TOWN OF VERNON Inland Wetlands Commission (IWC) Meeting Notice & Agenda **Tuesday, December 22, 2020, <u>7:00 PM</u>** VIA Teleconference

Join Zoom Meeting by link:

https://us02web.zoom.us/j/87332370404?pwd=aHBoV0FwUVFySnVLbDN6Vi9FUjh2Zz09

Meeting ID: 873 3237 0404 Passcode: DYDPG5 or Dial by your location (646) 876 9923 US Meeting ID: 873 3237 0404 Passcode: 870620

AGENDA -Revised

- 1. Call to Order & Roll Call
- 2. Administrative Actions
 - 2.1 Amendment/Adoption of Agenda Additional business to be considered under agenda item #9 "Other Business" requires Commission vote
 - 2.2 Approval of the Minutes from the November 24, 2020 regular meeting
 - 2.3 Communications received NOT related to Agenda items, if any
 - 2.4 Call for filing(s) of Intervener petition(s) and determination of status
- 3. New Applications for Receipt and Determination of Significance
 - 3.1 **IWC-2020-08** Application of Krause Realty Trust, for a Wetlands Permit to create additional parking for inventory storage (new cars), to include installation of pavement, security fencing, lighting, grading and drainage improvements at 6 Hartford Turnpike (Assessor ID: Map 1, Block 0159, Parcel 0001B), 34 Acorn (Assessor ID: Map 01, Block 159A, Parcel 00002) and 42 Acorn (Assessor ID: Map 01, Block 0159A, Parcel 00002).
- 4. Public Hearing and Action on New Application(s)
- 5. Status of Cease & Correct Orders, if any
- 6. Wetlands Enforcement Officer Report, if any
- 7. Inland Wetlands Agent Approvals, if any
 - 7.1 **WA-2020-06** 74 Reservoir Rd. for the work associated with the installation of an additional drive-thru lane.
- 8. Other Business
- 9. Adjournment

Minutes

Town of Vernon Inland Wetlands Commission (IWC) Tuesday, November 24, 2020, 7:00 p.m. Teleconference Meeting

DRAFT MINUTES

1. Call to Order and Roll Call

VERHON TOWN CLERK Chairperson Rachel Stansel called the meeting to order at 7:00 p.m. Also in \Box attendance were Commission Members Don Schubert, and Kathy Minor. Staff members present were Craig Perry, Wetlands Agent, David Smith, Town Engineer, and George McGregor, Town Planner.

- 2. Administrative Actions
 - 2.1 Amendment/Adoption of Agenda – Additional business to be considered under agenda item #9 "Other Business" requires Commission vote None
 - 2.2 Approval of Minutes from the October 27, 2020, regular meeting Correction on name in Item 4, bullet #4 - change the name to Dave Smith, and a spelling correction in 2.2. Don Schubert made a Motion seconded by Rachel Stansel to approve the minutes of October 27, 2020, with corrections. Motion carried unanimously.
 - 2.3 Approval of IWC 2021 Meeting Schedule Discussion took place regarding changing December 28, 2021, meeting to December 21, 2021. Rachel Stansel made a Motion seconded by Don Schubert to approve the 2021 IWC meeting schedule as listed with the exception of the December meeting being moved to December 21, 2021. Motion carried unanimously.
 - 2.4 Communications received NOT related to Agenda items, if any None
 - 2.5 Call for filing(s) of Intervener petition(s) and determination of status. None
- 3. New Applications for Receipt and Determination of Significance None

- 4. Public Hearing and Action on New Application(s) None
- 5. Status of Cease & Correct orders, if any Craig Perry gave an update on Scranton Powersports; new Bond expected.
- 6. Wetlands Enforcement Officer Report, if any None
- 7. Inland Wetlands Agent approvals, if any
 - 7.1 WA-2020-05 212 West Street for the improvement of traffic areas with bituminous pavement and drainage improvements.
 Wetland Agent Craig Perry's certified letter dated November 5, 2020, included in Commission Packet. Wetlands Approval was given.
- 8. Other Business None
- 9. Adjournment Don Schubert made a Motion seconded by Kathy Minor to adjourn at 7:11pm. Motion carried unanimously.

Respectfully Submitted

Auvett

Susan Hewett Recording Secretary

APPLICATION 1



TOWN OF VERNON INLAND WETLANDS COMMISSION (IWC)

APPLICATION

This form is to be used to apply to the Vernon Inland Wetlands Commission (IWC) for approval for a redesignation of a wetlands area, a change to the Inland Wetlands and Watercourses Regulations, and/or a permit to conduct a regulated activity in a wetland, watercourse, or upland review area (URA), which are defined as areas within one hundred (100) feet from the boundary of a wetland, watercourse, or intermittent watercourse and areas within two hundred (200) feet from the boundary of Gage's Brook, Hockanum River, Ogden Brook, Railroad Brook, Tankerhoosen River, Valley Falls Pond, Walker Reservoir East, Walker Reservoir West. Any activity that the Commission determines is likely to impact or affect wetlands or watercourses may be considered a regulated activity. **Provide all the information requested.**

The Applicant must be the property owner, the property owner's agent, the Town of Vernon, or someone with a direct financial interest in the subject property. Said interest shall be explained. If the applicant is not the property owner, written permission for this Application must be obtained from the property owner and submitted by letter signed by the property owner authorizing submission of the Application.

The Applicant understands that the Application is complete only when all information and documents required by IWC have been submitted and that any approval by the IWC relies upon complete and accurate information being provided by the Applicant. Incorrect information provided by the Applicant may make the approval invalid. The IWC may require additional information to be provided by the Applicant.

I. APPLICANT (S)

Name:The Krause Realty Trust
Title:
Company:
Address: 24 Hartford Turnpike, Vernon, CT 06066
Telephone: <u>860-649-6550</u> Fax:
E-mail:pkrause@krausecars.com
II. PROPERTY OWNERS
Name:Same as applicant
Title:
Company:
Address:
Telephone: Fax:
E-mail:

III. PROPERTY

Address: <u>6 Hartford Turnpike; 34 Acorn Road; 42 Acorn Road</u>	
Assessor ID Code: Map # Block # Lot/Parcel # *	See attached
Land Record Reference to Deed Description: Volume:* Page*	Addendum to Application
USGA Location:	
Circle the Map Quadrangle Name: Manchester # 38 Rockville #39	
Circle the Sub regional Drainage Basin #: 3108 4500 4502 4503	
Zoning District:*	
IV. PROJECT	
Project Name: <u>Subaru Parking Expansion</u>	
Project Contact Person:	
Name: <u>Dorian R. Famiglietti</u>	
Title: <u>Attorney for Applicant/Ownwer</u>	
Company: Kahan, Kerensky & Capossela, LLP	
Address: 45 Hartford Turnpike	
Vernon, CT 06066	
Telephone:860-646-1974 Fax:860-647-8302	
E-mail: <u>dfamiglietti@kkc-law.com</u>	
V. PROJECT SUMMARY	
Describe the project briefly in regard to the purpose of the project and the activities that will o application a complete and detailed description with maps and documentation as required by Vernon Inland Wetlands and Watercourses Regulations ".	ccur. Attach to this the " The Town of
Purpose: Creation of additional parking for inventory storage (new ca	rs)
General Activities: See attached Addendum to Application	
Regulated Activities:	
Watercourse disturbance (linear feet):0–	
Wetlands disturbance (acres or sq. ft.):0-	
Upland Review Area (URA)disturbance:21,670 SF (see attached Addendum to A	pplication)
Nonregulated activities & activities outside URA: <u>installation of pavement, secu</u> r: lighting, grading and drainage improve	ity fencing, ements.

