separator and underground stormwater infiltration system. The underground stormwater infiltration system then discharges to the north, daylighting at a rip rap plunge pool adjacent to the inland wetlands in the vicinity of WF#5 (on 1505 Hartford-New London Turnpike).

The limits of proposed improvements are primarily coincident with a concrete retaining wall that will cause the developed portion of the site to be elevated above the adjacent wetlands. Where the concrete retaining wall will not be constructed, filling is proposed to provide a 2H:1V earthen slope on the downgradient side of the proposed underground stormwater infiltration system, which slope is to be reinforced with a slope stabilization fabric prior to final seeding.

In order to prohibit fugitive sediment from entering the adjacent wetland system(s), the entirety of the construction site is to be ringed with a filter fabric silt fence (sediment barrier), and once installed, all new catch basins will be equipped with silt sacks and ringed with a staked hay bale barrier until the bituminous concrete pavement is installed.

The development proposed by the applicant appears to be well conceived and the design engineer has prepared the Site Development Plan to adequately protect the adjacent regulated resources. Provided that the project is constructed in accordance with the approved plans and that erosion and sediment controls are properly installed and maintained throughout the project, there should be no negative impact(s) to the adjacent inland wetland resources.

If you have any questions or concerns regarding this correspondence or any of the information contained herein, please contact the undersigned at your convenience.

Sincerely,

Demian A. Sorrentino, AICP, C.S.S.
Certified Planner & Soil Scientist
Boundaries LLC

Attach (1) - Web Soil Survey Report

Soil Map—State of Connecticut

Map Scale: 1:2,420 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 18, Dec 6, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 20, 2019—Mar 27, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
15	Scarboro muck, 0 to 3 percent slopes	7.0	27.3%
29A	Agawam fine sandy loam, 0 to 3 percent slopes	3.9	15.1%
34A	Merrimac fine sandy loam, 0 to 3 percent slopes	2.7	10.6%
38E	Hinckley loamy sand, 15 to 45 percent slopes	3.8	14.6%
61B	Canton and Charlton fine sandy loams, 0 to 8 percent slopes, very stony	1.1	4.4%
61C	Canton and Charlton fine sandy loams, 8 to 15 percent slopes, very stony	0.0	0.1%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	1.9	7.6%
84C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes	2.1	8.2%
85B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony	0.0	0.2%
305	Udorthents-Pits complex, gravelly	3.1	12.1%
Totals for Area of Interest		**25.8**	**100.0%**

LAND & MARINE
ENGINEERING SURVEYING
PLANNING
ANGUS McDONALD
GARY SHARPE
& ASSOCIATES, INC.
SINCE 1966

Drainage Analysis

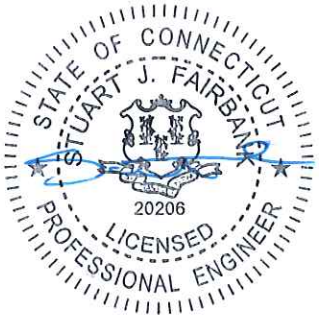
1499 and 1505 Hartford – New London Turnpike

Montville, Connecticut

Prepared for

Deer Run Stable, LLC.

Date: October 1, 2019



233 BOSTON POST ROAD, PO BOX 608 OLD SAYBROOK, CT 06475
860-388-4671 PHONE 860-388-3962 FAX

Existing Conditions

The properties located at 1499 and 1505 Hartford New London Turnpike (Route 85) are located in the C-1 Zone and currently are occupied by residential homes. The majority of the soils on the site are made up of Agawam fine sandy loam, 0 to 3 percent slopes (29A) and Hinckley loamy sand, 15 to 45 percent slopes (38E) which have a hydrologic soil group rating of A and B respectively. Surface cover on the site ranges from developed impervious areas around the homes to undisturbed woodland areas further back on the site. Inland wetlands are found along the northern boundary of both properties; however 1499 Hartford New London Turnpike (Route 85) has a significant wetland area encompassing approximately 1/3 of the northern portion of the lot.

Storm water on both existing sites generally drains from the higher elevations along Route 85 on the southern boundaries of the properties, toward the Inland wetlands on the northern boundaries of the properties.

Existing Drainage Data

The soil properties and qualities of the soils present on the site were determined using mapping provided by the United States Department of Agriculture's, Natural Resources Conservation Survey – Web Soil Survey.

Analysis of the existing conditions at the site was done using the TR-55 method. The tables below identify the different cover type and soil group combinations present at the site, the Weighted Runoff Curve Number that has been calculated to the drainage design point, as well as the Time of Concentration from the most hydraulically remote location on the site. In both existing and developed conditions the drainage design point is the edge of the Inland wetlands along the northern edge of the property.

Area 1 (Existing)

Overall Area 1.82 Ac

Cover Type	Condition	Soil Types	Soil Group		Area		CN
Woods/Grass Combination	Fair	38E	A		0.5	Ac	43
Grass (Lawn)	Good	38E	A		0	Ac	39
Gravel	Good	38E	A		0.07	Ac	76
Impervious	Good	38E	A		0	Ac	98
Woods	Good	29A	B		0.26	Ac	55
Grass (Lawn)	Good	29A	B		0.7	Ac	61
Gravel	Good	29A	B		0.08	Ac	85
Impervious	Good	29A	B	+	0.21	Ac	98
			Total =		1.82		
			Weighted Curve Number =				**61**

Time of Concentration

Segment	Surface Description	Flow Type	Slope (%)	Flow Length (ft)	Average Velocity (ft / sec)	Tt (hours)
AB	Dense Grass	Sheet	5.5	100	-	0.15
BC	Unpaved	Shallow Concentrated	11	145	5.5	0.01
					Time of Concentration =	**0.16** **hours**

The previous information was run through a drainage model in Haestad Methods – Pondpack. The following table is a drainage summary for the site in existing conditions.

Return Event	Total depth *in*	Hydrograph Volume *Ac-ft*	Q_{peak} *cfs*
2	3.3	0.074	0.59
10	5	0.208	2.21
25	5.6	0.264	2.89
50	6.3	0.335	3.73

Proposed Development

The proposed development at the site will include the demolition of the existing structures on the sites, the combination of the two individual lots (1.22 Ac and 1.26 Ac) into a single 2.48 Ac parcel. The proposed construction will consist of a 4,960 sf Convenience Store / Gas Station with a drive thru, 12 gasoline fueling points and 4 diesel fueling points, and two fueling canopies. In addition to the main structures supporting parking, septic and drainage facilities will be constructed on the property.

Developed Drainage Data

In developed conditions there will be an increase in impervious surfaces on the site which will increase runoff. In order to counteract this increase a subsurface stormwater detention/retention basin will be constructed. This subsurface basin, which will be located north of the proposed building, will consist of 112 Stormtech SC-740 Stormwater chambers constructed on a 4' deep crushed stone pad.

Once the site is developed, it will be divided into two drainage areas, the Developed area and the Developed Remaining Area. The Developed area will include the Main portion of the site including the building parking areas and gas pumps. Stormwater from this area will be captured in catch basins around the property and diverted to the proposed subsurface basin. The developed remaining area will be the down gradient areas outside the main proposed development which will remain undisturbed or as lawn area following development and will sheet flow to the inland wetlands on the northern portion of the site.

