

May 9, 2024 at 10:45 am

TOWN CLERK'S OFFICE  
MIDDLEBURY, CT



## TOWN OF MIDDLEBURY

Planning & Zoning

Commission 1212

Whittemore Road

Middlebury, Connecticut 06762

(203) 577-4162 ph

*Wanda H. Lubinski, Clerk*  
TOWN CLERK

May 2, 2024

### REGULAR MEETING MINUTES

#### Regular Members

Terry Smith, Chairman  
Erika Carrington  
Matthew Robison  
Linda Hermann

#### Regular Members Absent

William Stowell

#### Alternate Members

Paul Anderson  
Frank Mirovsky  
Joe Mancini

#### Alternate Members Absent

#### Also Present

John Calabrese, P.E.  
Curtis Bosco, Zoning Enforcement Officer

#### CALL TO ORDER

The Chairman called the Regular Meeting to order at 7:00 p.m. and announced if anyone was present for the Application for the Dog Park and associated parking at 69 Nichols Rd. (Application #24-33Z), that application has been withdrawn, and there will not be a public hearing tonight.

#### ROLL CALL AND DESIGNATION OF ALTERNATES

Chairman Smith named regular members Carrington, Robison, and Hermann, and alternate members Anderson, Mirovsky, and Mancini were present. The Chairman appointed Paul Anderson to sit in place of Stowell, who was absent from this meeting.

#### DISCUSSION OF THE MINUTES OF THE REGULAR MEETING 3-7-2024

There are two corrections to be made:

Page 3 - Mr. Matthew Robison made a MOTION to TABLE the discussion on this application to the regular meeting to be held on May 2, 2024. This motion was SECONDED by Ms. Linda Herrmann. The motion was APPROVED by a unanimous voice vote. The revised site plan is available in the Middlebury Zoning Office.

Page 5 - Ms. Erika Carrington made a MOTION to TABLE the discussion on this application to the regular meeting to be held on May 2, 2024. This motion was SECONDED by Ms. Linda Herrmann. The motion was APPROVED by a unanimous voice vote. The revised site plan is available in the Middlebury Zoning Office.

**A MOTION was made by Erika Carrington, SECONDED by Paul Anderson, to approve the amended minutes from April 4, 2024. The MOTION passed unanimously.**

**Old Business**

**Mark Riefenhauser/Benson Woods Associates, LLC – Site Plan Modification Benson Woods, Phase 2, North Benson Road (Application #24-30Z)**

Mark Riefenhauser is in receipt of John Calabrese P.E.'s letter and they have added those comments to the plans he has submitted recently. He also included the cut sheet for the retaining wall and will use a modular block. He received approval from the police and fire department. Working on the landscaping and lighting scheme prepared. Chairman Smith asks Mr. Calabrese to summarize his April 22, 2024 report.

Mr. Calabrese reviewed his comments and stated his items should be as a condition of approval.

**A MOTION was made by Matthew Robison, SECONDED by Erika Carrington, to approve the application of Mark Riefenhauser/Benson Woods, LLC – Site Plan Modification Benson Woods, Phase 2 (Application #23-30Z). The MOTION was approved by RESOLUTION. The MOTION passed unanimously.**

**Eric Anderson/Lake Quassapaug Amusement Park, Inc., 2132 Middlebury Road – Site Plan Modification to allow the replacement of existing ride (Application #23-37Z).**

Eric Anderson submitted site plans. Mr. Smith wants to confirm that the new ride does not take up any other area, and Mr. Anderson responded that it does not.

**A MOTION was made by Erika Carrington; SECONDED by Paul Anderson to approve the application of Eric Anderson/Lake Quassapaug Amusement Park, Inc., 2132 Middlebury Road – Site Plan Modification to allow the replacement of existing ride (Application #23-37Z). The MOTION was approved by RESOLUTION. The MOTION passed unanimously.**

**Attorney Edward G. Fitzpatrick for Southford Park, LLC, 764 Southford Rod,  
Application for Site Plan Modification reducing buildings, parking, and impervious  
coverage. (Application #24-35Z)**

Gail McTaggart, counsel for the commission, summarized the memo she had given to the commission. See the attached file. Ms. McTaggart also asked the original record be incorporated into this proceeding.

Attorney Edward Fitzpatrick, the applicant and representing the property owner, addressed the commission. He gives into the record the reports of underlying approvals from the Fire Marshall, Fire Chief, Health District, updated traffic report, air quality report, and disposal of liquids report. He also accompanied a copy of the statement of use. The statement of use remains the same as was approved in January 2024, and there are no changes. They still comply with the setback parking and other bulk standards outlined in the regulations and provide the buffering, screening, and natural landscaping that the Commission approved on January 4, 2024. He is here because they are making the building smaller and reducing impervious surfaces. Specifically reducing the tractor-trailer parking spaces and the automobile parking spaces. They are here to apply for a modification of the site plan the Commission granted on January 4<sup>th</sup>, 2024.

Mark Grocki, Senior Project Manager with VHB, summarizes some site plan changes from previously approved engineers. The limit of the disturbance line remains the same. The larger building will be in the exact location, and the smaller one will be in the same area. The dock orientation is still the same for the larger building off to the west—the smaller building to the northeast. The centralized parking in the middle has been removed. The primary access off of Southford Road is the same curb cut configuration, and they are proposing to maintain the emergency access off Christian Rd. One of the more apparent changes for the larger building is that the primary parking field will be directly to the east of the building, and the primary parking for the smaller building down South will be just off to the southern face of the building. All of the stormwater management features will have the same discharge points. The centralized basin in the previous plan had surface parking and needed underground concrete chambers. Mr. Grocki states they do not need the underground system and are mimicking the same volume of chambers but in an above-ground basin. The building's finished floors are approximately the same; the large building has the same finished floor of elevation 715 as the previous approval. The smaller building to the south will be lowered by a foot and a half. The earlier plans had an elevation for a finished 680. They are going to be proposing 678.5. The erosion and set of controls will be mimicked site lighting, and the intents of the site lighting will be mimicked. The total for both buildings from the previous plan to this plan is 2100 SF, reducing it. 5,280 SF is reducing the total impervious area and is reducing parking from 409 spaces to 284.

Justin Bridges of Davidson Architecture and Engineering presents slides showing the approved plan and the proposed modifications. Mr. Bridges wanted to note the variation between the approved and the SLR plans, which had an absolutely flat roof proposed at 42 feet for the entire building. The proposed buildings will have a slight pitch. They will have ¼ inch per foot pitch to

the roofs, allowing a bit of a parapet wall that will help screen any rooftop equipment. Another change is the finishes on the building. The approved building exterior material is an insulated metal panel, and they are proposing precast concrete. Exterior walls will also have a textured finish, and they provided samples to the Commission for the record.

Mr. Fitzpatrick wanted to ensure that the record was clear that they are retaining the entire 35-acre conservation area approved by the Commission. They are also awaiting two reports, one from the Conservation Commission and one from Economic Development, and they are not seeking the Planning & Zoning Commission approval this evening.

John Calabrese P.E. issued a revised report from April 22<sup>nd</sup> to April 25<sup>th</sup>. He states the only difference was a typographical error on their observation #1. It read the existing Conservation Commission approval. He changed the word Conservation Commission to Planning and Zoning Commission. His recommendations were the architectural plans, materials, and color. The other was a detail sheet from the SLR plan that was approved that they would be included when the final set is completed. Some engineering notes, certifications, and as-builts. He had a question about the loading docks for building one and two. They were labeled LD and KO, and he was told that the LD would be the loading dock spaces. The KO are future knockouts if required. His last item was the bond to be turned by the Board of Selectman and Planning & Zoning Commission.

Attorney Keith Ainsworth representing the intervenors, Middlebury Small Town Alliance. He will be submitting a report from engineer Steve Trinkaus into record who was unable to attend the meeting. He raised the issue of adding a couple of walls (sound walls). He stated there was a state statute (23204 section 173) that was passed since the original application before the Conservation Commission and before the original application was approved. He states it was a statute passed to protect wetlands because it mentions a certain amount of wetlands that are one of the qualifying factors for triggering the statute. Then, the other was the distance from elementary schools. Mr. Ainsworth paraphrases the statute to the Commission. He states that the lot line revision that artificially split the two properties does not change the fact that the property is located on a parcel or two parcels that qualify. The access easement eases this use, and that is the emergency access. The conservation easement eases this use because, without that conservation easement, there wouldn't have been a Conservation Commission approval, which informs the planning and zoning decision. The buildings use the same driveways, and those driveways ease the use of the common driveway for both, so all of the parcels are easing the use of this facility. Mr. Ainsworth believes that the statute does apply fairly straightforwardly. Mr. Ainsworth says this application initially started as an application that was for three text amendments that talked about this as a distribution facility and needing text amendments. Those were pulled before there was an approval. Still, it tells a little bit about the intent of the application, that it was one single purpose, one single facility, and also that they must have felt that they needed those changes to qualify under the regulations. Now, they simply changed the terminology of the building and say it qualifies it, but it's the same project effectively. They've



tweaked a bit of the building and moved a little bit of the parking, but it is still the same facility. It's aesthetic changes in that regard. Mr. Ainsworth submitted a report from Carl Cascio.

Carl Cascio, Acoustical Technologies Inc., speaks remotely via Zoom and reviews his report. See the attached file. Also, a poster board of the property is brought up before the Commission to view as he reviews his report. Mr. Cascio also states that numerous amounts of acoustic work needs to be done.

