Special Permits with Integrated Site Plan

Application:	**Special Permits with Integrated Site Plan**
Project Name:	**Deming Road Business Park**
Address:	**Map 10-1, Block 83, Lots 3A, 3A1, 3A2, 3A3**
Zone:	**General Industry -2 (GI-2)**
Applicant:	**Richard Munson, Principal**
Owner:	**Deming Road Business Park LLC.**
Proposal:	**Integrated site plan with contractor shop use on each of four (4) lots**

PROPOSAL

Richard Munson, Deming Road Business Park, LLC is seeking an integrated Site Plan approval for a building on each of four existing lots, with related site improvements and Special Permit approvals for contractor shop uses on each lot:

1. Map 10-1, Block 83, Lot 3A (7,500 sq. ft.) Deming Road, 7,500 sq. ft. building on a rear lot for contractor shop use
2. Map 10-1, Block 83, Lot 3A1 Deming Road, 3,606 sq. ft. building for contractor shop use
3. Map 10-1, Block 83, Lot 3A2 Deming Road, 6,750 sq. ft. building for contractor shop use
4. Map 10-1, Block 83, Lot 3A3 (9,000 sq. ft.) Deming Road, 9,000 sq. ft. building on a rear lot for contractor shop use

in the GI-2 Zone pursuant Berlin Zoning Regulations Sections VII.C.3.e., XII, and XIII.

STAFF COMMENTS/ RECOMMENDATIONS

1. The Public Hearing be kept open as a decision by the IWWCC is pending.
2. Proposed easement documents including cross easements for shared improvements including for drainage, parking and drives be recorded prior to permitting.
3. Any signage for the development is required to be in accordance with Section IX.A of the Berlin Zoning Regulations and will require application for Building Permits which includes applicable zoning reviews.
4. Landscape plan details be submitted for zoning review on each lot's building permit plan.
5. Zoning statistics for each lot be shown on individual permit and as-built plot plans.
6. Hydrant be installed consistent with Berlin Water Control comment.
7. Department comments be resolved to the satisfaction of the applicable department.
8. Submittal of any required bonding in an amount to be determined by staff.
9. Any outstanding conditions from the 2015 PZC approval be carried forward with this approval.

EXISTING CONDITIONS

The site is on the south side of Deming Road, approximately 1/3 mile east of the intersection with Christian Lane. A 5.34 Acre parcel was subdivided into 2 fronting and 2 rear building lots as shown on the subdivision plan filed on the Land Records as Map #4220. A sewer easement for the Mattabassett District (trunk line) runs east to west through the development. There is an access easement shown over the new entrance drive. There are wetland, floodway and flood plain identified on the properties.

BACKGROUND

A subdivision of the property into the four (4) existing lots was reviewed, approved and filed in 2016. The site plan and special permit approvals approved at the same time have expired in accordance with the Regulations and State Statutes. An allowed Statutory extension for an additional five (5) years was not sought prior to expiration. The proposal with submitted applications and plans are the same as approved five years ago.

PROPOSED CONDITIONS

Contractor uses are proposed on each of the lots. Special permit approval is required for contractor uses in the GI2 zone. Lots 3 ad 4 are rear lots; Special permit approval is required for the development of rear lots. The easterly portion of lot 4 will remain in its natural state. Cross easements will be required and should be recorded as necessary for shared improvements.

Traffic Study

A traffic study is required as the total GFA of 26,856 is greater than the threshold for a report of 25,000 s.f. The applicant has indicated to staff that documentation confirming the report submitted for the 2016 approval remains valid will be forthcoming.

Soils Report

The applicant has indicated to staff that documentation confirming the report submitted for the 2016 approval remains valid will be forthcoming.

Stormwater Management (XIII.A.6.g) and Grading

Catch basins equipped with silt soxx that will feed into a subsurface drainage system are proposed. The improved area of the development will be substantially flat at 46-48 elevation with an increased grade over the water and sewer laterals due to installation of rigid protective insulation resulting in a grade of up to 51.

Inland Wetlands and Flood Zones

The easterly portion of the property has wetland, floodway and floodplain areas

The applicant has resubmitted the 2015 plans for IWWC reapproval as well. Staff understands that the wetlands public hearing was opened on 10/6/2020 and remains open with Wetland approval pending.

Per Connecticut General Statute, the Planning and Zoning Commission cannot render a decision until Wetlands has submitted a report of their decision.

Utilities (XIII.A.6.f)

The sites will have public water and sewer, served by Berlin Water Control. Gas will also be provided. Electrical service is required to be underground per the subdivision regulations.

Parking & Driveways (XIII.A.6.d)

A 30-foot-wide shared driveway will serve the 4 separate lots that each will be improved with contractor shop buildings. Required parking and loading for each shop has been provided as part of the integrated site plan. Cross easements should be recorded.

Required parking provided for industrial uses at 1:500 s.f. Total: 55 spaces, Total provided: 60.

Lot 1:	3606 s.f.	8 (1 H/C)
Lot 2	6750 s.f.	14 (1 H/C)
Lot 3	9000 s.f.	18 (1 H/C)
Lot 4	7500 s.f.	15 (1 H/C)

Signs and Lighting (XIII.A.6.e)

A single freestanding sign is shown in a landscaped area adjacent to the access drive. The installation will require appropriate permits to include dimensioned location to confirm compliance with the Regulations. Signage would be subject to Berlin Zoning Regulations Section IX.A. Signage requires building permits which includes zoning review.

Proposed site lighting would be required to be in accordance with the Regulations including full cut off, with no trespass.

Landscaping

A Layout and Landscape Plan dated May 6, 2013 rev to 9/16/20 by Kratzert & Jones Associates has been submitted. Landscape plantings of perennials are proposed along the Deming Road frontage and in parking peninsulas. A landscaped sign area is proposed at the shared drive entrance that includes low flowering shrubs. A landscape border of white pines is proposed along the property line adjacent to 198 Deming Road. The approved landscape plan should be provided on each lot permit application to confirm zoning compliance.

Buildings

Building elevations were provided for Lot 1. The applicant should describe the proposed buildings that are designed to serve contractor uses and confirm if all building will be of a similar design of 1-story, gable roof, vinyl clapboard siding and fiberglass roof shingles. Several overhead garage and entrance doors and no windows are shown on the elevations.

Interdepartmental Comments

Inland Wetlands: "Wetlands/Flood Hazard Permit pending!"

Berlin Water Control: "Berlin Water Control would be the water and sewer provider. It appears each building will have separate water lines and there will be an 8" water main with hydrant. This will be owned by the Developer/owner. We would recommend the hydrant be consistent with our hydrants (Meuller 5-1/4")".
Fire Marshall: "Fire Department access and water supply ok"
Police Chief: (see attached)
The Building Official and Board of Police Commissioners indicated "No Comment"

Wisniowski & Sullivan, LLC
Attorneys at Law

Wanda L. Wisniowski
Also admitted in New York

Timothy Sullivan

Please respond to our Southington office

FILE COPY

September 3, 2020

Town of Berlin
240 Kensington Road
Berlin, CT 06037

Town of Berlin
Received
SEP 03 2020
Planning & Zoning Department
Berlin, Connecticut

Attn: Maureen Giusti, Acting Town Planner

RE: Deming Road Business Park, LLC
Site Plan Application
Special Permit Application

Dear Mrs. Giusti

As we discussed, Wisniowski & Sullivan, LLC represents Deming Road Business Park, LLC ("DRBP") in regard to its Special Permit Applications and Site Plan Application for property on Deming Road known as 10-1/83/3A, 10-1/83/3A1, 10-1/83/3A2 and 10-1/83/3A3 (the "Property"). These are identical applications filed by Progressive Development Corporation ("PDC") in 2014 which were approved by the Planning & Zoning Commission in 2015 with the only change being the applicant. PDC is solely owned by Richard Munson and at the time of the 2014 application the Property was owned by Karen Berube. Following the 2015 approvals DRBP, which is solely owned by Munson, purchased the Property from Berube. Enclosed please find the following:

SPECIAL PERMIT

1. An Application/Application Checklist and a check in the amount of $1,120.00
2. Written Narrative of Proposal;
3. List of names and addresses of owners of property within 500 feet of the subject property. The Proof of mailing will be submitted once a Public Heating date is scheduled;

4. Acknowledgement of sign posting requirement;

5. Three (3) copies of a traffic study;

6. Three (3) copies of the environmental impact analysis submitted with the 2014 application. Concerning section XIIB5i of the regulation, while the Berlin Inland Wetlands & Watercourses Commission approved the 2014 application, an identical application was resubmitted on September 3, 2020 and is pending. Concerning section XIIB5j (new since 2014), a Phase 2 Environmental Study was performed which revealed no environmental contamination on the property; and

7. Three (3) copies of the Soil Resource Consultants report which was submitted with the 2014 application.

Finally, if possible, please schedule the Public Hearing on the applications for the Commission's October 15, 2020 meeting.

SITE PLAN

1. An Application/Application Checklist and a check in the amount of $2,465.00;

2. Five (5) sets of 24"x36" Design Prints and Twelve (12) sets of 12"x18" Design Prints;

3. Five (5) sets of 24"x36" Architectural Plans and Twelve (12) sets of 12"x18" Architecural Plans; and

4. Two (2) copies of The Drainage Report which is the same Drainage Report submitted with the 2014 application.

Please note that the Landscaping Plan will be submitted.

Sincerely

Timothy Sullivan

ETS/AM
Enc.

Town of Berlin

Planning and Zoning Department

240 Kensington Road
Berlin, Connecticut 06037
www.town.berlin.ct.us

SITE PLAN APPLICATION

☒ Site Plan ☐ Site Plan Amendment

Project Name: Deming Road Business Park
Property Owner(s): Deming Road Business Park, LLC
Project Address*: *
Map: * Block: * Lot: * Zone(s): GI2 Lot Area: *
* See Addendum

Please select all relevant items below:

☒ Special Permit – Also complete special permit application form
☐ Property is within 500 feet of a Municipal Boundary of _____
☐ Amendment to Zoning Regulations – Section(s) _____
☐ Amendment to Zoning Map – Zone(s) affected _____
☐ Zoning Board of Appeals review needed
☒ Inland Wetlands and Water Course Commission review needed

Applicant Information

Name: Richard Munson
Firm Name: Deming Road Business Park, LLC
Street Address: 990 Andrews St
City: Southington ST: CT Zip: 06489
Email: none
Phone: 860-919-6912
Signature: _____
Date: _____

Property Owner(s) Information (If Not the Applicant)

Name: Same as Applicant
Principal: _____
Street Address: _____
City: _____ ST: _____ Zip: _____
Email: _____
Phone: _____
*Letter of Authorization Required

***Any town official and/or employee that the town deems necessary may enter the property to verify information submitted with this application.**

This Site Plan Involves:

☐ Additions ☐ Alterations ☐ Demolition ☒ New Construction

Description of Project*: See Addendum

*If more space is needed, then please provide separate narrative document.

SITE PLAN ZONING STATISTICS

	EXISTING	PROPOSED	REQUIRED
USE(S)	none		
COMMERCIAL			
Gross Floor Area			
Parking Spaces			
INDUSTRIAL			
Gross Floor Area	none	See Attached	
Parking Spaces	none	See Attached	
RESIDENTIAL			
Number of Units			
Number of Bedrooms			
Gross Floor Area			
Parking Spaces			
OTHER USES			
Gross Floor Area			
Parking Spaces			

To be completed by P&Z staff only:

Fee Paid $_____ (Refer to current Fee Schedule)

Received by: _____

Town of Berlin
Received
SEP 03 2020

Planning & Zoning Department
Berlin, Connecticut

Town of Berlin

Planning and Zoning Department

240 Kensington Road
Berlin, Connecticut 06037
www.town.berlin.ct.us

FILE COPY

SPECIAL PERMIT APPLICATION

(Any Special Permit Application shall be submitted simultaneously with a Site Plan Application)

Project Name: Deming Road Business Park

Property Owner(s): Deming Road Business Park, LLC

Project Address*: 0 Deming Road, Berlin, CT

Map: 10-1 Block: 83 Lot: 3A Zone(s): GI2 Lot Area: 3.45 acres

Applicant Information

Name: Richard Munson Firm Name: Deming Road Business Park, LLC

Street Address: 990 Andrews St City: Southington ST: CT Zip: 06489

Email: none Phone: 860-919-6912

Signature: _____ Date: _____

Property Owner(s) Information (If Not the Applicant)

Name: Same as Applicant Principal: _____

Street Address: _____ City: _____ ST: _____ Zip: _____

Email: _____ Phone: _____

*Letter of Authorization Required

Special Permit required pursuant to section(s):

Section VII c 3 e

***Any town official and/or employee that the town deems necessary may enter the property to verify information submitted with this application.**

To be completed by P&Z staff only:

Fee Paid $ 280.- (Refer to current Fee Schedule)

Received by: MS

Town of Berlin
Received
SEP 03 2020
Planning & Zoning Department
Berlin, Connecticut

Town of Berlin

Planning and Zoning Department

240 Kensington Road
Berlin, Connecticut 06037
www.town.berlin.ct.us

SPECIAL PERMIT APPLICATION

(Any Special Permit Application shall be submitted simultaneously with a Site Plan Application)

Project Name: Deming Road Business Park

Property Owner(s): Deming Road Business Park, LLC

Project Address*: 0 Deming Road, Berlin, CT

Map: 10-1 Block: 83 Lot: 3A1 Zone(s): GI2 Lot Area: .55 acres

Applicant Information

Name: Richard Munson Firm Name: Deming Road Business Park, LLC

Street Address: 990 Andrews St City: Southington ST: CT Zip: 06489

Email: none Phone: 860-919-6912

Signature: _____ Date: _____

Property Owner(s) Information (If Not the Applicant)

Name: Same as Applicant Principal: _____

Street Address: _____ City: _____ ST: _____ Zip: _____

Email: _____ Phone: _____

*Letter of Authorization Required

Special Permit required pursuant to section(s):

Section VII c 3 e

_____

***Any town official and/or employee that the town deems necessary may enter the property to verify information submitted with this application.**

To be completed by P&Z staff only:

Fee Paid $ 280.- (Refer to current Fee Schedule)

Received by: PMS

Town of Berlin
Received
SEP 03 2020
Planning & Zoning Department
Berlin, Connecticut

Town of Berlin

Planning and Zoning Department

240 Kensington Road
Berlin, Connecticut 06037
www.town.berlin.ct.us

FILE COPY

SPECIAL PERMIT APPLICATION

(Any Special Permit Application shall be submitted simultaneously with a Site Plan Application)

Project Name: Deming Road Business Park

Property Owner(s): Deming Road Business Park, LLC

Project Address*: 0 Deming Road, Berlin, CT

Map: 10-1 Block: 83 Lot: 3A2 Zone(s): GI2 Lot Area: .51 acres

Applicant Information

Name: Richard Munson Firm Name: Deming Road Business Park, LLC

Street Address: 990 Andrews St City: Southington ST: CT Zip: 06489

Email: none Phone: 860-919-6912

Signature: _____ Date: _____

Property Owner(s) Information (If Not the Applicant)

Name: Same as Applicant Principal: _____

Street Address: _____ City: _____ ST: _____ Zip: _____

Email: _____ Phone: _____

*Letter of Authorization Required

Special Permit required pursuant to section(s):

Section VII c 3 e

***Any town official and/or employee that the town deems necessary may enter the property to verify information submitted with this application.**

To be completed by P&Z staff only:

Fee Paid $280.- (Refer to current Fee Schedule)

Received by: fm S

Town of Berlin
Received
SEP 03 2020
Planning & Zoning Department
Berlin, Connecticut

Town of Berlin

Planning and Zoning Department

240 Kensington Road
Berlin, Connecticut 06037
www.town.berlin.ct.us

SPECIAL PERMIT APPLICATION

(Any Special Permit Application shall be submitted simultaneously with a Site Plan Application)

Project Name: Deming Road Business Park

Property Owner(s): Deming Road Business Park, LLC

Project Address*: 0 Deming Road, Berlin, CT

Map: 10-1 Block: 83 Lot: 3A3 Zone(s): GI2 Lot Area: .82 acres

Applicant Information

Name: Richard Munson Firm Name: Deming Road Business Park, LLC

Street Address: 990 Andrews St City: Southington ST: CT Zip: 06489

Email: none Phone: 860-919-6912

Signature: _____ Date: _____

Property Owner(s) Information (If Not the Applicant)

Name: Same as Applicant Principal: _____

Street Address: _____ City: _____ ST: _____ Zip: _____

Email: _____ Phone: _____

*Letter of Authorization Required

Special Permit required pursuant to section(s):

Section VII c 3 e

***Any town official and/or employee that the town deems necessary may enter the property to verify information submitted with this application.**

To be completed by P&Z staff only:

Fee Paid $ 280.— (Refer to current Fee Schedule)

Received by: fms

Town of Berlin
Received
SEP 03 2020
Planning & Zoning Department
Berlin, Connecticut

Deming Road Busines Park, LLC

Special Permit Application Written Narrative

PROPERTY: **Deming Road, Berlin, CT**
Map/Block/Lot **10-1-83-3A**
10-1-83-3A1
10-1-83-3A2
10-1-83-3A3

The proposed development is an integrated four lot subdivision with a light industrial building on each lot. Access to the four lots is by way of a shared driveway as depicted on the proposed site plan. The subdivision was unanimously approved by the Berlin Planning and Zoning Commission on February 12, 2015. The intended use is for small contractors such as carpenters, electricians, plumbers, landscapers, courier services, industrial repair services and HVAC companies. The proposed buildings range in size from 3,606 sq. ft. to 9,000 sq. ft.

The Special Permit is required by Building Zoning regulations Section VII C3C because the Application proposes rear lots. The total number of persons to occupy the premises could be up to 50 daily. The parking and loading requirements are met as indicated on the proposed site plan. It is anticipated that there will be up to 75 entries and exits or motor vehicle traffic during a normal day.

September 23, 2020

TOWN OF BERLIN
PLANNING & ZONING DEPARTMENT
STAFF COMMENTS

APPLICATIONS: Special Permits/Site Plan Amendment
for a building on each of four lots, ranging from 3,606 sq. ft. to 9,000 sq. ft. to be used for contractor shop uses

APPLICANT: Richard Munson, Deming Road Business Park LLC

LOCATIONS:
a. Lot 3A (7,500 sq. ft.) Deming Road
b. Lot 3A1 (3,606 sq. ft.) Deming Road
c. Lot 3A2 (6,750 sq. ft.) Deming Road
d. Lot 3A3 (9,000 sq. ft.) Deming Road

AGENDA DATE: October 15, 2020

To the Applicant:

- *These are the comments received to date, additional comments may be forthcoming.*
- *Please submit any written response to Maureen Giusti, Acting Town Planner/Zoning Enforcement Officer at mgiusti@town.berlin.ct.us or revised plans directly to the Planning & Zoning Department in Room 121. We will forward your comments or distribute materials to the relevant departments.*

Building Official
No comment

Board of Police Commissioners
No comment

Berlin Water Control
Berlin Water Control Commission would be the water and sewer provider. It appears each building will have separate water lines and there will be an 8" water main with hydrant. This will be owned by the Developer/Owner. We would recommend the hyrant be consistent with our hydrants (Meuller 5-1/4")

Fire Marshal
Fire Department Access and water supply ok

Inland Wetlands
Wetlands/Flood Hazard Permit pending!

Police Chief
See Attached Report

Emailed to Attorney Sullivan: September 23, 2020

BERLIN POLICE DEPARTMENT

Officer Thomas Bobok ~ Traffic Bureau
Email: tbobok@Berlinpd.org Phone: 860-828-7082

9/14/2020

To: Chief Klett

From: Officer Tom Bobok

Re: Deming Road Business Park, LLC

I have reviewed the submitted materials regarding the proposed development, Deming Road Business Park, LLC. There appears to be ample ISD in both directions and adequate handicapped parking with proper signage and markings is also proposed. The plans also call for the business park egress to be stop sign controlled, which is appropriate.

There are no traffic related issues anticipated outside of what is contained in the submitted report.

SOIL RESOURCE CONSULTANTS

P.O. Box 752 Meriden, CT 06450

January 21, 2015

SRC Job No. 14-90

Richard Munson
Progressive Development Corporation
P.O. Box 812
Plainville, CT 06062-0812

Dear Mr. Munson:

Re: **Environmental Impact Analysis - Deming Road Business Park - 198 Deming Road - Berlin, CT**

At your request, I have completed an onsite investigation and analysis of the inland wetland and watercourse resources associated this proposed development site. The purpose of my analysis was assess the existing character and functioning of the wetland and watercourse resources and the potential for adverse impacts to those resources from this proposed project. As part of my evaluation I utilized site plan drawings prepared by your project engineers, Kratzert Jones& Associates dated as revised through November 24, 2014. I also have researched the CT DEP Natural Diversity Database for any listing of plant or animal specie sightings on or nearby to this development site. The latest mapping from that agency source indicated no listings as of December 2014. I have attached a copy of the relevant section of the map with printing date.

No direct impacts to inland wetlands or watercourses are proposed by any of phase of this development. Wetland and watercourse resource areas are located along the eastern side of the proposed development. A section of Webster Brook flows along the eastern portion of this property. The ground water classification for Webster Brook, according to CT DEEP standards, is GB. A GB classification relates to "uses for industrial process water and cooling waters and base flow for hydraulically-connected water bodies and is assumed not for human consumption without treatment.

One (1) area of associated wetland and watercourses have been identified for this study. Located along the eastern side of the project site, the wetland resource area (A) consists of a well defined section of Webster Brook and a narrow strip of inland wetland soils along the Brook's western bank. The area of wetland soil widens along the southern boundary and is connected to a larger wetland-watercourse area south of the subject site. Wetland Area A would be classified as a palustrine wooded type resource. Red Maples and American Elm dominate the very young tree strata with a dense stand of Silky dogwoods dominating the shrub layer. Upland portions of the site where development is proposed consist of lightly wooded to open grass areas. Sapling to pole sized Cottonwoods and Locust trees dominate. The shrub where present is dominated by invasive species including Russian Olive and Multiflora Rose

I have included a series of photographs on the next pages to provide a representative view of existing vegetative cover patterns.