Return to: Krause Realty Trust 24 Hartford Turnpike Vernon, CT 06066

STATUTORY FORM WARRANTY DEED

IT, ANTHOS ACORN 32-34, LLC, a Connecticut limited liability company, having a place of business in the Town of Nanuet, and State of New York (the "Grantor"),

for the consideration of SIXTY-FIVE THOUSAND AND 00/100 DOLLARS (\$65,000.00) paid grants to KRAUSE REALTY TRUST, having a place of business in the Town of Vernon, County of Tolland and State of Connecticut (the "Grantee")

with WARRANTY COVENANTS:

A certain piece or parcel of land, situated in the Town of Vernon, County of Tolland and State of Connecticut, known as 34 Acorn Road (Parcel No. 01159A00002) and 42 Acorn Road (Parcel No. 01159A00001), and more fully described in <u>Schedule A</u> attached hereto and made a part hereof.

Said premises are subject to any and all provisions of any ordinance, municipal regulation, or public or private law.

Said premises are subject to Taxes due the Town of Vernon on the List of October 1, 2019, which taxes the Grantee herein assumes and agrees to pay as part consideration for this conveyance.

Said premises are subject to the following:

As to both 34 Acorn Road 42 Acorn Road:

- (a) A utility easement in favor of The Connecticut Light and Power Company dated June 4, 1956 and recorded June 21, 1956 in Volume 107 at Page 30 of the Vernon Land Records.
- (b) Caveat dated June 15, 1978 and recorded June 21, 1978 in Volume 336 at Page 10 of the Vernon Land Records.
- (c) Notice dated August 15, 1980 and recorded August 18, 1980 in Volume 388 at Page 163 of the Vernon Land Records.
- (d) Certificate of Taking dated October 22, 1980 and recorded October 22, 1980 in Volume 394 at Page 264 of the Vernon Land Records.
- (e) Certificate of Notice of Assessments and Deferral of Payments recorded April 3, 1991 in Volume 828 at page 246 of the Vernon Land Records.

CUNVEYANCE TAX RECEIVED STATE * \$487,50 LOCAL * \$162,50 RAREN C. DAIGLE TOWN CLERK OF VERMON



3.

- (f) Affidavit dated December 27, 2008 and recorded December 28, 2007 in Volume 1971 at page 239 of the Vernon Land Records.
- (g) Building lines, notes, sanitary easements and 20' conservation easement to be deeded to the Town of Vernon as shown on map.

As to 42 Acorn Road only:

(h) Certificate of Notice of Installment Payment of Assessment of Benefits recorded March 23, 1983 in Volume 451 at page 129 of the Vernon Land Records.

As to 34 Acorn Road only:

- (i) Certificate of Notice of Installment Payment of Assessment of Benefits recorded March 23, 1983 in Volume 451 at page 127 of the Vernon Land Records.
- (j) Certificate of Notice of Installment Payment of Assessment Benefits recorded March 23, 1983 in Volume 451 at page 128 of the Vernon Land Records.

(signature page to follow)

Signed this 10 day of June, 2020.

Signed, sealed and delivered in the presence of:

Chery

ANTHOS ACORN 3 aralambos Kostopoulos

Its Member, duly authorized

STATE OF NEW YORK

COUNTY OF ROCKland)

June 1 2020

On this 10 day of June, 2020, before me, Stephini e (wghl/the undersigned officer, personally appeared Haralambos Kostopoulos who acknowledged himself to be the Member of ANTHOS ACORN 32-34, LLC, and that he as such Member, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the limited liability company by himself as Member, duly authorized.

Notary Public

Grantee's Address: 24 Hartford Turnpike Vernon, CT 06066

F:\COMMERCIAL REAL ESTATE\Sale Files\Anthos Acorn 32-34, LLC(HUMMS)Warranty Deed (2).docx

STATUTORY FORM WARRANTY DEED

HRK ASSOCIATES, LLC, a Connecticut limited liability company having an office in Coral Gables, Florida, formerly known as HRK Associates, for consideration paid, grants to PETER B. KRAUSE and JAMES F. MARTIN, AS TRUSTEES OF THE KRAUSE REALTY TRUST DATED OCTOBER 30, 2007, having an address of 24 Hartford Turnpike, Vernon, CT 06066, with WARRANTY COVENANTS, those certain pieces or parcels of land, situated in the Towns of Vernon and Manchester, County of Tolland and State of Connecticut, known as 6 Hartford Road, Vernon, and being more particularly bounded and described on <u>Exhibit A</u> attached hereto and made a part hereof.

BALANCE OF PAGE INTENTIONALLY LEFT BLANK

CONVEYANCE TAX RECEIVED STATE \$ 10070.63 TOWN \$ 2517.66 Bernice K. Dixon TOWN CLERK OF VERNON Signed this $\underline{30}$ day of October, 2007.

Witnessed by:

Print Name: CARRENCE H K Ra

Sint

Print Name: 41.

HRK ASSOCIATES, LLC

B Kenneth Gorin, Member

ACKNOWLEDGMENT ON FOLLOWING PAGE

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STATE OF FLORIDA)) ss. COUNTY OF **DAD**?)

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October 30, 2007

Personally appeared, Kenneth Gorin, Member of HRK Associates, LLC a Connecticut limited liability company, signer of the foregoing instrument and acknowledged the same to be his free act and deed as such member and the free act and deed of the limited liability company, before me.

Commissioner of the Superior Court Notary Public My Commission Expires:



Grantee's Mailing Address:

24 Hartford Turnpike Vernon, CT 06066

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SCHEDULE A

LEGAL DESCRIPTION

A certain piece or parcel of land situated in the Town of Vernon, County of Tolland and State of Connecticut, shown as "LOT 1" on a map entitled "ACORN ROAD VERNON, CONNECTICUT REAR LOT APPLICATION 2.68 ACRES, ALL LOTS - ZONE R-27 PREPARED FOR HOMEOWNERSHIP ASSISTANCE 549 BURNSIDE AVE EAST HARTFORD, CT JOB NO: 04-P34 DRAWN BY: T.L DESIGNED BY: T.J. CHECKED BY: T.I. DATE: 3/1/06 SCALE: 1" = 40' DRAWING NO: C1 ENGINEERS: INGA CONSULTING ENGINEERS ANDREW T. INGA 139 WHITNEY STREET HARTFORD, CONNECTICUT REG, 14894 PHONE 860-233-4991 SURVEYOR: OSWALD BUNT REGISTERED LAND SURVEYOR WINDSOR, CONNECTICUT REG, 12048 REVISIONS 0 3/1/06 1 6/7/05 Conservation easement, driveway tum around 2 7/21/06 Refocate Road and Detention Basin" said map has been filed as map #5036 in the land records of the Town of Vernon where a more particular description may be had.