Mr. Ainsworth questions the knockout panels for the bays and asks if that is for future bays and if it would have to come back to the Commission for approval or if it is being approved now. He states that would make a difference in the number of bays and the number of vehicles visiting the site. Regarding unreasonable impairment to natural resources, the natural acoustic soundscape is the natural resource. He states that just like we have scenic vistas, that's a natural resource, and so is the acoustical background or the acoustic landscape. That's the resource that they are claiming is unreasonably impaired. The first legal barrier is the State statute.

Chairman Smith asked Mr. Ainsworth, given what was on the table, whether they should approve the modified site plan or stay with the original. He is trying to figure out where Mr. Ainsworth stands. He asks if they approve of the modification or if they want the Commission to stay with the original. Mr. Ainsworth replies that he would ask that this modification be modified for sound mitigation, as Mr. Cassio suggested, to reduce that impact. But also asked that it be denied simply because it violates the State Statute.

Mr. Fitzpatrick states that they disagree with the legal arguments made by the Counsel and suggest that the Commission defer to its Counsel for guidance. All the acoustic records have been established to comply with state law and are not subject to this hearing. They still have to wait for the Conservation Commission's approval. Their position is that modification has merit.

Chairman Smith asked if the Commission had any further questions, and there were none. The Chairman tables this application to next month's June 6, 2024 meeting.

### **New Business**

#### **Discussion and possible action CGS §8-24 referral regarding the sale of MBL 1-00-48 Lake Shore Drive to abutter, James K. Zonavich, Jr.**

Attorney Dana D'Angelo for the Town of Middlebury. The Town of Middlebury owns multiple T-Lots, and over the years, they have tried to sell them to abutting landowners to get them back on the tax rolls. Mr. Janovich approached Middlebury and said he wanted to purchase the T-Lot next to his home. They got an appraisal, and Attorney D'Angelo was before the Board of Selectman, and they referred it to the Planning & Zoning Commission. She has provided the commission with the assessor's card and the appraisal.

Middlebury Planning & Zoning Commission  
Regular Meeting  
May 2, 2024

**A MOTION was made by Matthew Robison, SECONDED by Paul Anderson, to approve the sale of MBL 1-00-48 Lake Shore Drive to abutter, James K. Zanaavich Jr. The MOTION was approved by RESOLUTION. The MOTION passed unanimously.**

**Other Business**

**Enforcement Report**

None

**Adjournment**

**A MOTION was made by Linda Herrmann and SECONDED by Matthew Robison to adjourn the meeting at 8:12 pm. The MOTION passed unanimously.**

These minutes are submitted subject to approval.

Respectfully submitted,

*Jennifer Atkinson*

Recording Clerk

cc: Brigitte Bessette, Town Clerk  
Members of the Planning & Zoning Commission  
Paul Bowler, Chairman – Conservation Commission  
Mark Lubus, Building Official  
Curtis Bosco, Z.E.O.  
Linda Herrmann, Chairman, Z.B.A.  
Attorney Dana D'Angelo  
Rob Rubbo, Director of Health

SITE PLAN RESOLUTION

RECEIVED FOR FILING  
May 9 2024 at 10:45 am  
TOWN CLERK'S OFFICE  
MIDDLEBURY, CT  
Mary Beth Lubinski, Esq.  
TOWN CLERK

Upon motion by Commissioner ROBISON, seconded by  
Commissioner CARRINGTON, it was voted \_\_\_\_\_ to  
approve (~~disapprove~~) the application of BENSON WOODS ASSOCIATES for a  
\_\_\_\_\_ SITE PLAN <sup>MODIFICATION</sup> located on  
NORTH BENSON WOODS, and as shown on Record Subdivision Map  
entitled BENSON WOODS PHASE 2 and prepared by  
SMITH & COMPANY and dated 3/12/2024 REV. TO 4/30/2024

The commission specifically finds The Application:

1. is in compliance with the requirements of the Planning & Zoning Regulations 51.3.1;

The Application is subject to the following conditions/modifications:

- a) Providing bond satisfactory to the Commission and the Board of Selectmen;
- b) Posting of a landscape bond as determined by the Board of Selectman
- c) Signing of the Map by the First Selectman;
- d) Signing of the Map by the Conservation Officers;
- e) COMPLIANCE WITH REPORT OF CAHABESE ENGINEERING DATED 4/22/24
- f) PROVIDING AN UPDATED LANDSCAPE AND LIGHTING PLAN ACCEPTABLE TO THE TOWN ENGINEER
- g) DESIGN AND STRUCTURAL CALCULATIONS FOR THE MODULAR WALL AT THE ENTRANCE OF ROAD 2 ACCEPTABLE TO THE TOWN ENGINEER
- h) PROVIDING AN ACCEPTABLE NAME FOR ROAD 2

If the above conditions and or modifications are complied with within 90 days of this decision, the Chairman/ ~~ZSO~~ is authorized to sign the Map. Otherwise, the application is to be considered disapproved and denied.

SITE PLAN RESOLUTION

RECEIVED FOR FILING  
May 9 2024 at 10:45 am  
TOWN CLERK'S OFFICE  
MIDDLEBURY, CT  
Mary Beth Lubinski  
TOWN CLERK

Upon motion by Commissioner CARRINGTON, seconded by  
Commissioner ANDERSON, it was voted \_\_\_\_\_ to  
approve (~~disapprove~~) the application of ERIC ANDERSON / LAKE QUASSAPAUG  
AMUSEMENT PARK for a  
\_\_\_\_\_ SITE PLAN MODIFICATION located on  
2132 MIDDLEBURY ROAD, and as shown on Record Subdivision Map  
PROPOSED RIDE - NEW WAVE SWINGERS - DATA ACCUMULATION PLAN  
entitled LAKE QUASSAPAUG AMUSEMENT PARK and prepared by  
SMITH & COMPANY and dated 4/15/2024,

The commission specifically finds The Application:

1. is in compliance with the requirements of the Planning & Zoning Regulations 51.3.1;

The Application is subject to the following conditions/modifications:

- a) ~~Providing bond satisfactory to the Commission and the Board of Selectmen;~~
- b) ~~Posting of a landscape bond as determined by the Board of Selectman~~
- c) Signing of the Map by the First Selectman;
- d) Signing of the Map by the Conservation Officers;
- e)

If the above conditions and or modifications are complied with within 90 days of this decision, the Chairman/ ZEO is authorized to sign the Map. Otherwise, the application is to be considered disapproved and denied.



ATTORNEYS

EDWARD G. FITZPATRICK  
CARLOS A. SANTOS  
CESAR L. SOUSA  
TIMOTHY E. FITZPATRICK  
DANIELLE N. PERUGINI

OF COUNSEL:

ANTONIO A. NUNES  
PETER E. MARIANO



FITZPATRICK | SANTOS | SOUSA | PERUGINI P.C.  
ATTORNEYS AT LAW

OFFICE

203 CHURCH STREET  
NAUGATUCK, CT 06770  
(203) 729-4555  
(203) 723-1914 - FAX  
Toll Free 1-866-729-4555  
[www.fssplaw.com](http://www.fssplaw.com)

**STATEMENT OF USE**  
**RE: Application of Southford Park LLC**

The application proposes the construction of two industrial buildings on the property for WAREHOUSING use in the LI 200 zone. The proposed use is an expressly Permitted Use as specifically set forth in Section 42.1.5 of the Middlebury Zoning Regulations. Specifically, the intended use is for a warehouse facility. There is no intention to establish a "last mile" distribution facility on the property or sub-same day fulfillment center on the property.

The property will be serviced by public water, sewer, and other public utilities, all of which shall be placed underground. Included in the plan are provisions for off-street parking and loading as required by the zoning regulations. All vehicular access and egress to and from the property, both automobile and truck, shall be from RT 188. There will be no site vehicular traffic entering from or exiting to Christian Road. The current access to and from Christian Road shall be converted to an EMERGENCY ACCESS ONLY driveway.

All truck ACCESS and EGRESS shall only be allowed to and from westerly Connecticut State Highway RT. 188 thence proceeding to Interstate Highway I-84. Both visual (signage) and physical impediments, as more particularly shown on the site plan, will ensure that the truck access and egress routes as detailed above, will be maintained. There will be no industrial truck traffic onto local or town roads.

There will be no storage of salts, fuels nor any volatile organic compounds or explosives on the site in accordance with the terms and conditions of the Middlebury Conservation Commission approval dated May 10, 2023.

The application meets or exceeds the set-back, parking, loading, lot coverage and other bulk standards set forth in the Middlebury Zoning Regulations and also provides buffering and screening together with the natural landscape to limit visual effects on neighboring properties.

Thirty-five (35) acres on an adjacent piece of land will be designated to be placed in Conservation and serves to protect iconic areas, wetlands, watercourses, and wildlife corridors for uses as determined by the legislative body of the Town of Middlebury, and in accordance with the terms and conditions of the above-referenced Middlebury Conservation Commission approval.



Patrick D. Deely  
Chief of Police

## MIDDLEBURY POLICE DEPARTMENT

200 Southford Road · Middlebury, Connecticut 06762-0440  
(203) 577-4028



Edward B. St John  
First Selectman

Terry Smith, Chairman  
Middlebury Planning and Zoning Commission  
1212 Whittemore Road  
Middlebury, CT 06762

April 19, 2024

Re: Southford Park, LLC

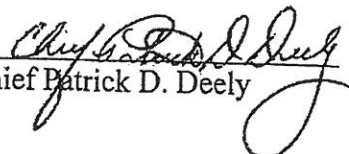
Dear Chairman Smith,

I have reviewed the revised plans for the above referenced project.