Photo #1 - Southerly View of Vegetative Cover Along Wetland Watercourse Boundary

Photo #2 - Close-up View of Vegetation Along Wetland-Watercourse Boundary

Photo #3 - Northerly View of Wetland Watercourse in SE Corner (Wetland Flag is #9)

Photo #4 - Northerly View of Webster Brook & Associated Wetland

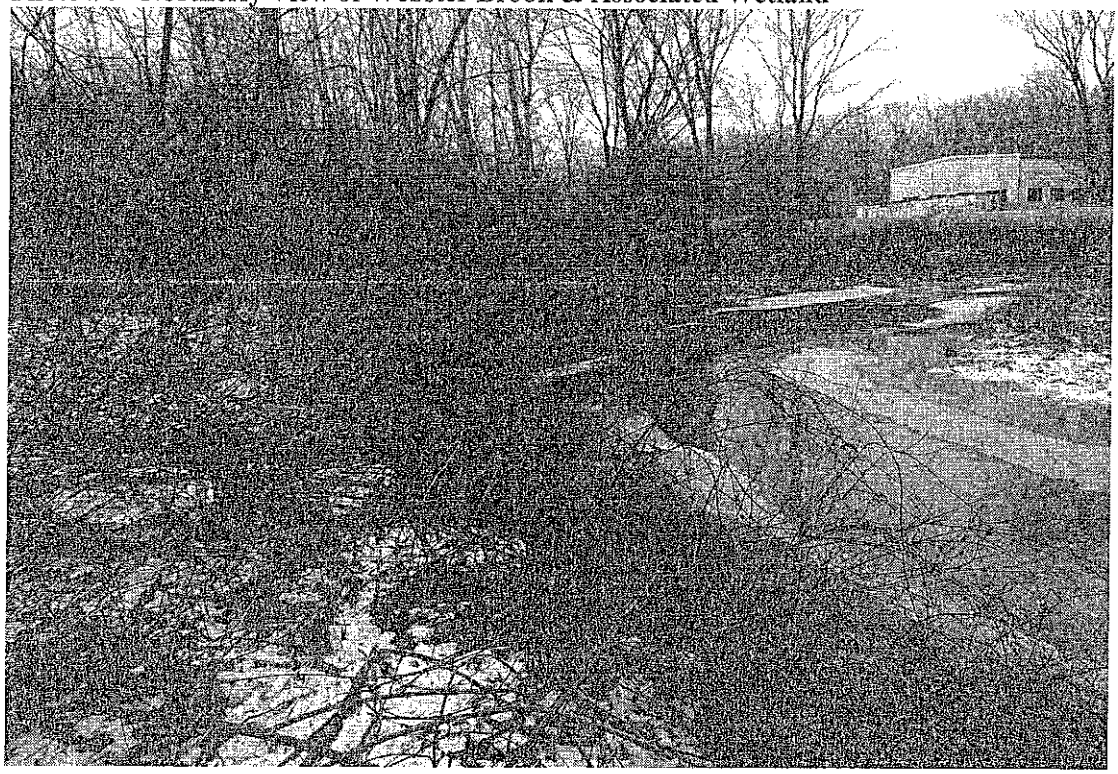


Photo #5 - Northerly View of Uplands Proposed for Development

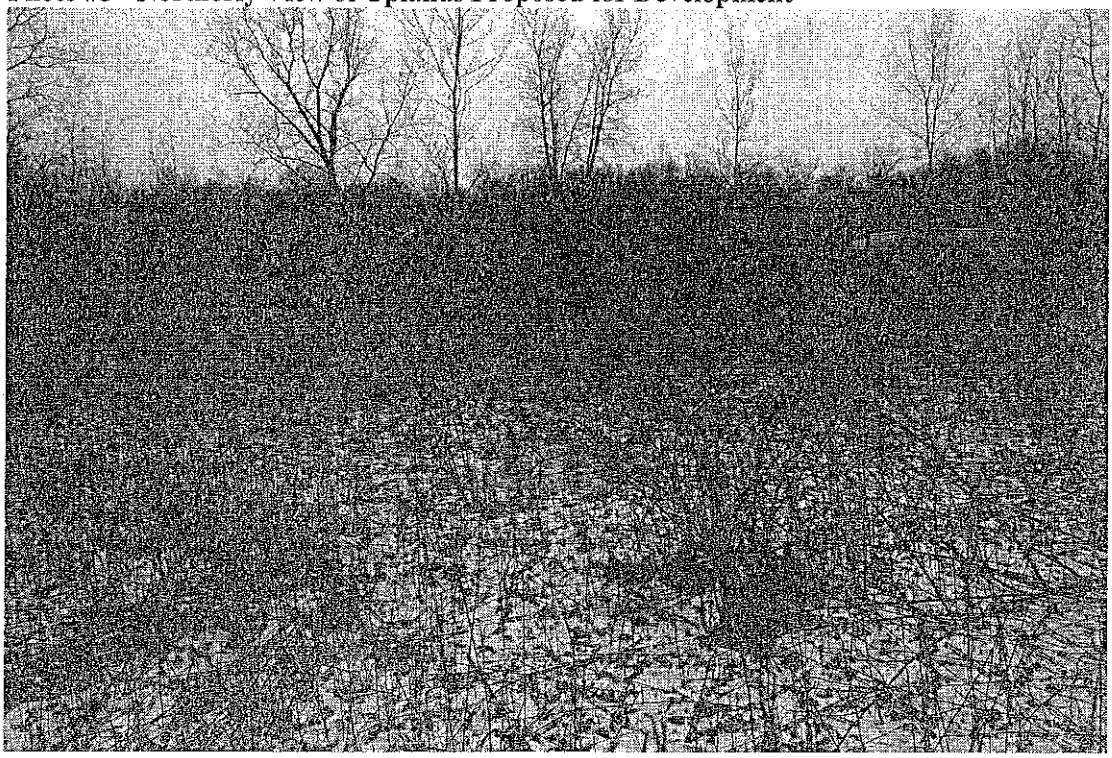
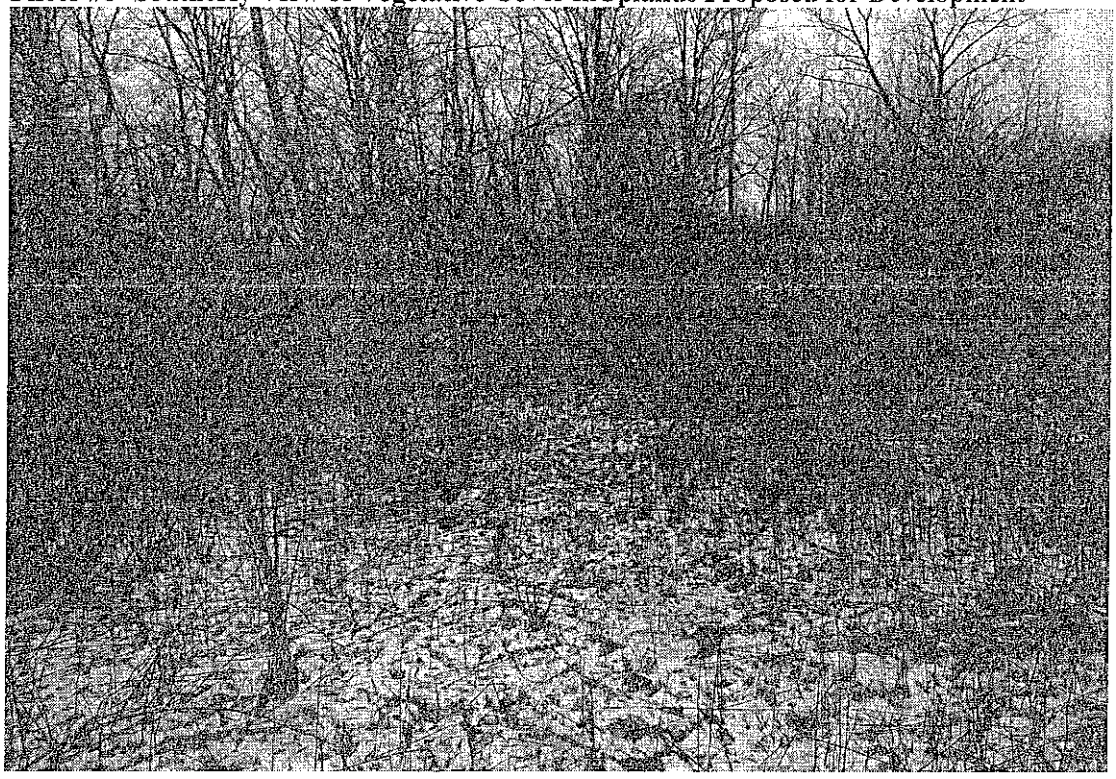


Photo #6 -Southerly View of Vegetative Cover inUplands Proposed for Development



WETLAND FUNCTIONS AND VALUES

The US Army Corps of Engineers utilizes an evaluation methodology that provides for a descriptive evaluation of wetland and watercourse resources. The methodology is contained within a document entitled "The Highway Methodology Workbook, Supplement", US Army Corps of Engineers, New England Division, November 1995. Rather than providing a "rating" number or subjective rank such as low, medium, or high, this evaluation approach provides a qualitative description of the physical characteristics of the wetland/watercourse resource, identifies the functions and values exhibited, and these basis for the conclusions using "best professional judgment".

The following Functions and Values were identified as existing within the wetland resource subareas by the evaluation process. The documentation for the evaluation can be found attached to this report.

Groundwater Recharge/Discharge functioning was evaluated and found to not be significant based on the fine grained soil material and very flat slopes of the wetland-watercourse area. The downward infiltration (recharge of surface water would be impeded by the fine grained dense soil structure.

Floodflow Alteration functioning was evaluated and found to be one of the primary functions of the resource area. The narrow band of wetland soils which widens in the southern portion of the site provides for temporary storage of flood waters during out of bank flow conditions. This functioning is somewhat limited by the relatively small size of the wetland area as compared to the upstream drainage area.

Finfish and Shellfish Habitat functioning is present within the limits of Webster Brook. The observed in channel sedimentation and CT DEEP documented lower water quality ratings do reduce the significance of the onsite resource area for these habitats.

Sediment and Toxicant Retention functioning was found to be of some significance due to the flat densely vegetated characteristics of the inland wetland soil areas. Visible signs of sedimentation retention were observed especially in the southern limits of the wetlands.

Nutrient Removal functioning, while present within the onsite wetland soils, is very limited based on the very small size of the resource area relative to its drainage area. The dense shrub and tree vegetation do provide for some renovation functioning when out of bank flow conditions persist.

Production Export functioning was observed within the onsite wetland-watercourse resource area. Woody detritus and surface leaf cover indicate production of natural organic materials available for offsite export by Webster Brook.

Sediment/Shoreline Stabilization functioning was provided for along the bank of Webster Brook by the dense stands of Silky Dogwood shrubs. The dense root systems of this shrub provide soil stabilization while the above ground woody stems promote the collection and retention of sediments, woody detritus and leaves.

Wildlife Habitat functioning was evaluated and found to be consistent with localized edge area habitat conditions that are in close proximity to high levels of human activity and noise generation. Only those species well adapted to these conditions could be expected to utilize the subject resource area. Less tolerant species while possibly using the resource area as a temporary stop-off point would not be expected to use the site for long term habitat needs.

Recreation Value, Educational/Scientific Value, Uniqueness/Heritage Value, and Visual Quality/Aesthetics Values were analyzed and found to not be present in any measure degree within the onsite wetland-watercourse resource area. The amount, proximity, and type of surrounding landuses greatly inhibit or eliminate the evaluation criteria for these values.

Comments

The proposed development includes the construction of four (4) separate buildings and associated parking on individual lots. No direct impacts to wetland-watercourse areas are proposed. Impacts to Upland Review Zone areas are limited to: (1) portion of Building #4 and its associated grading; and (2) the four easternmost parking spaces on Lot #4.

Stormwater runoff from the entire site will be discharged through AbTech water quality structures at each of the 5 proposed catchbasins before reaching either Webster Brook or the existing drainage system in Deming Road.

Conclusion

In my professional opinion, this development as proposed does not represent any significant or measurable potential for adverse environmental impacts to the existing wetland-watercourse resources or their long term functioning at present levels.

If you have any questions regarding this impact evaluation, or need additional assistance with this site, please contact me.

Sincerely,

David H. Lord

David H. Lord
Certified Soil Scientist
& Environmental Consultant

APPENDIX

Natural Diversity Data Base Areas

BERLIN, CT

December 2014

State and Federal Listed Species & Significant Natural Communities

Town Boundary

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

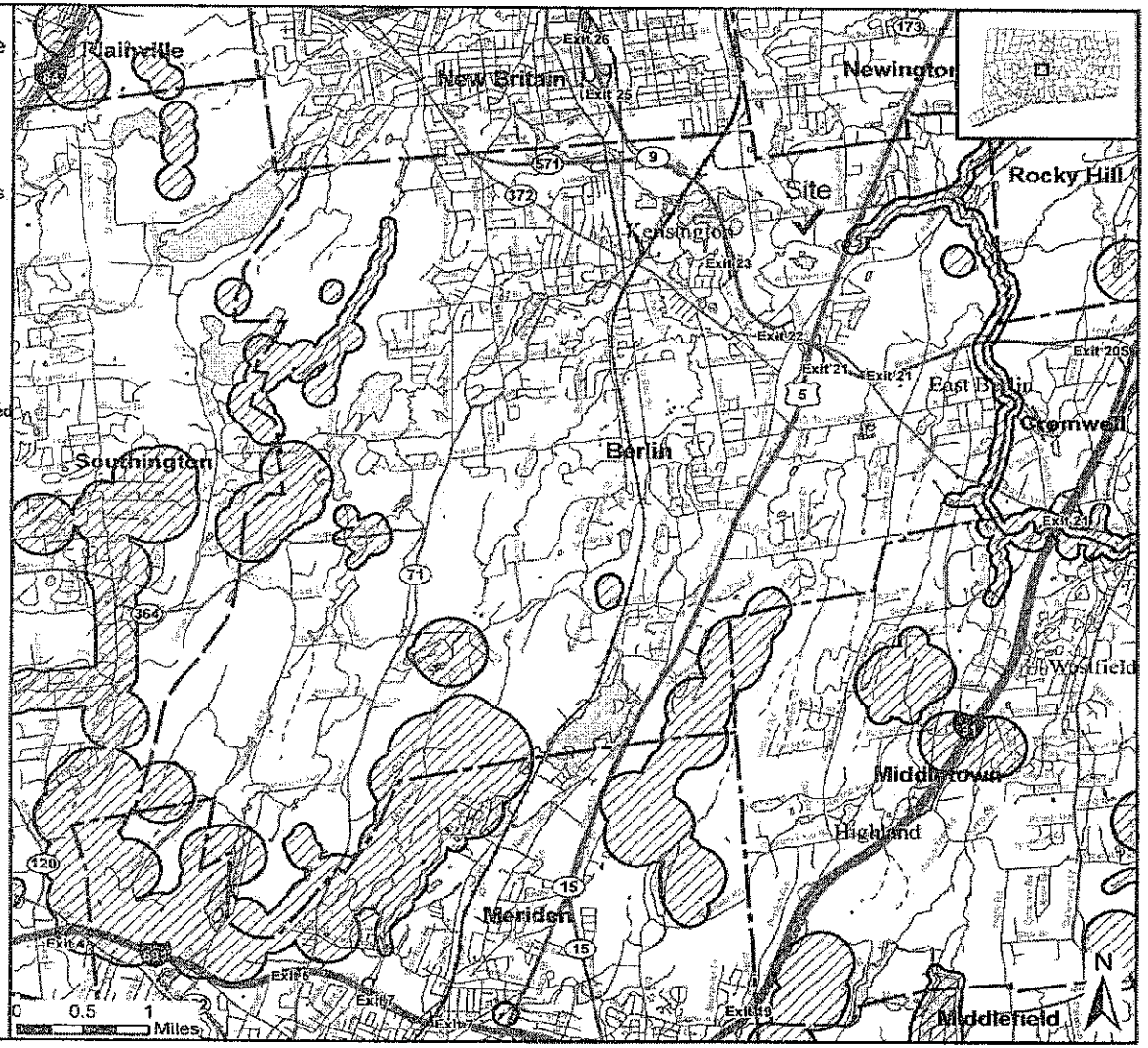
This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas. If the project is within a shaded area there may be a potential conflict with a listed species. For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

www.ct.gov/deep/nddbrequest

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

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

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



The Highway Methodology Workbook *Supplement*

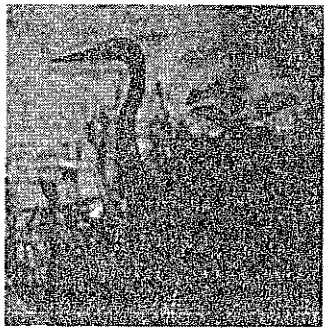
US Army Corps of Engineers®
New England District

Wetland Functions and Values
A Descriptive Approach

What are wetland functions and values?

Wetland functions and values form a very important part of Section 404 permit decisions by the Corps. **Functions** are self-sustaining properties of a wetland ecosystem that exist in the absence of society. Functions result from both living and non-living components of a specific wetland. These include all processes necessary for the self-maintenance of the wetland ecosystem such as primary production and nutrient cycling. Therefore, functions relate to the ecological significance of wetland properties without regard to subjective human values.

For example, a wetland that has slowly moving water performs the function of retaining sediments and toxicants. That is, the physical characteristic of a wetland that causes surface water to move slowly serves to let suspended particulates settle out of that water. This function traps sediments carried to it in runoff from uplands or upstream areas and clarifies the water. Identification of that function helps the Corps evaluate (1) whether the impacts of a project may impair that function and (2) whether such impacts are permissible.



Great Blue Heron

Values are benefits that derive from either one or more functions and the physical characteristics associated with a wetland. Most wetlands have corresponding societal value. This is recognized in various federal, state, and local wetland legislation that was enacted to protect these resources. The value of a particular wetland function, or combination thereof, is based on human judgment of the worth, merit, quality, or importance attributed to those functions. For example, a particular wetland might be considered valuable because it is known to store flood waters upgradient or adjacent to a developed area. That function is valuable to society because it attenuates flood waters which lessens the destructive severity of flood events. Another wetland might be valued because its combination of diverse wildlife habitat and picturesque setting offers various recreational and educational opportunities. The judgment of value is based on the opinion of recognized experts whose views are ultimately weighed and considered by the Corps in its permit process.

What wetland functions and values are considered by the Corps in its Section 404 permit process?

The 13 functions and values that are considered by the Regulatory Branch for any Section 404 wetland permit are listed below. The list includes eight functions and five values. Values are grouped together at the end of the list.

These are not necessarily the only wetland functions and values possible, nor are they so precisely defined as to be unalterable. However, they do represent the best working "palette" of descriptors which can be used to paint an objective representation of the wetland resources associated with a proposed project.

GROUNDWATER RECHARGE/DISCHARGE — This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area. Recharge should relate to the potential for the wetland to contribute water to an aquifer. Discharge should relate to the potential for the wetland to serve as an area where groundwater can be discharged to the surface.

FLOODFLOW ALTERATION (Storage & Desynchronization) — This function considers the effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events.

FISH AND SHELLFISH HABITAT — This function considers the effectiveness of seasonal or permanent waterbodies associated with the wetland in question for fish and shellfish habitat.

SEDIMENT/TOXICANT/PATHOGEN RETENTION — This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens.

NUTRIENT REMOVAL/RETENTION/TRANSFORMATION — This function relates to the effectiveness of the wetland to prevent adverse effects of excess nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.

PRODUCTION EXPORT (Nutrient) — This function relates to the effectiveness of the wetland to produce food or usable products for humans or other living organisms.

SEDIMENT/SHORELINE STABILIZATION — This function relates to the effectiveness of a wetland to stabilize streambanks and shorelines against erosion.

WILDLIFE HABITAT — This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and/or migrating species must be considered. Species lists of observed and potential animals should be included in the wetland assessment report.

RECREATION (Consumptive and Non-Consumptive) — This value considers the effectiveness of the wetland and associated water-courses to provide recreational opportunities such as canoeing, boating, fishing, hunting, and other active or passive recreational activities. Consumptive activities consume or diminish the plants, animals, or other resources that are intrinsic to the wetland, whereas non-consumptive activities do not.

EDUCATIONAL/SCIENTIFIC VALUE — This value considers the effectiveness of the wetland as a site for an "outdoor classroom" or as a location for scientific study or research.

UNIQUENESS/HERITAGE — This value relates to the effectiveness of the wetland or its associated waterbodies to produce certain special values. Special values may include such things as archaeological sites, unusual aesthetic quality, historical events, or unique plants, animals, or geologic features.

VISUAL QUALITY/AESTHETICS — This value relates to the visual and aesthetic qualities of the wetland.

THREATENED or ENDANGERED SPECIES HABITAT — This value relates to the effectiveness of the wetland or associated waterbodies to support threatened or endangered species.

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APPENDIX A: ACOE HIGHWAY METHODOLOGY CRITERIA

GROUNDWATER RECHARGE/DISCHARGE - Considers the potential for groundwater recharge and/or discharge.

CONSIDERATIONS/QUALIFIERS

1. Public or private wells occur downstream of the wetland.
2. Potential exists for public or private wells downstream of the wetland.
3. Wetland is underlain by stratified drift.
4. Gravel or sandy soils present in/or adjacent to the wetland.
5. Fragipan does not occur in the wetland.
6. Fragipan, impervious soils, or bedrock, does occur in the wetland.
7. Wetland is associated with a perennial or intermittent watercourse.
8. Signs of groundwater recharge are present or piezometer data demonstrates recharge.
9. Wetland is associated with a watercourse but lacks a defined outlet or contains a constricted outlet.
10. Wetland contains only an outlet.
11. Groundwater quality of stratified drift aquifer of wetland meets drinking water standards.
12. Quality of water associated with the wetland is high.
13. Signs of groundwater discharge are present (e.g. springs).
14. Water temperature suggests it is a discharge site.
15. Wetland shows signs of variable water levels.
16. Piezometer data demonstrates discharge.

FLOODFLOW ALTERATION - Considers the effectiveness of the wetland in reducing flood damage by water retention.

CONSIDERATIONS/QUALIFIERS

1. Area of this wetland is large relative to its watershed.
2. Wetland occurs in the upper portions of its watershed.
3. Effective flood storage is small or non-existent upslope of or above the wetland.
4. Wetland watershed contains a high degree of impervious surfaces.
5. Wetland contains hydric soils which are able to absorb and detain water.
6. Wetland exists in a relatively flat area that has flood storage potential.
7. Wetland has an intermittent outlet, ponded water, or signs are present of variable water level.
8. During flood events, wetland retains higher volumes of water than under normal rainfall events.
9. Wetland receives and retains overland or sheet flow runoff from surrounding uplands.
10. In the event of a large storm, wetland may receive and detain excessive flood water from watercourse.
11. Valuable properties or resources are located in or near the floodplain downstream from wetland.
12. The watershed has a history of economic loss due to flooding.
13. This wetland is associated with one or more watercourses.
14. This wetland watercourse is sinuous or diffuse.
15. This wetland outlet is constricted.
16. Channel flow velocity is affected by this wetland.
17. Land uses downstream are protected by this wetland.
18. This wetland contains a high density of vegetation.

FISH AND SHELLFISH HABITAT - Considers effectiveness of watercourse associated with wetland for fish habitat.

CONSIDERATIONS/QUALIFIERS

1. Forest land dominant in the watershed above this wetland.
2. Abundance of cover objects present.
3. Size of this wetland is able to support large fish/shellfish populations.
4. Wetland is part of a larger, contiguous watercourse.
5. Wetland has sufficient size/depth in open water so as not to freeze solid, retains some open water in winter.
6. Stream width (bank to bank) is more than 50 feet.
7. Quality of the watercourse associated with wetland able to support healthy fish/shellfish populations.
8. Streamside vegetation provides shade for the watercourse.
9. Spawning areas are present (submerged vegetation or gravel beds).
10. Food is available to fish/shellfish populations within this wetland.
11. Barrier(s) to anadromous fish (dams, including beaver dams, water falls, road crossing, etc.) are absent from stream.
12. Evidence of fish is present.
13. Wetland is stocked with fish.

14. The watercourse is persistent.
15. Man-made streams are absent.
16. Water velocities are not too excessive for fish usage.
17. Defined stream channel is present.

SEDIMENT/TOXICANT/PATHOGEN RETENTION -Considers effectiveness of the wetland as a trap for sediments, toxicants, or pathogens in runoff from surrounding uplands, or upstream eroding wetland areas.

CONSIDERATIONS/QUALIFIERS

1. Potential sources of excess sediment are in the watershed above the wetland.
2. Potential or known sources of toxicants are in the watershed above the wetland.
3. Opportunity for sediment trapping by slow moving water or deepwater habitat are present in this wetland.
4. Mineral, fine grained, or organic soils are present.
5. Long duration water retention time is present in this wetland.
6. Public or private water sources occur downstream.
7. The wetland edge is broad and intermittently aerobic.
8. The wetland is known to have existed for more than 50 years.
9. Drainage ditches have not been constructed in the wetland.
10. Wetland is associated with an intermittent or perennial stream, or a lake.
11. Channelized flows have visible velocity decreases in the wetland.
12. Effective floodwater storage in wetland is occurring. Areas of impounded open water are present.
13. No indicators of erosive forces are present. No high water velocities are present.
14. Diffuse water flows are present in the wetland.
15. Wetland has a high degree of water and vegetation interspersion.
16. Dense vegetation provides opportunity for sediment trapping and/or signs of sediment accumulation are present.