The table below shows the different cover type and soil group combinations present at the site in developed conditions:

Developed Remaining

Overall Area 0.53 Ac

Cover Type	Condition	Soil Types	Soil Group		Area		CN
Woods	Good	38E	A		0.13	Ac	30
Grass (Lawn)	Good	38E	A		0.24	Ac	39
Gravel	Good	38E	A		0	Ac	76
Impervious	Good	38E	A		0	Ac	98
Woods	Good	29A	B		0	Ac	55
Grass (Lawn)	Good	29A	B		0.16	Ac	61
Gravel	Good	29A	B		0	Ac	85
Impervious	Good	29A	B	+	0	Ac	98
			Total =		0.53		

Weighted Curve Number = 43

Time of Concentration

Segment	Surface Description	Flow Type	Slope (%)	Flow Length (ft)	Average Velocity (ft / sec)	Tt (hours)
AB	Dense Grass	Sheet	5.5	100	-	0.15
BC	Unpaved	Shallow Concentrated	11	145	5.5	0.01

Time of Concentration = 0.16 hours

Developed

Overall Area 1.36 Ac

Cover Type	Condition	Soil Types	Soil Group		Area		CN
Woods	Good	38E	A		0	Ac	30
Grass (Lawn)	Good	38E	A		0	Ac	39
Gravel	Good	38E	A		0	Ac	76
Impervious	Good	38E	A		0.21	Ac	98
Woods	Good	29A	B		0	Ac	55
Grass (Lawn)	Good	29A	B		0.21	Ac	61
Gravel	Good	29A	B		0	Ac	85
Impervious	Good	29A	B	+	0.94	Ac	98
			Total =		1.36		

Weighted Curve Number = 92

Time of Concentration

Segment	Surface Description	Flow Type	Slope (%)	Flow Length (ft)	Average Velocity (ft / sec)	Tt (hours)
AB	Pavement	Sheet	2	100	-	0.08

Time of Concentration = 0.08 hours

As with the existing conditions analysis the previous information was modeled in Haestad Methods – Pondpack. The following table is a drainage summary for the site in developed conditions.

Return Event	Total depth *in*	Hydrograph Volume *Ac-ft*	Q_{peak} *cfs*
2	3.3	0.067	0.12
10	5	0.268	0.9
25	5.6	0.343	1.69
50	6.3	0.432	2.87

Storm Water Collection and Treatment Train

The stormwater collection and treatment system will be a multi-tiered system that has been designed to ensure hydrocarbon and sediment removal, good stormwater quality and ease of maintenance. The system will be comprised of a series of catch basins located around the developed drainage area that will capture storm water and divert it through the treatment train to the existing drainage design point.

After leaving the catch basins stormwater will pass through an Oil / Water separator to remove floating debris and hydrocarbons that may have been picked up from the parking areas.

Storm water leaving the oil / water separator will enter the second phase of the treatment train, an inlet man hole to the subsurface basin. This man hole will be fitted with an overflow weir that will divert low flow storm events to the Stormtech Isolator Row. The Isolator row is the first row of chambers within the subsurface basin that has been wrapped in filter fabric. The isolator row acts as a filter for the subsurface basin by trapping Total Suspended Solids within the first chamber where they can easily be removed through the inlet manhole, thus protecting the remaining rows from becoming clogged by deposited sediement. Larger storm events will fill the isolator row and storm water will crest the over flow weir in the inlet manhole and fill the remaining rows chambers through a header manifold.

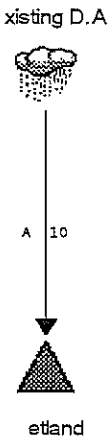
Once the basin is filled, an outlet structure in the outlet manhole will restrict flow leaving the basin to ensure peak rates of runoff do not exceed pre-development values.

Flows leaving the basin will pass through the final element of the stormwater treatment train a rip rap plunge pool, which will resist erosion, reduce exit velocity of storm water leaving the outlet and help to disperse the concentrated pipe flow leaving the outlet.

In addition to the stormwater retention capabilities of the proposed subsurface basin, and additional 4' deep crushed stone pad will be constructed below the Stormtech Chambers that will capture and retain stormwater entering the system. This crushed stone pad will be constructed below the lowest outlet of the detention basin and will retain stormwater onsite and allow it to infiltrate back into the surrounding soils.

Conclusion

Through the use of Best Management Practices the proposed combination and development of 1499 and 1505 Hartford – New London Turnpike will result in storm water of a good quality leaving the site and Peak Rates of runoff will be reduced to below pre-development values.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MASTER DESIGN STORM SUMMARY

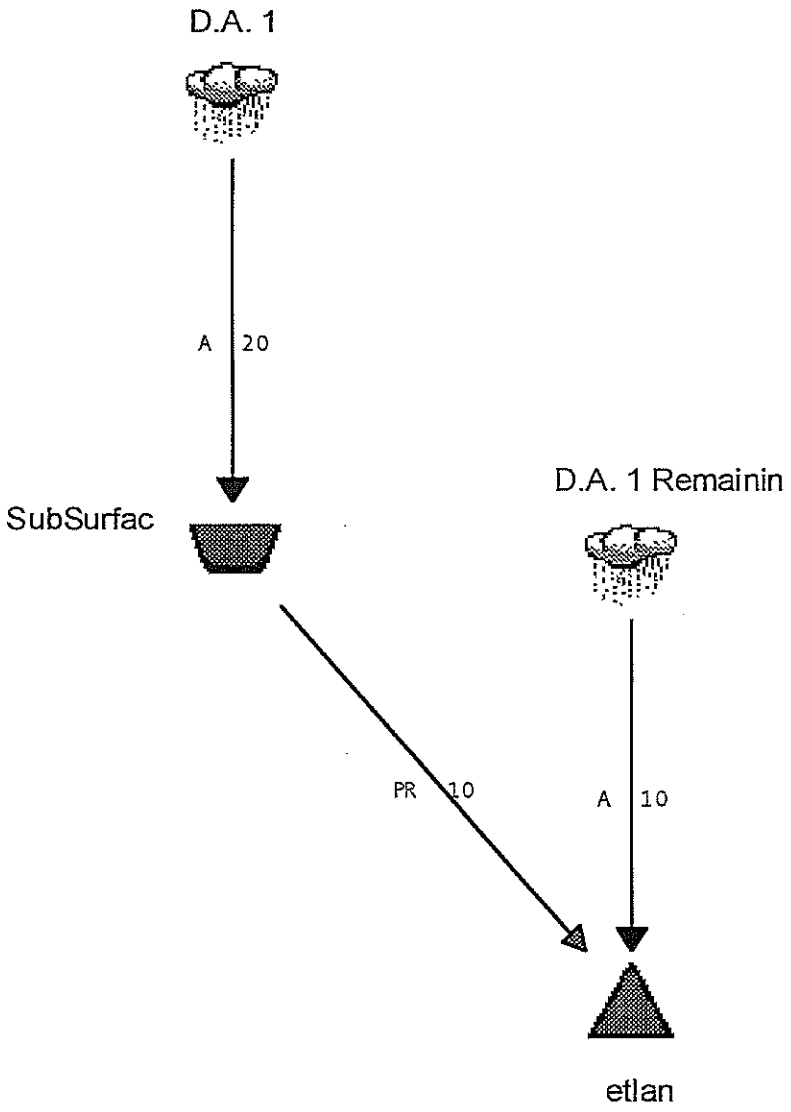
Default Network Design Storm File, ID CT STORM.RNQ All Storms

Return Event	Total Depth in	Rainfall Type	RNF File	RNF ID
2	3.3000	Synthetic Curve	SCSTYPES	TypeIII 24hr
10	5.0000	Synthetic Curve	SCSTYPES	TypeIII 24hr
25	5.6000	Synthetic Curve	SCSTYPES	TypeIII 24hr
50	6.3000	Synthetic Curve	SCSTYPES	TypeIII 24hr
100	7.1000	Synthetic Curve	SCSTYPES	TypeIII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Storage Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-ft
EXISTING D.A.	AREA	2	.074		12.2000	.59		
EXISTING D.A.	AREA	10	.208		12.1500	2.21		
EXISTING D.A.	AREA	25	.264		12.1500	2.89		
EXISTING D.A.	AREA	50	.335		12.1500	3.73		
EXISTING D.A.	AREA	100	.421		12.1500	4.74		
*WETLAND	JCT	2	.074		12.2000	.59		
*WETLAND	JCT	10	.208		12.1500	2.21		
*WETLAND	JCT	25	.264		12.1500	2.89		
*WETLAND	JCT	50	.335		12.1500	3.73		
*WETLAND	JCT	100	.421		12.1500	4.74		