The proposed site plan modifications are documented within the site civil plan set prepared by VHB titled "Southford Park, 764 Southford Road (Rte. 188) Middlebury, CT 06762" dated March 25, 2024. Moreover, there is a proposed vehicle parking reduction from 409 spaces (previously approved plans by SLR) to 284 spaces (current VHB plan set) as well as a reduction in Tractor Trailer parking spaces from 168 (previously approved plans by SLR) to 166 spaces (current VHB plan set).

It is my opinion that there are no traffic congestion concerns as a result of these modifications.

Sincerely,

  
Chief Patrick D. Deely

Fwd: [External] Southford Park FM review - revised drawings 4-15-2024

Edward Fitzpatrick <fitz@fssplaw.com>

Tue 4/23/2024 5:06 PM

To: Lauren Geary <Lauren@fssplaw.com>; Edward Fitzpatrick <fitz@fssplaw.com>

Lauren - 6 copies for file

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**From:** Brian Proulx <brianproulx@middlebury-ct.org>

**Sent:** Tuesday, April 23, 2024 5:04:46 PM

**To:** Mark Grocki <MGrocki@VHB.com>; Curt Bosco <cbosco@middlebury-ct.org>

**Cc:** Steve Harder <Steve@flintdevelopment.com>; Edward Fitzpatrick <fitz@fssplaw.com>

**Subject:** RE: [External] Southford Park FM review - revised drawings 4-15-2024

Mark,

Comment 20 is no longer applicable as this was for a central parking area that has become an access road in the updated drawings. The hydrant at the peninsula where you applied the 180 degree turn radius for our Ladder Truck nullifies Comment 20.

Curt,

Based upon the above including the updated drawings recently received, comments and responses made below including VHB's letter received on 4-23-2024, I approve the site plan for Southford Park.

Brian Proulx

Fire Marshal - Middlebury

CT Fire Academy Adjunct Instructor

(o) 203-577-6740

**From:** Mark Grocki <MGrocki@VHB.com>

**Sent:** Monday, April 22, 2024 2:25 PM

**To:** Brian Proulx <brianproulx@middlebury-ct.org>

**Cc:** Steve Harder <Steve@flintdevelopment.com>; Ned Fitzpatrick (fitz@fmslaw.org) <fitz@fmslaw.org>; Curt Bosco <cbosco@middlebury-ct.org>

**Subject:** RE: [External] Southford Park FM review - revised drawings 4-15-2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. Email [support@computercompany.net](mailto:support@computercompany.net) if you doubt the validity of this email.

Fire Marshal Proulx,

Attached please find VHB's response to your comment letter dated Oct. 23, 2023. We have acknowledged all comments previously responded to and approved by the former engineer SLR and have no issues.

If you have any additional comments, please let me know. If you are satisfied with the responses, please indicate as such in a reply email. Thanks you.

**Mark Grocki, PE, LEED AP, CPESC**

Senior Project Manager

CT - Land Development

Licensed in CT, MA, RI

P 860.807.4369

[www.vhb.com](http://www.vhb.com)

**From:** Brian Proulx <brianproulx@middlebury-ct.org>

**Sent:** Tuesday, April 16, 2024 8:58 AM

**To:** Mark Grocki <MGrocki@VHB.com>

**Cc:** Andria May Kowalczyk <AKowalczyk@VHB.com>; Steve Harder <Steve@flintdevelopment.com>; Ned Fitzpatrick (fitz@fmslaw.org) <fitz@fmslaw.org>; Curt Bosco <cbosco@middlebury-ct.org>

**Subject:** [External] Southford Park FM review - revised drawings 4-15-2024 [Filed 16 Apr 2024 09:12]

Hello Mark,



## TORRINGTON AREA HEALTH DISTRICT

350 Main Street ♦ Suite A ♦ Torrington, Connecticut 06790  
Phone (860) 489-0436 ♦ Fax (860) 496-8243 ♦ E-mail [info@tahd.org](mailto:info@tahd.org) ♦ Web [www.tahd.org](http://www.tahd.org)  
*"Promoting Health & Preventing Disease Since 1967"*

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April 24, 2024

Re: Southford Park, LLC  
764 Southford Road

To the Middlebury Planning and Zoning Commission,

I have reviewed the Site Plan for the above referenced proposal. The project will be serviced by public water and sewer. I am able to attest to the adequacy of the proposed location, site plan, buildings and facilities for its intended use.

If you should have any other questions please call this office.

Sincerely,

Justin Rompre  
Registered Sanitarian  
Torrington Area Health District





Mr. Curtis Bosco  
Middlebury Zoning Enforcement Officer  
1212 Whittemore Road  
Middlebury, CT 06762

Re: Industrial Development  
764 Southford Road  
Middlebury, Connecticut

The proposed development offers flex industrial space with buildings intended for general warehousing, office, assembly and/or storage. Waste generation is expected to be limited to domestic wastewater (i.e., sewage) and municipal solid waste (i.e., trash). Domestic wastewater will be discharged to the Middlebury sanitary sewer system, while trash will be stored in dumpsters and hauled to a transfer/disposal facility by a state-licensed transporter.

Industrial waste is not expected to be generated by site occupants. While the Middlebury Zoning Regulations do not define "Industrial Waste," it is commonly identified as solid or liquid wastes generated by certain manufacturing processes. The uses listed above will not generate "Industrial Waste."

In accordance with Section 42.6.2 of the Zoning Regulations, the Economic and Industrial Development Commission (Economic Development Commission) will be notified of any intended change in industrial waste generation practices should they occur in the future. The notification will include a description of the process generating the waste, the means and location of any temporary storage of the waste, and the intended method of disposal of the waste.

Vanasse Hangen Brustlin, Inc.

Mark Grocki

Sr Project Manager  
mgrocki@vhb.com

100 Great Meadow Road  
Wethersfield, Connecticut 06109  
P 860.807.4300  
F 860.372.4570



December 4, 2023

Mr. Curtis Bosco  
Middlebury Zoning Enforcement Office  
1212 Whittemore Road  
Middlebury, CT 06762

SLR Project No.: 141.20970.00002.0070

**RE: Southford Park Development – Air Quality**  
**764 Southford Road**  
**Middlebury, Connecticut**

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Dear Mr. Bosco,

The proposed Southford Park development is not expected to have enough emissions to be a concern to the maintenance of existing air quality.

Like any stationary source of emissions with associated mobile source activity, the Southford Park development is subject to existing air quality programs designed to protect public health, prevent air quality degradation, and assure conformity with plans to reduce regional ozone levels. Those programs provide reasonable assurance that the Southford Park development will not result in impacts injurious to public health or significantly degrade air quality, and will conform to Town of Middlebury Connecticut Zoning Regulations relevant to air quality or air quality-related values (e.g., Section 61 – Performance Standards).

The Clean Air Act has been the primary regulatory framework driving air quality regulation in the United States since 1970. The Clean Air Act requires EPA to set National Ambient Air Quality Standards (NAAQS) for Criteria Pollutants and regulate emissions of 188 hazardous air pollutants. One of the goals of the Clean Air Act is to achieve the NAAQS everywhere to address the public health and welfare risks posed by Criteria Pollutants. The primary NAAQS are designed to protect the health of sensitive populations such as asthmatics, children, and the elderly. The secondary standards are concerned with protecting the environment and are designed to address visibility, damage to crops, vegetation, buildings, and animals. A project that complies with the NAAQS is certain to comply with the local standards. Furthermore, areas that are not currently achieving the NAAQS are designated nonattainment and are subject to additional regulation designed to improve air quality and must comply with federally mandated milestones for achieving the NAAQS.

Equally as important, the Clean Air Act also includes provisions to prevent significant deterioration of air quality in all areas through the Prevention of Significant Deterioration (PSD) program. This program prevents locations with favorable air quality from becoming magnets for development and deters additional development in areas with elevated Criteria Pollutant concentrations. By correcting nonattainment issues while at the same time preventing significant deterioration the Clean Air Act works to provides equal access to clean air for all communities consistent with EPA's emphasis on Environmental Justice.

Except for ozone, regional concentrations of Criteria Pollutants are at or below 50% of the NAAQS based on data collected with oversight by EPA in Bridgeport, Danbury, New Haven,

Waterbury, Hartford, and East Hartford. This is a strong indication that a source of emissions many times the size of the Southford Park development could be built in the Middlebury area without threatening compliance with the NAAQS. While this provides reasonable assurance that the Southford Park development will not result in impacts above levels designed to protect the health of sensitive populations and will comply with state and local zoning performance standards it does not address the possibility that a proposed project would not significantly degrade air quality. Addressing this possibility is the purview of the PSD program.

Broadly speaking, the PSD program limits the incremental increase in air quality impacts designed to prevent degradation. It does this by identifying projects that have enough emissions to significantly degrade air quality and subject them to additional emissions controls review, air quality modeling demonstrations, and more stringent air quality standards which are 10% of the NAAQS. Southford Park development emissions are expected to be much lower than those subject to PSD review providing reasonable assurance that the project will not significantly degrade air quality.

While regional ozone concentrations have decreased over the last several years, they may exceed the NAAQS at times which has led parts of Connecticut to be designated nonattainment. Ozone is unique among the Criteria Pollutants because it is formed from the interaction of other criteria pollutants with volatile organic compounds emitted regionally. Consequently, even though the project area has relatively low industrialization, it experiences elevated ozone concentrations because of the cumulative effect of regionally transformed and transported emissions and not the result of an individual source. In Connecticut, the geographic extent of this regional ozone issue is the result of emissions transport from other states coupled with the population density and the number of vehicle miles traveled in an area. Therefore, ozone concentrations around Middlebury are unlikely to be exacerbated locally by insignificant sources of precursor emissions like the Southford Park development. In other words, while the proposed project will result in ozone precursor emissions, it is not responsible for the regional population growth and associated vehicle traffic that directly contributes to the elevated ozone concentrations.