NUTRIENT REMOVAL/RETENTION/TRANSFORMATION -Considers effectiveness of wetland as a trap for nutrients in runoff from uplands or contiguous wetlands, and ability of wetland to process these nutrients into other trophic levels.

CONSIDERATIONS/QUALIFIERS

1. Wetland is large relative to the size of its watershed.
2. Deep water or open water habitat exists.
3. Overall potential for sediment trapping exists in the wetland.
4. Potential sources of excess nutrients present in the watershed above the wetland.
5. Wetland saturated for most of the season. Ponded water is present in the wetland.
6. Deep organic/sediment deposits are present.
7. Slowly drained mineral, fine grained, or organic soils, are present.
8. Dense vegetation is present.
9. Emergent vegetation and/or dense woody stems are dominant.
10. Aquatic diversity/abundance sufficient to utilize nutrients.
11. Opportunity for nutrient attenuator exists.
12. Vegetation diversity/abundance sufficient to utilize nutrients.
13. Waterflow through this wetland is diffuse.
14. Water retention/detention time in this wetland is increased by constricted outlet or thick vegetation.
15. Water moves slowly through this wetland.

PRODUCTION EXPORT (Nutrient) - Considers effectiveness of wetland to produce food or usable products.

CONSIDERATIONS/QUALIFIERS

1. Wildlife food sources grow within this wetland.
2. Detritus development is present within this wetland
3. Economically or commercially used products found in this wetland.
4. Evidence of wildlife use found within this wetland.
5. Higher trophic level consumers are utilizing this wetland.
6. Fish or shellfish develop or occur in this wetland.
7. High vegetation density is present.
8. Wetland exhibits high degree of plant community structure/species diversity.
9. High aquatic diversity/abundance is present.
10. Nutrients exported in wetland watercourses (permanent outlet present).
11. "Flushing" of relatively large amounts Of organic plant material occurs from this wetland.
12. Wetland contains flowering plants which are used by nectar-gathering insects.
13. High production levels occurring however, no visible signs of export (assumes export is attenuated).

SEDIMENT/SHORELINE STABILIZATION - Considers effectiveness of wetland to stabilize stream banks, shorelines.

CONSIDERATIONS/QUALIFIERS

1. Indications of erosion, siltation present
2. Topographical gradient is present in wetland.
3. Potential sediment sources are present up-slope.
4. No distinct shoreline or bank is evident between the waterbody and the wetland or upland.
5. A sharp bank between the open waterbody or stream and the adjacent land exists with dense roots throughout.
6. Wide wetland (>10') bordering watercourse, lake, or pond.
7. High flow velocities in the wetland.
8. Potential sediment sources present upstream.
9. The watershed is of sufficient size to produce channelized flow.
10. Open water fetch is present.
11. Boating activity is present.
12. Dense vegetation is bordering watercourse, lake, or pond.
13. High percentage of energy absorbing emergents and/or shrubs bordering watercourse, lake or pond.
14. Vegetation comprised of large trees and shrubs which withstand floods and stabilize shoreline on a large scale (feet).
15. Dense herb layer which stabilizes sediments/shoreline on a small scale (inches) during flood erosive events.

WILDLIFE HABITAT - Considers effectiveness of wetland to provide habitat for various resident and migrant animals.

CONSIDERATIONS/QUALIFIERS

1. Wetland is not degraded by human activity.
2. Water quality of the watercourse, pond, or lake wetland meets or exceeds Class A or B standards.
3. Wetland is not fragmented by development.
4. Upland surrounding this wetland is undeveloped.
5. 40% of wetland edge bordered by upland wildlife habitat (e.g. woodland, active farmland, idle land) 500'wide.
6. Wetland contiguous with other wetland systems connected by watercourse or lake.
7. Wildlife overland access to other wetlands is present.
8. Wildlife food sources are within this wetland or are nearby.
9. Wetland exhibits a high degree of interspersion of vegetation classes and/or open water.
10. Two or more islands or inclusions of upland within the wetland are present.
11. Dominant wetland class includes deep or shallow marsh or wooded swamp.
12. More than three acres of shallow permanent open water including streams in or adjacent to wetland are present.
13. Density of the wetland vegetation is high.
14. Wetland exhibits a high degree of plant species diversity.
15. Wetland exhibits a high degree of diversity in plant community structure.
16. Plant/animal indicator species present.
17. Animal signs observed (tracks, scats, nesting areas, etc.)
18. Seasonal uses vary for wildlife, wetland appears to support varied population diversity.
19. Wetland contains or has potential to contain a high population of insects.
20. Wetland contains or has potential to contain large amphibian populations.
21. Wetland has a high avian utilization or its potential.
22. Indications of less disturbance-tolerant species present.
23. Signs of wildlife habitat enhancement present (birdhouses, nesting boxes, etc.).

RECREATION - Considers suitability of wetland and associated watercourses to provide recreation.

CONSIDERATIONS/QUALIFIERS

1. Wetland is part of a recreation area, park, forest, or refuge.
2. Fishing is available within or from the wetland.
3. Hunting is permitted in the wetland.
4. Hiking occurs or has potential to occur within the wetland.
5. Wetland is a valuable wildlife habitat.
6. The watercourse, pond, or lake, associated with the wetland is unpolluted.
7. High visual/aesthetic quality of this potential recreation site.
8. Access to water is available at this potential recreation site for boating, canoeing, or fishing.
9. Watercourse associated with this wetland is wide and deep enough to accommodate non-powered boating.

10. Off-road public parking available at the potential recreation site.
11. Accessibility and travel ease is present at this site.
12. The wetland is within a short drive or safe walk from highly populated public and private areas.

EDUCATIONAL/SCIENTIFIC VALUE - Considers suitability of wetland as outdoor classroom or for scientific study.

CONSIDERATIONS/QUALIFIERS

1. Wetland contains or is known to contain threatened, rare, or endangered species.
2. Little or no disturbance is occurring in this wetland.
3. Potential educational site contains a diversity of accessible or potentially accessible wetland classes.
4. Potential educational site is undisturbed and natural.
5. Wetland is considered to be a valuable wildlife habitat.
6. Wetland is located within a nature preserve or wildlife management area.
7. Signs of wildlife habitat enhancement present (bird houses, nesting boxes, food sources, etc.).
8. Off-road parking at potential educational site suitable for school bus access in or near wetland.
9. Potential educational site is within safe walking distance or a short drive to schools.
10. Potential educational site within safe walking distance to other plant communities.
11. Direct access to perennial stream at potential educational site available.
12. Direct access to pond or lake at potential educational site available.
13. No known safety hazards within the potential educational site.
14. Public access to the potential educational site is controlled.
15. Handicap accessibility is available.
16. Site is currently used for educational or scientific purposes.

UNIQUENESS/HERITAGE - Considers effectiveness of the wetland or its waterbodies to provide special values.

CONSIDERATIONS/QUALIFIERS

1. Upland surrounding wetland primarily urban.
2. Upland surrounding wetland developing rapidly.
3. More than 3 acres of shallow permanent open water occur in wetlands (less than 6.6' deep) including streams.
4. Three or more wetland classes present.
5. Deep and/or shallow marsh, or wooded swamp dominate.
6. High degree of interspersion of vegetation and/or open water occurring in this wetland.
7. Well-vegetated stream corridor (15 feet on each side of the stream) occurs in this wetland.
8. Potential educational site is within a short drive or a safe walk from schools.
9. Off-road parking at potential educational site is suitable for school buses.
10. No known safety hazards exist within this potential educational site.
11. Direct access to perennial stream or lake at potential educational site.
12. Two or more wetland classes visible from primary viewing locations.
13. Low-growing wetlands (marshes, scrub-shrub, open water) visible from primary viewing locations.
14. Half an acre of open water or 200 feet of stream is visible from the primary viewing locations.
15. Large area of wetland is dominated by flowering plants, plants with vibrant colors in different seasons.
16. Appearance of the wetland visible from primary viewing areas is unpolluted and/or undisturbed.
17. Overall view of the wetland is available from the surrounding upland.
18. Quality of the water associated with the wetland is high.
19. Opportunities for wildlife observations are available.
20. Historical buildings occur within the wetland.
21. Presence of pond or pond site and remains of a dam occur within the wetland.
22. Wetland within 50 yards of the nearest perennial watercourse.
23. Visible stone or earthen foundations, dams, standing structures or associated features occur in wetland.
24. Wetland contains critical habitat for a state or federally listed threatened or endangered species.
25. Wetland is known to be a study site for scientific research.
26. Wetland is a natural landmark or recognized by the natural heritage inventory as exemplary natural area.
27. Wetland has local significance because it serves several functional values.
28. Wetland has biological, geological, or other features which are locally rare or unique.
29. Wetland is known to contain an important archaeological site.
30. Wetland is hydrologically connected to a state or federally designated scenic river.
31. Wetland is located in an area experiencing a high wetland loss rate.

VISUAL QUALITY/AESTHETICS - Considers the visual quality of the wetland.
CONSIDERATIONS/QUALIFIERS

1. Multiple wetland classes visible from primary viewing locations.
2. Emergent marsh and/or open water visible from primary viewing locations.
3. Diversity of vegetation species visible from primary viewing locations.
4. Wetland dominated by flowering plants, or plants which turn vibrant colors in different seasons.
5. Land use surrounding the wetland is undeveloped as seen from primary viewing locations.
6. Visible surrounding land use form contrasts with wetland.
7. Wetland views absent of trash, debris, and signs of disturbance.
8. Wetland is considered to be a valuable wildlife habitat.
9. Wetland is easily accessed.
10. Low noise level at primary viewing locations.
11. Unpleasant odors absent at primary viewing locations.

ENDANGERED SPECIES HABITAT- Considers the ability of wetland to support threatened/endangered species.
CONSIDERATIONS/QUALIFIERS

1. Wetland contains or is known to contain threatened or endangered species.
2. Wetland contains critical habitat for a state or federally listed threatened or endangered species.

VLIET & O'NEILL, LLC
CRASH RECONSTRUCTION
TRAFFIC ENGINEERING

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January 20, 2015

Mr. Anthony J. Tranquillo, P.E.
Project Manager
Kratzert Jones Associates
1755 Meriden-Waterbury Road
Milldale, CT 06467-0337

Re: Traffic Study
Deming Road Business Park
198 Deming Road, Berlin CT

Dear Mr. Tranquillo:

As requested, VLIET & O'NEILL, LLC has investigated the traffic impacts associated with the proposed Deming Road Business Park. This letter/report has been prepared to summarize our findings and opinions relative to the traffic engineering aspects of the project. Our work has been performed to address the Berlin Municipal Code concerning Special Permit Uses Involving High Traffic Generators.

The development site is currently vacant and has not been previously developed. The proposed plan is to construct four (4) buildings with a total gross floor area of 26,856 SF. Sixty (60) parking spaces are to be provided. There will be a total of nineteen (19) business units provided within the buildings. The use of the units will be for small startup contractors specializing in construction and/or service (plumbers, electricians, carpenters, etc…) businesses. Each unit will consist of an interior garage bay, storage area, small office space and lavatory.

EXISTING ROADWAY CONDITIONS

Deming Road begins at the intersection with Christian Lane 1,800 ft. west of the site and runs east for approximately 0.85 miles (4,500 ft.) to the intersection with the Berlin Turnpike (State Routes 5/15). Deming Road east of the Berlin Turnpike becomes State Route 160 and continues through Berlin into Rocky Hill and ending at the intersection with Route 3.

Deming Road in the vicinity of the development site is a two lane bi-directional roadway with an approximate total width of forty feet (40'). This geometry provides for a twenty-one foot (21') westbound lane width and a nineteen foot (19') eastbound lane width.

The posted speed limit on Deming Road in the vicinity of the site is 40 MPH in both directions. The 85% speed (speed at which 85% of the vehicles are traveling or lower) is approximately 48 MPH in both directions.

Deming Road intersects Christian Lane west of the site at a 3-way traffic signal controlled "T" intersection. East of the site, Deming Road intersects the Berlin Turnpike at a 4-way traffic signal controlled intersection.

The proposed site access driveway intersection with Deming Road will be a stop sign controlled "T" intersection. The two lane bidirectional driveway will have a total width of twenty four feet (24') and will intersect Deming Road at a ninety degree (90°) angle.

TRAFFIC VOLUMES

In order to determine the traffic impact of the proposed development on the adjacent Deming Road roadway system, representatives of VLIET & O'NEILL, LLC, conducted manual traffic counts at the proposed Site Access intersection location with Deming Road. Additionally, available Connecticut Department of Transportation (ConnDOT) traffic data for the area roadways was obtained and reviewed. The obtained and reviewed traffic data revealed that the A.M. peak hour is 6:45 to 7:45 A.M. and the P.M. peak hour is 4:30 to 5:30 P.M.

After reviewing and balancing the count data, the traffic volumes were projected to the 2016 design year (the anticipated completion year for the development) using a one and one-half percent (1.5%) per year peak hour growth factor to account for normal growth in the area.

Inquiries were made to the ConnDOT Office of the State Traffic Administration (OSTA) and ConnDOT concerning approved or pending developments and roadway projects which may impact traffic conditions in the vicinity of the traffic study area for the proposed development. As a result of these inquiries, it was determined that there are currently no approved or pending developments or roadway improvement projects within the study area which need to be included in the traffic volumes. Figure Nos. 1 & 2 (Attached) show the 2015 Existing A.M. & P.M. peak hour traffic volumes. Figures Nos. 3 & 4 show the 2016 No-Build A.M. & P.M. peak hour traffic volumes which is defined as the design year traffic NOT including the proposed development traffic.

The obtained ConnDOT data revealed that the current Average Daily Traffic (ADT) on Deming road in the vicinity of the site is 13,800 vehicles (total of both directions.) The ADT of the Berlin Turnpike at its intersection with Deming Road is 30,000 vehicles (total of both directions.) The ADT of Christian Lane north of Deming Road is 6,900 vehicles and south of Deming Road is 16,000 vehicles. For comparison purposes, a two lane facility such as Deming Road, could support a bi-directional flow as high as 3,000 vehicles per hour (VPH) which indicates that Deming Road has substantial reserve capacity for the current roadway geometry.

SITE GENERATED TRAFFIC

Estimates of the amount of traffic to be generated by a proposed development are typically made using the Institute of Transportation Engineers (ITE) publication *Trip Generation -9th Edition.* The proposed development use is not part of the extensive data contained in *Trip Generation.* However, although the proposed development use is not contained in this resource, other Land Uses were reviewed in order to determine the probable expected Trip Generation for the proposed development. Trip Generation Land Use Codes (LUC) 110 General Light Industrial, 130 Industrial Park, 150 Warehousing and 750 Office Park were reviewed and assessed as part of determining the trip generation for the development. Additionally, VLIET & O'NEILL, LLC queried the owner of an existing similar development located in Southington, CT as part of determining the trip generation for the Deming Road Business Park.

As a result of the above data sources in conjunction with the proposed development size, the probable expected A.M & P.M. Peak Hour trip generation for the development use was determined. During the Deming Road A.M. peak hour, the development is expected to generate 40 vehicle trips in and 40 vehicle trips out of the site. During the Deming Road P.M. peak hour, the development is expected to generate 35 vehicle trips in and 35 vehicle trips out of the site.

The arrival and departure distributions for the expected peak hour site generated traffic were revealed by the manual traffic counts conducted on Deming Road, the ADT data as well as the proximity of the site to the nearby arterial roadway corridors. Based on the existing traffic patterns, Figure No. 5 depicts the Arrival/Departure Distribution for the Site Generated Traffic Volumes. Using the distribution, results in Figure Nos. 6 & 7 which depict the A.M. & P.M. Peak Hour Site Generated traffic volumes, respectively.

Using the arrival and departure distribution, the site generated traffic was then added to the No-Build traffic volumes to yield the 2016 Build A.M. & P.M. peak hour traffic volumes as shown in Figure Nos. 8 & 9.

ANALYSES

Intersection Analysis – In discussing intersection analyses, two terms are used to describe the operating condition of the roadway or intersection. These two terms are Volume to Capacity Ratio (v/c) and Level of Service (LOS).

The v/c ratio is a ratio of the volume of traffic using an intersection to the total capacity of the intersection (the maximum number of vehicles that can utilize the intersection during the analysis period). The v/c ratio can be used to describe the percentage of capacity utilized by a single intersection movement, a combination of movements, an entire approach or the intersection as a whole. As the v/c ratio approaches 1, the intersection nears capacity and it may no longer be able to process vehicles on all approaches efficiently.

LOS is a measure of the delay experienced by stopped vehicles at an intersection. LOS is rated on a scale from A to F, with A describing a condition of very low delay (less than 10 seconds per vehicle), and F describing a condition where delays exceed 50 seconds per vehicle. Therefore, unsignalized intersections with longer delay times are less acceptable to most drivers.

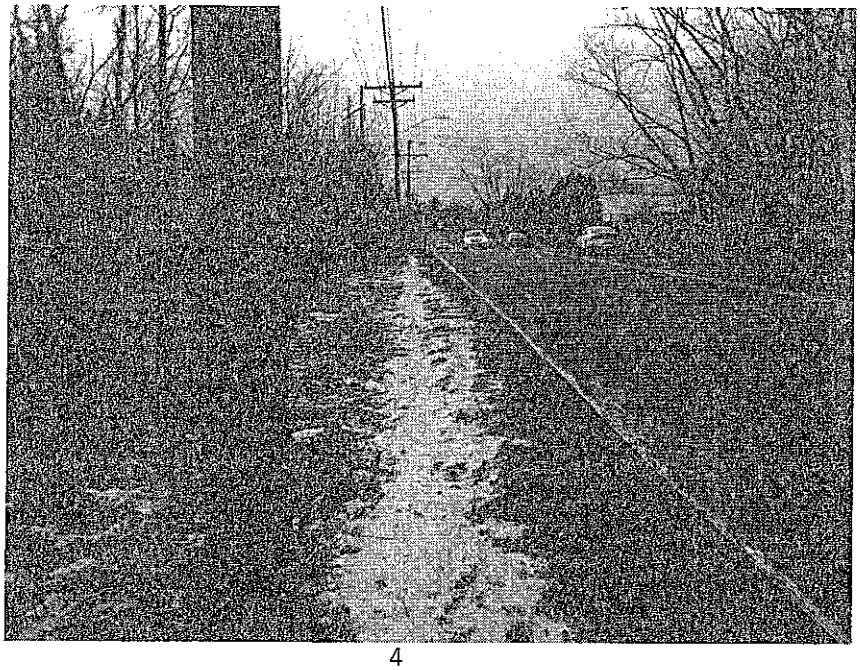
These definitions for v/c ratio and LOS, as well as the methodology for analyses, are taken from the "2010 Highway Capacity Manual" published by the Transportation Research Board (TRB).

Assessing the above referenced methodologies coupled with the extensive experience of VLIET & O'NEILL, LLC, it is our professional opinion that the proposed site access intersection with Deming road will operate at acceptable peak hour LOS for the site generated traffic volumes.

It is important to note that actual operations at the intersection will operate very efficiently due to the traffic stream gaps that are created by the adjacent signalized intersections of Deming Road with Christian lane and the Berlin Turnpike. Additionally, left turning site traffic from Deming Road into the site access driveway will not impede west bound Deming Road through traffic as the west bound travel lane width of twenty one feet (21') allows "by-pass" capability for through traffic around left turning traffic.

Site Distance Analysis – Intersection Sight Distances (ISD) for vehicles entering and exiting the proposed site access driveway intersection with Deming Road were field measured. ISD looking to the left (west) and right (east) both exceed seven hundred and fifty feet (750'). The ISD available at the intersection location will provide for safe and efficient access to and from the development parcel in consideration of the level of site generated traffic, Deming Road traffic volumes/speed, Deming Road flow/gaps created by the adjacent signalized intersections and the west bound roadway lane geometry which permits by-pass capability. Below are photographs of the ISD that will be afforded to exiting site traffic.

ISD to the Left looking west at east bound traffic



ISD to the Right looking east at west bound traffic

Accident Analysis – Accident data was obtained from ConnDOT for the area roadways in the vicinity of the site. Within the past three (3) year time frame of available data reviewed, no significant identifiable accident rates or patterns were revealed. No accident history was revealed for the immediate section of Deming Road along the site frontage. Accident history for the signalized intersections east and west of the site were consistent with the amount of traffic processed at the intersection coupled with the type of control in place.

In review of the extremely small amount of traffic which will be generated by the development compared to existing traffic volumes coupled with the existing Deming Road geometry, no appreciable changes in the accident frequencies for the roadways in the development area are expected.

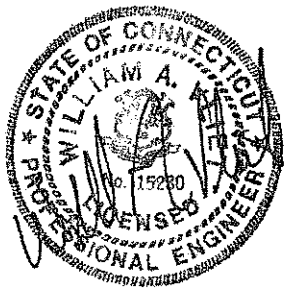
CONCLUSION

In summary, it is the professional opinion of VLIET & O'NEILL, LLC that the probable expected traffic to be generated by the proposed Deming Road Business Park can be safely and efficiently introduced into as well as accommodated by the adjacent roadway system. The development traffic will not disrupt the continuity of weekday peak hour traffic flow on Deming Road or the area roadway system.

Thank you for choosing VLIET & O'NEILL, LLC to work on this matter and please feel free to call with any questions.