A certain piece, or parcel: of land situated in the Town of Vernon, County of Tolland and State of Connecticut, shown as "LOT 2" on a map entitled "ACORN ROAD VERNON, CONNECTICUT REAR LOT APPLICATION 2.68 ACRES, ALL LOTS – ZONE R-27 PREPARED FOR HOMEOWNERSHIP ASSISTANCE 549 BURNSIDE AVE EAST HARTFORD, CT JOB NO: 04-P34 DRAWN BY: T.I. DESIGNED BY: T.I. CHECKED BY: T.I. DATE: 3/1/06 SCALE: 1" = 40' DRAWING NO: C1 ENGINEERS: INGA CONSULTING ENGINEERS ANDREW T. INGA 139 WHITNEY STREET HARTFORD, CONNECTICUT REG. 14894 PHONE 860-233-4991 SURVEYOR: OSWALD BUNT REGISTERED LAND SURVEYOR WINDSOR, CONNECTICUT REG. 12048 REVISIONS 0 3/1/06 1 6/7/06 Conservation easement, driveway turn around 2 7/21/06 Relocate Road and Detention Basin" said map has been filed as map #5036 in the land records of the Town of Vernon where a more particular description may be had.

> RECORDED IN VERNON LAND RECORDS KAREM C. DAIGLE VERNON TOUN CLERK ON JUN 22, 2020 AT 03:01 PH

LID CHECKLIST Applicants must complete and submit the following checklist with the application.

Date: December 16, 2020 Project: Proposed Parking Lot Expansion, 34 & 42 Acorn Road, Vernon

Conformance with the following criteria shall be initialed in the spaces provided below by a Connecticut Registered Professional Engineer, Land Surveyor, or Certified Soils Scientist as appropriate. If conditions cannot be met comments addressing each item should be provided by the applicant in the space provided below. Comments will be reviewed with Town Staff at the scheduled Development Staff Meeting and documented.

ltem	Description	Verified	Comments
1	An Existing Conditions Plan is provided documenting sensitive natural resources including but not limited to existing wetlands (as designated by a Certified Soils Scientist in Connecticut), streams, ponds, vernal pools, flood zones, stream channel encroachment lines, soil types and infiltration rates, wells, tree lines, property boundaries, and other items that may be requested by the Town.		Regulated resources (i.e., wetlands/watercourses) both on the property and off-site to the west have been documented and are shown on the plan. The site is predominately wooded with scrub shrub tangles along the existing sewer easement.
2	Utilizing the Existing Conditions Plan as a guide, development has been located to maximize preservation of contiguous natural sensitive areas.		Preservation of natural sensitive areas has been accomplished. There is no direct impact to wetlands or watercourses.
3	Proposed site developments for residential or two family dwellings on more than one individual parcel, all commercial, industrial, and retail developments have been guided by the applicable requirements of the Town's Low Impact Development Stormwater Quality Manual and the Connecticut Storm Water Quality Manual.		Applicable manuals have been used as guidance. Proposal includes permeable pavement as the primary LID best management practice.
4	Bioretention Basins or Rain Gardens have been incorporated within yards, median strips, cul-de-sacs islands, and parking lot islands.		see above

Project: Proposed Parking Lot Expansion, 34 & 42 Acorn Road, Vernon

Conformance with the following criteria shall be initialed in the spaces provided below by a Connecticut Registered Professional Engineer, Land Surveyor, or Certified Soils Scientist as appropriate. If conditions cannot be met comments addressing each item should be provided below. Comments will be reviewed with Town Staff at the scheduled development staff meeting and documented.

Date: December 16, 2020

ltem	Description	Verified	Comments
5	Dry Wells have been incorporated into the design to control roof and pavement runoff.		n/a
6	Permeable (Porous) Pavement has been incorporated into areas of low traffic, parking lots, residential and light commercial use driveways, walkways, bike paths, etc.		More than a third of the proposed parking lot (western section) would have permeable pavement
7	Natural areas including woodlands, regulated wetland areas, naturally vegetated areas have been preserved/ and or replicated to the maximum extent practical.		More than half of the site will be preserved as woods, and be restricted from future development.
8	Post Development stormwater runoff is at or less than the predevelopment runoff.		Not analyzed, but likely based on the capacity of the permeable pavement to infiltrate runoff to the underlying soil substrata.
9	Stormwater infiltration has been provided by the use of underground storage units, devices, and/or infiltration swales/trenches.		Stormwater would be infiltrated via the proposed permeable pavement
10	Level spreaders/vegetation have been provided at storm drainage outfalls to enhance water quality and mitigate erosion.		n/a

Date: <u>December 16, 2020</u> Conformance with the following criteria shall be initialed in the spaces provided below by a Connecticut Registered Professional Engineer, Land Surveyor, or Certified Soils Scientist as appropriate. If conditions cannot be met comments addressing each item should be provided below. Comments will be reviewed with Town Staff at the scheduled development staff meeting and documented.

ltem	Description	Verified	Comments
11	On-Site retention/detention facilities have been provided to address water quality and storm water runoff.		n/a; permeable pavement provided
12	Rain Barrels, cisterns, and/or other rainwater harvesting techniques to reuse rainwater for irrigation and other non-potable uses are incorporated into the design.		n/a; permeable pavement provided
13	An Erosion and Sedimentation Control Plan conforming to the Standards of the Connecticut Guidelines for Soil Erosion and Sediment Control is included in the design.		Yes; complying with applicable standards
14	A yearly maintenance plan of all components of best management practices associated with storm water management has been provided.		Yes; required per maintenance recommendations for permeable pavement
15	Impervious area percentages for pre and post development have been provided.		To be provided.
16	When conflicts exist between the Town's Low Impact Development Stormwater Quality Manual and the Connecticut Storm Water Quality Manual the State Manual shall govern.		



Legend



USGS Quadrangles for Vernon, CT



Town Line



Water Bodies Quad Index NAD83 38 - Manchester 39 - Rockville





Legend

Water Bodies

Major Basin

- Subregional Basin

4503 Basin ID#

Town of Vernon Subregional Drainage Basins

Source: CT DEP

This map was createdby the Vernon Planning Department June 2010

This map is for information only, and its utilization and verification shall be the sole responsibility of the user. No warranty, expressed or implied, is made by the Town of Vernon as to the accuracy or completeness of this map, nor shall the fact of distribution constitute any such warranty.







Ecology
 Soil & Wetland Studies
 Water Quality Monitoring • GPS
 Environmental Planning & Management
 Ecological Restoration & Habitat Mitigation
 Aquatic, Wildlife and Listed Species Surveys
 Application Reviews • Permitting & Compliance

VIA EMAIL & HAND-DELIVERY

December 15, 2020

Town of Vernon Inland Wetlands Commission Memorial Building, 14 Park Place Vernon, CT 06066

RE: *WETLANDS ASSESSMENT & IMPACTS ANALYSIS: SUMMARY OF FINDINGS* Proposed Parking Lot Expansion, 34 & 42 Acorn Road, Vernon, CT *REMA Job # 20-2329-VER52*

Dear Chairperson Stansel and Commissioners:

On behalf of the applicant, the Krause Realty Trust, REMA ECOLOGICAL SERVICES, LLC (REMA) has prepared this brief *Wetlands Assessment & Impacts Analysis* report, to be submitted with an application to conduct regulated activities at the above-referenced property. This is pursuant to the provisions of the Inland Wetlands and Watercourses Act, Connecticut General Statutes Section 22a-28 through 22a-45d, inclusive, and the Inland Wetlands and Watercourses Regulations of the Town of Vernon (adopted September 22, 2009, effective October 8, 2009, and amended through April 4, 2013).