A review of existing air quality and expected Southford Park development emissions suggests that the existing federal and state regulatory framework is sufficient to prevent emissions from the project that would harm the public, result in air quality degradation, or interfere with plans to reduce regional ozone levels. Consequently, this provides reasonable assurance that the project will comply with the performance standards of the Town of Middlebury zoning regulations.

Regards,

SLR International Corporation

*TA DAMIANA*

Tom Damiana  
Principal Air Quality Engineer  
tdamiana@slrconsulting.com





April 5, 2024

Attention: Steven Wyman  
Southford Park, LLC  
205 Newbury Street, #410  
Framingham, MA 01701

SLR Project No.: 141.20970.00002

**RE: Southford Park Traffic Impact Comparison  
Middlebury, Connecticut**

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SLR International Corporation (SLR) has prepared this letter to evaluate the traffic-related impacts of the approved Southford Park development in Middlebury, Connecticut. SLR previously prepared a Traffic Impact Study, dated August 29, 2023, and two supplemental capacity analysis reports on November 2, 2023, and November 13, 2023. The following is a comparison of the approved development at the time of the initial traffic evaluations and the modified Southford Park development as of March 25, 2024.

## **Site Development**

The approved development will include two buildings, on-site parking, and access to the site via Southford Road. The modified site plan proposes 667,213 square feet (SF) of total building area, 284 parking spaces, and 166 tractor trailer parking spaces, a reduction from the previously approved site layout which proposed 669,596 SF of total building area, 410 parking spaces, and 168 tractor trailer parking spaces.

## **Trip Generation**

The site-generated peak-hour and weekday 24-hour trips were estimated using statistical data published by the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*. Land Use Code 154: High-Cube Transload and Short-Term Storage Warehouse was used for the approved Southford Park development. **Table 1** summarizes the site-generated traffic estimated in the original traffic evaluations and for the modified site development during the weekday morning peak hour, afternoon peak hour, and weekday 24-hour period.



**Table 1: Trip Generation Summary**

Development Design Date	Use	ITE Land Use Code	Size	A.M. Peak Hour			P.M. Peak Hour			Weekday 24-hour		
				In	Out	Total	In	Out	Total	In	Out	Total
November 16, 2023	High-Cube Transload and Short-Term Storage Warehouse	154	539,414 SF	33	10	43	15	39	54	378	377	755
			130,182 SF	8	2	10	4	9	13	91	91	182
	Total (669,596 SF)			41	12	53	19	48	67	469	468	937
March 24, 2024	High-Cube Transload and Short-Term Storage Warehouse	154	537,525 SF	33	10	43	15	39	54	376	377	753
			129,688 SF	8	2	10	4	9	13	91	91	182
	Total (667,213 SF)			41	12	53	19	48	67	467	468	935

Source: Trip Generation, 11th Edition. Institute of Transportation Engineers, 2021

## Conclusions

This evaluation was conducted to compare the approved development at the time of the initial traffic evaluations against the modified Southford Park development as of March 25, 2024. The modified Southford Park development includes an overall reduction to the building size, standard parking, and tractor trailer parking on-site. The results of this assessment indicate the reduction in building size is likely to have a minimal reduction or impact on the site-generated traffic. Therefore, the previously prepared Traffic Impact Study and supplemental reports are still applicable to the latest development design. We hope this evaluation is useful to you and the Town of Middlebury. If you have any questions or need anything further, please do not hesitate to contact the undersigned.

Regards,

SLR International Corporation



**David G. Sullivan, PE**  
U.S. Manager of Traffic & Transportation Planning

*(Signature)*

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**Kimberly Guthrie, PE**  
Associate Transportation Engineer

*(Signature)*



To: Planning and Zoning Commission  
From: Gail E. McTaggart, Special Counsel to P & Z  
Dated: May 2, 2024

As to the intervention, I offer the following guidance which is an adaptation of (and in some cases direct quoting of) the guidance by Attorney Mark Branse to the Conservation/Wetland Commission, but revised to respond to the Intervention by Middlebury Small Town Alliance in the zoning Site Plan Modification application before the P & Z:

1. The intervention is allowed under Conn. Gen. Stat. § 22a-19 (CEPA) which provides as follows:

(a)(1) In any administrative, licensing, or other proceeding, and in any judicial review thereof made available by law, . . . any instrumentality or agency of the state or of a political subdivision thereof, any person, partnership, corporation, association, organization or other legal entity may intervene as a party on the filing of a verified pleading asserting that the proceeding or action for judicial review involves conduct which has, or which is reasonably likely to have, the effect of unreasonably polluting, impairing or destroying the public trust in the air, water or other natural resources of the state.

(2) The verified pleading shall contain specific factual allegations setting forth the nature of the alleged unreasonable pollution, impairment or destruction of the public trust in air, water or other natural resources of the state and should be sufficient to allow the reviewing authority to determine from the verified pleading whether the intervention implicates an issue within the reviewing authority's jurisdiction. For purposes of this section, "reviewing authority" means the board, commission, or other decision-making authority in any administrative, licensing, or other proceeding or the court in any judicial review.

(b) In any administrative, licensing or other proceeding, the agency shall consider the alleged unreasonable pollution, impairment or destruction of the public trust in the air, water or other natural resources of the state and no conduct shall be authorized or approved which does, or is reasonably likely to, have such effect as long as, considering all relevant surrounding circumstances and factors, there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety and welfare.

2. As the intervention states, the intervention is self-executing. That is to say, the Commission doesn't need to vote to accept (or reject) the intervention. By the mere filing of the verified pleadings, the party becomes an intervenor. As an intervening party, the intervenor has whatever status the applicant has. This would

entail the right to speak to the Commission, even in the absence of a public hearing; however, no interested party (applicant, intervenor, etc.) may submit any testimony or documents that related to the prior approval (except as to the modifications presented). The intervenors have asked for notices of any meeting concerning this application and they have the right to make that request.

3. The intervention cannot expand the jurisdiction of the Commission. It cannot convert a Planning and Zoning Commission into a wetlands Commission or make it a "mini-DEEP" with authority over all possible environmental impacts. Your Commission's authority remains constrained by your Regulations.

4. The Commission should incorporate its record from the prior site plan approval so as to be able to determine the changes. The applicant has stated at the April meeting that the changes to the prior site plan, as outlined by Mr. Grocki, PE from VHB, on behalf of the applicant are:

- 1). A reduction of  $\pm 2,100$  sq. feet to the proposed buildings
- 2). A reduction of  $\pm 5,260$  sq. feet to the impervious surface space
- 3). Changed the location and reduced the number of proposed parking spaces as follows:
  - a. Vehicle parking spaces are reduced from 409 to 284 and relocated next to the proposed buildings, thereby eliminating a large parking lot in the original plan.
  - b. Tractor trailer parking spaces are reduced from 168 to 166.
- 4). The roof line of the buildings will now have a slope with a 3-foot parapet, providing better screening of any rooftop units from the ground level view.

And items discussed by Mr. Grocki are unchanged include:

- a. The revised site plan was fully contained in the previously designated limit of disturbance area as outlined by red lines on the site plan.
- b. 3rd party review of the storm water basin plan was conducted by VHB in light of the reduction in impervious surface space, and the conclusion reached was to mimic the prior plan's design.
- c. Renderings of the proposed building and explanation confirm that the revised design stayed within the previously approved 44 feet height limit

average approved, with the revised average being 42 feet, with a high point of 43 feet from grade.

d. The proposed earth work at the site will still be within the original design's specifications.

5. The Commission should ask Applicant to confirm that the written Statement of Use filed with the prior application including performance standards from § 61 remains in effect with the modifications.

6. The standards in the Zoning Regulations as to site plans and thus site plan modifications are found at Regs § 8.2, § 42.3, § 51 (site plans), §61 (performance standards), § 63 (signs), and § 62, (Parking and Loading) must be met in addition to standards of 42.5 (LI Zone). Traffic review under § 42.5.3 is limited to driveway design for turning movements without resorting to wide turns or hazardous maneuvers, no obstruction of sight lines for entering and existing, no parking/standing in public streets. Section 51.2.5 regarding site plans review allows additional information where needed by the Commission.

Section 51.3 sets out standards for the Commission determining "acceptability of a proposed site plan" (Below is a summary of those standards, however, these will apply only to the modifications as they were not previously approved):

51.3.1 Meet all regulations such as building setbacks, coverage, lot area, height.

51.3.2 Neighborhood. Site plan and architectural plan related harmoniously to terrain and building in vicinity with visual relationship, with transition for area with unlike character to protect property values and preserve beauty of community.

51.3.3 Landscape to preserve natural state where practical , minimize tree and soil removal --grade changes in keeping with developed neighborhood appearance.

51.3.4 Drives, parking and circulation -avoid undue hazard and undue traffic congestion on streets, and separate pedestrian from vehicular – with parking designed to not detract from proposed building design and neighboring property structures.

51.3.5 Utility service underground if feasible. Signoff from Director of Health, DEEP and Connecticut Health Dept.

51.3.6 Paving and drainage with no adverse effect on neighborhood-underground system for roof and paved areas, no obstruction in traffic flow- no pavement puddles.

51.3.7 Signs shall not detract from building design and surrounding properties.

51.3.8 Truck loading and similar service area subject to setbacks, and with screen plantings or other screening so not incongruous with existing surrounding properties.

51.3.9 Effect on Residential – adequate screening and buffers to “insulate “ the proposed use and to “substantially block view from first floor of immediately adjacent residences.