Very truly yours,

William A. Vliet, P.E.
Manager for VLIET & O'NEILL, LLC



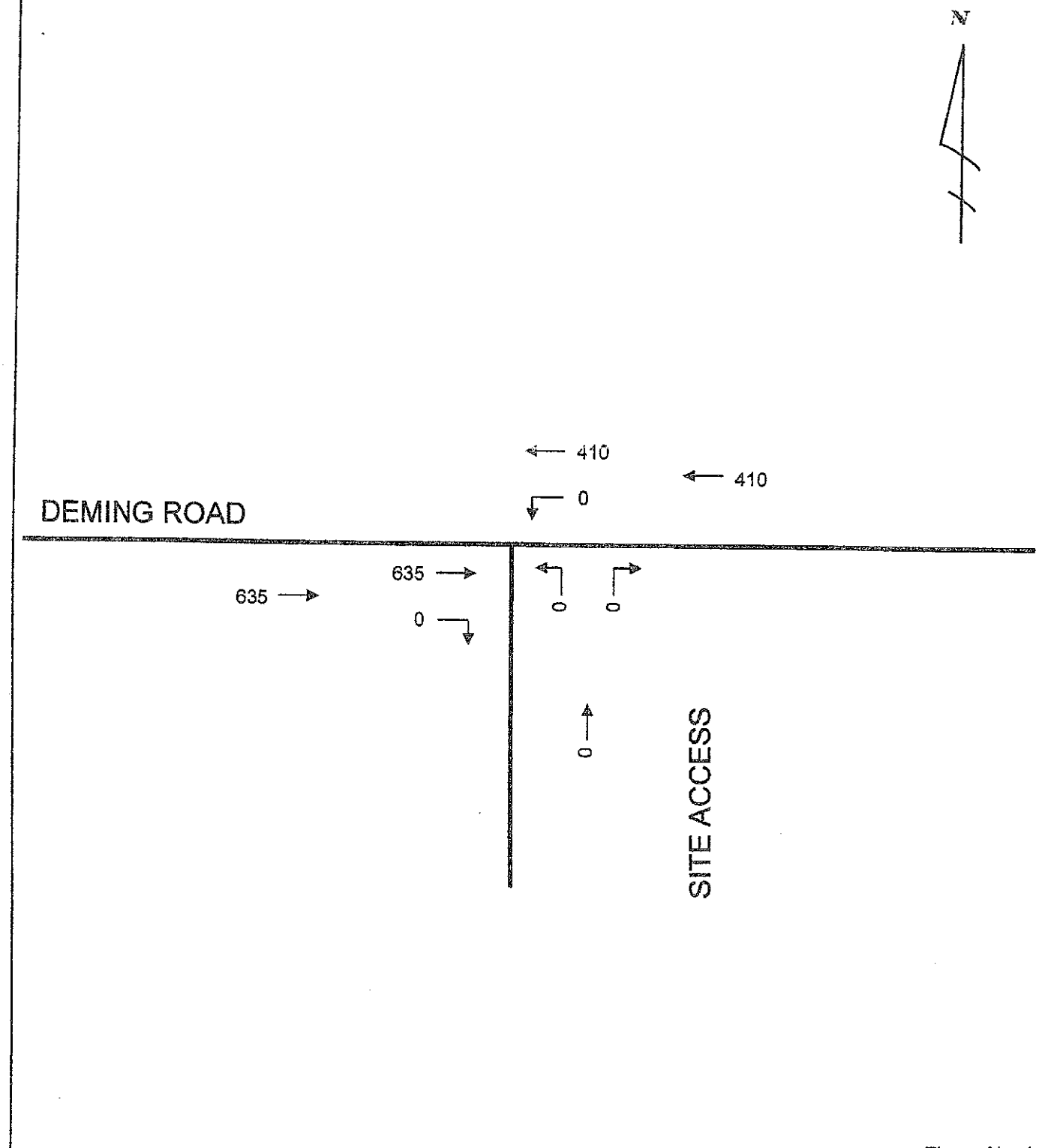


Figure No. 1

VLIET & O'NEILL, LLC Traffic Engineering/Crash Reconstruction

41 Prospect Street, Manchester, CT 06040 (860)533-1210

A.M. PEAK HOUR

2015 EXISTING TRAFFIC VOLUMES

DEMING ROAD BUSINESS PARK

BERLIN CONNECTICUT

January 2015 Scale: NTS

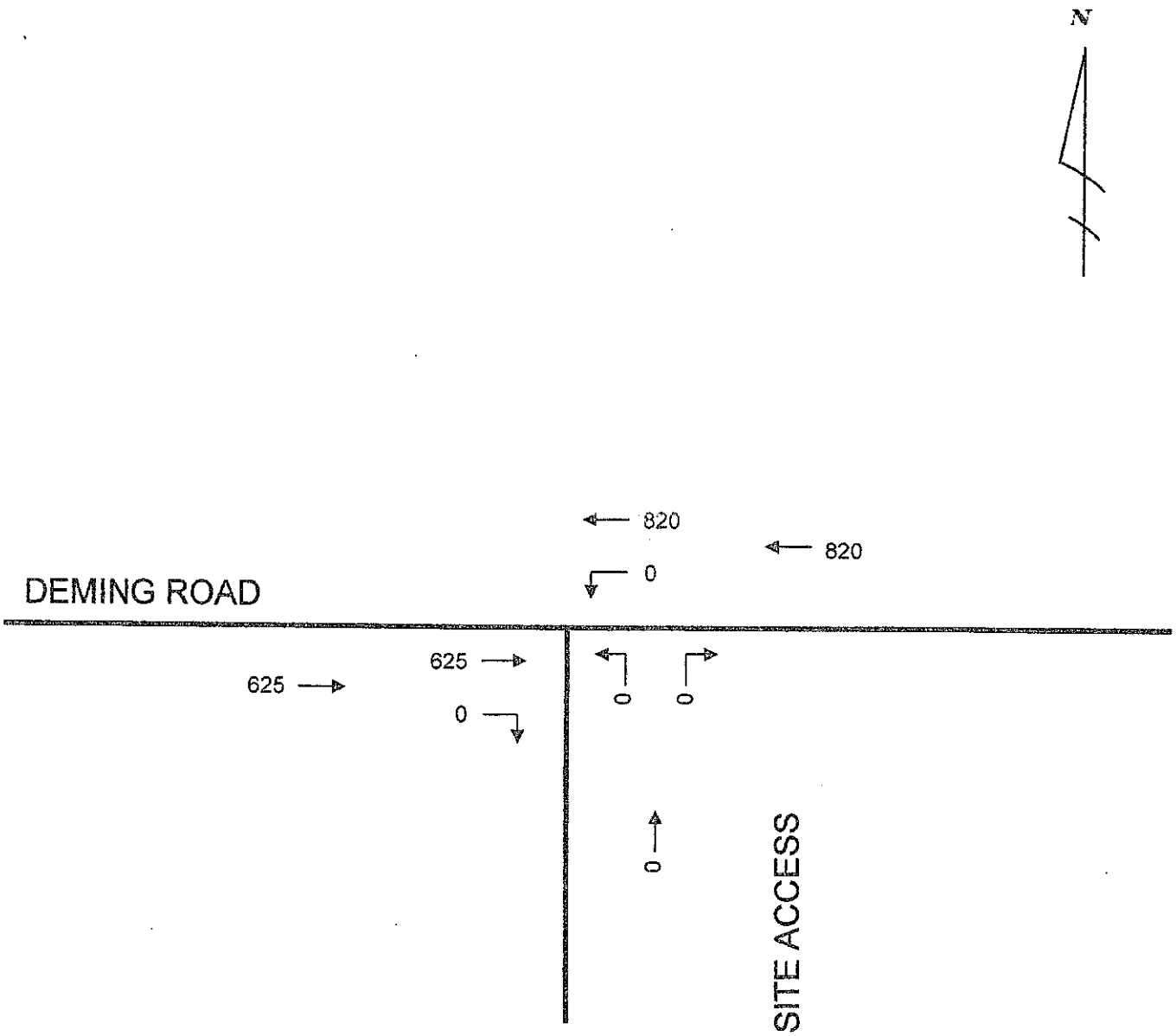


Figure No. 2

VLIET & O'NEILL, LLC Traffic Engineering/Crash Reconstruction

41 Prospect Street, Manchester, CT 06040 (860)533-1210

P.M. PEAK HOUR

2015 EXISTING TRAFFIC VOLUMES

DEMING ROAD BUSINESS PARK

BERLIN CONNECTICUT

January 2015 Scale: NTS

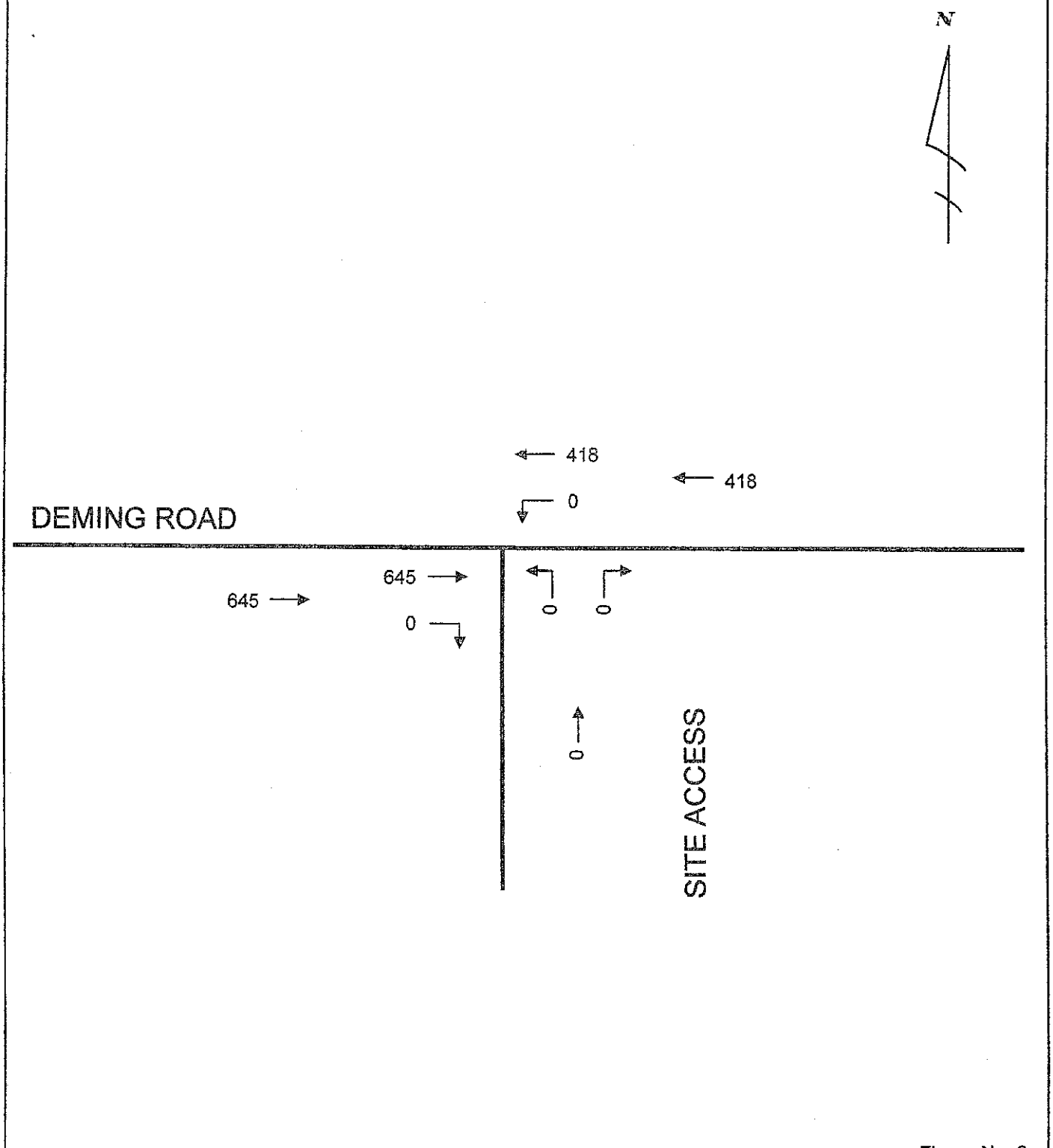


Figure No. 3

VLIET & O'NEILL, LLC Traffic Engineering/Crash Reconstruction

41 Prospect Street, Manchester, CT 06040 (860)533-1210

A.M. PEAK HOUR

2016 NO-BUILD TRAFFIC VOLUMES

DEMING ROAD BUSINESS PARK

BERLIN CONNECTICUT

January 2015 Scale: NTS

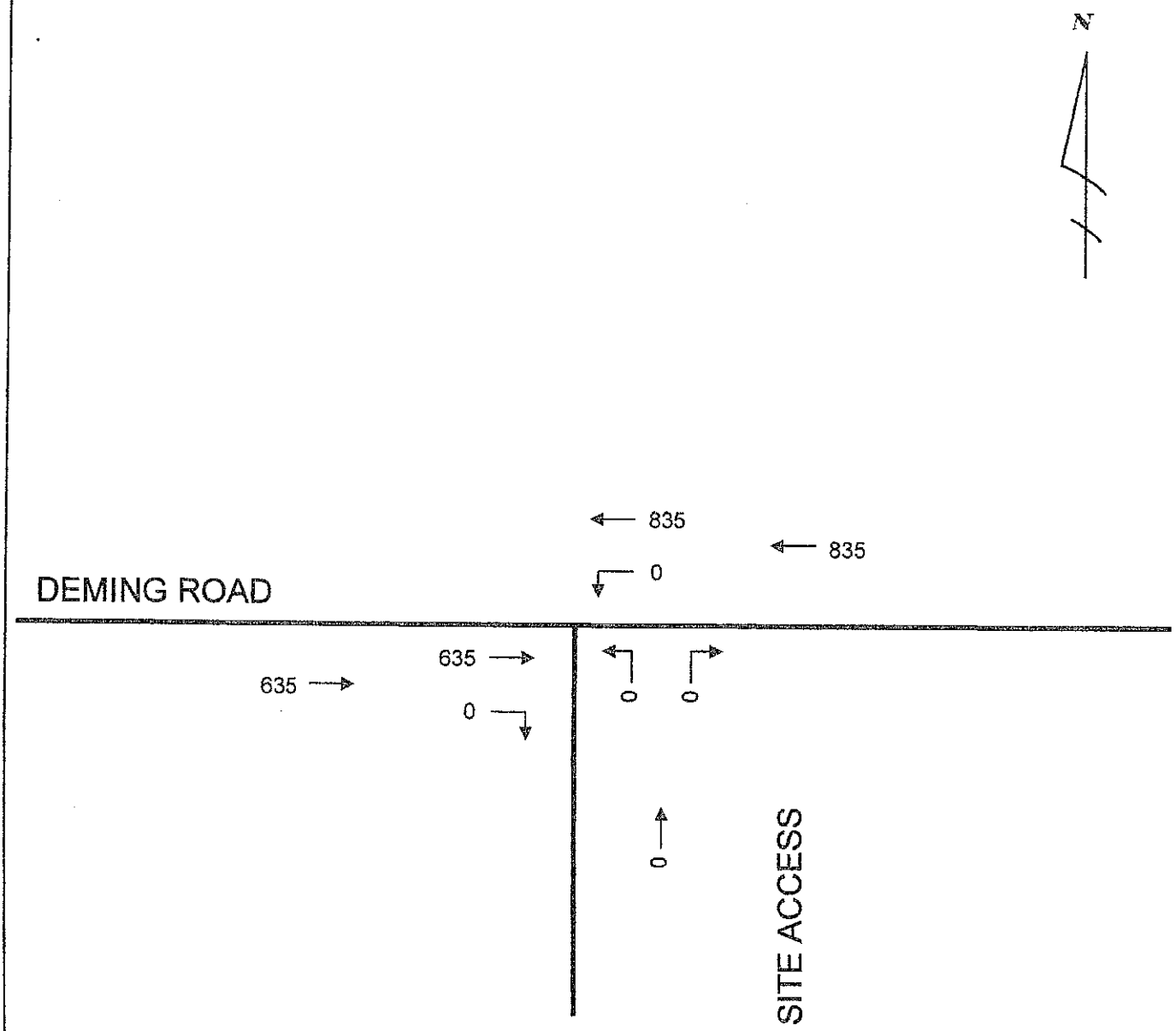


Figure No. 4

VLIET & O'NEILL, LLC Traffic Engineering/Crash Reconstruction

41 Prospect Street, Manchester, CT 06040 (860)533-1210

P.M. PEAK HOUR

2016 NO-BUILD TRAFFIC VOLUMES

DEMING ROAD BUSINESS PARK

BERLIN CONNECTICUT

January 2015 Scale: NTS

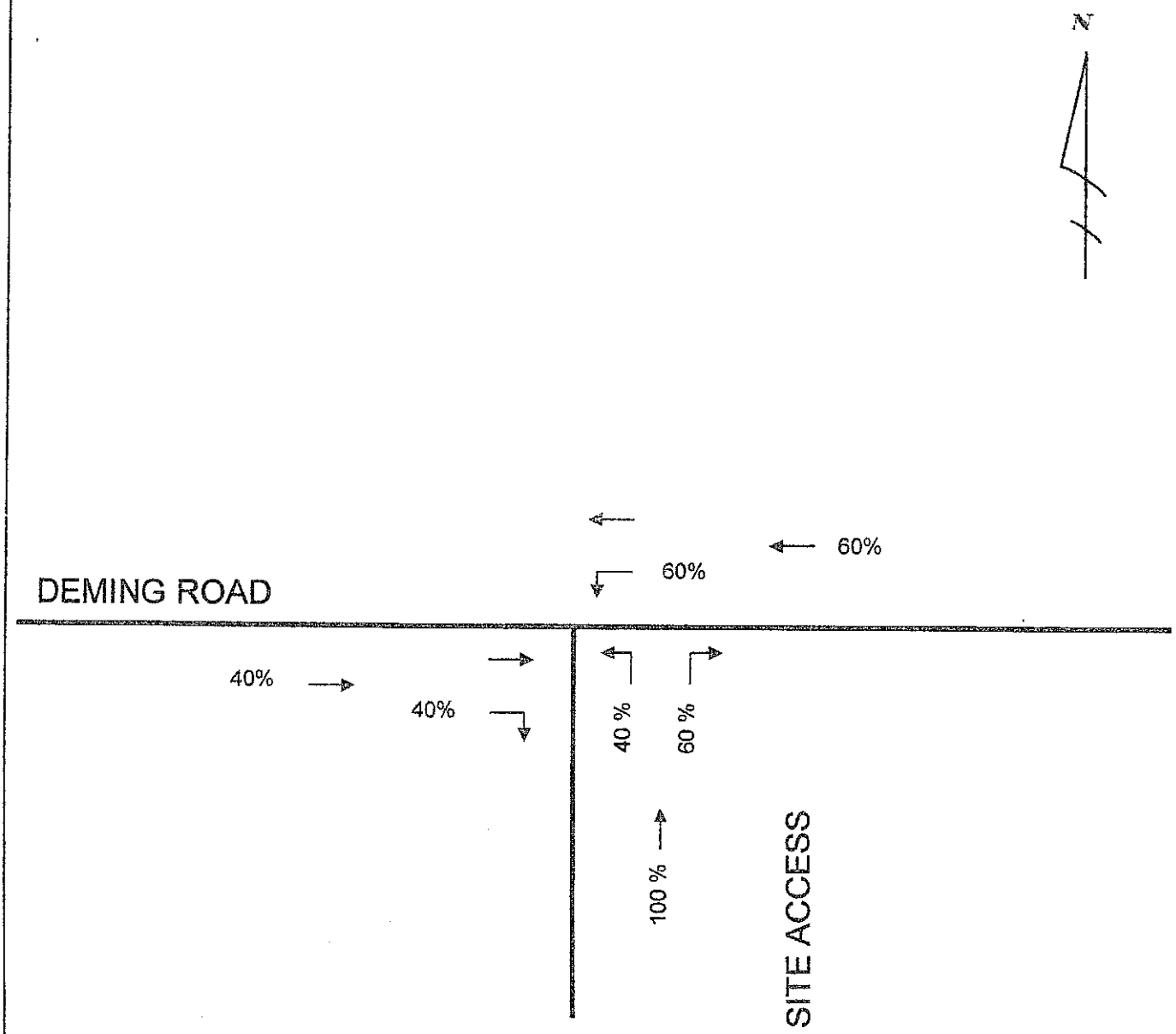


Figure No. 5

VLIET & O'NEILL, LLC Traffic Engineering/Crash Reconstruction

41 Prospect Street, Manchester, CT 06040 (860)533-1210

ARRIVAL/DEPARTURE DISTRUBUTION

SITE GENERATED TRAFFIC VOLUMES

DEMING ROAD BUSINESS PARK

BERLIN CONNECTICUT

January 2015 Scale: NTS

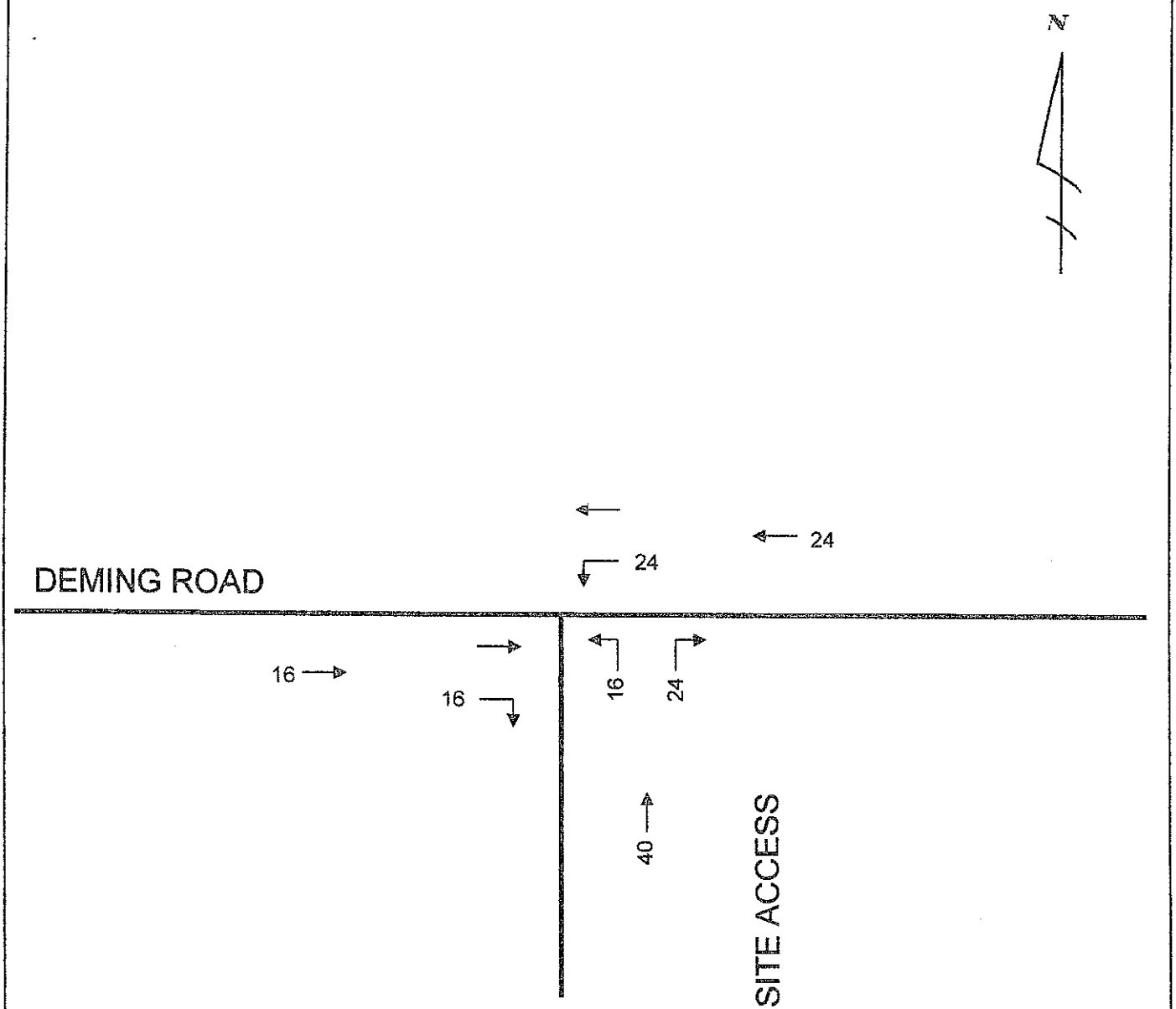


Figure No. 6

VLIET & O'NEILL, LLC Traffic Engineering/Crash Reconstruction

41 Prospect Street, Manchester, CT 06040 (860)533-1210

A.M. PEAK HOUR

SITE GENERATED TRAFFIC VOLUMES

DEMING ROAD BUSINESS PARK

BERLIN CONNECTICUT

January 2015 Scale: NTS

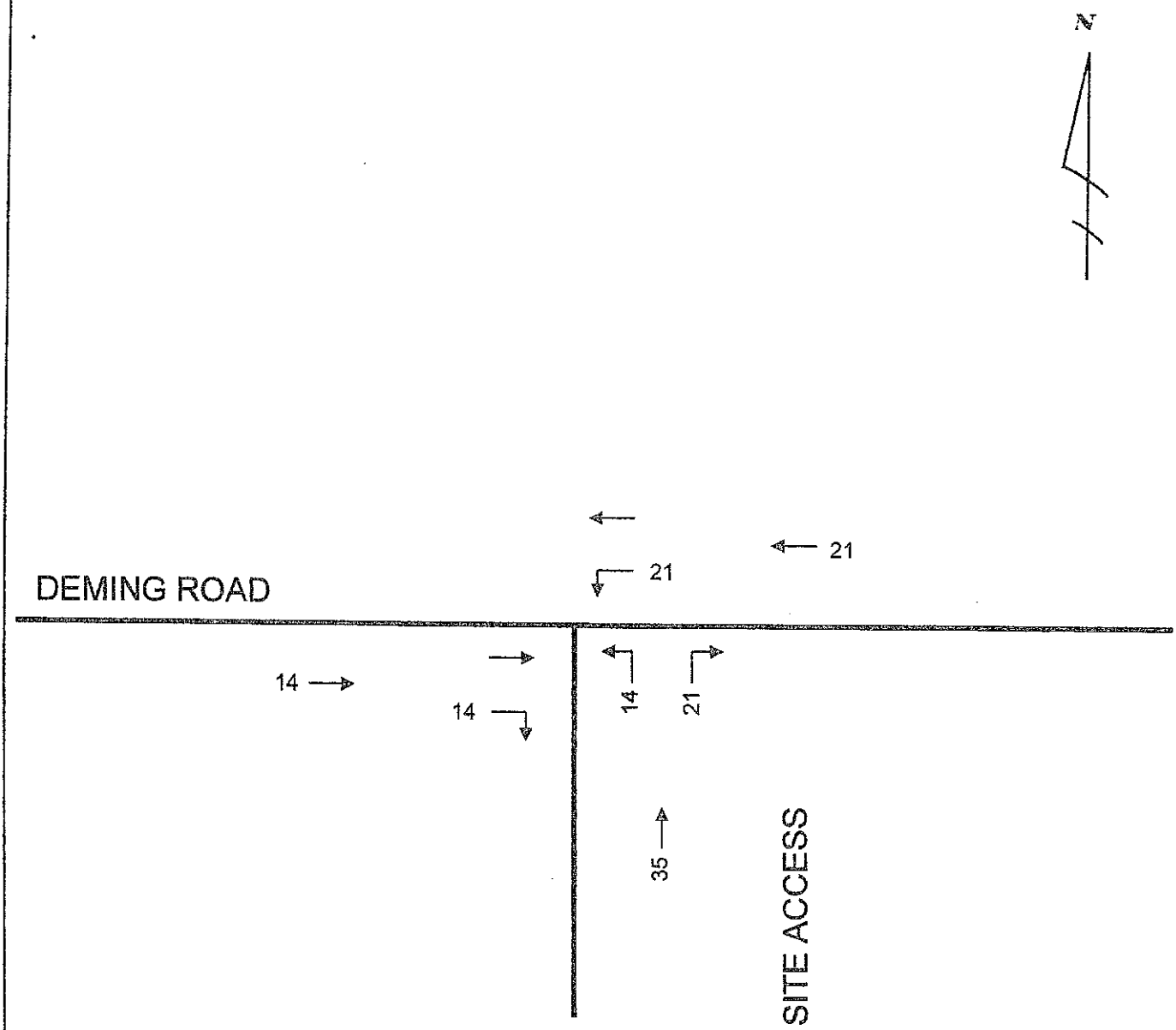


Figure No. 7

VLIET & O'NEILL, LLC Traffic Engineering/Crash Reconstruction

41 Prospect Street, Manchester, CT 06040 (860)533-1210

P.M. PEAK HOUR

SITE GENERATED TRAFFIC VOLUMES

DEMING ROAD BUSINESS PARK

BERLIN CONNECTICUT

January 2015 Scale: NTS

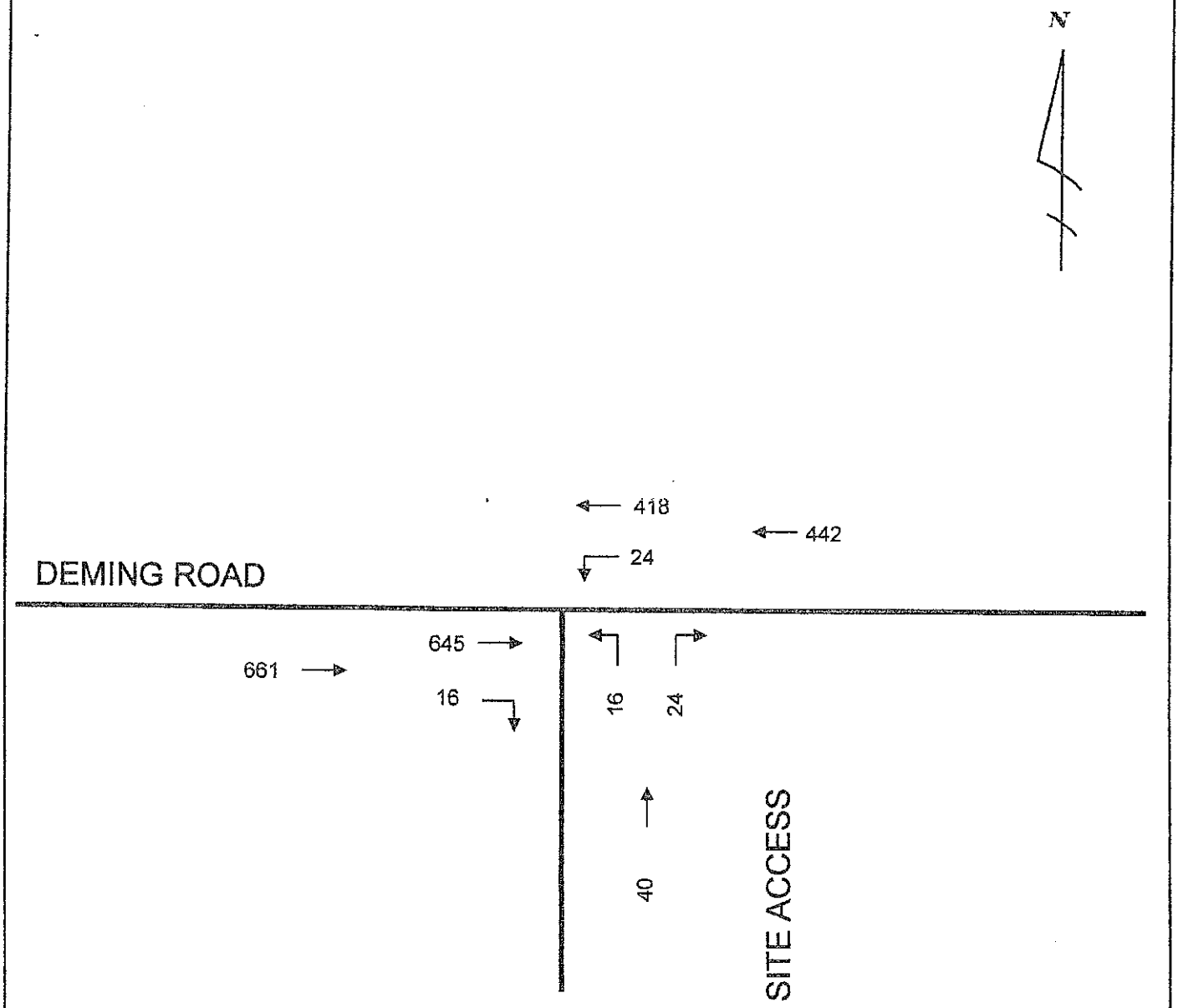


Figure No. 8

VLIET & O'NEILL, LLC Traffic Engineering/Crash Reconstruction

41 Prospect Street, Manchester, CT 06040 (860)533-1210

A.M. PEAK HOUR

2016 BUILD TRAFFIC VOLUMES

DEMING ROAD BUSINESS PARK

BERLIN CONNECTICUT

January 2015 Scale: NTS

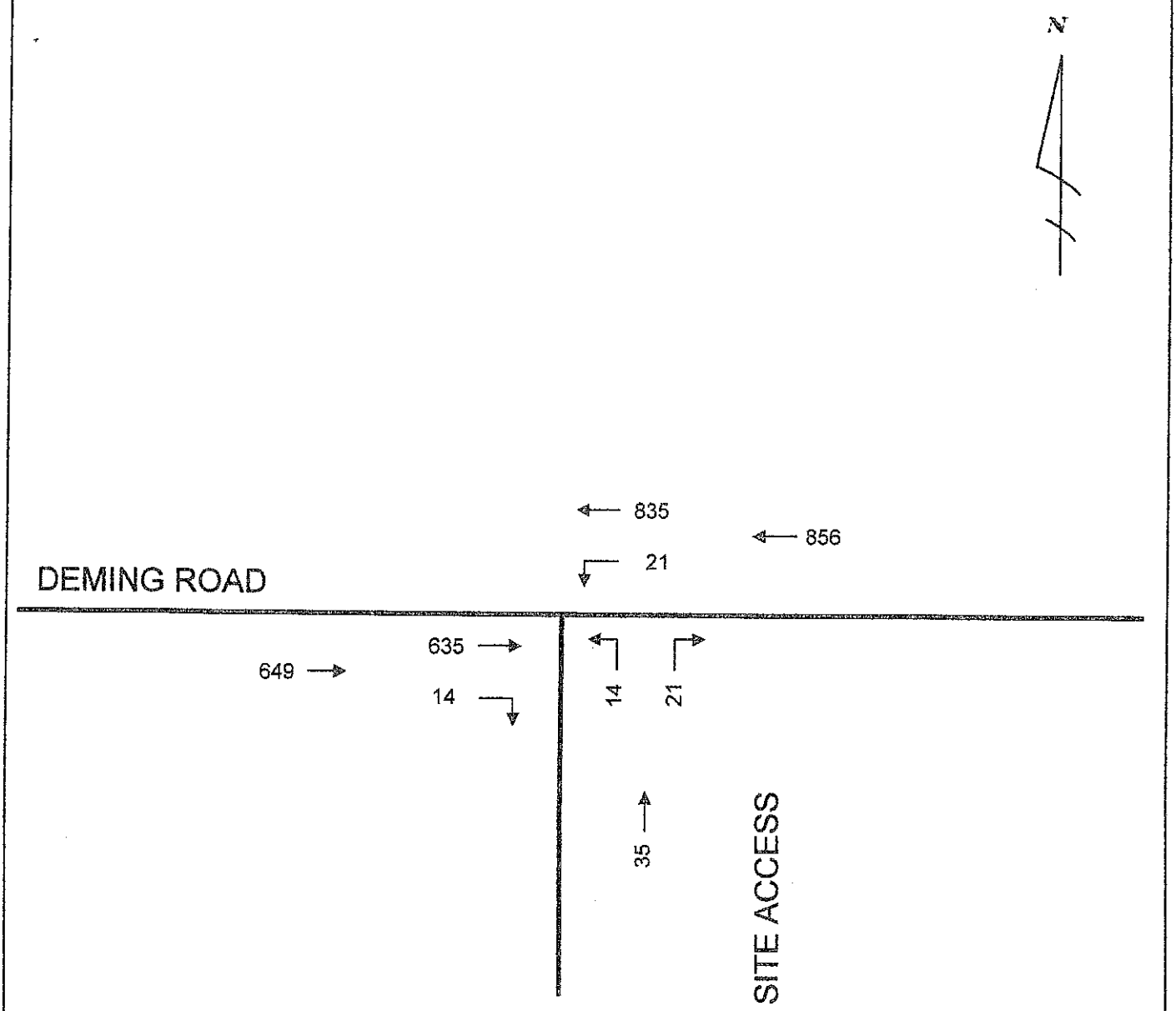


Figure No. 9

VLIET & O'NEILL, LLC Traffic Engineering/Crash Reconstruction

41 Prospect Street, Manchester, CT 06040 (860)533-1210

P.M. PEAK HOUR

2016 BUILD TRAFFIC VOLUMES

DEMING ROAD BUSINESS PARK

BERLIN CONNECTICUT

January 2015 Scale: NTS

KJA

Kratzert, Jones & Associates, Inc

CIVIL ENGINEERS • LAND SURVEYORS • SITE PLANNERS • TOWN PLANNERS • BUILDING ENGINEERS

1-23-15
a mtg

January 20, 2015

ENVIRONMENTAL IMPACT STATEMENT
As required by section XII B.5. a.thru i. of the Berlin Zoning regulations
BERLIN, CT-DEMING ROAD – DEMING ROAD BUSINESS PARK
RICHARD MUNSON/PROGRESSIVE DEVELOPMENT

5A. There is very little impact on the surrounding neighborhood since the majority of the existing land uses within 500 feet are light and heavy industrial. Proposed use is light industry. Surrounding proposed site is landfill to the west, auto repair to the east, wetland/flood plain to the east/south and heavy industry to the north on the opposite side of Deming Road. The nearest residential is approximately 500' to the east on the south side of Deming and about 2000' to the west on Christian Lane, well removed from proposed site. Proposed site will be screened from the traveling public on Deming Road. The uses on the site will be such that very little noise, odor, or traffic will be generated. A separate traffic report will be prepared which is expected to show minimal site generated traffic. All of the businesses in the facility will have none or very few visitors since on site direct public services are not proposed. Also most businesses will be closed during weekend hours. There will be no impact on surrounding property values and neighborhood stability.