The primary objective of this report is to provide the Commission with a brief description and characterization of the regulated wetlands associated with the subject site, an assessment of their ability to provide various functions and values, and to analyze potential short-term and long-term impacts to these resources from the proposed development. The plans reviewed for this report were prepared by Messier Survey, LLC, of Vernon, CT, and are dated August 2020, and revised through October 18th, 2020 (2 sheets).

1.0 INTRODUCTION & OVERVIEW

The overall property that is the subject of the application (i.e., "site," "study area") can be accessed from Acorn Road to the east (see Figures 1 and 2, attached). To the north the site



abuts an existing commercial establishment (i.e., Suburban Subaru) also owned by the applicant. The site encompasses roughly 2.386 acres of land, the majority of which is in second growth deciduous woodlands. A sanitary sewer easement runs along the northern and western portions of the site. The regulated wetlands associated with the site include Wetland 1A, located in part at the northwestern section of the site, as well as Wetland 1B, located off-site to the west (see Figure 2, attached).

The proposed regulated activity is for the construction of a parking lot with 116 spaces, to serve primarily for vehicle inventory for Suburban Subaru to the north of the site, with which it will connect. The parking area will occupy approximately 1.108 acres, with the remaining land (i.e., +/- 1.277 acres) to be permanently restricted from development.

Wetland delineations were conducted by Certified Soil Scientist, John Ianni, in December 2011 and March 2012. These wetland delineations, which appear on the submitted plans, were accepted by the Town of Vernon, through its wetland map amendment process (a.k.a., wetland redesignation) in 2012. REMA has reviewed these delineations in the field and has verified that they are substantially correct, and have not changed in the intervening years. For this application, REMA soil and wetland scientists conducted baseline natural resource inventories at the site on November 4th, 2020. However, it should be noted that REMA had previously inventoried the site on March 11th, and August 22nd, 2006, as part of a two-lot residential subdivision that created the subject parcels (see attached Photos 1 through 7).

We should note that we have evaluated the proposal for consistency with the Connecticut Inland Wetlands and Watercourses Act (Section 22a-36 through 22a-45 of the Connecticut General Statutes), and the Town's Inland Wetland & Watercourses Regulations.

Appended to this report are several figures (i.e., Figures 1 through 4), including a recent aerial photograph (e.g., 2019), as well as annotated photographs of the site's regulated areas (i.e., Photos 1 through 7, and A through F, attached).

2.0 SUMMARY OF EXISTING CONDITIONS

Introduction

• The subject site occupies roughly 2.386 acres of level to moderately steep terrain to the west and southwest of Acorn Road and to the north of Taylor Street in Vernon, CT. It is located within a small block of undeveloped, but previously disturbed land surrounded by



residential and commercial uses to the north, east, and south. A sanitary easement traverses the site both along its western and northern property boundaries. The Town of Manchester municipal boundary is about 50 to 75 feet to the west of the site.

Past Land Use

Review of archived aerials and topographic maps (i.e., 1934, 1965, 1970, 1986, 1990, 1995, and 2004) show that the site was once mostly open field, with the exception of a wooded swath, south of the sewer easement at the northern edge of the property (see Figure 4, attached).

Surficial Geology & Soils

Soils within the uplands are derived from glaciofluvial <u>deposits</u> (i.e., outwash, stratified sands and gravel) and are classified primarily as the moderately well drained Ninigret and Tisbury (21) soils series complex and the well-drained Manchester (37) soil series. Disturbed upland soils are mapped predominately as Udorthents (306), and encompass roughly one quarter of the site, especially along and near the sewer easement. The wetland-type soils are predominately mapped as Aquents (308w), that is, disturbed wetlands soils, which are associated with Wetland 1A, and the very poorly drained Saco (108) soil series, associated with Wetland 1B, which occurs off-site to the west. The Saco soil series are derived from alluvial <u>deposits</u> (i.e., stratified sand and silt). Also see the State of Connecticut Soil Survey (attached).

<u>Uplands</u>

- Maturing second-growth, oak-maple upland forest can be found in the southeastern portion of the site. Dominant vegetation includes red, white, and black oak, red maple, sugar maple, slippery elm, black cherry, white ash, cottonwood, multiflora rose (invasive), Morrow's honeysuckle (invasive), firebush (invasive), shadblow, blackberries, wood and Christmas ferns, Canada mayflower, grasses, partridgeberry, poison ivy, Asiatic bittersweet, and Virginia creeper.
- A few large diameter trees occur on the site. These appear to be along an old hedgerow between two fields as seen on the 1934 aerial photograph. One of these is an over fourfoot diameter white oak, a "wolf tree," typically used to provide shade for livestock.
- ➤ A large portion of the site, particularly its northernmost and western sections (where the parking expansion is proposed), have much less mature vegetation and are characterized



by tangles and thickets a more open woody overstory and invasive plant species such as Asiatic bittersweet, firebush, Japanese barberry, multiflora rose, and Morrow's honeysuckle.

Wetlands/Watercourse

- The site's regulated resources are located within one watershed (i.e., local basin #4500-00-3-R5). The site's ditched intermittent watercourse flows westerly to join an unnamed perennial watercourse, tributary to the Hockanum River.
- The surface water quality classification of the site's waters, namely of unnamed perennial watercourse to which the site's ditched watercourse flows, is a Class A surface water, according to Connecticut Environmental Conditions Online (CTECO). However, it is likely that surface waters are somewhat impaired since much of this watercourse's watershed is developed, and it receives direct runoff from several commercial establishments, built in the 1950s and 1960s.
- Wetland 1A, includes the easterly section of the off-site ditched watercourse, with both poorly and very poorly drained soils. Its hydrologic regimes includes seasonally flooded, seasonally saturated, and temporarily flooded. The wetlands' hydrogeomorphic classification (HGM)¹ is predominately surface water depression and groundwater depression (see attached wetland classification definitions).
- This wetland encompasses approximately 0.28 acres, occurring off-site and to the north of the site (see Figure 2, attached). Only +/- 320 square feet of Wetland 1A extends onto the subject site. Based on review of archival aerial photographs, as well as our site investigation, this wetland was excavated in the past, likely to act as a detention basin. It's "outlet," which consists of the ditched intermittent watercourse, is the restriction that keeps surface waters within Wetland 1A, which is somewhat depressional and will retain up to two feet of water, particularly after storm events. A roughly 2' x 3' arch pipe discharges runoff directly in Wetland 1A, at the eastern end of the ditched intermittent watercourse.
- ➤ Wetland 1A is much less diverse, vegetatively, than Wetland 1B. Dominant or common overstory trees include red maple, cottonwood, and American elm. Its woody understory includes such species as multiflora rose (invasive), Morrow's honeysuckle

¹ Brinson, M.M. 1993. A hydrogeomorphic classification for wetlands, Technical Report WRP–DE–4, U.S. Army Corps of Engineers Engineer Waterways Experiment Station, Vicksburg, MS



(invasive), glossy buckthorn (invasive), and spicebush. Herbaceous species observed include skunk cabbage, smartweeds, and jewelweed.