7. Under CEPA, the allegations in the intervention verified pleading must include specific factual allegations setting forth the nature of the alleged unreasonable pollution, impairment or destruction of the public trust in air, water or other natural resources of the state; these should be sufficient to allow your commission to determine from the verified pleading whether the intervention implicates an issue within the P & Z’s jurisdiction when reviewing this site plan modification proposal.

The Intervenor’s allegations are summarized as follows:

- 1). The “industrial warehouse and transportation distribution center construction project [will] directly impact the quality of life of the members of the Alliance.”
- 2). Members of the Alliance abut or are in close proximity to the development site and “enjoy the integrity of natural resources in the Christian Road area and generally in Middlebury.”
- 3). The “administrative proceeding involves conduct which has, or which is reasonably likely to have the effect of unreasonably polluting, impairing, or destroying the public trust in the air, water, and other natural resources of the state in the following ways:
  - a. Site not designed to meet latest CT DEEP 2023 Storm Water Manual (although applicant’s engineer for approved site plan proceeding stated it does) and is stated to meet the 2004 Storm Water Manual, thus inconsistent with the underlying permit .or represents a degradation in quality of storm water management at the site.
  - b. Activities involve site alternations that are reasonably likely to discharge storm water runoff pollutants from the roof area—which will increase the nutrient loading of Nitrogen and phosphorus to the



on-site wetlands. Professional literature documents that 40% of the annual nutrient loads from industrial development comes from atmospheric deposition and impervious surfaces. As proposed the stormwater discharged upstream will increase the nutrient loading to the wetlands and watercourse which has the potential to cause premature eutrophication.

c. The filling of 15,608 SF of wetlands and attempted replacement by man-made wetlands is a significant activity that may well lead to loss of ecological wetland functions.

d. The proposed activity constitutes a High Pollutant Load Site under the 2004 DEP Water Quality Manual under several criteria, and these uses generate higher pollutant loads from the proposed impervious surfaces.

e. Allegation 3.e cites to Public Act 23-204, §173, which the intervenor claim prohibit the proposed use. However, the use has been approved, that approval is on appeal and therefore that record is closed. As you will remember, the previous approval recited:

“The Commission has reviewed, considered and hereby rejects the claim that the warehousing project violates Section 173 of PA 23-204 (“PA 23-204”) which provides as follows:

Notwithstanding any municipal charter, ordinance, regulation or resolution, special act or provision of title 8 of the general statutes, no municipality with a population of less than eight thousand, as determined by the most recent federal decennial census, or board or commission of any such municipality authorized to regulate planning, zoning or land use, shall approve the siting, construction, permitting, operation or use of a warehousing or distribution facility exceeding an area of one hundred thousand square feet if such (1) facility is located on one or more parcels of land that are less than one hundred fifty acres in total, (2) parcels contain more than five acres of wetlands in total, and (3) parcel or parcels are located not more than two miles from an elementary school.

The Commission finds that 72± acre piece (Parcel A) proposed for the Site Plan for the proposed warehousing use fails to meet the second condition of the Public Act because Parcel A has only



3.847 acres of wetlands, which is less than 5 acres that trigger the prohibition. Since the Public Act uses the conjunctive "and" and three conditions, all three must be met for the warehousing/distribution use prohibition to apply."

Thus, this claim was already ruled upon assuming that the modification continue to relate to same Parcel A with the same amount of designated wetlands; it is also my understanding that the application does not propose to alter the warehousing use previously approved.

f. Filling of wetlands for building and /or parking result in destruction of wetlands which by definition is a significant activity which requires the consideration by the wetlands agency (CC) of feasible and prudent alternatives.

g. The proposed wetland mitigation will not serve to mitigate the filling and loss of functional wetlands and is not a feasible and prudent alternative.

4). The verified pleading also alleges that are feasible alternatives to the proposal that better protect natural resources:

- a). Reduction in size of or eliminating project in its entirety
- b). Reduction in impact on upland review area and overall site disturbance
- c). Improving storm water controls
- d) Using site for less intensive use than "warehouse trucking/distribution center."

8. The intervenors have the burden of proving the allegations that they have made in their intervention, and they must be given the opportunity to do that. Typically, the applicant would make their presentation and then the intervenors would make theirs, after which the commission will present questions.

9. The intervention cannot exceed the scope of the proceeding itself. This application is to modify a previously approved site plan permit. Thus, the Commission cannot reopen that permit proceeding and reconsider it, and for the same reason, the intervenors cannot reopen that proceeding and try to introduce evidence or testimony concerning that approved permit. The proceeding itself is limited to considering the *modifications* to that permit and so the intervenors are limited to considering the *modifications*, as well. I would suggest that when you hear testimony from the intervenor or its experts which seems to be addressing the approved permit, that you ask the speaker: "How does this address the permit modification that is before this Commission now?" The meeting will be more productive if you can encourage the intervenor's representatives to focus on the modification and not rehash

arguments or testimony that relate to the permit that is already approved and cannot be revoked in this proceeding.

10. Subject to the above limitations as to testimony being limited to consideration of the modifications, the intervenor must have the opportunity to present testimony to support the specific factual allegations set out as unreasonable destruction of the public trust in the air, water, natural resources as outlined in the pleading.

11. The intervenors have alleged that there are feasible and prudent alternatives to the activity which will have no, or lesser, impact on the inland wetlands or watercourses. Assuming that the intervenors are able to show relevance to matters under the Commission's jurisdiction, the intervenors do not have to submit specific designs or site plan in order to prove this allegation. They must merely identify those alternatives in sufficient detail so that the Commission understands them, and the applicant can respond to them.

12. When making the decision on the application, the Commission will have the threshold task of determining if the intervenor has presented convincing testimony to support the allegations of its intervention that are relevant to the application before you. Only If you determine that the Intervenor sustained their burden, is then the "feasible and prudent alternative" test invoked so that the Commission must consider if there are, in fact, such feasible and prudent alternatives based on the evidence produced at the meeting. If you determine that the intervenor has not sustained its burden, then you would proceed to apply the criteria of your regulations as you would in any other site plan modification application.

13. As with any proceeding, the Commission members should listen and ask questions, but not testify or discuss opinions until all evidence is in and deliberations have started by the seated members.

14. It would be helpful if at the beginning of the meeting, you would identify who are the seated members and alternates present who will be reviewing the application and ask if anyone claims a conflict of interest or predetermination and if so, as to who and for what reason(s). If such claims are made, the individual must have the opportunity to respond to the claim and decide if he/she will or will not recuse himself/herself.

Members present at the April Meeting were:

Regular Members Present

Mr. Terry Smith, Chairman

Ms. Erika Carrington

Ms. Linda Herrmann

Mr. Matthew Robison

Alternate Members Present

Mr. Paul Anderson, Mr. Joel Mancini, Mr. Frank Mirovsky

Regular Members Absent

Mr. William Stowell

15. You should incorporate the prior record to reflect what modifications are presented for review.

Voting should occur at the next meeting that is within the 65 day review period allowed; this will provide time for a receipt and consideration at the June meeting of the wetlands report from the Conservation Commission and other referrals, including Economic and Industrial Development/Architectural Plan review as required at Regs. §51.4 (nonbinding) See § 42.6.1.

Middlebury Small Town Alliance

Attention: Jennifer Mahr

Date: May 1, 2024

Acoustical Technologies Inc. was asked to look at the acoustical analysis in the report provided by SLR International Corporation dated December 4, 2023. There are a number of issues that seriously question the general conclusion that warehouse operation will produce airborne sound levels well below the Connecticut night time noise requirement.

- 1) Connecticut day time and night time noise requirements are established at the neighbor's property line not at the second story of the neighbor's house. *CT Ordinance Sec. 22a-69-3.1. General prohibition. No person shall cause or allow the emission of excessive noise beyond the boundaries of his/her Noise Zone so as to violate any provisions of these Regulations.*<sup>1</sup>
- 2) Table A of the SLR report lists the four sites where noise estimates were made. The Executive Summary states that these sites were representative of neighboring residences (but not property lines). No noise estimates at property lines were provided in the SLR report and thus no comparisons with the Connecticut noise requirement were made.
- 3) The SLR report makes statements that indicate the ambient levels are lower in the fall and that insect noise and residential air conditioning will mask the noise from the AHU condenser fans in the spring and summer. This implies that the residential neighbors will have to endure condenser fan noise during the fall and winter as well as requiring air conditioning to be running in the nearby homes during the spring and summer to avoid hearing the AHU condenser fans.
- 4) The SLR report uses the metric Leq to describe the ambient noise measured in Table 5-2. *CT Ordinance Sec. 22a-69-1.2. Acoustic terminology and definitions, Measurement procedures, (c) background noise means noise which exists at a point as a result of the combination of many distant sources, individually indistinguishable. In statistical terms, it is the level which is exceeded 90% of the time (L90) in which the measurement is taken.* The State identifies L90, not Leq, as the metric to establish the background noise level. The SLR's use of Leq seriously overstates the background noise level. SLR report Figures A-4 and A-5 show this in Appendix A. The lower part of the sound level curves show significant time at values between 30 dBA and 35 dBA. The L90 background values for these SLR measurements will be well below the numbers stated in the report's Table 5-2.

- 5) Let's look at the worst cases, the backup alarm at a power level of 108 dB reference 1 picoWatt from Table 6-1 of the SLR report. Next, a single truck at a source level of 101 dB. The following table shows the property line airborne noise level at various distances using a 10 foot wall in the truck parking area and a 10 foot high wall at the road on the west side of building 1. The level at the second story of the closest home is also given in the last column of the table.