5B. The uses in this zone were recently approved by PZC action so the issues have been discussed and considered. Our plan is consistent with the objectives of the 2013 POCD, particularly goal #3.

5C. A separate environmental report will be prepared by David lord, licensed soil scientist and licensed biologist. This report will be submitted as part of the record.

5D. The demands placed on the town's infrastructure, water, sewer and storm drainage are minimal. Maximum water and sewer flows are estimated to be 2,686 GPD. Town facilities have sufficient capacity to accept this small flow and

Phone: (860) 621-3638 Fax: (860) 621-9609 Email: info@kratzertjones.com
1755 Meriden - Waterbury Tpke.
P.O. Box 337
Milldale (Southington) CT 06467-0337

have been approved by the local water and sewer authorities. A drainage report has been prepared showing no impact to the drainage system and natural resources in the area. An inland wetlands application has been submitted to the local IW commission which has reviewed and approved the proposed activity on the site.

5E. A separate traffic study will be prepared to define any impacts from this development. It will be submitted under separate cover.

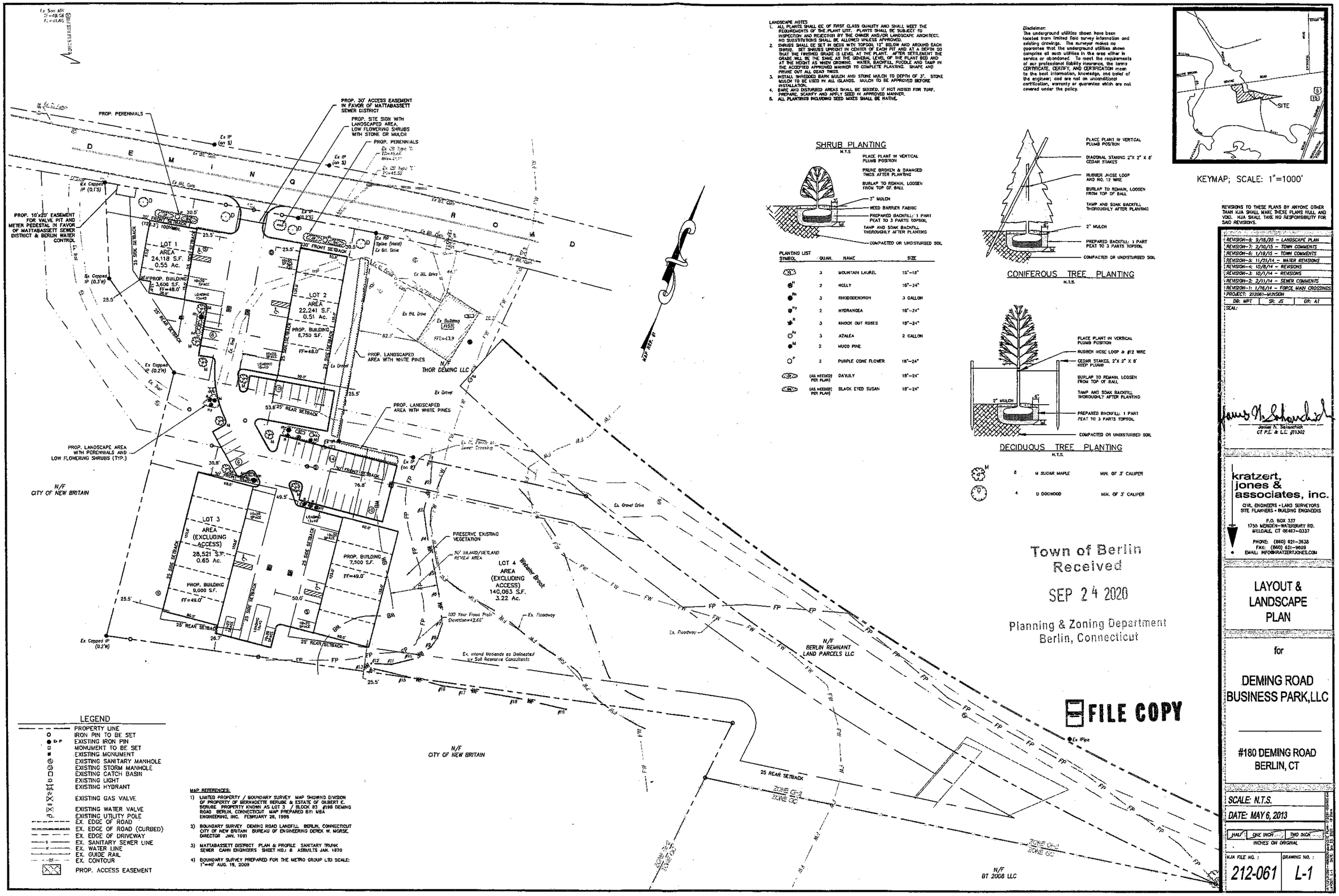
5F. There will be no permanent residency in the buildings proposed so town services will be limited to fire, police and medical response during normal working hours. Small businesses are proposed so recreation needs will not be impacted. Many of the businesses will be relocated from present residential areas so overall impact will be insignificant and the zoning benefits will be considerable.

5G. Design team does not anticipate any adverse impacts from this development.

5H. Alternative to this proposal is to do nothing, let the land sit idle and not reap the benefits to the town from taxes, employment and service opportunities.

5I. Project has been approved by IW Commission with Abtech CB filters for proposed drainage system. Traffic study shows no mitigation needed.

Anthony J. Tranquillo, P.E.



LANDSCAPE NOTES

1. ALL PLANTS SHALL BE OF FIRST CLASS QUALITY AND SHALL MEET THE REQUIREMENTS OF THE PLANT LIST. PLANTS SHALL BE SUBJECT TO INSPECTION AND REJECTION BY THE OWNER AND/OR LANDSCAPE ARCHITECT. NO SUBSTITUTIONS SHALL BE ALLOWED UNLESS APPROVED.
2. SHRUBS SHALL BE SET IN BEDS WITH TOPSOIL 12" BELOW AND AROUND EACH SHRUB. SET SHRUBS UPRIGHT IN CENTER OF EACH PIT AND AT A DEPTH SO THAT THE FINISHED GRADE IS LEVEL AT THE PLANT. AFTER SETTLEMENT THE GRADE WILL BE THE SAME AS THE GENERAL LEVEL OF THE PLANT BED AND AT THE HEIGHT AS WHEN GROWING. WATER, BACKFILL PUDDLE AND TAMP IN THE ACCEPTED APPROVED MANNER TO COMPLETE PLANTING. SHAPE AND PRUNE OUT ALL DEAD TWIGS.
3. INSTALL SHREDDED BARK MULCH AND STONE MULCH TO DEPTH OF 3". STONE MULCH TO BE USED IN ALL ISLANDS. MULCH TO BE APPROVED BEFORE INSTALLATION.
4. BARE AND DISTURBED AREAS SHALL BE SEEDED, IF NOT NOTED FOR SOD. PREPARE, SCARIFY AND APPLY SEED IN APPROVED MANNER.
5. ALL PLANTINGS INCLUDING SEED MIXES SHALL BE NATIVE.

SHRUB PLANTING
N.T.S.

PLANTING LIST

SYMBOL	QUAN.	NAME	SIZE
KL	3	MOUNTAIN LAUREL	15"-18"
H	2	HOLLY	18"-24"
Rh	3	RHODODENDRON	3 GALLON
Hy	2	HYDRANGEA	18"-24"
R	3	KNOCK OUT ROSES	18"-24"
Az	3	AZALEA	2 GALLON
M	2	MUGO PINE	
P	2	PURPLE CONE FLOWER	18"-24"
DAY	(AS NEEDED PER PLAN)	DAYLILY	18"-24"
BEH	(AS NEEDED PER PLAN)	BLACK EYED SUSAN	18"-24"

Disclaimer:
The underground utilities shown have been located from limited field survey information and existing drawings. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area either in service or abandoned. To meet the requirements of our professional liability insurance, the terms CERTIFICATE, CERTIFY, AND CERTIFICATION mean to the best information, knowledge, and belief of the engineer; and are not an unconditional certification, warranty or guarantee which are not covered under the policy.

CONIFEROUS TREE PLANTING
N.T.S.

DECIDUOUS TREE PLANTING
N.T.S.

SYMBOL	QUAN.	NAME	SIZE
M	8	M SUGAR MAPLE	MIN. OF 3" CALIPER
D	4	D DOGWOOD	MIN. OF 3" CALIPER

KEYMAP; SCALE: 1"=1000'

Town of Berlin
Received
SEP 24 2020
Planning & Zoning Department
Berlin, Connecticut

FILE COPY

REVISIONS TO THESE PLANS BY ANYONE OTHER THAN KJA SHALL MAKE THESE PLANS NULL AND VOID. KJA SHALL TAKE NO RESPONSIBILITY FOR SAID REVISIONS.