- ➤ Wetland 1B, occurring entirely off-site to the west, is a predominately very poorly drained, seasonally flooded to saturated, palustrine, broad-leaved deciduous forested wetland (PFO1F), per the National Wetland Inventory (NWI) classification. The wetlands' hydrogeomorphic classification (HGM)² is predominately groundwater slope.
- ➤ Wetland 1B is roughly 2.3 acres in size, and drains to the unnamed perennial tributary of the Hockanum River at its far western extent, behind the Sherman-Williams paint store (see Figure 4).
- Wetland 1B is characterized by a somewhat more open overstory (canopy closure: +/-65 - 70%). Its woody overstory is dominated by red maple, but also includes green ash, American and slippery elm, black cherry, and sycamore. Its woody understory is relatively open, but diverse, and incudes such species as multiflora rose, Japanese barberry (invasive), Morrow's honeysuckle (invasive), glossy buckthorn (invasive), gray dogwood, nannyberry, northern arrowwood, elderberry, highbush blueberry, maleberry, shadblow, meadowsweet, and winterberry. Herbaceous species are moderately diverse and dense. Those observed during the off-season included skunk cabbage, sedges, including tussock, fringed, and bladder, white avens, ferns (i.e., sensitive, crested, royal, cinnamon, New York, marsh, wood), goldenrods including rough-stemmed and swamp, jewelweed, smartweeds, water horehound, mad-dog skullcap, bittercress, New York aster, soft rush, violets, and false nettle.

Wetland Functions & Values

The evaluation units for the *Functions and Values Assessment* were Wetlands 1A and 1B. We have used best professional judgment in this assessment, while relying on the rationales found in the US Army Corps of Engineers' (USACE) *Descriptive Approach* (1995), the assessment methodology most commonly used in our region. Results are summarized below in Table 1.

Overall, *Wetland 1B* confers several <u>principal</u> functions predominately due to its size, relative undisturbed nature, which has been somewhat preserved by the fact that the ditched watercourse, which runs along its northern boundary, bypasses the bulk of the wetland,

² Brinson, M.M. 1993. A hydrogeomorphic classification for wetlands, Technical Report WRP–DE–4, U.S. Army Corps of Engineers Engineer Waterways Experiment Station, Vicksburg, MS



general lack of invasive species, likely due to its very poorly drained soils that are at least saturated year round, and also its good floristic diversity and habitat structure, including microtopography. *Wetland 1A*, however, is quite disturbed, directly receiving stormwater, has low vegetative diversity and structure, is replete with invasive species, and is small compared to Wetland 1B. It provides two <u>principal</u> functions due to the fact that it acts to polish stormwater.

Function/Value	Wetland 1A	Wetland 1B
1.Groundwater Recharge/ Discharge	Y	Р
2. Floodflow Alteration	Y	Р
3. Fish and Shellfish Habitat	N/A	N/A
4. Sediment/Toxicant/ Pathogen Retention	Р	Р
5. Nutrient Removal	Р	Р
6. Production Export	N	Y
7. Sediment/Shoreline Stabilization	N	Y
8. Wildlife Habitat	Y	Р
9. Recreation (Passive, Active)	N	Y
10. Educational/Scientific Value	N	Y
11. Uniqueness/Heritage	N	N
12 Visual Quality/Aesthetics	N	Y
13. Endangered Species Habitat ³	N	N
14. Fish & Shellfish habitat (Marine)	N/A	N/A

Table 1: Summary of Wetland Function-Value Assessment

Notes: P = Principal function; Y = function present; N = function not appreciably present

3.0 SUMMARY OF PROPOSED CONDITIONS

3.1 DIRECT WETLAND IMPACTS & URA ENCROACHMENT

Direct permanent wetland or watercourse impacts are not proposed. Encroachment within the site's 100-foot upland review area (URA), from wetland boundaries, consists of 21,670 square feet (i.e., 0.497 acres), as measured to the perimeter silt fence shown on the submitted plans.

3.2 POTENTIAL INDIRECT WETLAND IMPACTS

Indirect or secondary impacts to a wetland or watercourse can occur as a result of activities outside of wetlands or watercourses. Such impacts can be *short-term* or *long-term*, and are



typically associated with erosion and sedimentation, mostly during the construction period, the removal or disturbance of vegetation in upland areas but adjacent to wetlands or watercourses, the alteration of wetland hydrology or the flow regime of a watercourse, and the discharge of degraded surface water or groundwater, which may adversely impact the water quality of the regulated resources.

The potential for any of these indirect impacts to occur at the site as a result of the proposal depends on the regulated resources themselves, their ecological sensitivity, and their ecological and physical characteristics. These potential impacts are discussed below.

3.2.1 Erosion and Sedimentation

The potential for soil erosion and subsequent deposition in wetlands or watercourses exists at every construction site that involves soil disturbance. At this site the overall risk or the potential for adverse impacts from erosion and sedimentation is considered to be *moderate*. The primary reasons for this assessment are as follows: (1) a detailed erosion and sedimentation control plan has been prepared, which complies with the CT DEEP's 2002 *Connecticut Guidelines for Erosion and Sediment Control*; (2) the dominant soils in the areas to be graded and/or exposed, have *low* to *low-moderate* erodibility; and (3) for the most part slopes are nearly flat to gentle in the areas proposed for development. We note that the moderately steep slope in the southeasterly section of the site has been avoided and will be permanently restricted from development.

3.2.2 Removal of Native Vegetation and Habitat Loss

Habitat loss associated with land clearing is an unavoidable consequence of land development, which has the potential of impacting wetlands and watercourses. At the subject site, however, all of the on-site upland areas adjacent to wetlands are already encumbered by a sanitary sewer easement, have been cleared in the past, and contain invasive species and only young pole-size trees. Therefore, they do not contribute much as complimentary habitat to the wetlands. Wetland 1A is already up against development, while Wetland 1B, which is off-site, will still have a sufficient upland buffer to complement and protect its functions and values post-construction. Therefore, the potential of adverse impacts from land clearing to the regulated areas is minimal.

³ Review of CT DEEP's Natural Diversity Database did not reveal any estimated habitats for listed species (i.e.,



3.2.3 Potential Impacts to Wetland Hydrology and Stream Flow

To the extent that the hydrologic and flow regimes of the wetlands and watercourse depend on the site, this will be mitigated by providing a permeable pavement surface within the parking lot's western section. This will allow for infiltration to the underlying sandy soils, recharging the groundwater table associated with these wetlands, specifically Wetland 1B, off-site. Furthermore, more than half of the site will remain undeveloped and will continue to recharge the groundwater regime that governs wetland hydrology. Therefore, the potential for adverse impacts to the hydrologic and flow regimes of the regulated resources is negligible.

3.2.4 Potential Water Quality Impacts

Stormwater runoff from impervious surfaces of commercial sites has the potential of degrading the water quality (i.e., surface and groundwater) of regulated resources. Generation of potential pollutants on impervious surfaces typically results from vehicular traffic over them. The more the "axle-miles" or the movements of vehicles over impervious surfaces, the higher is the loading of runoff constituents, including sediment, nutrients, heavy metals, and the like.