Table 1. Sample Calculations of Truck Noise

<b>10 foot barrier at parking area</b>		<b>Source = One Backup Alarm (20 trips at 108 dB)</b>	
Distances in feet		Sound Level dBA reference 20 microPascals	
Wall to Property Line	Wall to Truck	Sound Level at PL	Sound at Nearest Home
33 minimum	70	61.5	50.0
33 minimum	130	58.0	47.8
83 maximum	70	59.8	49.6
83 maximum	130	58.0	48.0
<b>10 foot barrier along road</b>		<b>Source = Single Truck (34 trips at 101 dB))</b>	
45 minimum	8	56.2	42.9
45 minimum	24	56.7	44.0
83 maximum	8	51.9	41.8
83 maximum	24	53.6	43.3
<b>10 foot barrier at parking area</b>		<b>Source = Single Truck (34 trips at 101 dB))</b>	
33 minimum	10	58.4	45.7
33 minimum	130	51.0	40.8
83 maximum	10	52.4	43.9
83 maximum	130	51.0	43.3

\*assumes alarm at back end of truck with cab at wall in parking area

The property line noise level varies from 58 to 61.5 dBA for a single back up alarm. The property line noise level varies from 51 to 58.4 dBA for a single truck near the 10 foot wall. Table 6.4 of the SLR report indicates as many as five trucks would be entering or leaving the facility during any night time hour. Five trucks simultaneously backing up would be 7 dB higher but this is highly unlikely. What would be more likely are five trucks driving by, but at a lower sound power level (Table 6-4 at night). From Table 6-1 we see that the truck power level is 7 dB lower than the backup alarm. Therefore the airborne noise from five trucks is roughly the same as the airborne noise from one backup alarm. All of these positions produce airborne noise levels at or above the 51 dBA night time noise limit at the property line. The 10 foot wall at the parking area and along the road is not sufficient for even one truck to meet the state's 51 dBA noise limit at the property line. A 19 foot wall is needed in the parking area to bring the truck noise below 51 dBA. The figure below shows the calculation closest to the wall in the parking area.

As a result of the April 30, 2024 Benson Woods developer's request for a modification of his housing plans, the closest home to the Southford Park property line is 165 feet. This distance and the 50 foot difference in elevation have been used to calculate the expected sound levels at

the home as given in the last column of Table 1. The backup airborne sound levels vary from 47.8 to 50 dBA while single truck levels vary from 40.8 to 45.7 dBA, all of which are above the expected L90 background noise.

### Sound Propagation Level Calculator

Interactive noise source to receiver diagram with barrier calculations (includes 2024 update)

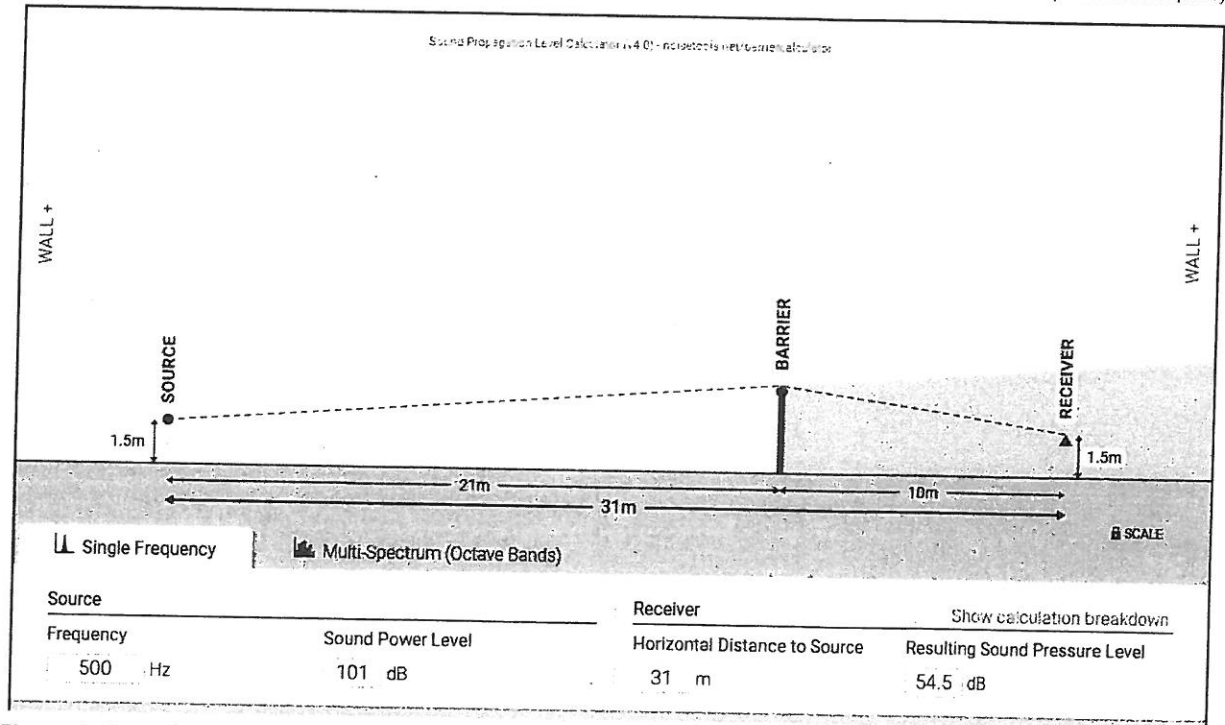


Figure 1. Sample Noise Tools Calculation of the Sound at the Property Line<sup>3</sup>

6) Residential background airborne noise in the vicinity of the Southford site is often lower than 35 dBA so additional noise mitigation of more than 20 dB is needed to avoid impacting nearby properties. Even reaching the background for the backup alarm is not sufficient to meet the goal of having no or little impact on the surrounding residential neighborhood. Human hearing is capable of detecting transient sound as much as 10 dB below the background level. A reasonable goal would be 10 dB below the L90 background noise or about 25 dBA for the transient noises. An October 2000 document from the NY State Dept. of Environmental Conservation, Assessing and Mitigating Noise Impacts<sup>2</sup> quantifies the impact of adding noise to a quiet background:

1. under 5 dB, unnoticed or tolerated,
2. 5-10 dB, intrusive,
3. 10-15 dB very noticeable,
4. 15-20 dB objectionable,
5. over 20 dB, very objectionable to intolerable - **this is the situation the Southford Park neighbors would face during truck operations.**



- 7) The current design shows ten, fifteen and twenty foot high walls and places with no walls. For example, the road going around the upper right corner of building 1 is only 25 meters from the property line. Without a wall a single truck would produce 65 dBA at the property line. There is no wall to the north of building 1. A 15 foot wall 15 meters from the property line would get the level down to the 51 dBA. It would take a 20 foot wall to get the noise from 2 trucks down to the allowed 51 dBA. The road going around the lower right corner of building 1 is only 18 meters from the property line. With no wall a single truck will produce an airborne noise level of 67.8 dBA at the property line. The R40 portion of Parcel B needs to be protected from the truck noise in Parcel A.
- 8) Walls made of wood or any other hard material reflect sound so the effective transmission loss of the barrier is reduced when a nearby surface can reflect the sound back towards the barrier. This will occur near buildings 1 and 2 and more so off the trucks parking up against the wall west of building 1. One solution is to add a weather proof absorbing blanket to the barrier which will then capture the sound at some additional expense.
- 9) **In summary, more work needs to be done to address the acoustic issues of placing a truck distribution facility in a quiet residential neighborhood. In addition to meeting the state's night time noise limit at the property line the developer needs to address truck noise levels in the 25 dBA to 51 dBA range at nearby homes that will become a night time nuisance to the nearby residents.**

Carl Cascio

Acoustical Technologies Inc.

50 Myrock Avenue, Waterford, CT 06385

Phone: 860-443-0200 Mobile: 860-705-1508

#### References

- 1) 1) CT DE&EP Noise Control Regulation RCSA Section 22a-69-1 to 22a-69-7.4  
<http://www.ct.gov/dep/lib/dep/regulations/22a/22a-69-1through7.pdf>
- 2) Assessing and Mitigating Noise Impacts, Table 2, page 15,  
[https://extapps.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/noise2000.pdf](https://extapps.dec.ny.gov/docs/permits_ej_operations_pdf/noise2000.pdf)
- 3) Noise Tools Application, <https://noisetools.net/barriercalculator>

**CARL A. CASCIO**

B.S. (Physics)  
M.S. (Ocean Engineering)  
Ph.D. (Acoustics)

Rensselaer Polytechnic Institute, 1966  
University of Rhode Island, 1976  
Catholic University of America, 1980

**Professional Experience**

Fifty-seven years of experimental and analytical studies in the design and testing of quiet mechanical systems; Acoustical Technologies Inc. (ATI), Principal, 1999 – Present

Experimental and analytical studies in the design, construction and testing of quiet mechanical systems, including Unmanned Underwater Vehicles (UUV) and submarines, at BBN Technologies, 1979-1998.

Radiated and self-noise control for underwater systems, including the acoustic testing of UUV's, at Oceanic Division of Westinghouse Electric Corp. (now Northrop Grumman Undersea Systems), 1973-1979.

Submarine acoustic noise and vibration control, at the Electric Boat Div. of General Dynamics Corp. 1967-1973.

**Professional Responsibilities and Projects****Acoustical Technologies Inc.**

Waterford, CT

Dr. Cascio has successfully managed noise control projects involving all aspects of the design and development of quiet mechanical systems as well as the prediction, measurement and control of acoustic radiated noise and mechanical vibration. Acoustical Technologies Inc. (ATI) has been tasked by Doosan Fuel Cell America in the years from 2017 through 2024 to perform acoustic site surveys during the permitting process for new 460 KW fuel cell installations in CT. The most recent test was at the York C. I. (East Lyme) site in January 2024.