REVISION–8: 9/16/20 – LANDSCAPE PLAN
REVISION–7: 2/10/15 – TOWN COMMENTS
REVISION–6: 1/18/15 – TOWN COMMENTS
REVISION–5: 11/21/14 – WATER REVISIONS
REVISION–4: 10/8/14 – REVISIONS
REVISION–3: 10/1/14 – REVISIONS
REVISION–2: 2/11/14 – SEWER COMMENTS
REVISION–1: 1/16/14 – FORCE MAIN CROSSINGS
PROJECT: 212061–MUNSON

DR: MPT | SR: JS | QR: AT

SEAL:

James N. Salvatori
CT P.E. & L.S. #13302

kratzert, jones & associates, inc.
CIVIL ENGINEERS • LAND SURVEYORS
SITE PLANNERS • BUILDING ENGINEERS
P.O. BOX 337
1755 MERIDEN–WATERBURY RD.
MILLDALE, CT 06467–0337
PHONE: (860) 621–3638
FAX: (860) 621–9609
EMAIL: INFO@KRATZERTJONES.COM

LAYOUT & LANDSCAPE PLAN

for

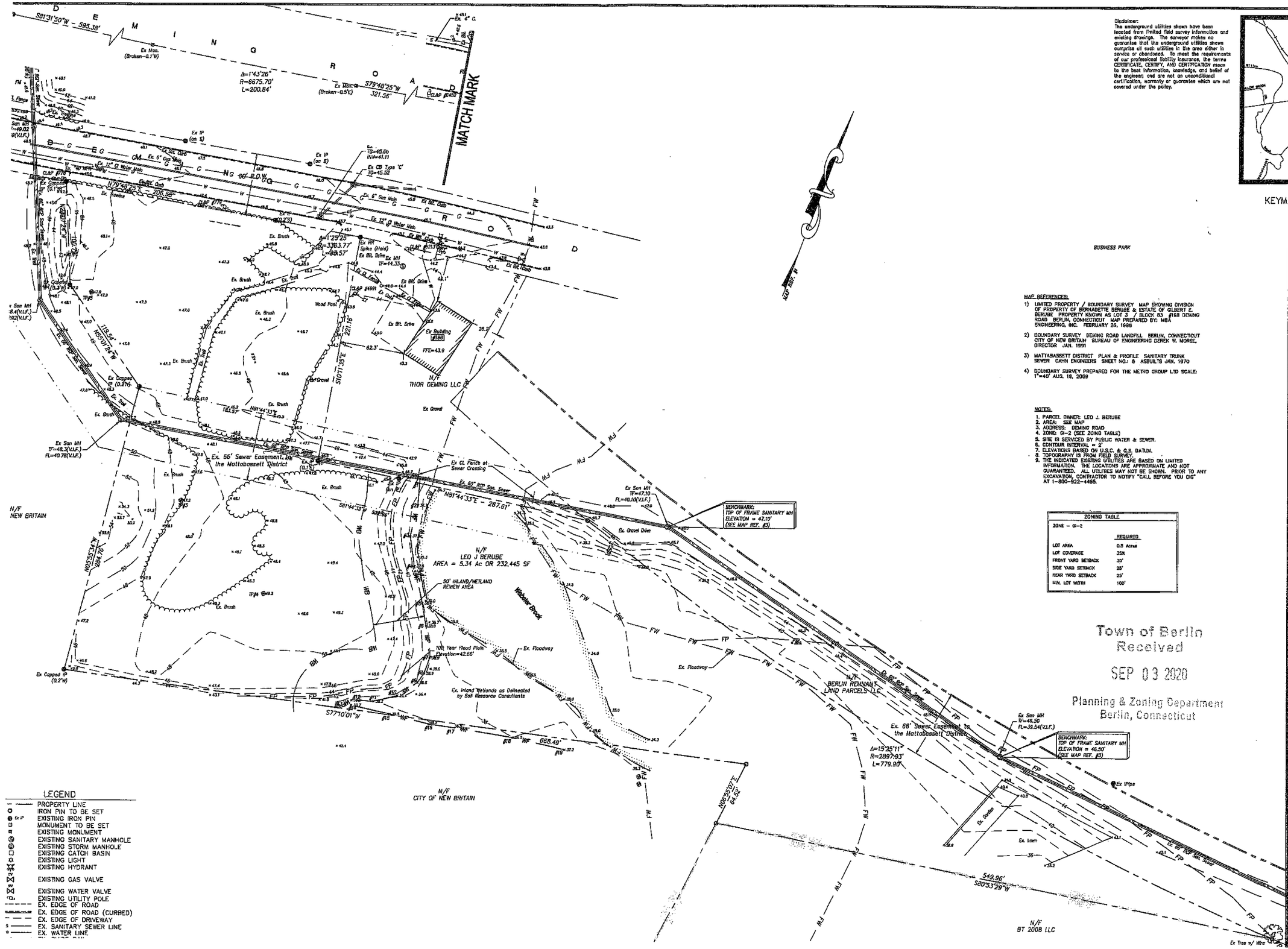
DEMING ROAD BUSINESS PARK,LLC

#180 DEMING ROAD
BERLIN, CT

SCALE: N.T.S.
DATE: MAY 6, 2013

HALF | ONE INCH | TWO INCH
INCHES ON ORIGINAL

KJA FILE NO.: 212-061
DRAWING NO.: L-1



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KEYMAP; SCALE: 1"=1000'

MAP REFERENCES:

1) LIMITED PROPERTY / BOUNDARY SURVEY MAP SHOWING DIVISION OF PROPERTY OF BERNADETTE BERUBE & ESTATE OF GILBERT E. BERUBE PROPERTY KNOWN AS LOT 3 / BLOCK 83 #198 DEMING ROAD BERLIN, CONNECTICUT MAP PREPARED BY: MBA ENGINEERING, INC. FEBRUARY 26, 1996
2) BOUNDARY SURVEY DEMING ROAD LANDFILL BERLIN, CONNECTICUT CITY OF NEW BRITAIN BUREAU OF ENGINEERING DEREK W. MORSE, DIRECTOR JAN. 1991
3) MATTABASSETT DISTRICT PLAN & PROFILE SANITARY TRUNK SEWER CAHN ENGINEERS SHEET NO.: 8 ASBUILTS JAN. 1970
4) BOUNDARY SURVEY PREPARED FOR THE METRO GROUP LTD SCALE: 1"=40' AUG. 19, 2009

NOTES:

1. PARCEL OWNER: LEO J. BERUBE
2. AREA: SEE MAP
3. ADDRESS: DEMING ROAD
4. ZONE: GI-2 (SEE ZOING TABLE)
5. SITE IS SERVICED BY PUBLIC WATER & SEWER.
6. CONTOUR INTERVAL = 2'
7. ELEVATIONS BASED ON U.S.C. & G.S. DATUM.
8. TOPOGRAPHY IS FROM FIELD SURVEY.
9. THE INDICATED EXISTING UTILITIES ARE BASED ON LIMITED INFORMATION. THE LOCATIONS ARE APPROXIMATE AND NOT GUARANTEED. ALL UTILITIES MAY NOT BE SHOWN. PRIOR TO ANY EXCAVATION, CONTRACTOR TO NOTIFY "CALL BEFORE YOU DIG" AT 1-800-922-4455.

ZONING TABLE

ZONE – GI-2

	REQUIRED
LOT AREA	0.5 Acres
LOT COVERAGE	35%
FRONT YARD SETBACK	30'
SIDE YARD SETBACK	25'
REAR YARD SETBACK	25'
MIN. LOT WIDTH	100'

Town of Berlin
Received

SEP 03 2020

Planning & Zoning Department
Berlin, Connecticut

LEGEND

— —	PROPERTY LINE
○	IRON PIN TO BE SET
● Ex IP	EXISTING IRON PIN
☐	MONUMENT TO BE SET
■	EXISTING MONUMENT
Ⓢ	EXISTING SANITARY MANHOLE
Ⓓ	EXISTING STORM MANHOLE
☐	EXISTING CATCH BASIN
☼	EXISTING LIGHT
⌘	EXISTING HYDRANT
GV ⋈	EXISTING GAS VALVE
WV ⋈	EXISTING WATER VALVE
⊙	EXISTING UTILITY POLE
– – – –	EX. EDGE OF ROAD
═══	EX. EDGE OF ROAD (CURBED)
— — —	EX. EDGE OF DRIVEWAY
S ———	EX. SANITARY SEWER LINE
W ———	EX. WATER LINE

REVISIONS TO THESE PLANS BY ANYONE
THAN KJA SHALL MAKE THESE PLANS NU
VOID. KJA SHALL TAKE NO RESPONSIBILI
SAID REVISIONS.

REVISION-7:
REVISION-6:
REVISION-5:
REVISION-4:
REVISION-3: 1/19/15 – TOWN COMMEN
REVISION-2: 10/8/14 – REVISIONS
REVISION-1: 10/1/14 – REVISIONS
PROJECT: 212061-MUNSON

DB: AQ	SR: JS	DR:

SEAL:

SURVEY NOTES:
THIS MAP HAS BEEN PREPARED IN ACCORDANCE WITH THE "MINIMUM STAN FOR SURVEYS AND MAPS IN THE STATE CONNECTICUT" AS ADOPTED FOR USE E REGULATIONS OF CONNECTICUT STATE ON SEPTEMBER 26, 1996. (CT SECTIO 20-300b-1 TO 20-300b-20).

THE TYPE OF SURVEY PERFORMED IS A PROPERTY MAP.

BOUNDARY DETERMINATION IS BASED U A DEPENDENT RESURVEY.

THIS SURVEY CONFORMS TO A:
CLASS A-2 & T-2

TO THE BEST OF MY KNOWLEDGE AND THIS MAP IS SUBSTANTIALLY CORRECT NOTED HEREON.

J Sak

James N. Sakonchick
CT P.E. & L.S. #11302

kratzert, jones & associates, i

CIVIL ENGINEERS • LAND SURVEY
SITE PLANNERS • BUILDING ENGIN

P.O. BOX 337
1755 MERIDEN-WATERBURY R
MILLDALE, CT 06467-0337

PHONE: (860) 621-3638
FAX: (860) 621-9809
EMAIL: INFO@KRATZERTJONES.C

EXISTING CONDITIONS M

for

DEMING ROAD BUSINESS PARK,

#180 DEMING ROA
BERLIN, CT

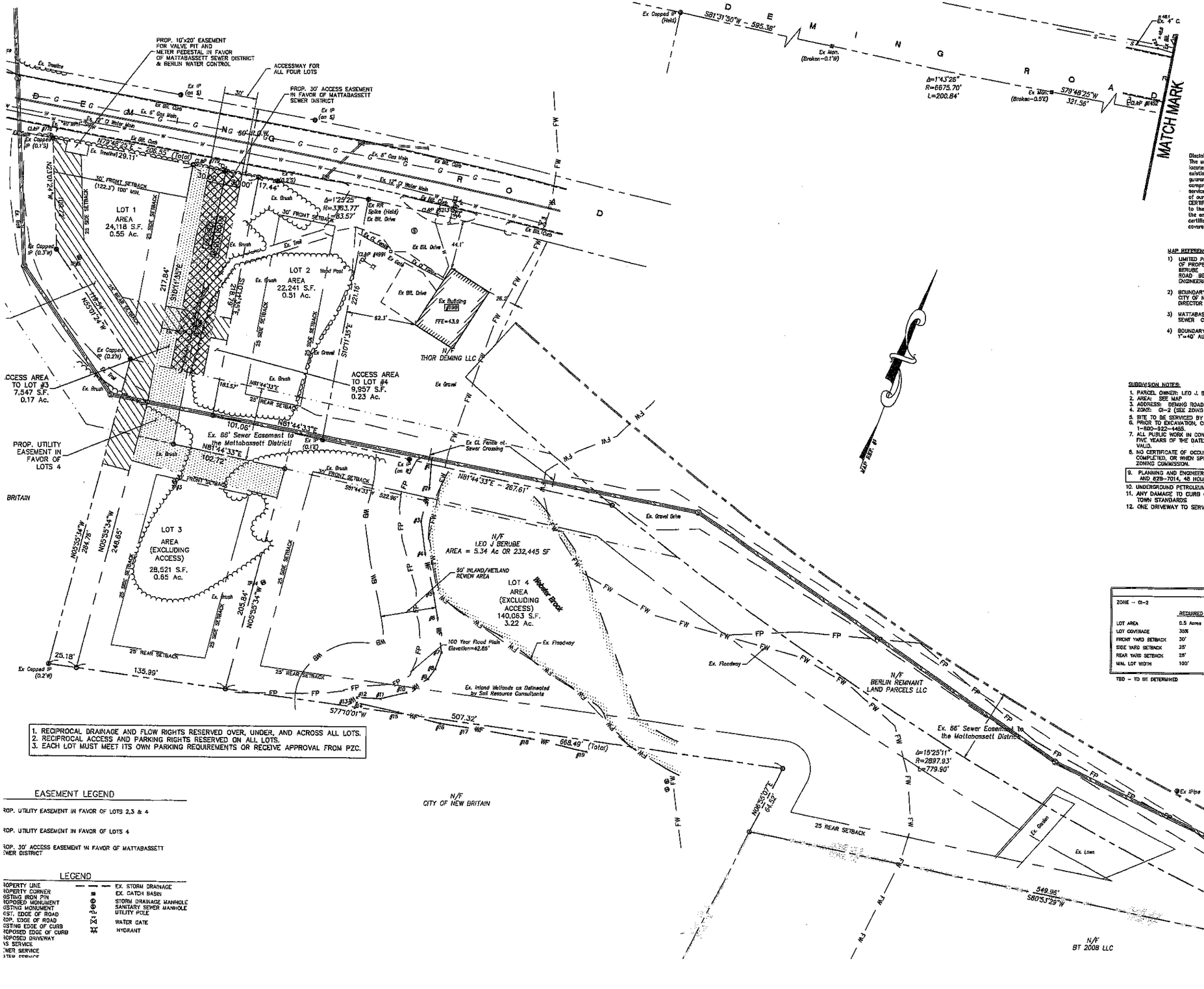
SCALE: 1" = 40'

DATE: MAY 6, 2013

HALF	ONE INCH	TWO INCH

INCHES ON ORIGINAL

KJA FILE NO. :	DRAWING NO. :
212-061	R-1



1. RECIPROCAL DRAINAGE AND FLOW RIGHTS RESERVED OVER, UNDER, AND ACROSS ALL LOTS.
2. RECIPROCAL ACCESS AND PARKING RIGHTS RESERVED ON ALL LOTS.
3. EACH LOT MUST MEET ITS OWN PARKING REQUIREMENTS OR RECEIVE APPROVAL FROM PZC.

EASEMENT LEGEND

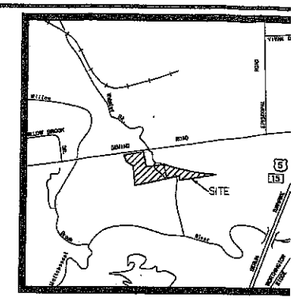
ROP. UTILITY EASEMENT IN FAVOR OF LOTS 2,3 & 4

ROP. UTILITY EASEMENT IN FAVOR OF LOTS 4

ROP. 30' ACCESS EASEMENT IN FAVOR OF MATTABASSETT SEWER DISTRICT

LEGEND

ROPERTY LINE
ROPERTY CORNER
ISTING IRON PIN
ROPOSED MONUMENT
ISTING MONUMENT
IST. EDGE OF ROAD
OP. EDGE OF ROAD
ISTING EDGE OF CURB
ROPOSED EDGE OF CURB
ROPOSED DRIVEWAY
S SERVICE
WER SERVICE
TER SERVICE
EX. STORM DRAINAGE
EX. CATCH BASIN
STORM DRAINAGE MANHOLE
SANITARY SEWER MANHOLE
UTILITY POLE
WATER GATE
HYDRANT



KEYMAP; SCALE: 1"=1000'

Disclaimer:
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MAP REFERENCES:

1) UNITED PROPERTY / BOUNDARY SURVEY MAP SHOWING DIVISION OF PROPERTY OF BERNADETTE RERUBE & ESTATE OF GILBERT E. BERUBE PROPERTY KNOWN AS LOT 3 / BLOCK 83 #195 DEMING ROAD BERLIN, CONNECTICUT MAP PREPARED BY: MBA ENGINEERING, INC. FEBRUARY 26, 1998

2) BOUNDARY SURVEY DEMING ROAD LANDFILL BERLIN, CONNECTICUT CITY OF NEW BRITAIN BUREAU OF ENGINEERING DEREK W. MORSE, DIRECTOR JAN. 1991

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4) BOUNDARY SURVEY PREPARED FOR THE METRO GROUP LTD SCALE: 1"=40' AUG. 19, 2009

SUBDIVISION NOTES:

1. PARCEL OWNER: LEO J. BERUBE
2. AREA: SEE MAP
3. ADDRESS: DEMING ROAD
4. ZONE: CI-2 (SEE ZONE TABLE)
5. SITE TO BE SERVICED BY PUBLIC WATER AND PUBLIC SEWER.
6. PRIOR TO EXCAVATION, CONTRACTOR TO NOTIFY "CALL BEFORE YOU DIG" 1-800-922-4455.
7. ALL PUBLIC WORK IN CONNECTION WITH THIS PLAN SHALL BE COMPLETED WITHIN FIVE YEARS OF THE DATE OF THE APPROVAL, OR THE APPROVAL IS NO LONGER VALID.
8. NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL ALL SITE WORK IS COMPLETED, OR WHEN SPECIFICALLY APPROVED BY THE PLANNING AND ZONING COMMISSION.
9. PLANNING AND ENGINEERING DEPARTMENTS TO BE NOTIFIED AT 828-7080 AND 828-7015, 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY.
10. UNDERGROUND PETROLEUM OR HAZARDOUS SUBSTANCE TANKS ARE PROHIBITED.
11. ANY DAMAGE TO CURB OR ROADWAY TO BE RESTORED TO TOWN STANDARDS
12. ONE DRIVEWAY TO SERVE ALL FOUR LOTS.

ZONING TABLE

ZONE – CI-2	REQUIRED	PROPOSED LOT #1	LOT #2	LOT #3	LOT #4
LOT AREA	0.5 Acres	24,118 S.F.	22,241 S.F.	28,521 S.F.	140,083 S.F.
LOT COVERAGE	35%	TBD	TBD	TBD	TBD
FRONT YARD SETBACK	30'	30'	30'	30'	30'
SIDE YARD SETBACK	25'	25'	25'	25'	25'
REAR YARD SETBACK	25'	25'	25'	25'	25'
MIN. LOT WIDTH	100'	122.3'	101.01'	30.00' (FRONT LOT)	30.00' (REAR LOT)

TBD – TO BE DETERMINED

REVISIONS TO THESE PLANS BY ANYONE OTHER THAN KJA SHALL MAKE THESE PLANS NULL AN VOID. KJA SHALL TAKE NO RESPONSIBILITY FO SAID REVISIONS.

REVISION-7:	
REVISION-8:	
REVISION-6: 8/4/15 – PLANNER COMMENTS	
REVISION-5: 2/10/15 – TOWN COMMENTS	
REVISION-4: 1/19/15 – TOWN COMMENTS	
REVISION-3: 10/9/14 – REVISIONS	
REVISION-2: 10/9/14 – REVISIONS	
REVISION-1: 10/1/14 – REVISIONS	
PROJECT: 212081-MUNSON	
DR: MPT/AO	SR: JS / DR: AT

SEAL:

SURVEY NOTES:
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THE TYPE OF SURVEY PERFORMED IS AN: PROPERTY MAP.

BOUNDARY DETERMINATION IS BASED UPON: A DEPENDENT RESURVEY.

THIS SURVEY CONFORMS TO A: CLASS A-2 & T-2

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

James H. Sonnichsen
CT P.E. & L.S. #11302

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PHONE: (860) 621-3838
FAX: (860) 621-9609
EMAIL: INFO@KRATZERTJONES.COM

SUBDIVISION PLAN

for

DEMING ROAD BUSINESS PARK,LLC

MAP 10-1 BLOCK 83 LOT 3A

DEMING ROAD
BERLIN, CT

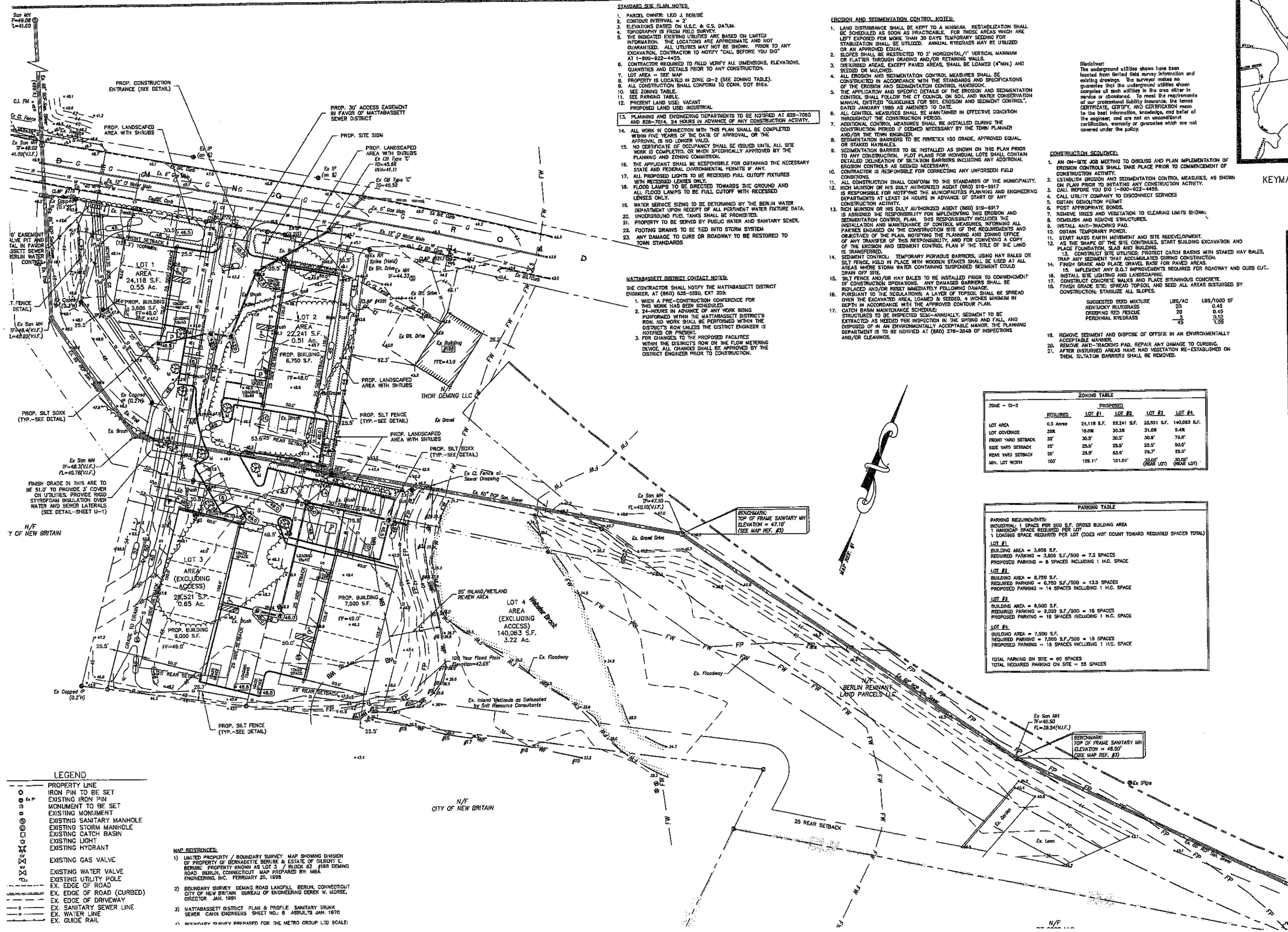
SCALE: 1"=40'

DATE: MAY 6, 2013

HALF | ONE INCH | TWO INCH
INCHES ON ORIGINAL

KJA FILE NO.: 212.061

DRAWING NO.: S-1



STANDARD SITE PLAN NOTES:

1. PARCEL OWNER: LEO J. BERUBE
2. CONTOUR INTERVAL = 2'
3. ELEVATIONS BASED ON U.S.C. & G.S. DATUM.
4. TOPOGRAPHY IS FROM FIELD SURVEY.
5. THE INDICATED EXISTING UTILITIES ARE BASED ON LIMITED INFORMATION. THE LOCATIONS ARE APPROXIMATE AND NOT GUARANTEED. ALL UTILITIES MAY NOT BE SHOWN. PRIOR TO ANY EXCAVATION, CONTRACTOR TO NOTIFY "CALL BEFORE YOU DIG" AT 1-800-922-4455.
6. CONTRACTOR REQUIRED TO FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, QUANTITIES AND DETAILS PRIOR TO ANY CONSTRUCTION.
7. LOT AREA = SEE MAP
8. PROPERTY IS LOCATED IN ZONE GI-2 (SEE ZONING TABLE).
9. ALL CONSTRUCTION SHALL CONFORM TO CONN. DOT 816a.
10. SEE ZONING TABLE.
11. SEE PARKING TABLE.
12. PRESENT LAND USE: VACANT
PROPOSED LAND USE: INDUSTRIAL
13. PLANNING AND ENGINEERING DEPARTMENTS TO BE NOTIFIED AT 828-7060 AND 828-7014, 24 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY.
14. ALL WORK IN CONNECTION WITH THIS PLAN SHALL BE COMPLETED WITHIN FIVE YEARS OF THE DATE OF APPROVAL, OR THE APPROVAL IS NO LONGER VALID.
15. NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL ALL SITE WORK IS COMPLETED, OR WHEN SPECIFICALLY APPROVED BY THE PLANNING AND ZONING COMMISSION.
16. THE APPLICANT SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY STATE AND FEDERAL ENVIRONMENTAL PERMITS IF ANY.
17. ALL PROPOSED LIGHTS TO BE RECESSED FULL CUTOFF FIXTURES WITH RECESSED LENSES ONLY.
18. FLOOD LAMPS TO BE DIRECTED TOWARDS THE GROUND AND ALL FLOOD LAMPS TO BE FULL CUTOFF WITH RECESSED LENSES ONLY.
19. WATER SERVICE SIZING TO BE DETERMINED BY THE BERLIN WATER DEPARTMENT UPON RECEIPT OF ALL PERTINENT WATER FIXTURE DATA.
20. UNDERGROUND FUEL TANKS SHALL BE PROHIBITED.
21. PROPERTY TO BE SERVED BY PUBLIC WATER AND SANITARY SEWER.
22. FOOTING DRAINS TO BE TIED INTO STORM SYSTEM
23. ANY DAMAGE TO CURB OR ROADWAY TO BE RESTORED TO TOWN STANDARDS

MATTABASSETT DISTRICT CONTACT NOTES:

THE CONTRACTOR SHALL NOTIFY THE MATTABASSETT DISTRICT ENGINEER, AT (860) 635-5550, EXT 205:

1. WHEN A PRE-CONSTRUCTION CONFERENCE FOR THIS WORK HAS BEEN SCHEDULED.
2. 24-HOURS IN ADVANCE OF ANY WORK BEING PERFORMED WITHIN THE MATTABASSETT DISTRICT'S ROW. NO WORK SHALL BE PERFORMED WITHIN THE DISTRICT'S ROW UNLESS THE DISTRICT ENGINEER IS NOTIFIED OR PRESENT.
3. FOR CHANGES TO THE PROPOSED FACILITIES WITHIN THE DISTRICT'S ROW OR THE FLOW METERING DEVICE. ALL CHANGES SHALL BE APPROVED BY THE DISTRICT ENGINEER PRIOR TO CONSTRUCTION.