D.A. 1
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D.A. 1 Remainin
PR 10
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MASTER DESIGN STORM SUMMARY

Default Network Design Storm File, ID CT STORM.RNQ All Storms

Return Event	Total Depth in	Rainfall Type	RNF File	RNF ID
2	3.3000	Synthetic Curve	SCSTYPES	TypeIII 24hr
10	5.0000	Synthetic Curve	SCSTYPES	TypeIII 24hr
25	5.6000	Synthetic Curve	SCSTYPES	TypeIII 24hr
50	6.3000	Synthetic Curve	SCSTYPES	TypeIII 24hr
100	7.1000	Synthetic Curve	SCSTYPES	TypeIII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Storage Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-ft
EXISTING D.A.	AREA	2	.074		12.2000	.59		
EXISTING D.A.	AREA	10	.208		12.1500	2.21		
EXISTING D.A.	AREA	25	.264		12.1500	2.89		
EXISTING D.A.	AREA	50	.335		12.1500	3.73		
EXISTING D.A.	AREA	100	.421		12.1500	4.74		
*WETLAND	JCT	2	.074		12.2000	.59		
*WETLAND	JCT	10	.208		12.1500	2.21		
*WETLAND	JCT	25	.264		12.1500	2.89		
*WETLAND	JCT	50	.335		12.1500	3.73		
*WETLAND	JCT	100	.421		12.1500	4.74		

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = CT STORM.RNQ All Storms

Storm Tag Name = 2
Description: 2 yr

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 2 yr
Total Rainfall Depth= 3.3000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Node ID	Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
EXISTING D.A.	AREA	.074		12.2000	.59	
Outfall WETLAND	JCT	.074		12.2000	.59	

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = CT STORM.RNQ All Storms

Storm Tag Name = 10
Description: 10 year

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 10 yr
Total Rainfall Depth= 5.0000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Node ID	Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
EXISTING D.A.	AREA	.208		12.1500	2.21	
Outfall WETLAND	JCT	.208		12.1500	2.21	

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = CT STORM.RNQ All Storms

Storm Tag Name = 25
Description: 50 year

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 25 yr
Total Rainfall Depth= 5.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Node ID	Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
EXISTING D.A.	AREA	.264		12.1500	2.89	
Outfall WETLAND	JCT	.264		12.1500	2.89	

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = CT STORM.RNQ All Storms

Storm Tag Name = 50
Description: 100 yr

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 50 yr
Total Rainfall Depth= 6.3000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Node ID	Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
EXISTING D.A.	AREA	.335		12.1500	3.73	
Outfall WETLAND	JCT	.335		12.1500	3.73	

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = CT STORM.RNQ All Storms

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 7.1000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Node ID	Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
EXISTING D.A.	AREA	.421		12.1500	4.74	
Outfall WETLAND	JCT	.421		12.1500	4.74	

Index of Starting Page Numbers for ID Names

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MASTER DESIGN STORM SUMMARY

Default Network Design Storm File, ID CT STORM.RNQ All Storms

Return Event	Total Depth in	Rainfall Type	RNF File	RNF ID
2	3.3000	Synthetic Curve	SCSTYPES	TypeIII 24hr
10	5.0000	Synthetic Curve	SCSTYPES	TypeIII 24hr
25	5.6000	Synthetic Curve	SCSTYPES	TypeIII 24hr
50	6.3000	Synthetic Curve	SCSTYPES	TypeIII 24hr
100	7.1000	Synthetic Curve	SCSTYPES	TypeIII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Storage Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-ft
D.A. 1	AREA	2	.277		12.1000	3.30		
D.A. 1	AREA	10	.463		12.1000	5.34		
D.A. 1	AREA	25	.530		12.1000	6.05		
D.A. 1	AREA	50	.608		12.1000	6.88		
D.A. 1	AREA	100	.697		12.1000	7.82		
D.A. 1 REMAINING	AREA	2	.001		14.5500	.00		
D.A. 1 REMAINING	AREA	10	.016		12.3500	.07		
D.A. 1 REMAINING	AREA	25	.024		12.2500	.13		
D.A. 1 REMAINING	AREA	50	.035		12.2000	.25		
D.A. 1 REMAINING	AREA	100	.049		12.1500	.41		
SUBSURFACE	IN POND	2	.277		12.1000	3.30		
SUBSURFACE	IN POND	10	.463		12.1000	5.34		
SUBSURFACE	IN POND	25	.530		12.1000	6.05		
SUBSURFACE	IN POND	50	.608		12.1000	6.88		
SUBSURFACE	IN POND	100	.697		12.1000	7.82		
SUBSURFACE	OUT POND	2	.066		15.8000	.12	198.73	.225
SUBSURFACE	OUT POND	10	.252		12.5500	.85	199.54	.276
SUBSURFACE	OUT POND	25	.319		12.4500	1.58	199.92	.300
SUBSURFACE	OUT POND	50	.397		12.3500	2.65	200.23	

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
SUBSURFACE	OUT POND	100	.486		12.2500	4.04	200.54	.339
*WETLAND	JCT	2	.067		15.8000	.12		
*WETLAND	JCT	10	.268		12.5500	.90		
*WETLAND	JCT	25	.343		12.4500	1.69		
*WETLAND	JCT	50	.432		12.3500	2.87		
*WETLAND	JCT	100	.536		12.2500	4.41		

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = CT STORM.RNQ All Storms

Storm Tag Name = 2
Description: 2 yr

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 2 yr
Total Rainfall Depth= 3.3000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Node ID	Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
D.A. 1	AREA	.277		12.1000	3.30	
D.A. 1 REMAINING	AREA	.001		14.5500	.00	
SUBSURFACE IN	POND	.277		12.1000	3.30	
SUBSURFACE OUT	POND	.066		15.8000	.12	198.73
Outfall WETLAND	JCT	.067		15.8000	.12	

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = CT STORM.RNQ All Storms

Storm Tag Name = 10
Description: 10 year

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 10 yr
Total Rainfall Depth= 5.0000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Node ID	Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
D.A. 1	AREA	.463		12.1000	5.34	
D.A. 1 REMAINING	AREA	.016		12.3500	.07	
SUBSURFACE IN	POND	.463		12.1000	5.34	
SUBSURFACE OUT	POND	.252		12.5500	.85	199.54
Outfall WETLAND	JCT	.268		12.5500	.90	

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = CT STORM.RNQ All Storms

Storm Tag Name = 25
Description: 50 year

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 25 yr
Total Rainfall Depth= 5.6000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Node ID	Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
D.A. 1	AREA	.530		12.1000	6.05	
D.A. 1 REMAINING	AREA	.024		12.2500	.13	
SUBSURFACE IN	POND	.530		12.1000	6.05	
SUBSURFACE OUT	POND	.319		12.4500	1.58	199.92
Outfall WETLAND	JCT	.343		12.4500	1.69	

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = CT STORM.RNQ All Storms

Storm Tag Name = 50
Description: 100 yr

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 50 yr
Total Rainfall Depth= 6.3000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Node ID	Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
D.A. 1	AREA	.608		12.1000	6.88	
D.A. 1 REMAINING	AREA	.035		12.2000	.25	
SUBSURFACE IN	POND	.608		12.1000	6.88	
SUBSURFACE OUT	POND	.397		12.3500	2.65	200.23
Outfall WETLAND	JCT	.432		12.3500	2.87	

NETWORK SUMMARY -- NODES
(Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File,ID = CT STORM.RNQ All Storms

Storm Tag Name = 100

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeIII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 7.1000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Node ID	Type	HYG Vol ac-ft	Trun.	Qpeak hrs	Qpeak cfs	Max WSEL ft
D.A. 1	AREA	.697		12.1000	7.82	
D.A. 1 REMAINING	AREA	.049		12.1500	.41	
SUBSURFACE IN	POND	.697		12.1000	7.82	
SUBSURFACE OUT	POND	.486		12.2500	4.04	200.54
Outfall WETLAND	JCT	.536		12.2500	4.41	