The proposed parking lot is not considered a significant generator of runoff constituents, as for example would be a parking lot of a commercial establishment, such as a grocery store or other retailer. The parking lot will used predominately for inventory of vehicles, most of them new, to be sold at the dealership. The primary best management practice (BMP) for water quality control is the proposed permeable pavement to be constructed at the western section of the parking lot. Runoff generated at the eastern section will sheet flow to the permeable pavement where it will be infiltrated and treated before interacting with the subsurface soil strata and the local water table associated with the regulated wetlands.

Permeable pavement (or porous asphalt) is largely recognized as a low impact development (LID) practice able to provide excellent water quantity and water quality control/treatment. The University of New Hampshire Stormwater Center has developed specifications based on multi-year testing showing the benefits of the stormwater treatment practice (see attached fact sheet and submitted plans). This BMP is suitable for cold-climate applications and also allows for reduced sand and salt usage. It can be introduced and function efficiently in areas where the permeability of the underlying soils is above 0.5 inch per hour. At this site, the

endangered, threatened, special concern) associated with the subject site.



soil parent materials are sandy outwash, capable of permeabilities in the 1.0 to 1.5 inch per hour range. Therefore, the existing water quality of the off-site downgradient wetlands and watercourses will be maintained in the long-term. No significant adverse impacts to the water quality of the regulated resources is expected.

4.0 CONCLUSION

It is our professional opinion that that the proposal will have no direct impacts and minimal indirect impacts to wetlands and watercourses. Following implementation of the proposed mitigation strategies, such as the proposed LID practice of utilizing permeable pavement, and including a carefully maintained erosion and sedimentation control plan, there will be no long-term significant or adverse impacts to regulated wetlands and watercourses that occur off-site and downstream.

Please feel free to contact our office with any questions on the above.

Respectfully submitted,

REMA ECOLOGICAL SERVICES, LLC

George T. Logan, MS, PWS, CSE Registered Soil Scientist/Professional Wetland Scientist Certified Senior Ecologist

Attachments:Figures 1 through 4
Photos 1-7, A-F
Web Soil Survey of Subject Site
Wetland Classification/Characterization Definitions
UNH-SC Permeable Pavement Fact Sheet

Figure 1: Site Locus, Acorn Road, Vernon, CT





FIGURE 4: 34 & 42 Acorn Road, Vernon, CT as seen on a 1965 aerial (CT State Library)

Wetland 1A

24.9

Wetland 1B

121277

Unnamed Perennial Stream

Photo 1: Typical wooded uplands; lower well drained to moderately well drained portion of site; facing northeasterly

Photo 2: Invasive plants along existing sewer line through site; facing northerly

Photo 3: Off-site (mostly) northerly wetland; receives storm drainage from surrounding landuses; facing northwesterly

Photo 4: Off-site (northerly) forested wetland; facing northeasterly

Photo 5: Portion of off-site (mostly) northerly wetland; receives storm drainage from surrounding landuses; facing northwesterly

Photo 6: Off-site (northerly) wetland drains out behind area businesses to the west; facing northeasterly

Photo 7: Off-site (west) young forested swamp; approximately 175 feet from western property boundary; facing westerly

Photo A: Wetland 1A; previously excavated detention basin; facing southerly

Photo B: Drainage ditch (i.e., intermittent watercourse) connecting Wetlands 1A and 1B; facing easterly

Photo C: Drainage ditch (i.e., intermittent watercourse) connecting Wetlands 1A and 1B; facing westerly

Photo D: Wetland 1B (off-site) as viewed from near western property boundary; facing westerly

Photo E: Wetland 1B, roughly 120 feet west of western property boundary; this wetland had a more open habit 30 - 40 years ago; facing westerly

Photo F: Central property uplands; note young pole-sized trees; facing southwesterly

USDA Natural Resources Conservation Service Web Soil Survey National Cooperative Soil Survey

МА	P LEGEND	MAP INFORMATION
Area of Interest (AOI) Area of Interest (ACI Soils Soil Map Unit Polyg Soil Map Unit Lines Soil Map Unit Points	N) Spoil Area N) Stony Spot Ons M Very Stony Spot M Wet Spot A Other	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
Soil Map Unit Points Special Point Features Image: Special Point Poi	s Control Special Line Features Water Features Streams and Canals Transportation HIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	 Interpretendent in the halp of the bench the be
Sodic Spot		

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
33A	Hartford sandy loam, 0 to 3 percent slopes	1.9	6.0%
108	Saco silt loam	9.4	30.2%
237A	Manchester-Urban land complex, 0 to 3 percent slopes	2.0	6.5%
237C	Manchester-Urban land complex, 3 to 15 percent slopes	11.4	36.4%
306	Udorthents-Urban land complex	1.1	3.5%
307	Urban land	5.5	17.6%
Totals for Area of Interest		31.3	100.0%

WETLANDS: The Physical Environment

WETLAND HYDROGEOMORPHIC CLASSIFICATION

- *Surface-Water Depression Wetlands:* In these wetlands, precipitation and overland flow (surface runoff) collect in a depression where there is little or no groundwater discharge. Water leaves the wetland principally by evaporotranspiration and infiltration (groundwater recharge). The wetland hydrologic system lies above the local or regional groundwater system and is isolated from it by an unsaturated zone; thus, it is said to be "perched." In the glaciated Northeast, surface-water depression wetlands are most likely to form over bedrock or till deposits in topographically elevated areas of landscape; however, they may develop in lowland kettles or ice-block basins that formed in glaciolacustrine or fine-textured glaciofluvial deposits.
- *Surface-Water Slope Wetlands:* These wetlands are located along the edge of stream or lake or on the sloping surface of a floodplain. They may occur on till or stratified drift but are commonly found on alluvium. While precipitation and overland flow also feed these wetlands, the principal source of water is the overflow of the adjacent water body. The sloping surface of the wetland permits water to drain readily back to the lake or river as its stage falls. As was the case with the previous class, the wetland surface usually lies well above the local water table, so groundwater discharge to the wetland is negligible or nonexistent. Groundwater recharge from the wetland is possible, depending on the permeability of underlying surficial deposits.
- *Groundwater Depression Wetlands:* These wetlands occur where a basin intercepts the local groundwater table, so that groundwater discharge as well as precipitation and overland flow feed the wetland. Classic groundwater depression wetlands have no surface drainage leaving the site; however, occasional streamflow out may occur form basin overflow. Groundwater inflow may be continuous or seasonal, depending upon the depth of the basin and the degree of fluctuation of the local water table. During periods when the wetland water level is higher than the local groundwater table (e.g., after major precipitation events in dry season), groundwater recharge may occur. Groundwater may enter the wetland basin from all directions, or it may discharge in one area and recharge in another. In the glaciated Northeast, groundwater depression wetlands are most likely to occur in stratified drift, particularly in coarse-textured glaciofluvial deposits where relatively rapid movement between groundwater and surface water can occur.
- *Groundwater Slope Wetlands:* These wetlands occur where groundwater discharges as springs or seeps at the land surface and drains away as streamflow. Most commonly, these wetlands occur on hillsides over till deposits or at the base of hills where stratified drift and till come into contact. Headwater wetlands are typically groundwater slope wetlands. The local water table slopes toward the wetland surface. Where groundwater flow is continuous, the soil remains saturated. At many sites, however, groundwater inputs cease during late summer or early fall as evaporotranspiration depletes soil moisture in the root zone, in which case the soil is only seasonally saturated. Permanent ponding of water is prevented by the sloping land surface, but water may collect temporarily in isolated depressions. Precipitation and overland flow provide additional water to the wetland on an intermittent basis. Groundwater recharge may occur in the wetland after such events, but amounts are likely to be negligible, especially where wetland soils have formed over dense lodgment till deposits. Where such deposits are present, groundwater slope wetlands may be fed primarily by shallow groundwater systems perched above the regional system.