EROSION AND SEDIMENTATION CONTROL NOTES:

1. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM. RESTABILIZATION SHALL BE SCHEDULED AS SOON AS PRACTICABLE. FOR THOSE AREAS WHICH ARE LEFT EXPOSED FOR MORE THAN 30 DAYS TEMPORARY SEEDING FOR STABLIZATION SHALL BE UTILIZED. ANNUAL RYEGRASS MAY BE UTILIZED OR AN APPROVED EQUAL.
2. SLOPES SHALL BE RESTRICTED TO 2' HORIZONTAL/1' VERTICAL MAXIMUM OR FLATTER THROUGH GRADING AND/OR RETAINING WALLS.
3. DISTURBED AREAS, EXCEPT PAVED AREAS, SHALL BE LOAMED (4"MIN.) AND SEEDED OR MULCHED.
4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE EROSION AND SEDIMENTATION CONTROL HANDBOOK.
5. THE APPLICATION AND SPECIFIC DETAILS OF THE EROSION AND SEDIMENTATION CONTROL SHALL FOLLOW THE CT COUNCIL ON SOIL AND WATER CONSERVATION MANUAL ENTITLED "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL", DATED JANUARY 1985 AS AMENDED TO DATE.
6. ALL CONTROL MEASURES SHALL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
7. ADDITIONAL CONTROL MEASURES SHALL BE INSTALLED DURING THE CONSTRUCTION PERIOD IF DEEMED NECESSARY BY THE TOWN PLANNER AND/OR THE TOWN ENGINEER.
8. SEDIMENTATION BARRIERS TO BE FIBRETEX 150 GRADE, APPROVED EQUAL, OR STAKED HAYBALES.
9. SEDIMENTATION BARRIER TO BE INSTALLED AS SHOWN ON THIS PLAN PRIOR TO ANY CONSTRUCTION. PLOT PLANS FOR INDIVIDUAL LOTS SHALL CONTAIN DETAILED DELINEATION OF SILTATION BARRIERS INCLUDING ANY ADDITIONAL EROSION CONTROLS AS DEEMED NECESSARY.
10. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY UNFORSEEN FIELD CONDITIONS.
11. ALL CONSTRUCTION SHALL CONFORM TO THE STANDARDS OF THE MUNICIPALITY.
12. RICH MUNSON OR HIS DULY AUTHORIZED AGENT (860) 919-6917 IS RESPONSIBLE FOR NOTIFYING THE MUNICIPALITIES PLANNING AND ENGINEERING DEPARTMENTS AT LEAST 24 HOURS IN ADVANCE OF START OF ANY CONSTRUCTION ACTIVITY.
13. RICH MUNSON OR HIS DULY AUTHORIZED AGENT (860) 919-6917 IS ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENTATION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, NOTIFYING THE PLANNING AND ZONING OFFICE OF ANY TRANSFER OF THIS RESPONSIBILITY, AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE OF THE LAND IS TRANSFERRED.
14. SEDIMENT CONTROL: TEMPORARY PERVIOUS BARRIERS, USING HAY BALES OR SILT FENCE, HELD IN PLACE WITH WOODEN STAKES SHALL BE USED AT ALL AREAS WHERE STORM WATER CONTAINING SUSPENDED SEDIMENT COULD DRAIN OFF SITE.
15. SILT FENCE AND/OR HAY BALES TO BE INSTALLED PRIOR TO COMMENCMENT OF CONSTRUCTION OPERATIONS. ANY DAMAGED BARRIERS SHALL BE REPLACED AND/OR RESET IMMEDIATELY FOLLOWING DAMAGE.
16. PURSUANT TO THE REGULATIONS; A LAYER OF TOPSOIL SHALL BE SPREAD OVER THE EXCAVATED AREA, LOAMED & SEEDED, 4 INCHES MINIMUM IN DEPTH IN ACCORDANCE WITH THE APPROVED CONTOUR PLAN.
17. CATCH BASIN MAINTENANCE SCHEDULE:
STRUCTURES TO BE INSPECTED SEMI-ANNUALLY. SEDIMENT TO BE EXTRACTED AS NEEDED PER INSPECTION IN THE SPRING AND FALL, AND DISPOSED OF IN AN ENVIRONMENTALLY ACCEPTABLE MANOR. THE PLANNING DEPARTMENT IS TO BE NOTIFIED AT (860) 276-2848 OF INSPECTIONS AND/OR CLEANINGS.

Disclaimer:
The underground utilities shown have been located from limited field survey information and existing drawings. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area either in service or abandoned. To meet the requirements of our professional liability insurance, the terms CERTIFICATE, CERTIFY, AND CERTIFICATION mean to the best information, knowledge, and belief of the engineer; and are not an unconditional certification, warranty or guarantee which are not covered under the policy.

CONSTRUCTION SEQUENCE:

1. AN ON-SITE JOB MEETING TO DISCUSS AND PLAN IMPLEMENTATION OF EROSION CONTROLS SHALL TAKE PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY.
2. ESTABLISH EROSION AND SEDIMENTATION CONTROL MEASURES, AS SHOWN ON PLAN PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITY.
3. CALL BEFORE YOU DIG 1-800-922-4455.
4. CALL UTILITY COMPANY TO DISCONNECT SERVICES
5. OBTAIN DEMOLITION PERMIT
6. POST APPROPRIATE BONDS.
7. REMOVE TREES AND VEGETATION TO CLEARING LIMITS SHOWN.
8. DEMOLISH AND REMOVE STRUCTURES.
9. INSTALL ANTI-TRACKING PAD.
10. OBTAIN TEMPORARY POWER.
11. START MASS EARTH MOVEMENT AND SITE REDEVELOPMENT.
12. AS THE SHAPE OF THE SITE CONTINUES, START BUILDING EXCAVATION AND PLACE FOUNDATION, SLAB AND BUILDING.
13. CONSTRUCT SITE UTILITIES; PROTECT CATCH BASINS WITH STAKED HAY BALES, TRAP ANY SEDIMENT THAT ACCUMULATES DURING CONSTRUCTION.
14. FINISH GRADE AND PLACE GRAVEL BASE FOR PAVED AREAS.
15. IMPLEMENT ANY D.O.T IMPROVEMENTS REQUIRED FOR ROADWAY AND CURB CUT..
16. INSTALL SITE LIGHTING AND LANDSCAPING.
17. CONSTRUCT CONCRETE WALKS AND PLACE BITUMINOUS CONCRETE.
18. FINISH GRADE SITE; SPREAD TOPSOIL AND SEED ALL AREAS DISTURBED BY CONSTRUCTION; STABILIZE ALL SLOPES.

SUGGESTED SEED MIXTURE	LBS/AC	LBS/1000 SF
KENTUCKY BLUEGRASS	20	0.45
CREEPING RED FESCUE	20	0.45
PERENNIAL RYEGRASS	5	0.10
	45	1.00

19. REMOVE SEDIMENT AND DISPOSE OF OFFSITE IN AN ENVIRONMENTALLY ACCEPTABLE MANNER.
20. REMOVE ANTI-TRACKING PAD, REPAIR ANY DAMAGE TO CURBING.
21. AFTER DISTURBED AREAS HAVE HAD VEGETATION RE-ESTABLISHED ON THEM, SILTATION BARRIERS SHALL BE REMOVED.

ZONING TABLE

ZONE – GI-2	REQUIRED	PROPOSED LOT #1	LOT #2	LOT #3	LOT #4
LOT AREA	0.5 Acres	24,118 S.F.	22,241 S.F.	28,521 S.F.	140,063 S.F.
LOT COVERAGE	35%	15.0%	30.3%	31.6%	5.4%
FRONT YARD SETBACK	30'	30.5'	30.5'	30.8'	76.8'
SIDE YARD SETBACK	25'	25.5'	25.5'	25.5'	50.0'
REAR YARD SETBACK	25'	25.5'	53.6'	26.7'	25.5'
MIN. LOT WIDTH	100'	128.11'	101.01'	30.00' (REAR LOT)	30.00' (REAR LOT)

PARKING TABLE

PARKING REQUIREMENTS:
INDUSTRIAL: 1 SPACE PER 500 S.F. GROSS BUILDING AREA
1 HANDICAP SPACE REQUIRED PER LOT
1 LOADING SPACE REQUIRED PER LOT (DOES NOT COUNT TOWARD REQUIRED SPACES TOTAL)

LOT #1
BUILDING AREA = 3,606 S.F.
REQUIRED PARKING = 3,606 S.F./500 = 7.2 SPACES
PROPOSED PARKING = 8 SPACES INCLUDING 1 H.C. SPACE

LOT #2
BUILDING AREA = 6,750 S.F.
REQUIRED PARKING = 6,750 S.F./500 = 13.5 SPACES
PROPOSED PARKING = 14 SPACES INCLUDING 1 H.C. SPACE

LOT #3
BUILDING AREA = 9,000 S.F.
REQUIRED PARKING = 9,000 S.F./500 = 18 SPACES
PROPOSED PARKING = 18 SPACES INCLUDING 1 H.C. SPACE

LOT #4
BUILDING AREA = 7,500 S.F.
REQUIRED PARKING = 7,500 S.F./500 = 15 SPACES
PROPOSED PARKING = 15 SPACES INCLUDING 1 H.C. SPACE

TOTAL PARKING ON SITE = 60 SPACES
TOTAL REQUIRED PARKING ON SITE = 55 SPACES

LEGEND

PROPERTY LINE
IRON PIN TO BE SET
Ex IP EXISTING IRON PIN
MONUMENT TO BE SET
EXISTING MONUMENT
EXISTING SANITARY MANHOLE
EXISTING STORM MANHOLE
EXISTING CATCH BASIN
EXISTING LIGHT
EXISTING HYDRANT
GV EXISTING GAS VALVE
WV EXISTING WATER VALVE
EXISTING UTILITY POLE
EX. EDGE OF ROAD
EX. EDGE OF ROAD (CURBED)
EX. EDGE OF DRIVEWAY
S EX. SANITARY SEWER LINE
W EX. WATER LINE
EX. GUIDE RAIL

MAP REFERENCES:

1) LIMITED PROPERTY / BOUNDARY SURVEY MAP SHOWING DIVISION OF PROPERTY OF BERNADETTE BERUBE & ESTATE OF GILBERT E. BERUBE PROPERTY KNOWN AS LOT 3 / BLOCK 83 #198 DEMING ROAD BERLIN, CONNECTICUT MAP PREPARED BY: MBA ENGINEERING, INC. FEBRUARY 26, 1998
2) BOUNDARY SURVEY DEMING ROAD LANDFILL BERLIN, CONNECTICUT CITY OF NEW BRITAIN BUREAU OF ENGINEERING DEREK W. MORSE, DIRECTOR JAN. 1991
3) MATTABASSETT DISTRICT PLAN & PROFILE SANITARY TRUNK SEWER CAHN ENGINEERS SHEET NO.: 6 ASBUILTS JAN. 1970
4) BOUNDARY SURVEY PREPARED FOR THE METRO GROUP LTD SCALE:

KEYMAP; SCALE: 1"=1000'

REVISIONS TO THESE PLANS BY ANYONE
THAN KJA SHALL MAKE THESE PLANS NU
VOID. KJA SHALL TAKE NO RESPONSIBILI
SAID REVISIONS.

REVISION-7: 2/10/15 – TOWN COMME
REVISION-6: 1/19/15 – TOWN COMME
REVISION-5: 11/21/14 – WATER REVIS
REVISION-4: 10/8/14 – REVISIONS
REVISION-3: 10/1/14 – REVISIONS
REVISION-2: 2/11/14 – SEWER COMME
REVISION-1: 1/16/14 – FORCE MAIN
PROJECT: 212061–MUNSON
DB: MPT | SR: JS | DR

SEAL:

J Sak
James N. Sakanchick
CT P.E. & L.S. #11302

kratzert,
jones &
associates,

CIVIL ENGINEERS • LAND SURV
SITE PLANNERS • BUILDING ENG

P.O. BOX 337
1755 MERIDEN–WATERBURY
MILLDALE, CT 06487–032

PHONE: (860) 621–363
FAX: (860) 621–9609
EMAIL: INFO@KRATZERTJONE

GRADING & ERO
CONTROL PL

for

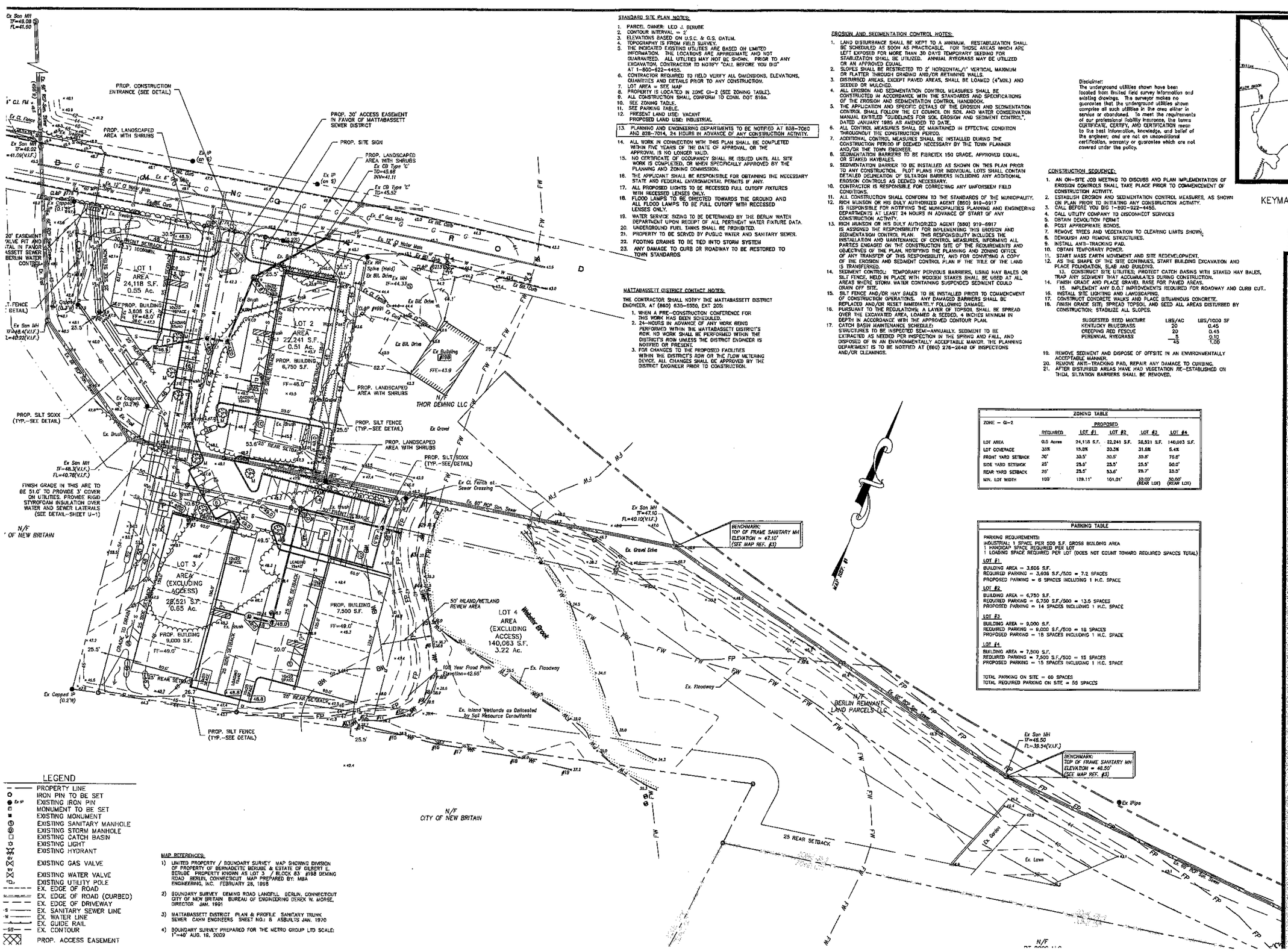
DEMING ROA
BUSINESS PAR

#180 DEMING RO
BERLIN, CT

SCALE: 1" = 40'
DATE: MAY 6, 2013

HALF | ONE INCH | TWO I
INCHES ON ORIGINAL

KJA FILE NO. : 212-061
DRAWING G



STANDARD SITE PLAN NOTES:

1. PARCEL OWNER: LEO J. BERUBE
2. CONTOUR INTERVAL = 2'
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8. PROPERTY IS LOCATED IN ZONE GI-2 (SEE ZONING TABLE).
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10. SEE ZONING TABLE.
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12. PRESENT LAND USE: VACANT
    PROPOSED LAND USE: INDUSTRIAL
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EROSION AND SEDIMENTATION CONTROL NOTES:

1. LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM. RESTABILIZATION SHALL BE SCHEDULED AS SOON AS PRACTICABLE. FOR THOSE AREAS WHICH ARE LEFT EXPOSED FOR MORE THAN 30 DAYS TEMPORARY SEEDING FOR STABILIZATION SHALL BE UTILIZED. ANNUAL RYEGRASS MAY BE UTILIZED OR AN APPROVED EQUAL.
2. SLOPES SHALL BE RESTRICTED TO 2' HORIZONTAL/1' VERTICAL MAXIMUM OR FLATTER THROUGH GRADING AND/OR RETAINING WALLS.
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5. THE APPLICATION AND SPECIFIC DETAILS OF THE EROSION AND SEDIMENTATION CONTROL SHALL FOLLOW THE CT COUNCIL ON SOIL AND WATER CONSERVATION MANUAL ENTITLED "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL", DATED JANUARY 1985 AS AMENDED TO DATE.
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17. CATCH BASIN MAINTENANCE SCHEDULE:
    STRUCTURES TO BE INSPECTED SEMI-ANNUALLY. SEDIMENT TO BE EXTRACTED AS NEEDED PER INSPECTION IN THE SPRING AND FALL, AND DISPOSED OF IN AN ENVIRONMENTALLY ACCEPTABLE MANOR. THE PLANNING DEPARTMENT IS TO BE NOTIFIED AT (860) 276-2648 OF INSPECTIONS AND/OR CLEANINGS.

Disclaimer:
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CONSTRUCTION SEQUENCE:

1. AN ON-SITE JOB MEETING TO DISCUSS AND PLAN IMPLEMENTATION OF EROSION CONTROLS SHALL TAKE PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY.
2. ESTABLISH EROSION AND SEDIMENTATION CONTROL MEASURES, AS SHOWN ON PLAN PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITY.
3. CALL BEFORE YOU DIG 1-800-922-4455.
4. CALL UTILITY COMPANY TO DISCONNECT SERVICES
5. OBTAIN DEMOLITION PERMIT
6. POST APPROPRIATE BONDS.
7. REMOVE TREES AND VEGETATION TO CLEARING LIMITS SHOWN;
8. DEMOLISH AND REMOVE STRUCTURES.
9. INSTALL ANTI-TRACKING PAD.
10. OBTAIN TEMPORARY POWER.
11. START MASS EARTH MOVEMENT AND SITE REDEVELOPMENT.
12. AS THE SHAPE OF THE SITE CONTINUES, START BUILDING EXCAVATION AND PLACE FOUNDATION, SLAB AND BUILDING.
13. CONSTRUCT SITE UTILITIES; PROTECT CATCH BASINS WITH STAKED HAY BALES, TRAP ANY SEDIMENT THAT ACCUMULATES DURING CONSTRUCTION.
14. FINISH GRADE AND PLACE GRAVEL BASE FOR PAVED AREAS.
15. IMPLEMENT ANY D.O.T IMPROVEMENTS REQUIRED FOR ROADWAY AND CURB CUT.
16. INSTALL SITE LIGHTING AND LANDSCAPING.
17. CONSTRUCT CONCRETE WALKS AND PLACE BITUMINOUS CONCRETE.
18. FINISH GRADE SITE; SPREAD TOPSOIL AND SEED ALL AREAS DISTURBED BY CONSTRUCTION. STABILIZE ALL SLOPES.

SUGGESTED SEED MIXTURE	LBS/AC	LBS/1000 SF
KENTUCKY BLUEGRASS	20	0.45
CREEPING RED FESCUE	20	0.45
PERENNIAL RYEGRASS	5	0.10
	45	1.00

19. REMOVE SEDIMENT AND DISPOSE OF OFFSITE IN AN ENVIRONMENTALLY ACCEPTABLE MANNER.
20. REMOVE ANTI-TRACKING PAD, REPAIR ANY DAMAGE TO CURBING.
21. AFTER DISTURBED AREAS HAVE HAD VEGETATION RE-ESTABLISHED ON THEM, SILTATION BARRIERS SHALL BE REMOVED.

ZONING TABLE

ZONE - GI-2	REQUIRED	PROPOSED LOT #1	LOT #2	LOT #3	LOT #4
LOT AREA	0.5 Acres	24,118 S.F.	22,241 S.F.	28,521 S.F.	140,063 S.F.
LOT COVERAGE	35%	15.0%	30.3%	31.5%	5.4%
FRONT YARD SETBACK	30'	30.5'	30.5'	30.8'	76.8'
SIDE YARD SETBACK	25'	25.5'	25.5'	25.5'	50.0'
REAR YARD SETBACK	25'	25.5'	53.6'	28.7'	25.5'
MIN. LOT WIDTH	100'	129.11'	101.01'	10.00' (REAR LOT)	50.00' (REAR LOT)

PARKING TABLE

PARKING REQUIREMENTS:
INDUSTRIAL: 1 SPACE PER 500 S.F. GROSS BUILDING AREA
1 HANDICAP SPACE REQUIRED PER LOT
1 LOADING SPACE REQUIRED PER LOT (DOES NOT COUNT TOWARD REQUIRED SPACES TOTAL)

LOT #1
BUILDING AREA = 3,606 S.F.
REQUIRED PARKING = 3,606 S.F./500 = 7.2 SPACES
PROPOSED PARKING = 6 SPACES INCLUDING 1 H.C. SPACE

LOT #2
BUILDING AREA = 6,750 S.F.
REQUIRED PARKING = 6,750 S.F./500 = 13.5 SPACES
PROPOSED PARKING = 14 SPACES INCLUDING 1 H.C. SPACE

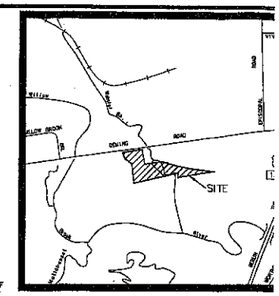
LOT #3
BUILDING AREA = 9,000 S.F.
REQUIRED PARKING = 9,000 S.F./500 = 18 SPACES
PROPOSED PARKING = 18 SPACES INCLUDING 1 H.C. SPACE

LOT #4
BUILDING AREA = 7,500 S.F.
REQUIRED PARKING = 7,500 S.F./500 = 15 SPACES
PROPOSED PARKING = 15 SPACES INCLUDING 1 H.C. SPACE

TOTAL PARKING ON SITE = 60 SPACES
TOTAL REQUIRED PARKING ON SITE = 56 SPACES

MAP REFERENCES:

1) LIMITED PROPERTY / BOUNDARY SURVEY MAP SHOWING DIVISION OF PROPERTY OF BERNADETTE BERUBE & ESTATE OF GILBERT E. BERUBE PROPERTY KNOWN AS LOT 3 / BLOCK 83 #188 DEMING ROAD BERLIN, CONNECTICUT MAP PREPARED BY: MBA ENGINEERING, INC. FEBRUARY 28, 1998
2) BOUNDARY SURVEY DEMING ROAD LANDFILL BERLIN, CONNECTICUT CITY OF NEW BRITAIN BUREAU OF ENGINEERING DEREK W. MORSE, DIRECTOR JAN. 1991
3) MATTABASSETT DISTRICT PLAN & PROFILE SANITARY TRUNK SEWER CAHN ENGINEERS SHEET NO.: 8 ASBUILTS JAN. 1970
4) BOUNDARY SURVEY PREPARED FOR THE METRO GROUP LTD SCALE: 1"=40' AUG. 18, 2009



KEYMAP; SCALE: 1"=1000'

REVISIONS TO THESE PLANS BY ANYONE O THAN KJA SHALL MAKE THESE PLANS AN VOID. KJA SHALL TAKE NO RESPONSIBILI SAID REVISIONS.