File.... C:\HAESTAD\PPKW\186333 - DEER RUN STABLES, LLC\DEVELOPED WITH POND (NO SURFACE TEST).PPW

USER DEFINED VOLUME RATING TABLE

Elevation (ft)	Volume (ac-ft)
194.00	.000
195.00	.048
196.00	.096
197.00	.145
198.00	.193
198.50	.210
201.00	.368
201.50	.385

File.... C:\HAESTAD\PPKW\186333 - DEER RUN STABLES, LLC\DEVELOPED WITH POND (NO SURFACE TEST).PPW

REQUESTED POND WS ELEVATIONS:

Min. Elev.= 194.00 ft
Increment = .10 ft
Max. Elev.= 201.50 ft

****
OUTLET CONNECTIVITY
****

---> Forward Flow Only (UpStream to DnStream)
<--- Reverse Flow Only (DnStream to UpStream)
<---> Forward and Reverse Both Allowed

Structure	No.		Outfall	E1, ft	E2, ft
Orifice-Circular		--->	TW	198.500	201.500
Orifice-Circular		--->	TW	199.500	201.500

TW SETUP, DS Channel

File.... C:\HAESTAD\PPKW\186333 - DEER RUN STABLES, LLC\DEVELOPED WITH POND (NO SURFACE TEST).PPW

OUTLET STRUCTURE INPUT DATA

Structure ID =
Structure Type = Orifice-Circular

# of Openings = 1
Invert Elev. = 198.50 ft
Diameter = .5000 ft
Orifice Coeff. = .600

Structure ID =
Structure Type = Orifice-Circular

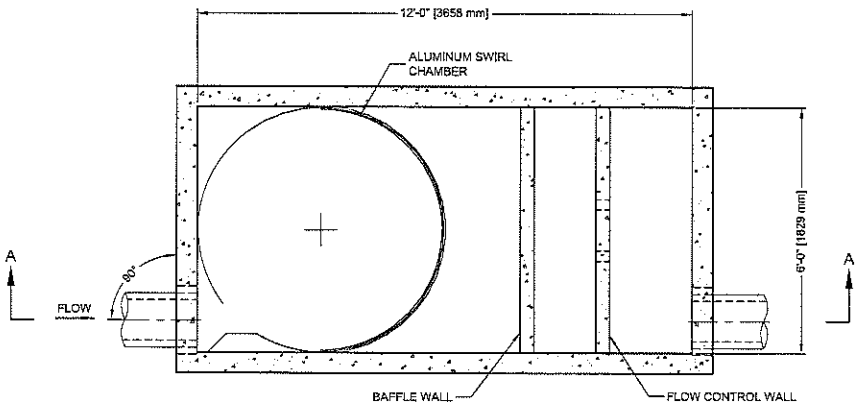
# of Openings = 1
Invert Elev. = 199.50 ft
Diameter = 1.0000 ft
Orifice Coeff. = .600

Structure ID = TW
Structure Type = TW SETUP, DS Channel

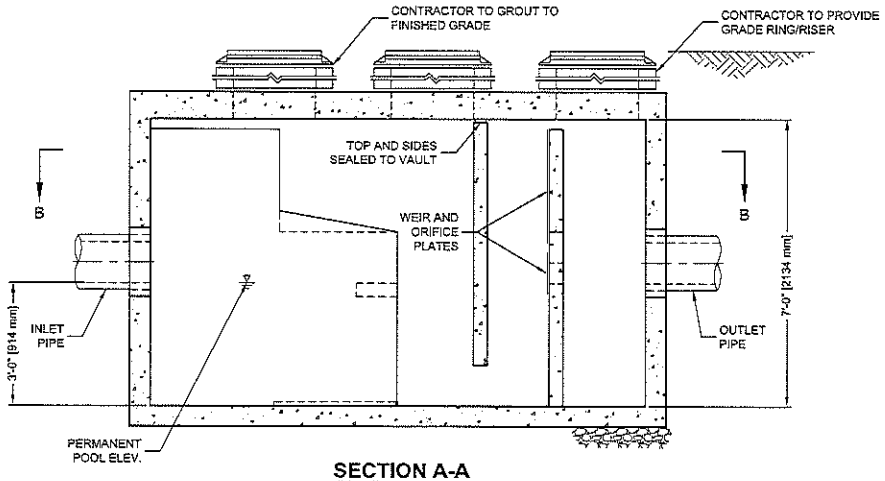
FREE OUTFALL CONDITIONS SPECIFIED

CONVERGENCE TOLERANCES...
Maximum Iterations= 30
Min. TW tolerance = .01 ft
Max. TW tolerance = .01 ft
Min. HW tolerance = .01 ft
Max. HW tolerance = .01 ft
Min. Q tolerance = .10 cfs
Max. Q tolerance = .10 cfs

Index of Starting Page Numbers for ID Names



SECTION B-B



SECTION A-A

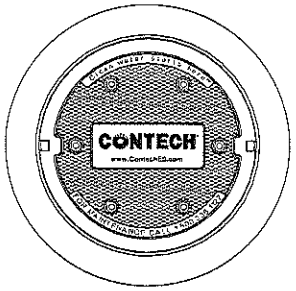
Vortechs®

THIS PRODUCT MAY BE PROTECTED BY THE FOLLOWING U.S. PATENTS: 5,759,415; RELATED FOREIGN PATENTS.

VORTECHS 4000 DESIGN NOTES

VORTECHS 4000 RATED TREATMENT CAPACITY IS 6 CFS, OR PER LOCAL REGULATIONS. IF THE SITE CONDITIONS EXCEED RATED TREATMENT CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD INLET/OUTLET CONFIGURATION IS SHOWN. FOR OTHER CONFIGURATION OPTIONS , PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.ContechES.com



FRAME AND COVER

(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			*
WATER QUALITY FLOW RATE (CFS)			*
PEAK FLOW RATE (CFS)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.ContechES.com
4. VORTECHS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET AASHTO M306 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. INLET PIPE(S) MUST BE PERPENDICULAR TO THE VAULT AND AT THE CORNER TO INTRODUCE THE FLOW TANGENTIALLY TO THE SWIRL CHAMBER. DUAL INLETS NOT TO HAVE OPPOSING TANGENTIAL FLOW DIRECTIONS.
7. OUTLET PIPE(S) MUST BE DOWN STREAM OF THE FLOW CONTROL BAFFLE AND MAY BE LOCATED ON THE SIDE OR END OF THE VAULT. THE FLOW CONTROL WALL MAY BE TURNED TO ACCOMODATE OUTLET PIPE KNOCKOUTS ON THE SIDE OF THE VAULT.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE VORTECHS STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

VORTECHS 4000
STANDARD DETAIL

Applicant Exhibit 10

HELLER, HELLER & McCOY
Attorneys at Law
736 Norwich-New London Turnpike
Uncasville, Connecticut 06382

Sidney F. Heller (1903-1986)
Harry B. Heller
William E. McCoy

Mary Gagne O'Donal

Telephone: (860)-848-1248
Facsimile: (860)-848-4003

November 20, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED
State of Connecticut Commissioner of Public Health
410 Capitol Avenue
Hartford, CT 06134

Re: Deer Run Stable, LLC
Application to the Town of Montville Inland Wetlands and Watercourses Commission for a permit to conduct regulated activities in upland review areas in conjunction with the development of a proposed gasoline/convenience store facility in a C-1 Zoning District
Montville Assessor's Designation: Map 005, Lots 023-00A and 024-00A
Address: 1499 and 1505 Hartford-New London Turnpike (Route 85), Montville, Connecticut

Dear Commissioner:

Please be advised that this office represents Deer Run Stable, LLC and Asif Choudhry, the owners of a 1.22 and 1.26 acre parcel of land, respectively, situated on the northeasterly side of the Hartford-New London Turnpike (Connecticut Route #85) in Montville, Connecticut. Our client has filed an application with the Town of Montville Inland Wetlands and Watercourses Commission for a permit to conduct regulated activities in an upland review area adjacent to inland wetlands in conjunction with the development of this project. The properties are now improved with two dwelling houses in a significant state of disrepair. Our clients propose to redevelop the combined properties for a modern gasoline/convenience store facility.