Reference:

Golet, C.G., A.J.K. Calhoun, W.R. DeRagon, D.J. Lowry, and A.J. Gold. 1993. Ecology of Red Maple Swamps in the Glaciated Northeast: A Community Profile. USFWS. Biological Report No. 12

WETLANDS: The Physical Environment

SOIL DRAINAGE CLASSES

- *Excessively drained:* Brightly colored; usually coarse-textured; rapid permeability; very low waterholding capacity; subsoil free of mottles
- *Somewhat excessively drained:* Brightly colored; rather sandy; rapid permeability; low water-holding capacity; subsoil free of mottles
- *Well drained:* Color usually bright yellow, red, or brown; drain excess water readily, but contain sufficient fine material to provide adequate moisture for plant growth; subsoil is free of mottles to a depth of at least 36 inches.
- *Moderately well drained:* Generally any texture, but internal drainage is restricted to some degree; mottles common in the lower part of the subsoil, generally at a depth of 18 to 36 inches; may remain wet and cold later in spring; generally suited for agricultural use.
- *Somewhat poorly drained:* Remain wet for long periods of time due to slow removal of water; generally have a slowly permeable layer within the profile or a high water table; mottles common in the subsoil at a depth of 8 to 18 inches.
- *Poorly drained:* Dark, thick surface horizons commonly; gray colors usually dominate subsoil; water table at or near the surface during a considerable part of the year; mottles frequently found within 8 inches of the soil surface.
- *Very poorly drained:* Generally thick black surface horizons and gray subsoil; saturated by high water table most of the year; usually occur in level or depressed sites and are frequently ponded with water.

Reference:

Wright, W. R., and E. H. Sautter. 1979. Soils of Rhode Island landscapes. R.I. Agric Exp. Station Bull. 429. 42 pp.

WETLANDS: The Plant Community

WETLAND CLASSES AND SUBCLASSES IN THE GLACIATED NORTHEAST

	WETLAND CLASS	WETLAND SUBCLASS
	Open Water	(OW-1) Vegetated (OW-2) Floating-leaved (OW-3) Non-vegetated
	Deep Marsh	(DM-1) Dead Woody (DM-2) Shrub (DM-3) Sub-shrub (DM-4) Robust (DM-5) Narrow-leaved (DM-6) Broad-leaved
	Shallow Marsh	(SM-1) Robust (SM-2) Narrow-leaved (SM-3) Broad-leaved
	Meadow	(M-1) Ungrazed (M-2) Grazed
	Shrub Swamp	(SS-1) Sapling (SS-2) Bushy (SS-3) Compact (SS-4) Aquatic
	Wooded Swamp	(WS-1) Deciduous (WS-2) Evergreen
	Bog	(BG-1A) Compact Shrub (BG-1B) Bushy Shrub (BG-2) Wooded (BG-3) Emergent
Note:	Subclass (OW-2) has replaced (SM-4) Seasonally Flooded Class (SF-1 & SF-2) has been	removed
Refere	ence:	
Golet,	F.C., and J.S. Larson. 1974. Classification of fro	eshwater wetlands in the glaciated Northeast.

USFWS Resour. Publ. 116. 56 pp.

WETLANDS: The Physical Environment

COMMON WATER REGIMES OF NORTHEASTERN WETLANDS

- *Seasonally flooded:* Surface water is present for extended periods, especially early in the growing season, but is absent by the end of the season in most years. When surface water is absent, the water table is often near the land surface.
- *Temporarily flooded:* Surface water is present for brief periods during the growing season, but the water table usually lies well below the soil surface for most of the season.
- *Seasonally saturated:* The soil is saturated to the surface, especially early in the growing season, but unsaturated conditions prevail by the end of the season in most years. Surface water is absent except for groundwater seepage and overland flow.
- *Semi-permanently flooded:* Surface water persists throughout the growing season in most years. When surface water is absent, the water table is usually at or very near the land surface.
- *Permanently flooded:* Water covers the land surface throughout the year in all years. Vegetation is composed of obligate hydrophytes.
- *Saturated:* The substratum is saturated to the surface for extended periods during the growing season, but surface water is seldom present. This water regime applies to permanently saturated, non-flooded wetlands such as bogs.

References:

- Golet, F. C., A. J. K. Calhoun, W. R. DeRagon, D. J. Lowry and A. J. Gold. 1993. Ecology of Red Maple Swamps in the Glaciated Northeast: A Community Profile. U. S. Dep. Int. Fish Wild. Serv. Biol. Rep. 12, 152 pp.
- Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U. S. Fish Wild. Serv. Biol. Serv. Program FWS-OBS 79/31. 103 pp.

Porous A	sphalt Pavement for Stormwater Management
Benefits and Uses	 Porous Asphalt can be used in replace of traditional stormwater management measures given the proper conditions. Porous Asphalt's primary advantages are: 1. Quantity and Flood Control 2. Water Quality Treatment 3. Recharges Groundwater to Underlying Aquifers 4. Allows for Reduction of Stormwater Infrastructure (Piping, Catch-Basins, Retention Ponds, Curbing, etc.) 5. Suitable for Cold-Climate Applications, Maintains Recharge Capacity When Frozen 6. Allows for Reduced Salt and Sand Usage Due to Low/No Black Ice Development 7. Maintains Traction While Wet 8. Reduced Spray from Traveling Vehicles, Reduced Roadway Noise 9. Extended Pavement Life Due to Well Drained Base and Reduced Freeze-Thaw
Disadvantages	 Requires Routine (Quarterly) Vacuum Sweeping (Vac-Assisted Dry Sweeper Only) Proper Construction Stabilization and Erosion Control are Required to Prevent Clogging Quality Control for Material Production and Installation are Essential for Success Accidental Seal-Coating or Similar Surface Treatment Will Cause Failure
Cost & Maintenance	 Total Project Cost is Comparable for Porous Asphalt with Reduced Stormwater Infrastructure VS. Standard Pavement Applications where Stormwater Infrastructure is Required Materials Cost is ~20-25% More Than Traditional Asphalt Long-term Maintenance is Required by Routine Quarterly Vacuum Sweeping Sweeping Cost May Be Off-set by Reduced Deicing Costs Repairs Can be Made with Standard Asphalt Not to Exceed 10% of Surface Area
Design Criteria	 Soil Permeability is Recommended Between 0.25-3.0 Inches Per Hour Recommended Drainage Time of 24-48 Hours Sub-Drains Should be Used Where Proper Drainage May be an Issue to Minimize Frost Damage Most Appropriate for use with Low-Use Roadways and Parking Lots – Without a Modified Asphalt Binder 3-5 Feet of Vertical Separation is Needed from Seasonal High Groundwater TYPICAL POROUS ASPHALT CROSS-SECTION The UNH Stormwater Center, Porous Asphalt Specs - General Porous Bituminous Paving
Additional Resources	 The UNH Stormwater Center, Porous Asphalt Specs - General Porous Bituminous Paving and Groundwater Infiltration Beds, <u>http://www.unh.edu/erg/cstev/</u> Federal Highway Administration (2006) Porous Pavement Fact Sheet <u>http://www.fhwa.dot.gov/environment/ultraurb/3fs15.htm</u> Ferguson, B. (2005), Porous Pavements, CRC Press. Porous Asphalt Pavements (2004) Information Series 131. The National Asphalt Pavement Association, Lanham, MD.