Acoustical Technologies Inc. was tasked by the town of Ridgefield's Recreation Department in October 2022 to analyze the noise performance of a new barrier treatment to mitigate pickleball noise at Martin Park. Acoustical Technologies Inc. was tasked by Swan Consulting to measure the airborne sound pressure levels produced by the HVAC equipment in the cooling mode at the 100 Defense Highway site in the Newport Naval Station's Building 1277 on May 17, 2022. The airborne noise levels obtained in this testing were then used to calculate Room Criteria (RC) values specified in the 2015 ASHRAE HVAC Applications IP document.

Acoustical Technologies Inc. was recently tasked by four different clients to assist in mitigating the airborne noise from wedding venues. Two clients were operating the wedding venues and required noise mitigation to allow wedding music to stay within local and state noise ordinances. Two clients were nearby neighbors who were opposed to the excessive noise levels played by bands and DJ's during weddings in a tent and building. ATI measured the wedding music noise at two locations and measured quiet background noise at the other two. Expert testimony was provided in one case and three reports indicating potential noise mitigation were given.

ATI was tasked by Tucker Mechanical to measure the airborne sound pressure levels produced by the Harbor Unit 5 power plant at the Atlantic Street site in Bridgeport CT on May 7, 2021. Airborne noise measurements were taken to quantify the machinery noise at 40 locations on the property. The airborne noise levels obtained in this testing were then compared with the airborne noise requirements in Document 191547.72.02152 to determine whether the HVAC machinery airborne noise levels meet these requirements.

Acoustical Technologies Inc. was tasked as part of a Plainfield Materials site permitting process with an assessment of potential acoustic issues associated with rock crushing noise reaching the properties adjacent to the Plant site in Plainfield CT (Jan. 24, 2020). Operation of the rock crusher produced airborne noise levels below the Residential, Commercial and Industrial Zone noise limits at all of the nearby property lines.

Acoustical Technologies Inc. was tasked by Grillo Services in 2013 to measure the airborne noise of wood grinding and stone crushing equipment. Airborne noise measurements were made at their site in Milford, CT. ATI provided analysis of the acoustic noise & potential implications for using the equipment near Interstate 95. ATI appeared as Grillo's acoustical consultant before the Milford Planning and Zoning Commission.

From 2005 to 2011 Dr. Cascio measured the acoustic noise radiated by the HVAC cooling towers at the Atwood Mill Development in the town of Stonington, CT. Airborne noise levels were taken in the community next to the Mill on seven occasions and recommendations were then made for correcting the airborne noise problem.

Dr. Cascio was tasked with the measurement of airborne noise associated with the use of air hammers and other sheet metal assembly equipment at Superior Mechanical Systems, Inc. in March 2006 at their 20 Atwood Place and 125 South Turnpike Road buildings. The test evaluated airborne noise levels in the shop near the sources of the noise and in the offices adjacent to the shop area. The test was designed to quantify the magnitude of the transmission loss of the wall between the shop and office spaces. Recommendations were made for reducing the airborne noise from the sheet metal assembly equipment.

ATI was tasked by Aquantis in 2015 to measure the airborne and underwater noise generated by a client's 28 KW datacenter server farm installed in a pressure vessel. The system consisted of pumped cooling sea water circulating through a heat exchanger near 5 banks of fans blowing over the blade servers. The pressure vessel was deployed dockside in the Pacific Ocean and ATI measured and reported the acoustic noise levels.

Acoustical Technologies Inc. was tasked in 2015 by The Boeing Company to measure the airborne and underwater noise as well as structureborne vibration of the Echo Voyager (XLUUV) underwater vehicle. Measurements were made at Boeing's facility in Huntington Beach, CA and documented in a report.

Dr. Cascio was tasked by Oceaneering Inc. to measure the radiated noise of the Hawksbill ROV. Acoustic measurements were made in October 2013 at Northrop Grumman's Acoustic Test Facility. ATI calibrated the acoustic tank and provided analysis of the vibration and underwater acoustic radiated noise generated by thrusters and other ROV mechanical systems. He provided similar services for Oceaneering's Comanche ROV in October 2010 including evaluation of the ROV's hydraulic subsystem.

In 2013 Dr. Cascio calibrated the acoustic tank at Boeing's Huntington Beach facility to allow the estimation of radiated noise of Boeing underwater hardware based on acoustic measurements in the tank. The tank was calibrated for frequencies from 100 Hz to 200 KHz. Dr. Cascio measured the structureborne vibration and airborne noise of Raytheon's MK54 Processor Group Assembly (PGA) and Control Group Assembly (CGA) as part of a successful first article noise and vibration qualification at Raytheon's facility in Keyport, WA.

In 2008 Acoustical Technologies Inc. was tasked by NUWC Newport to characterize the acoustic radiated noise of two NUWC developed WUUV vehicle concepts. A radiated noise model based on the noise performance of quiet UUV hardware was obtained from component, subsystem and system testing of several recent Navy programs. Component noise predictions were power summed to estimate total WUUV vehicle radiated noise.

Dr. Cascio supported Raytheon - Portsmouth on the DDG1000 destroyer design by measuring the airborne noise and structureborne vibration due to COTS electronic components in Raytheon cabinets. Dr. Cascio assisted Raytheon in 2008 by field testing the noise and vibration of the shipboard air conditioning system on the SBX-1 radar platform. Data was successfully obtained to identify the cause of mechanical failures in the drain piping subsystem. ATI supported Raytheon by measuring the acoustic radiated noise of the ADS buoy power system. ATI acoustic measurements made in July 2007 at Harbor Branch Oceanographic Institution (HBOI) provided analysis of the buoy's airborne noise and underwater acoustic radiated noise.

Dr. Cascio supported Perry Technologies' ADUUV and RMS Programs by providing acoustic radiated noise and vibration measurement services. ATI prepared a radiated and self noise model of the ADUUV vehicle. The ATI design effort on the Remote Mine Hunting System (RMS) controlled the self and radiated noise produced by the diesel powered mine hunting vehicle. Dr. Cascio upgraded the noise treatments and measured the vehicle's radiated noise during offshore testing in the Florida Gulf Stream. ATI then designed and developed a four-element hydrophone array, ranging pinger and recording system built for use as an unattended noise measuring system for radiated noise qualification of production RMS vehicles in the Gulf Stream off Florida.

Dr. Cascio supported Boeing by providing noise control services on the multi-year ATI subcontract for the Long Term Mine Reconnaissance System (LMRS). ATI diagnosed, designed noise treatments for and tested the LMRS hardware (both vehicle and recovery equipment) to resolve several significant radiated noise problems. In 1999, as principal of Acoustical Technologies Inc., he continued his consulting work with Northrop Grumman on the Rigel, NMRS and Orion underwater vehicle programs. Rigel activities included the initial noise control design and an extensive test program on vehicle propulsion noise that led to revisions of the noise treatments and pool testing to verify performance. Northrop integrated the changes and delivered the vehicle to the Navy.

**Bolt Beranek and Newman or BBN Technologies (now Raytheon)**

New London, CT

Dr. Cascio was a Division Scientist in the New London office of BBN Technologies. He managed projects involving the development of quiet marine hardware and the prediction, measurement and control of acoustic noise and vibration. His fieldwork included sites at Northrop Grumman (Annapolis, MD); Lockheed Martin (Sunnyvale, CA), Raytheon in Portsmouth, RI, NUWC-Newport sites in Middletown, RI; AUTECH, the Bahamas and Keyport, WA and acoustic sea trials on surface ships and submarines. Dr. Cascio delivered (with BBN staff) a weeklong seminar on Modeling and Control of Radiated Noise for Northrop's Marine Systems Division.

In 1998, Dr. Cascio supported NAVSEA in the investigation of SEAWOLF (SSN21) torpedo launcher transient noise and SSTG vibration problems on the USS OKLAHOMA CITY (SSN723). He also provided engineering services to investigate radiated noise issues on the SEAWOLF class submarine for Electric Boat. This included providing analysis of radiated noise problems, providing test support including planning, conduct and analysis as well as supporting Electric Boat at meetings with Newport News, NAVSEA and others.

Electric Boat / Application "C" - He was responsible for BBN's dockside and at sea radiated noise measurements during the successful field demonstration of new noise control technology developed by BBN. Noise produced by onboard shakers on a submarine was observed, recorded and analyzed dockside at Electric Boat's shipyard and from the Navy ship MONOB in Exuma Sound during the submarine's noise trials.

For NUWC/New London, he conducted field measurements of the radiated noise of the NUWC/NRL airboat towed array platform. The underwater noise on this vehicle was generated by the air boat's propeller radiating through the vehicle's hull. The field testing at Lake Seneca provided both airborne, structureborne and underwater acoustic data, to allow an evaluation of the source and paths of the propeller noise observed during operation of the airboat. The airboat was designed to be a quiet platform to tow advanced sonar arrays.

Dr. Cascio led the BBN effort to support the UUV Program Group at Northrop Grumman's Oceanic Systems by managing the BBN subcontract on the Rigel and NMRS vehicle programs. He performed laboratory noise tests on Alpha, Orion, Rigel and NMRS vehicle hardware. He calibrated the Northrop pool for UUV underwater acoustic measurements. To conduct this effort, he set up and operated a BBN field office in Annapolis, MD during the period from September 1995 to February 1998. He also developed the initial Phase II radiated noise model for the hardware segments of the Long Range Mine Reconnaissance System (LMRS) program. He prepared the Magnetism, Pressure, Electric, Galvanic, and Acoustics Signatures section of the Phase I effort including the preliminary radiated noise model and the noise treatment design for LMRS.