The land which is the subject of the inland wetland agency permit application is located within the watershed area of the City of New London Department of Public Utilities. We are providing notice to the City of New London Department of Public Utilities as well as the Commissioner of Public Health in accordance with the requirements of §8-3i of the Connecticut General Statutes.

I enclose herewith for your reference a copy of the wetland permit application which has been filed with the Town of Montville Inland Wetlands and Watercourses Commission as well as a copy of our transmittal to the Montville Inland Wetlands and Watercourses Commission

delineating the supplemental information which has been provided with the application, together with copies of the supplemental information.

Should you require further information, please feel free to contact the undersigned.

Very truly yours,

Harry B. Heller

HBH/rmb

Applicant Exhibit 9

HELLER, HELLER & McCOY
Attorneys at Law
736 Norwich-New London Turnpike
Uncasville, Connecticut 06382

Sidney F. Heller (1903-1986)
Harry B. Heller
William E. McCoy

Mary Gagne O'Donal

Telephone: (860)-848-1248
Facsimile: (860)-848-4003

November 20, 2019

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED
City of New London
Department of Public Utilities
120 Broad Street
New London, CT 06320

Re: Deer Run Stable, LLC
Application to the Town of Montville Inland Wetlands and Watercourses Commission for a permit to conduct regulated activities in upland review areas in conjunction with the development of a proposed gasoline/convenience store facility in a C-1 Zoning District
Montville Assessor's Designation: Map 005, Lots 023-00A and 024-00A
Address: 1499 and 1505 Hartford-New London Turnpike (Route 85), Montville, Connecticut

Gentleperson:

Please be advised that this office represents Deer Run Stable, LLC and Asif Choudhry, the owners of a 1.22 acre and 1.26 acre parcel of land, respectively, located at 1499 and 1505 Hartford-New London Turnpike (Connecticut Route 85) in Montville, Connecticut. The property is currently improved with two single family dwelling houses which are in a significant state of disrepair. Our client is proposing to redevelop the site for a modern gasoline/convenience store facility. In conjunction therewith, our client has submitted an application to the Town of Montville Inland Wetlands and Watercourses Commission for a permit to conduct regulated activities in upland review areas adjacent to inland wetlands on its property.

Our clients' properties are located within the watershed area of New London Public Utilities as evidenced by the watershed map filed by the City of New London Department of Public Utilities. Therefore, in accordance with the requirements of §8-3i of the Connecticut General Statutes, we are providing you with notice of the filing of this application with the Town of Montville Inland Wetlands and Watercourses Commission. A copy of this notice is also being provided contemporaneously herewith to the Commissioner of Public Health of the State of Connecticut.

I enclose herewith for your reference a copy of the permit application which has been filed with the Montville Inland Wetlands and Watercourses Commission, a copy of our transmittal to the Town of Montville Inland Wetlands and Watercourses Commission delineating the supplemental information which has been provided with the application, a copy of the site development plan which was submitted with the application and a copy of the supplemental information.

Should you have any questions or need any additional information, please feel free to contact the undersigned.

Very truly yours,

COPY

Harry B. Heller

HBH/rmb

APPLICATION OF DEER RUN STABLE LLC TO TOWN OF MONTVILLE INLAND WETLANDS AND WATERCOURSES COMMISSION
1499 AND 1505 HARTFORD-NEW LONDON TURNPIKE (ROUTE 85), MONTVILLE

LIST OF ABUTTING PROPERTY OWNERS

1499 HARTFORD-NEW LONDON TURNPIKE (ROUTE 85)

Parcel ID	Property Address	Owner Name and Mailing Address
005-023-001	Deer Run/Route 85	1-19 Deer Run LLC 23 Washington Square North 2R New York, NY 11011
005-024-000	1495 Route 85	KoreyO'R LLC 209 Niantic River Road Waterford, CT 06385
005-024-00A	1499 Route 85	Mr. Asif Choudhry 1499 Route 85 Oakdale, CT 06370
005-028-000	1502 Route 85	Mr. Jeffrey Daniels 1502 Hartford New London Turnpike Oakdale, CT 06370
005-023-00A	1505 Route 85	Deer Run Stable LLC 65 Timber Ridge Pawcatuck, CT 06379

1505 HARTFORD-NEW LONDON TURNPIKE (ROUTE 85)

Parcel ID	Property Address	Owner Name and Mailing Address
005-023-001	Deer Run/Route 85	1-19 Deer Run LLC 23 Washington Square North 2R New York, NY 11011
005-024-000	1495 Route 85	KoreyO'R LLC 209 Niantic River Road Waterford, CT 06385
005-024-00A	1499 Route 85	Mr. Asif Choudhry 1499 Route 85 Oakdale, CT 06370
005-028-000	1502 Route 85	Mr. Jeffrey Daniels 1502 Hartford New London Turnpike Oakdale, CT 06370
005-029-000	1530 Route 85	Double Down LLC 24 Industrial Drive Waterford, CT 06385
005-023-00A	1505 Route 85	Deer Run Stable LLC 65 Timber Ridge Pawcatuck, CT 06379

AUTHORIZATION

I, Asif Choudhry, owner of real property located at 1499 Hartford-New London Turnpike (Route 85), Montville, Connecticut hereby authorize Deer Run Stable, LLC, a Connecticut limited liability company, to file an application on my behalf with the Town of Montville Inland Wetlands and Watercourses Commission for a permit to conduct regulated activities in conjunction with the combined development of properties located at 1499 and 1505 Hartford-New London Turnpike (Connecticut Route 85) for a gasoline/convenience store facility.

I do hereby further authorize Deer Run Stable, LLC, as well as its professional consultants, Angus McDonald Gary Sharpe & Associates, Inc., Heller, Heller & McCoy and Boundaries, L.L.C. to represent my interests, as property owner, in all proceedings before the Town of Montville Inland Wetlands and Watercourses Commission with respect to said permit application.

Dated at Montville, Connecticut this 18th day of November, 2019.

Asif Choudhry

Applicant Exhibit 7

AUTHORIZATION

Deer Run Stable, LLC, hereby authorizes the law firm of Heller, Heller & McCoy to file an application on its behalf with the Town of Montville Inland Wetlands and Watercourses Commission seeking a permit to conduct regulated activities in upland review areas adjacent to wetlands in conjunction with the redevelopment of properties located at 1499 and 1505 Hartford-New London Road (Connecticut Route 85) for a gasoline/convenience store facility.

Deer Run Stable, LLC does hereby further authorize the law firm of Heller, Heller & McCoy, the civil engineering firm of Angus McDonald Gary Sharpe & Associates, Inc. and Demian A. Sorrentino, AICP and certified soil scientist to represent its interests in all proceedings before the Town of Montville Inland Wetlands and Watercourses Commission with respect to said permit application.

Dated at Montville, Connecticut this 18th day of November, 2019.