ADDENDUM TO WETLANDS APPLICATION

Applicant:	Krause Realty Trust
Property:	6 Hartford Turnpike
	34 Acorn Road
	42 Acorn Road
Date:	December 16, 2020

Properties involved:	
6 Hartford Turnpike	Zone: Commercial
Assessor's Parcel:	01-0159-0001B
Vernon Land Records:	Volume 1962, Page 1
34 Acorn Road	Zone: R-27
Assessor's Parcel:	01-159A-00002
Vernon Land Records:	Volume 2662, Page 61

42 Acorn Road	Zone: R-27
Assessor's Parcel:	01-159A-00001
Vernon Land Records:	Volume 2662, Page 61

The Krause Realty Trust (the "Applicant") is the owner of the three (3) above referenced properties. Applicant presently owns and operates a Subaru car dealership on the property at 6 Hartford Turnpike (as well as on properties at 14 and 24 Hartford Turnpike, however these latter 2 properties are not part of this application). Applicant acquired the properties at 34 and 42 Acorn Road in June, 2020 in order to provide additional parking area for the car dealership.

Applicant proposes to expand the parking area behind the building at 6 Hartford Turnpike onto a portion of the land at 34 and 42 Acorn Road. Portions of the new parking area are within the Upland Review Area. Consequently, Applicant seeks a permit to conduct all regulated activities associated with the creation of the expanded parking area, as shown on the attached site plans.

No activities are proposed within the wetlands or watercourses. The only improvements will be within the Upland Review Area. Those improvements consist of the installation of pavement (21,923 SF of impervious pavement and 12,405 SF of permeable pavement), security fencing, lighting and drainage facilities. Details of these improvements are shown on the attached site plans, as well as details regarding the proposed erosion controls.

Also included with this application is the report of REMA Ecological, which analyzes the impacts of the upland review area activities and concludes that the same will not have an adverse impact on the wetlands.

Applicant and its consultants will make a full presentation of the application and report at the public hearing on this application.

WETLAND AGENT REPORT

55 West Main St., VERNON, CT 06066 Tel: (860) 870-3638 Fax: (860) 870-3683 E-Mail: cperry@vernon-ct.gov

TOWN ENGINEER

To:Wetlands CommissionFrom:Wetlands Enforcement OfficerSubject:IWC Project Status Report

DATE: 2020 – December

Note: **Red letters** indicate a change from the last report.

IWC-2020-06 (CT Golfland).

• No erosion issues at this time.

IWC-2020-05 (Dart Hill Rd Bridge Replacement).

• Construction scheduled for the spring 2021.

IWC-2020-04 (Windermere Rd. – Athletic Fields).

• No construction activity at this time.

IWC-2020-03 (Main St. Bridge Replacement).

• Construction scheduled for the spring 2021.

IWC-2020-02 (724 Hartford Tpke. – TOV Fire Dept.).

• Completed.

IWC-2020-01 (19 Grove St. – Public Park).

• Completed.

IWC-2019-05 (Chilstone, LLC 624 Dart Hill Rd – 4 unit apartment bldg.).

• Still needs P & Z approval.

• Project is on hold.

IWC-2019-04 (652 Dart Hill Rd – 15 lot development).

- Erosion control appears to be working well.
- Construction is on-going with no issues.

IWC-2019-02 WPCA (Wetlands Permit for site upgrades).

• Construction continues.

IWC-2017-05 (#133 Tunnel Road)

• Project is on hold.

IWC-2017-03 (Hyde Park LLC – #14 Hyde Ave - Apartments)

• No construction activity at this time.

IWC-2016-05 (129/145 Talcottville Rd – Storage Facility behind Wendy's)

• Project is on hold.

IWC-2015-05 (Kenneth Kaplan – Drainage System – 200 West Main St.)

- No construction activity at this time.
- Expires on Oct. 9, 2025

IWC-2015-02 (Kenneth Kaplan – Parking Area – 200 West Main St.)

- No construction activity at this time.
- Expires on June 9, 2025

IWC-2013-05 (133 Washington St. – House surrounded by wetlands)

- No construction activity at this time.
- Expires on 3-17-2021

IWC-2009-07 (Hotel at 53 Hartford Turnpike)

- No construction at this time.
- Expiration date is 11/25/2023 with total extension applied.

IWC-2008-09 (380 Talcottville Road / Phase 2 The Shoppes at Vernon Valley)

- No construction at this time
- Expiration date is 7/28/2022 with total extension applied.

IWC-2006-24 (PZ-2007-20) (64 Hartford Turnpike - Office building)

- No construction activity at this time.
- New expiration extension date is 2/11/2021 with total extension applied.

IWC-2005-26 (Bolton Branch Road – Laurel Woods Development)

- There is no construction activity at this time.
- The new expiration date is 9/4/2022 with total extension applied.

IWC-2003-05 (117 Reservoir Rd. - Home Depot)

- There is no construction activity at this time.
- Expiration date is 3/27/2022 with total extension applied.

Other Information of Importance:

Notice of Violation - Scranton Powersports

Wetland Agent Report:

Approval for;

Wetland Agent Approvals

TOWN ENGINEER

TOWN OF VERNON

55 West Main St., VERNON, CT 06066 Tel: (860) 870-3638 Fax: (860) 870-3683 E-Mail: cperry@vernon-ct.gov

Certified Letter

Bohler 45 Lasalle Road, Suite 401 West Hartford, CT 06107

c/o Matthew Tyler (McDonald's Project)

December 2, 2020

RE: Wetland Agent Approval for 74 Reservoir Rd (McDonald's)

Dear Applicant,

I have received your Inland Wetlands Commission (IWC) application (WA-2020-06) for the above listed address. This application is requesting a Wetland Agent Approval for the work associated with the additional installation of a drive-thru lane. I have reviewed the proposed site plans associated with this project, and it is my opinion that the proposed site work will have no present or future impacts to the adjacent wetlands as long as proper erosion control measures are taken during construction.

Subsequently, I approve this work as the Wetland Agent for the Town of Vernon in accordance with CT General Statutes 22a-36 thru 22a-45.

If you have any questions or concerns, you may contact me at 860-870-3638.

Sincerely,

Craig W. Perry Wetland Agent Wetlands Enforcement Officer

c.c.

Rachel Stansel	- Chairperson, Inland Wetlands Commission
David Smith, PE	– Town Engineer
George McGregor, AICP	- Town Planner

File: WA-2020-06