He was responsible for radiated noise on the Rigel program at Northrop Grumman. After selecting the noise treatments and developing a radiated noise model using candidate system components, he prepared and delivered the radiated noise section of Northrop presentations for the System Requirement's Review (SRR) and the System Design Reviews (PDR and SDR).

Dr. Cascio was the principal investigator in BBN's efforts to support the silencing modifications to the MK48 ADCAP torpedo. He led the silencing design and measurement effort on the NAVSEA TPU (Torpedo Propulsion Upgrade) task for the Hughes/BBN team. He prepared a low-cost silencing design package based on extensive measurements of their concepts in the BBN reverberant tank. He performed similar investigations for NUWC Newport during the CCAPS (Closed Cycle Advanced Propulsion System) and SIA (Special Initiative Assessment) studies that led to the decision to upgrade the noise performance of the MK48 ADCAP torpedo.

Dr. Cascio worked with NOSC/San Diego in the evaluation of the sonar ping noise anticipated in the SSN 688 Class cruise missile submarine. He redesigned the exterior acoustic treatment to ensure adequate ping noise control and then prepared HMR's to implement the changes on SSN 719/720. A similar task was performed for the SSN 721-723 submarine design by updating the interior ping noise acoustic treatments. He developed a test plan to measure interior ping noise on the first Vertical Launch System (VLS) submarine.

In 1989, Dr. Cascio organized a four-day course in radiated noise control for underwater systems. Topics included the fundamentals of vibration and underwater acoustics, noise control treatments and the measurement of acoustic radiation from machinery components. He and other BBN staff prepared the lecture materials and presented the course at a client's facility.



He managed the development of computerized radiated noise prediction models for US Navy submarines. Estimates of the noise from each machinery item were calculated using the machine's source level, the transfer of acoustic energy from the machine to the hull and hull radiation to the far field. Individual predictions were combined with propeller and hydrodynamic noise to produce an overall prediction of the ship's radiated noise.

Dr. Cascio was principal investigator in the radiated noise analysis of fluid subsystems operating in proprietary underwater hardware (including UUV's and ROV's). Efforts for four clients were focused on both acoustic design (development of appropriate noise control treatments) and radiated noise prediction for hydraulic, fresh water and seawater pumping systems. Dr. Cascio also provided acoustic measurement and data analysis services as part of the operational evaluation of this equipment.

He directed a major program in which BBN was tasked to predict and control the airborne and underwater radiated noise for the SWATH Ship SEA SHADOW. In this project he provided both program management and a substantial part of the effort to predict the ship's underwater noise, select an efficient noise control suite, specify machinery airborne, fluidborne and structureborne noise allocations, and oversee the ship construction. He then measured the ship's onboard noise and vibration signature during the stealth ship's initial sea trials.

#### **Oceanic Division of Westinghouse Electric Corp (now Northrop Grumman)**

Annapolis, MD

From 1973 to 1979, Dr. Cascio provided noise and vibration control services for a number of the Oceanic Division's classified programs. With company IR&D funds, he also made extensive measurements of vibration sources and paths responsible for the sonar acoustic self-noise in laminar flow underwater vehicles. He made radiated and self noise measurements on buoyancy propelled and mechanically propelled low drag bodies.

He evaluated the design of a Westinghouse submarine mounted system for internal airborne noise and external radiated noise. He developed a noise model for each system component and compared expected performance against the submarine requirements for both compartment airborne noise as well as far field radiated noise.

#### **General Dynamics/Electric Boat Division**

Groton, CT

From 1967 to 1973, Dr. Cascio was in the Acoustic Research Group. To improve the ability to measure submarine radiated noise, he demonstrated that a dipole hydrophone could selectively reject ambient ocean noise. He built and tested a prototype system that effectively rejected horizontally directed high frequency ambient noise during a submarine radiated noise trial at Exuma Sound in the Bahamas.

Dr. Cascio studied the high airborne noise produced by the diesel generator set on SSN 637 class submarines that was causing poor communication using existing headset equipment. A testing program on the type H-2A2/U sound powered headset demonstrated this and revealed that a David Clark model-15SMA headset and prototype amplifier could be used to improve the communication ability of the watch stander exposed to the high ambient noise. Suggested improvements in the ability of the watch stander to hear the public-address system and the diesel alarms were also demonstrated and then documented.

He participated in the design of the OHIO class submarine by conducting research and development tasks associated with the reduction of fluidborne noise in fresh and seawater pumping systems.

#### **Capabilities**

Acoustical Technologies Inc. (ATI) is a federally certified Small Business Enterprise organized in 1999 in the state of Connecticut to provide clients with acoustic design, analysis and testing services. ATI optimizes mechanical system designs to meet acoustic noise requirements. ATI delivers knowledgeable support for measuring, analyzing and solving challenging acoustic noise problems. ATI conducts acoustic noise measurements of steady state and transient noise sources for vibration, airborne, fluidborne and radiated noise problems.

#### **ATI Company Designations**

CAGE Code: 1NCN7    DUNS: 093474596  
NAICS: 541330 Engineering

Corporate Structure: Corporation  
SIC: 8711 Engineering Services

#### **Contact Information:**

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April 30, 2024

Mr. Paul Bowler, Chairman  
Middlebury Conservation Commission  
1212 Whittemore Road  
Middlebury, Connecticut 06762

Re: Warehouse Proposal  
"Southford Park"  
555 Christian Road & 764 Southford Road  
Middlebury, Connecticut

Dear Chairman Bowler and Members of the Conservation Commission,

This memo is to clarify that it is not appropriate to use the full pollutant removal rates when treatment systems are in series. This is based on a professional literature review conducted by my office.

**Documents Reviewed:**

- A. Site Plans by VHB – March 25, 2024
- B. Memorandum by VHB of March 25, 2024 – adjustment to upland disturbance area and impervious area totals
- C. Memorandum by VHB of March 25, 2024 – Stormwater Management Revisions
- D. Memorandum by VHB – April 24, 2024 – CT Water Quality Volume
- E. Current (2023) Connecticut Stormwater Quality Manual (557 pages).

After reviewing the above documents, I have the following comments for your consideration.

1. The design of the stormwater management needs to comply with all the requirements of the 2023 CT DEEP stormwater management manual in my professional opinion for the following reasons:
  - a. VHB is not the original design engineer of the site. As the plans were dated just before the March 30, 2024 date of implementation by DEEP, it should comply with the new standards to ensure that there are no environmental impacts from the discharge of stormwater on the site.

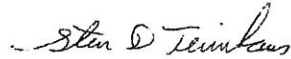


- b. As additional basins have been proposed in lieu of underground storage systems, this is a substantial change in the handling of stormwater management.
  - c. No calculations have been provided for the new stormwater Basin 430 for the routing of all required storm events have been provided.
  - d. Additionally, the discharge from Basin 430 is then directed to Basin 420 along with runoff from other impervious areas. No updated routing analysis has been provided for Basin 420.
  - e. No updated pollutant renovation analysis has been submitted for the project which complies with the 2023 Manual. The 2023 Manual requires the following reductions for New Development which would apply to all new construction of the site which is not located the existing development of the Timex Facility:
    - i. Total Suspended Solids (TSS) = 90%
    - ii. Total Phosphorous (TP) = 60%
    - iii. Total Nitrogen (TN) = 40%
  - f. The 2023 Manual requires the following reductions for Redevelopment which would apply to all new construction of the site which is located over the existing development of the Timex Facility:
    - i. Total Suspended Solids (TSS) = 80%
    - ii. Total Phosphorous (TP) = 50%
    - iii. Total Nitrogen (TN) = 30%
  - g. Construction of this project, if the modifications are approved by all land use agencies may not commence until after September 30, 2024 which the 2023 Manual is to be fully implemented.
2. The forebay for Basin 430 has a functional depth of 12" which is insufficient to trap sediments. The 2004 Manual required a forebay depth of 4'-6' and the 2023 Manual requires a forebay depth of 2'-4', so the forebay for Basin 430 does not comply with both versions of the Manual.
  3. The forebay for Basin 410 has a functional depth of 12" which is insufficient to trap sediments. The 2004 Manual required a forebay depth of 4'-6' and the 2023 Manual requires a forebay depth of 2'-4', so the forebay for Basin 430 does not comply with both versions of the Manual.
  4. Basin 420, as originally designed by SLR contains a Bioretention system at the bottom of a standard detention basin. These are two distinct stormwater management practices that have functionality which conflict with each other. No such hybrid design exists in either the 2004 or 2023 Manual. No documentation or analyses have been to support the hybrid design.
  5. The stormwater memo by VHB states that bioretention basins with sediment forebays will be used. This are not standalone practices but are incorporated as the bottom of a standard detention basin and thus do not function as a standalone Bioretention system. The Bioretention Basins cannot be used as detention basins without eliminating the water quality treatment associated with the Bioretention system due to the ponding of water to provide detention and reduce peak rates.

6. There have been modifications to the site design which according to the applicant will reduce the impervious area proposed on the site. However, no updated routing analyses have been provided by the applicant for all the stormwater basins to demonstrate how the modifications will affect the functionality of all the stormwater basins.

Please contact my office if you have any questions concerning this information.

Respectfully Submitted,  
Trinkaus Engineering, LLC

A handwritten signature in cursive script, appearing to read "Steven D. Trinkaus".

Steven D. Trinkaus, PE