DEER RUN STABLE, LLC

By: _____
Asif Choudhry, its Member

Applicant Exhibit 13

HELLER, HELLER & McCOY
Attorneys at Law
736 Norwich-New London Turnpike
Uncasville, Connecticut 06382

Sidney F. Heller (1903-1986)
Harry B. Heller
William E. McCoy

Mary Gagne O'Donal

Telephone: (860)-848-1248
Facsimile: (860)-848-4003

November 20, 2019

Town of Montville Inland Wetlands and Watercourses Commission
Attn: Ms. Nancy Woodlock, Wetlands Enforcement Officer
310 Norwich-New London Turnpike
Uncasville, CT 06382

RE: Application of Deer Run Stable, LLC for the re-development of properties at 1499 & 1505 Hartford-New London Turnpike (Route 85), Montville, Connecticut for a gasoline/convenience store facility

Dear Nancy:

Please be advised that this office represents Deer Run Stable, LLC (Applicant and Owner) and Asif Choudhry, the owners, respectively, of adjacent parcels of real property located at 1505 and 1499 Hartford-New London Turnpike. Each property is currently improved with a single family dwelling. Our client proposes to redevelop the parcels in one combined development by razing the existing improvements on the property and replacing the same with a modern convenience store facility containing 4,900 square feet, more or less, of building area with the accessory sale of gasoline and diesel fuel products. Due to the extent of the wetland system both on and immediately adjacent to the project site, it is necessary for our client to conduct regulated activities in upland review areas in conjunction with the development of the site.

In furtherance thereof, I forward herewith an application to the Town of Montville Inland Wetlands and Watercourses Commission seeking a permit to conduct regulated activities in conjunction with the redevelopment of these combined properties. Submitted herewith and constituting the application to the Town of Montville Inland Wetlands and Watercourses Commission are the following:

1. Seven (7) copies of the Application Form.

2. Seven (7) copies of the Inland Wetlands Application Checklist.

3. Seven (7) copies of the Erosion & Sediment Control Checklist.

4. Seven (7) copies of the list of abutting property owners and owners of property located immediately across the street from the application parcel.

5. Seven (7) copies of the Project Narrative including the Project Overview, List of Regulated Activities, Soil Classifications, General Procedures, Construction Sequencing Narrative, Maintenance Schedule and Delineation of no Feasible and Prudent Alternatives.

6. Authorization signed by Asif Choudhry, authorizing Deer Run Stable, LLC to file the instant application with the Town of Montville Inland Wetlands and Watercourses Commission.

7. Authorization signed by Deer Run Stable, LLC authorizing the law firm of Heller, Heller & McCoy to submit the instant permit application on its behalf and further authorizing the law firm of Heller, Heller & McCoy, the engineering firm of Angus McDonald Gary Sharpe & Associates, Inc. and certified planner and soil scientist, Demian A. Sorrentino, to represent its interests in all proceedings before the Town of Montville Inland Wetlands and Watercourses Commission with respect to said application.

8. State of Connecticut Department of Energy and Environmental Protection Inland Wetlands and Watercourses Reporting Form.

9. Seven (7) prints of the project plans entitled "Improvement Location Survey Prepared For Deer Run Stable, LLC 1499 & 1505 Hartford New London Turnpike Oakdale/Montville, Connecticut Date: January 10, 2019 Scale: 1" = 20' Sheet 1 of 10 to 10 of 10" prepared by Angus McDonald Gary Sharpe & Associates, Inc.

10. A copy of our letter of even date herewith to the City of New London Department of Public Utilities.

11. A copy of our letter being forwarded contemporaneously herewith to the State of Connecticut Department of Public Health.

12. Our check in the amount of Two Hundred Sixty and 00/100 ($260.00) Dollars representing payment of the application fee for this application, including the State of Connecticut surcharge.

13. Project impact report for the proposed commercial development prepared by Demian A. Sorrentino, AICP, C.S.S. on behalf of Boundaries, L.L.C.

14. Three (3) copies of the stormwater report and stormwater runoff calculations for the project prepared by Angus McDonald Gary Sharpe & Associates, Inc.

Request is hereby made that you place this matter on the agenda of the Town of Montville Inland Wetlands and Watercourses Commission for its regularly scheduled meeting of December 19, 2019.

Should you have any questions concerning the application, or need any additional information prior to the December 19, 2019 meeting, please feel free to call me to discuss the same.

Very truly yours,

Harry B. Heller

HBH/rmb
Enclosures
CC: Deer Run Stable, LLC
Mr. Stuart Fairbank
Mr. Demian Sorrentino

EROSION & SEDIMENT CONTROL CHECKLIST

Monitoring and Maintenance: The E&S plan and any revisions, shall identify an agent or agents who have the responsibility and authority for the implementation, operation, monitoring and maintenance of E&S measures. Such agent(s) shall be familiar with each control measure used including its limitations, installation, inspection and maintenance. When control measures fail, or are found to be otherwise ineffective, such agent(s) shall coordinate plan revisions with a professional experienced in erosion and sediment control and any approving agency when that agency's approval is required. Such agent(s) shall have the additional responsibility for ensuring all erosion and sediment controls are properly installed and maintained the construction site before predicted major storms. A major storm is defined as a storm predicted by the National Office of Atmospheric Administration (NOAA) Weather Service with warnings of flooding, severe thunderstorms or similarly severe weather conditions or effects.

Each measure has inspection requirements included in the measure's section entitled "Maintenance". Many of the measures require inspections at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater; some others require daily inspection. Only the permanent measures have less frequent inspections. More frequent inspections than those identified in the measure may be necessary for sites that are heavily traveled and before major storms.

NARRATIVE

- [X] Purpose and description of project.
- [X] Estimates of the total area of the project site and the total area of the site that is expected to be disturbed by construction activities.
- [X] Identification of site-specific erosion or sediment control concerns and issues.
- n/a [ ] The phases of development if more than one phase is planned.
- [X] The planned start and completion dates for each phase of the project.
- [X] *Either provide or identify where in the E&S plan the following information is found:*
- [X] The design criteria, construction details and maintenance program for the erosion and sediment control measures to be used.
- [X] The sequence of major operations within each phase, such as installation of erosion control measures, clearing, grubbing, excavation, grading, drainage and utility installation, temporary stabilization, road base, paving for roadways and parking areas, building construction, permanent stabilization, removal of temporary erosion control measures.
- [X] The time (in days) required for the major operations identified in the sequence.
- [X] Identify other possible local, state and federal permits required.
- [X] Identify the conservation practices to be used.
- [X] A listing of all other documents to be considered part of the E&S plan (e.g. reports of hydraulic and hydrologic computations, boring logs, test pit logs, soils reports, etc.).

SUPPORT DOCUMENTS

Hydraulic Calculations:

- [X] Size and locations of existing and planned channels or waterways with design calculations and construction details.
- [X] Existing peak flows with calculations.
- [X] Planned peak flows with calculations.
- [X] Changes in peak flows.
- [X] Off-site effects of increased peak flows or volumes.

- [x] Design calculations and construction details for engineered measures used to control off-site erosion caused by the project.
- [x] Design calculations and construction details for engineered measures used to control erosion below culverts and storm sewer outlets.
- [x] Design calculations and construction details for engineered measures used to control groundwater, i.e. seeps, high water table, etc.
- [x] *Boring logs, test pits logs, soils reports, etc.*

SITE DRAWING(S) CHECKLIST

Jurisdictional features Required on All Maps or Drawings

- [x] North Arrow.
- [x] Scale (including graphical scale).
- [x] A title block containing the name of the project, the author of the map of drawing, the owner of record for the project, date of drawing creation and any revision dates.
- [x] Property lines.
- [x] For plans containing E&S measures which require an engineered design, the signature and seal of a professional engineer licensed to practice in Connecticut.
- [x] *Site Locus Map:*
- [x] Scale (1:24,000 recommended).
- [x] Project location (show property boundaries and at least the area that is within 1000 feet of the property boundaries).
- [x] Roads, streets/buildings.
- [x] Major drainage ways (at least named watercourses).
- [x] Identification of any public drinking water supply watershed area.
- [x] *Topography, Natural Features and Regulatory Boundaries:*
- [x] Existing contours (2 foot intervals).
- [x] Planned grades and elevations.
- n/a [ ] Seeps, springs.
- [x] Limits of cuts and/or fills.
- [x] Soils, bedrock.
- [x] Inland wetlands boundaries.
- n/a [ ] FEMA identified floodplains, floodways and State established stream channel encroachment lines.
- [x] Streams, lakes, ponds, drainage ways, dams.
- [x] Existing vegetation.
- n/a [ ] Tidal wetland boundaries and coastal resource limits (e.g. mean high water, shellfish beds, submerged aquatic vegetation, CAM boundary).
- [x] Public water supply watershed, wellheads or aquifer boundaries (when available).

Drainage Patterns

- [x] Existing and planned drainage patterns (including offsite areas).
- [x] Size of drainage areas.
- [x] Size and location of culverts and storm sewers (existing and planned).
- [x] Size and location of existing and planned channels or waterways.
- [x] Major land uses of surrounding areas.

Road and Utility Systems

- [x] Planned and existing roads and buildings with their location and elevations.
- n/a [ ] Access roads: temporary and permanent.
- [x] Location of existing and planned septic systems.
- n/a [ ] Location and size of existing and planned sanitary sewers.
- [x] Location of other existing and planned utilities, telephones, electric, gas, drinking water wells, etc.

Clearing, Grading, Vegetation Stabilization

- [x] Areas to be cleared, and sequence of clearing.
- [x] Disposal of cleared material (off-site and on-site).
- [x] Areas to be excavated or graded, and sequence of grading or excavation.
- [x] Areas and acreage to be vegetatively stabilized (temporary and/or permanent).
- [x] Planned vegetation with details of plants, seed, mulch, fertilizer, planting dates, etc.

Erosion & Sediment Control Drawing

- [x] Location of E&S measure on site plan drawing with appropriate symbol.
- [x] Construction drawings and specifications for measures.
- [x] Maintenance requirements of measures during construction of project
- [x] Person responsible for maintenance during construction of project.
- [x] Maintenance requirements of permanent measures after project completion.
- [x] Organization or person responsible for maintenance of permanent measures having the authority to maintain and upgrade control measures as designed or as needed to control erosion and sedimentation
- [x] Handling of emergency situations (e.g. severe flooding, rains or other environmental problems).
- n/a [ ] If not provided in the narrative, the information listed in checklist for **NARRATIVE.**

TOWN OF MONTVILLE
INLAND WETLANDS APPLICATION CHECKLIST

N/A		
☐	☒	Completed application signed by the property owner. If you are acting on behalf of the property owner than a letter must also be submitted by the property owner stating that you are acting as his/her agent.
☐	☒	Application must have the disturbance area in square feet and acres to include the buffer area, as well as, the wetland area and what type of activity it will be in tabular format.
☐	☒	A narrative describing the activities to take place on the property. This is to include but not limited to: ☒ Alternatives considered. ☒ Description of the activity including location and square foot of Disturbance. ☒ What type of erosion and sediment control will be used? ☒ If machinery will be used or if work will be done by hand. ☒ Identify the sub-drainage basin where the proposed activity will occur.
☐	☒	List of abutting property owners and names indicated on plan.
☐	☒	Location of all wells and septic systems of abutting property owners, as well as, any located onsite.
☐	☒	Existing and proposed contours at five foot (5') contours.
☐	☒	Location of all designated wetland and watercourse areas by a Certified Soil Scientist. A soils report from the soil scientist shall also be provided along with a live signature and stamp on the plans.
☒	☐	Location of all Flood Zones per Federal Flood Insurance Rate Maps.
☐	☒	Location of all existing and proposed buildings and their uses.
☐	☒	Location of all crossings and storm water drainage systems and their drainage. Calculations based on ten (10) and twenty-five (25) year storms. In addition all points of ground water discharge will also be shown.
☐	☒	Location of all Erosion and Sediment control devices and an Erosion & Sediment control plan.
☐	☒	North arrow and location key at 1"= 1000'.
☐	☒	DEEP Report Form.
☒	☐	The requirements of Section 7.5 shall apply if the proposed activity has been determined **significant.**

☐ ☒ Site plans for the proposed use or operation and the property which will be affected, which show existing and proposed conditions, wetland and watercourse boundaries, land contours, boundaries of land ownership, proposed alterations and use of wetlands and watercourses, and other pertinent features of the development drawn by a licensed surveyor, professional engineer or landscape architect registered in the State of Connecticut or by such other qualified person;

☐ ☒ Engineering reports and analyses and additional drawing to fully describe the proposed project and any filling, excavation, drainage or hydraulic modifications to watercourses and the proposed erosion and sedimentation control plan;

☐ ☒ Mapping of soil types consistent with the categories established by the National Cooperative Soil Survey of the U. S. Soil Conservation Service (the Commission may require the applicant to have the wetlands delineated in the field by a soil scientist and that the field delineation be incorporated onto the site plan);

☒ ☐ Description of how the ecological communities and functions of the wetlands or watercourses involved with the application and the effects of the proposed regulated activities on these communities and wetlands functions;

☐ ☒ Description of how the applicant will change, diminish, or enhance the ecological communities and functions of the wetlands or watercourses involved in the application, and with each alternative, and a description of why each alternative considered was deemed neither feasible nor prudent;

☒ ☐ Analysis of chemical or physical characteristics of any fill material;

☐ ☒ Measures which mitigate the impact of the proposed activity. Such measures include, but are not limited to, plans or actions which avoid destruction or diminution of wetland or watercourse functions, recreational uses and natural habitats, which prevent flooding or degradation of water quality.

In addition to this checklist, the applicant is also responsible for those items listed in the EROSION & SEDIMENT CONTROL CHECKLIST

Applicant Exhibit 8

Connecticut Department of ENERGY & ENVIRONMENTAL PROTECTION

GIS CODE #: ___ ___ ___ ___ ___ ___ ___ ___ ___
For DEEP Use Only

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

Statewide Inland Wetlands & Watercourses Activity Reporting Form

Please complete and mail this form in accordance with the instructions on pages 2 and 3 to:
DEEP Land & Water Resources Division, Inland Wetlands Management Program, 79 Elm Street, 3rd Floor, Hartford, CT 06106
Incomplete or incomprehensible forms will be mailed back to the inland wetlands agency.

PART I: Must Be Completed By The Inland Wetlands Agency

1. DATE ACTION WAS TAKEN: year: _____ month: _____
2. ACTION TAKEN (see instructions, only use one code): _____
3. WAS A PUBLIC HEARING HELD (check one)? yes ☐ no ☐
4. NAME OF AGENCY OFFICIAL VERIFYING AND COMPLETING THIS FORM:
   (print name) _____ (signature) _____

PART II: To Be Completed By The Inland Wetlands Agency Or The Applicant

5. TOWN IN WHICH THE ACTION IS OCCURRING (print name): Montville
   does this project cross municipal boundaries (check one)? yes ☐ no ☒
   if yes, list the other town(s) in which the action is occurring (print name(s)): _____, _____
6. LOCATION (see instructions for information): USGS quad name: Montville or number: 86
   subregional drainage basin number: 2203
7. NAME OF APPLICANT, VIOLATOR OR PETITIONER (print name): Deer Run Stable, LLC
8. NAME & ADDRESS / LOCATION OF PROJECT SITE (print information): Proposed gasoline/convenience store facility 1499 and 1505 Hartford-New London Turnpike (Connecticut Route 85), Oakdale, CT 06370
   briefly describe the action/project/activity (check and print information): temporary ☐ permanent ☒ description: Construction of retaining wall and re-grading in upland review areas together with a stormwater discharge in conjunction with the ~~redevelopment of 2 non-conforming residences in a commercial zone for a use permitted by special permit in the C-1 Zoning District.~~
9. ACTIVITY *PURPOSE* CODE (see instructions, only use one code): D
10. ACTIVITY *TYPE* CODE(S) (see instructions for codes): 7, 9, 10, 12 and 14
11. WETLAND / WATERCOURSE AREA ALTERED (must provide acres or linear feet):
    wetlands: 0 acres open water body: 0 acres stream: 0 linear feet
12. UPLAND AREA ALTERED (must provide acres): 1.7 acres
13. AREA OF WETLANDS / WATERCOURSES RESTORED, ENHANCED OR CREATED (must provide acres): 0 acres

PART III: To Be Completed By The DEEP

DATE RECEIVED: DATE RETURNED TO DEEP:

FORM COMPLETED: YES NO FORM CORRECTED / COMPLETED: YES NO

CLA Engineers, Inc.
Civil • Structural • Survey

317 MAIN STREET • NORWICH, CT 06360 • (860) 886-1956 • (860) 886-9165 FAX

March 20, 2020

Ms. Marcia Vlaun
Town Planner
310 Norwich-New London Tpk.
Uncasville, CT 06382

Staff Exhibit 3(a)/Applicant Exhibit 28

RE: Deer Run Stable
Rt. 85 Gas Station
CLA-6314V

Dear Marcia:

We have reviewed the revised site development plans (dated 3-11-20) and supporting material received Mar. 18, 2020 for the proposed gas station at 1505 Rt. 85. We note that our past comments have been satisfactorily addressed. We also note:

1. The developed conditions drainage area map must be cleaned up and the two drainage areas distinctly shown.

2. The E&S Control Bond Estimate has been reviewed and we recommend an amount of $35,000.

Very truly yours,

Thomas L. Cummings, P.E.
Principal

Robert Russo
Soil Scientist

TLC:bab

Reviewing Agency: Fire Marshall
Review Date: 4/30/2020

Staff Exhibit 3(b)/
Applicant Exhibit 36

Reviewed By: PAUL D BARNES

Project Name: 219 IWC 6 (Deer Run Stable, LLC)
Project Location: 1499 & 1505 Route 85 (Map 5 Lots 23-A & 24-A)

Comments: NO COMMENTS

Electronic Signature:

Staff Exhibit 3(c)/
Applicant Exhibit 35

Reviewing Agency: Building
Review Date:

Reviewed By:

Project Name: 219 IWC 6 (Deer Run Stable, LLC)
Project Location: 1499 & 1505 Route 85 (Map 5 Lots 23-A & 24-A)

Comments:

1) Accessible Parking & Accessible Route Must Be Shown on Plan
2) Show Location Of Emergency Shut Off On Plan – Must Be Accessible To Attendant & Be Located Between 6'–100' From Dispensers

Electronic Signature:

Revised 2/27/2020

OK 4/4/20

\\mntvl-th-gis01\planningoffice$\CurrentProjects\IWC\2019\1499 & 1505 Route 85 (219 IWC 6) Gas Station\CORR\Trans\BLD Transmittals Letter 11-21-2019.doc

Staff Exhibit 3(d)/
Applicant Exhibit 34

Reviewing Agency: Uncas Health District

Review Date: April 10, 2020

Reviewed By: Michael J. Kirby, R.S., Chief Environmental Sanitarian

Project Name: 219 IWC 6 (Deer Run Stable, LLC)
Project Location: 1495 & 1505 Route 85 (Map 5 Lots 23-A & 24-A)

Comments:

Plan revised 3/11/20

1] The District cannot issue any approvals until the well site is approved by CT Department of Public Health's Drinking Water Section as the well will be a public water supply.

2] Additional test holes will be required.

3] The bottom of the GST appears to be only 14″ above the bottom of the deepest test hole. The bottom of the GST must be a minimum of 48″ above the bottom of the test hole.

4] H-20 loading specifications for the GST must be provided.

5] Prior to the start of construction a benchmark is to be set in the area of the septic system.

6] Prior to the start of construction, the building, well and system are to be staked by a licensed surveyor.

Electronic Signature: *Michael J. Kirby, R.S.*

Staff Exhibit 4

TOWN OF MONTVILLE
INLAND \WETLANDS COMMISSION
310 NORWICH NEW LONDON TURNPIKE
UNCASVILLE, CONNECTICUT 06382
PHONE (860) 848-6779 - FAX (860) 848-2354

May 26, 2020

Attorney Harry B. Heller
736 Route 32
Uncasville, CT 06382

RE: 1499 and 1505 Route 85 (Map 005, Lots 023-00A and 024-00A)
Application for Gas Station and Convenience Store

Dear Atty Heller:

Your application, pending before the Inland Wetlands Commission, is scheduled for a Public Hearing to be held at the Town Council Chambers, Montville Town Hall, on June 18, 2020 at 7:00 p.m.

Letters of proposed Hearing must be sent via Certificate of Mailing to Commission of Public Health and New London Water Authority. Copies of the Certificates of Mailing shall be provided to the Planning & Zoning office.

It will be necessary for you or your agent to come and be heard at this hearing. Should you have any questions, or need any further assistance, please feel free to contact me.

Respectfully,

Colleen Bezanson

Assistant Planner

cc. Asif Choudhry

Certified Mail: #7018 1830 0001 2918 5334

Staff Exhibit 5(a)
Applicant Exhibit 19

HELLER, HELLER & McCOY
Attorneys at Law
736 Norwich-New London Turnpike
Uncasville, Connecticut 06382

Sidney F. Heller (1903-1986)
Harry B. Heller
William E. McCoy

Mary Gagne O'Donal

Telephone: (860)-848-1248
Facsimile: (860)-848-4003

January 14, 2020

Town of Montville Inland Wetlands and Watercourses Commission
Attn: Ms. Nancy Woodlock, Wetlands Enforcement Officer
310 Norwich-New London Turnpike
Uncasville, CT 06382

Re: Deer Run Stable, LLC – 1495 and 1505 Hartford-New London Turnpike, Montville, Connecticut

Dear Nancy:

I am writing to advise you that the Applicant, Deer Run Stable, LLC does not intend to proceed before the Town of Montville Inland Wetlands and Watercourses Commission at its regularly scheduled meeting of January 16, 2020 with respect to the above referenced application. The review comments submitted by the Town of Montville's consulting engineers, CLA Engineers, Inc., required additional site testing as well as permeability tests to be performed in order to address issues identified in that engineering review. Those test results have only recently been received and are now being assimilated into revised plans for further review by the Applicant's design consultants, Angus McDonald/Gary Sharpe & Associates, Inc.

The Applicant hereby grants a forty-five (45) day extension of the time period within which the Town of Montville Inland Wetlands and Watercourses Commission is required to either open a public hearing or render a decision on this application.

Please place this matter on the agenda of the February 20, 2020 meeting of the Montville Inland Wetlands and Watercourses Commission.

Should you have any questions, please feel free to call me.

Very truly yours,

Harry B. Heller

HBH/rmb
cc: Brian Estep, Esquire (bestep@clsmlaw.com)
Z:\Deer Run Stable LLC\Wetlands\ltr.Montville re Extension.doc

Staff Exhibit 5(b)
Applicant Exhibit 21

HELLER, HELLER & McCOY
Attorneys at Law
736 Norwich-New London Turnpike
Uncasville, Connecticut 06382

Sidney F. Heller (1903-1986)
Harry B. Heller
William E. McCoy

Mary Gagne O'Donal

Telephone: (860)-848-1248
Facsimile: (860)-848-4003

February 18, 2020

Town of Montville
Inland Wetlands and Watercourses Commission
310 Norwich-New London Turnpike
Uncasville, CT 06382

RE: Application of Deer Run Stable, LLC
1499 and 1505 Route 85, Montville, Connecticut

Dear Commissioners:

The above referenced applicant hereby grants a thirty-five (35) day extension to the Town of Montville Inland Wetlands and Watercourses Commission of the statutory time period within which it is required to render a decision with respect to the above referenced application currently pending before your Commission in order to enable the applicant to address additional review comments which have recently been received from Montville's consulting municipal engineer.

Should you have any questions, please feel free to call me.

Very truly yours,

Harry B. Heller

HBH/tlk

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