REVISION-7: 2/10/15 - TOWN COMMENTS
REVISION-6: 1/19/15 - TOWN COMMENTS
REVISION-5: 11/21/14 - WATER REVISION
REVISION-4: 10/8/14 - REVISIONS
REVISION-3: 10/7/14 - REVISIONS
REVISION-2: 3/11/14 - SEWER COMMENTS
REVISION-1: 1/16/14 - FORCE MAIN CHANGES

PROJECT: 212061-MUNSON

DB: MPT	SR: JS	DR:

SEAL:

James N. Sakonchick
CT P.E. & L.S. #17302

kratzert, jones & associates, inc.
CIVIL ENGINEERS • LAND SURVEYORS
SITE PLANNERS • BUILDING ENGINEERS
P.O. BOX 337
1755 MERIDEN-WATERBURY RD.
MILLDALE, CT 06467-0337
PHONE: (860) 621-3838
FAX: (860) 621-9620
EMAIL: INFO@KRATZERTJONES.COM

GRADING & EROSION CONTROL PLAN

for

DEMING ROAD BUSINESS PARK, LLC

#180 DEMING ROAD
BERLIN, CT

SCALE: 1" = 40'

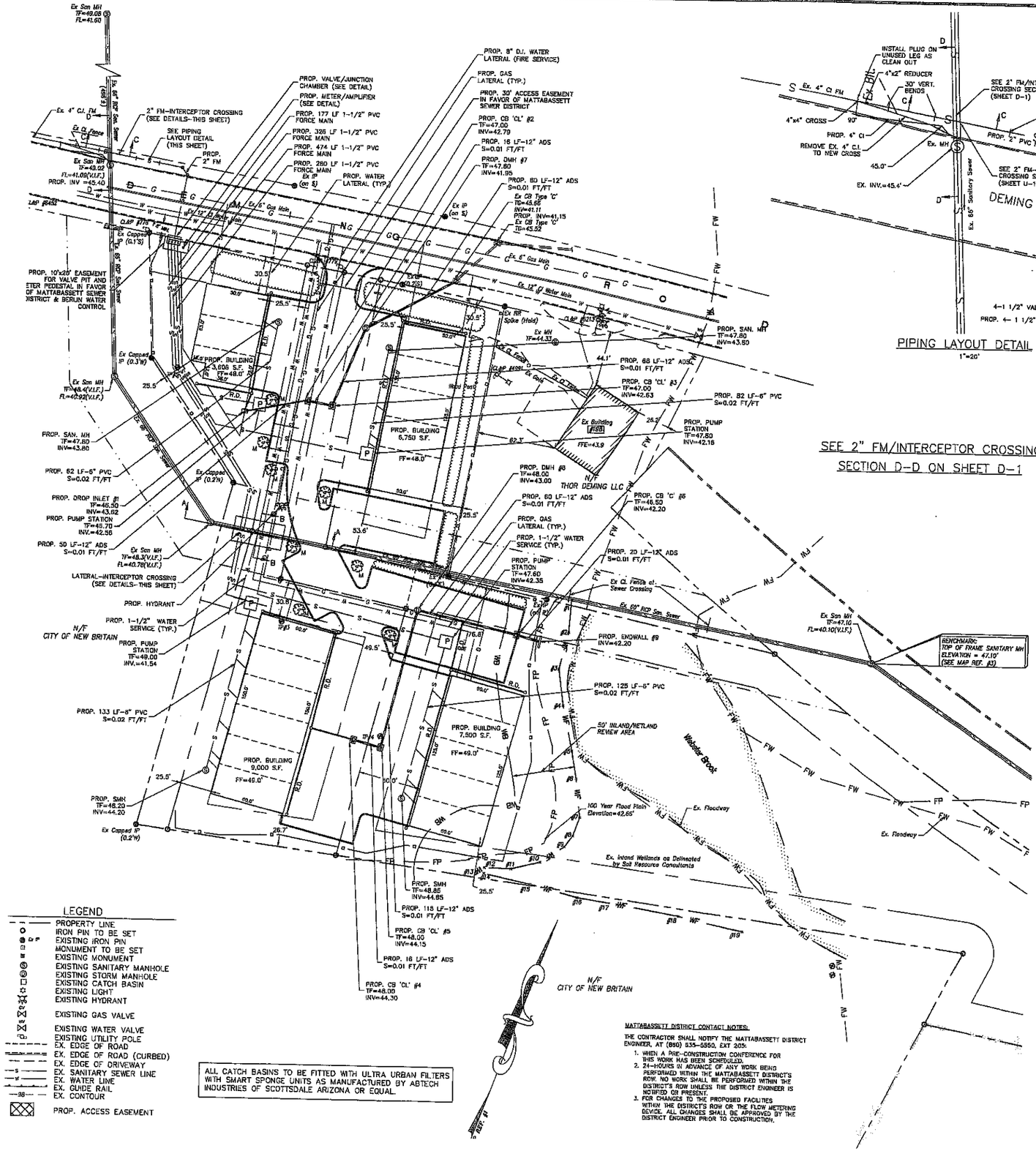
DATE: MAY 6, 2013

HALF	ONE INCH	TWO INCH

INCHES ON ORIGINAL

KJA FILE NO.: 212-061

DRAWING NO.: G-1



SEE 2" FM/INTERCEPTOR CROSSING SECTION D-D ON SHEET D-1

BENCHMARK:
TOP OF FRAME SANITARY MH
ELEVATION = 47.10'
(SEE MAP REF. #3)

Ex San MH TF=47.10 FL=40.10(V.I.F.)

LEGEND

— — ——	PROPERTY LINE
○	IRON PIN TO BE SET
●	EXISTING IRON PIN
▫	MONUMENT TO BE SET
▪	EXISTING MONUMENT
Ⓢ	EXISTING SANITARY MANHOLE
Ⓓ	EXISTING STORM MANHOLE
□	EXISTING CATCH BASIN
☼	EXISTING LIGHT
✡	EXISTING HYDRANT
GV ⋈	EXISTING GAS VALVE
WV ⋈	EXISTING WATER VALVE
⊸	EXISTING UTILITY POLE
- - - - -	EX. EDGE OF ROAD
═ ═ ═	EX. EDGE OF ROAD (CURBED)
— — —	EX. EDGE OF DRIVEWAY
—S—	EX. SANITARY SEWER LINE
—W—	EX. WATER LINE
·—·—·	EX. GUIDE RAIL
—98—	EX. CONTOUR
⊠	PROP. ACCESS EASEMENT

ALL CATCH BASINS TO BE FITTED WITH ULTRA URBAN FILTERS WITH SMART SPONGE UNITS AS MANUFACTURED BY ABTECH INDUSTRIES OF SCOTTSDALE ARIZONA OR EQUAL.

MATTABASSETT DISTRICT CONTACT NOTES:

THE CONTRACTOR SHALL NOTIFY THE MATTABASSETT DISTRICT ENGINEER, AT (860) 635-5550, EXT 205:

1. WHEN A PRE-CONSTRUCTION CONFERENCE FOR THIS WORK HAS BEEN SCHEDULED.
2. 24-HOURS IN ADVANCE OF ANY WORK BEING PERFORMED WITHIN THE MATTABASSETT DISTRICT'S ROW. NO WORK SHALL BE PERFORMED WITHIN THE DISTRICT'S ROW UNLESS THE DISTRICT ENGINEER IS NOTIFIED OR PRESENT.
3. FOR CHANGES TO THE PROPOSED FACILITIES WITHIN THE DISTRICT'S ROW OR THE FLOW METERING DEVICE. ALL CHANGES SHALL BE APPROVED BY THE DISTRICT ENGINEER PRIOR TO CONSTRUCTION.

PIPING LAYOUT DETAIL
1"=20'

LATERAL INTERCEPTOR CROSSING
SECTION A–A
SCALE: 1"=20' H, 1"=2' V

LATERAL–INTERCEPTOR CROSSING
SECTION B–B
SCALE: 1"=4' H, 1"=2' V

2" FM–INTERCEPTOR CROSSING
SECTION C–C
SCALE: 1"=4' H, 1"=2' V

Disclaimer:
The underground utilities shown have
located from limited field survey infon
existing drawings. The surveyor make
guarantee that the underground utiliti
comprise all such utilities in the area
service or abandoned. To meet the
of our professional liability insurance,
CERTIFICATE, CERTIFY, AND CERTIFICAT
to the best information, knowledge, o
the engineer; and are not an uncondi
certification, warranty or guarantee wi
covered under the policy.

REVISIONS TO THESE PLANS BY ANYO
THAN KJA SHALL MAKE THESE PLANS
VOID. KJA SHALL TAKE NO RESPONSI
SAID REVISIONS.

REVISION–8: 1/19/15 – TOWN COM
REVISION–7: 11/21/14 – WATER RE
REVISION–6: 10/8/14 – REVISIONS
REVISION–5: 10/1/14 – REVISIONS
REVISION–4: 3/4/14 – GEOTEXTILE
REVISION–3: 2/11/14 – SEWER COM
REVISION–2: 1/16/14 – FORCE MAI
REVISION–1: 7/31/13 – DETAILS
PROJECT: 212061–MUNSON

DB: MPT	SR: JS

SEAL:

J Sak
James N. Sakonchick
CT P.E. & L.S. #11302

kratzert,
jones &
associates,

CIVIL ENGINEERS • LAND SURVE
SITE PLANNERS • BUILDING ENGI

P.O. BOX 337
1755 MERIDEN–WATERBURY
MILLDALE, CT 06467–0337

PHONE: (860) 621-3638
FAX: (860) 621-9809
EMAIL: INFO@KRATZERTJONES.

UTILITY PLAN

for

DEMING ROA BUSINESS PARK

#180 DEMING ROA
BERLIN, CT

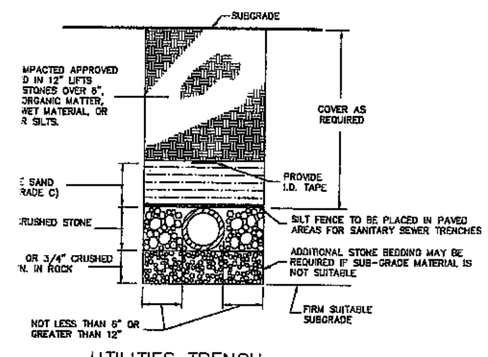
SCALE: 1"=40'

DATE: MAY 6, 2013

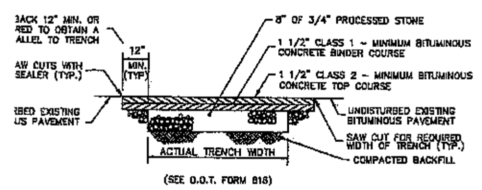
HALF	ONE INCH	TWO INCH

INCHES ON ORIGINAL

KJA FILE NO. :	DRAWING NO.
212-061	U-1

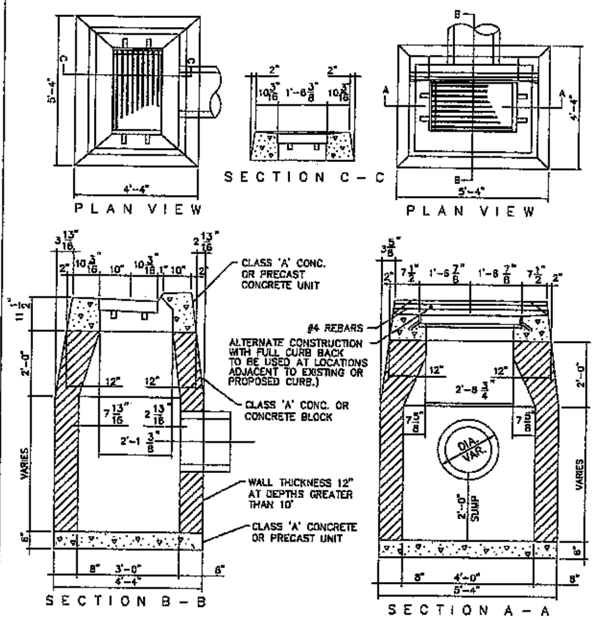


UTILITIES TRENCH
N.T.S.

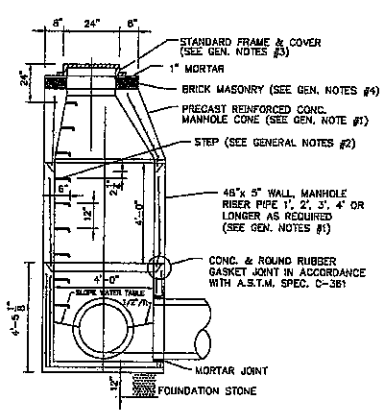


PERMANENT PAVEMENT REPAIR DETAIL
(FOR PUBLIC ROADWAYS)
N.T.S.

CATCH BASIN TYPE "C-L"
N.T.S.

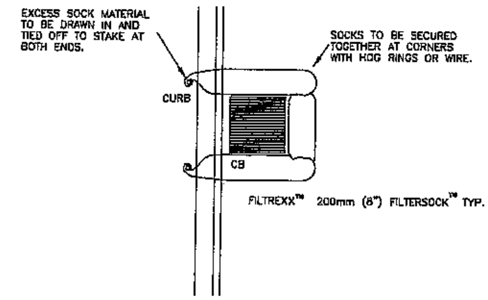


CATCH BASIN TYPE "C" DETAIL
N.T.S.



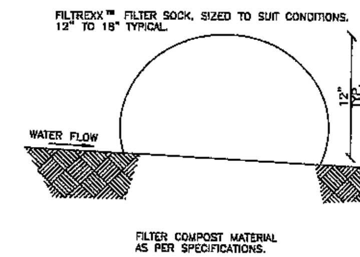
DRAINAGE
MANHOLE ASSEMBLY WITH TAPERED CONE
4'- 0" I.D. PRECAST REINFORCED CONCRETE (TYPE A)
N.T.S.

GENERAL NOTES:
1. OUTSIDE OF MASONRY TO BE COVERED WITH 1/2" CEMENT PLASTER AND WATERPROOFED. WATERPROOFING SHALL CONSIST OF (2) COATS OF BITUMINOUS WATERPROOFING MATERIAL TO BE EXTENDED OVER ENTIRE FACE OF MANHOLE.
2. 1" GALV. W.I. OR STAINLESS STEEL BARS SPACED 12" O.C. OR EVERY 5TH BRICK COARSE AND ANCHORED OR PENETRATING A MINIMUM OF 6 1/2" IN THE MASONRY.
3. C.I. MANHOLE FRAME & COVER CATALOG NUMBERS 1007D & 1007WT BY CAMPBELL FOUNDRY LABELED "SIMSBURY SEWER".
4. PROVIDE MINIMUM OF (2) COARSES OF BRICK MASONRY TO ADJUST FRAME TO GRADE & SLOPE.
5. MANHOLE'S SHALL BE CONSTRUCTED OF MATERIALS CONSISTING, -BRICK, CONCRETE BLOCK, OR PRE-CAST

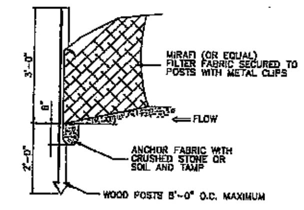


SILT SOXX CATCH BASIN
APPLICATION DETAIL
NTS

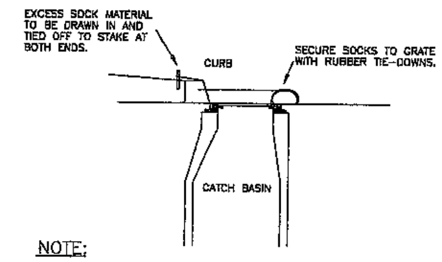
NOTES:
1. ALL MATERIAL TO MEET FILTREXX™ SPECIFICATIONS.
2. SECURE FILTERSOCK TO GROUND AT EACH END.
SOCK OPTION:



SILT SOXX DETAIL
NTS

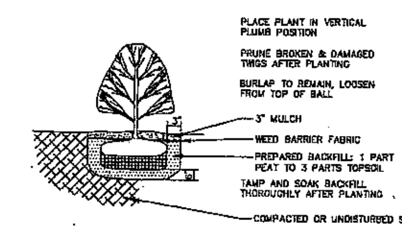


SILT FENCE DETAIL
N.T.S.

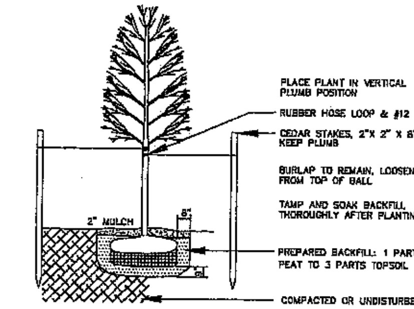


NOTE:
1. MULCH LOG SPECIFIED AS FILTREXX SILT SOXX. CONTRACTOR MAY SUBSTITUTE WITH APPROVED EQUAL.

EROSION CONTROL MULCH LOG DETAILS
NTS

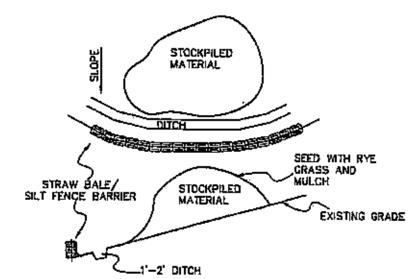


SHRUB PLANTING
N.T.S.

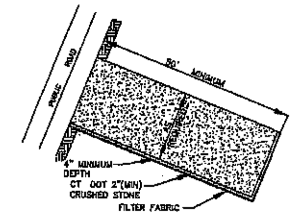


DECIDUOUS TREE PLANTING
N.T.S.

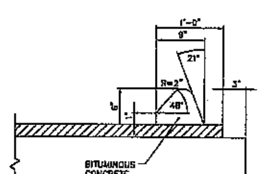
8 M SUGAR MAPLE MIN. OF 3" CALIPER



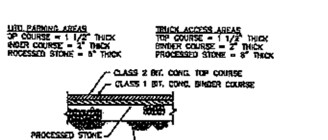
EROSION CONTROL
FOR STOCKPILED MATERIAL
N.T.S.



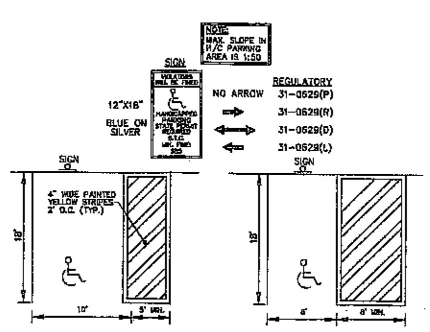
CONSTRUCTION ENTRANCE DETAIL
N.T.S.



BITUMINOUS CONCRETE LIP CURBING
N.T.S.

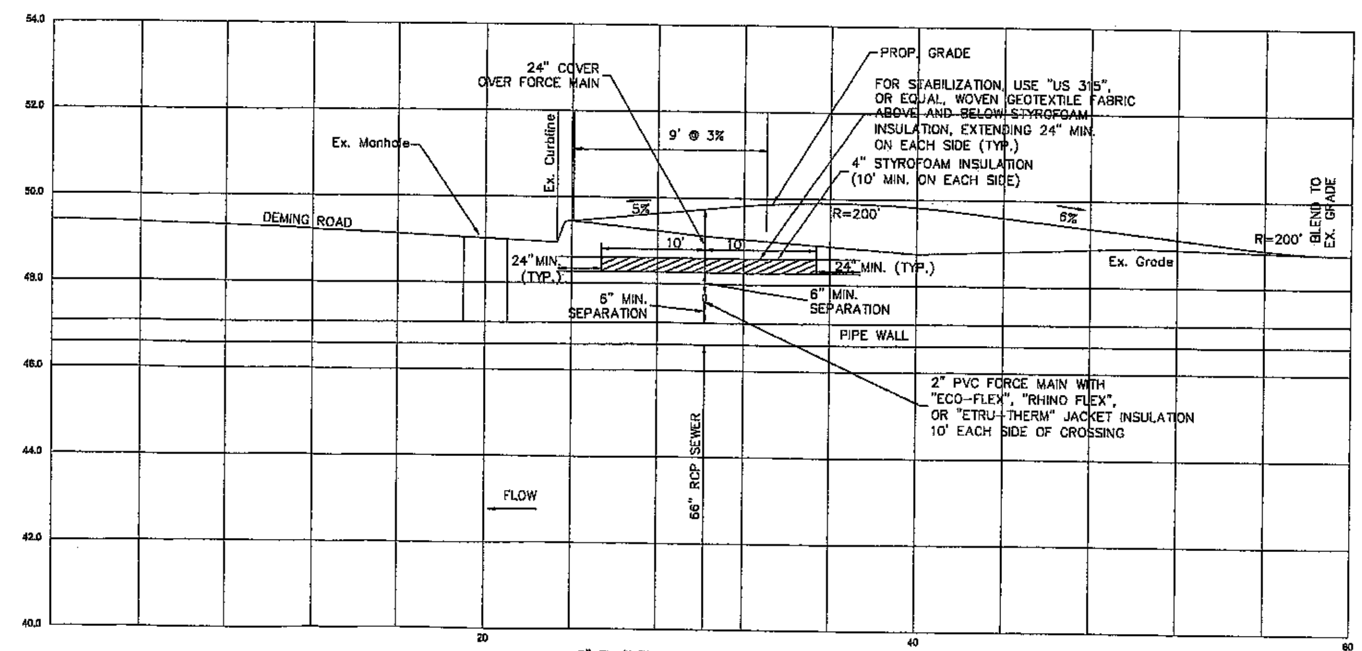


PAVING STANDARD SECTION
N.T.S.



H/C CAR SPACE
H/C VAN SPACE

HANDICAPPED PARKING DETAIL
N.T.S.



2" FM/INTERCEPTOR CROSSING
SECTION D-D
SCALE: 1"=4' H, 1"=2' V

Utilities Disclaimer:
The underground utilities shown have been ... from field survey information and existing ... The surveyor makes no guarantee that the underground utilities shown comprise all ... utilities in the area either in service or ab... The surveyor further does not warrant that underground utilities shown are in the exac... indicated although he does declare that the ... located as accurately as possible from info... available. The surveyor has not physically l... the underground utilities.

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REVISION-7:
REVISION-6:
REVISION-5: 10/8/14 - REVISIONS
REVISION-4: 10/1/14 - REVISIONS
REVISION-3: 3/4/14 - GEOTEXTILE FA...
REVISION-2: 2/11/14 - SEWER COMMEN...
REVISION-1: 1/16/14 - FORCE MAIN C...
PROJECT: 212051-MUNSON
DR: AD/MPT | SR: ---- | CH: ...

SEAL:

James N. Sakonchick
CT P.E. & L.S. #11302

kratzert, jones & associates, i...
CIVIL ENGINEERS • LAND SURVEYO... SITE PLANNERS • BUILDING ENGINE...
P.O. BOX 337
1755 MERIDEN-WATERBURY RD.
MILLDALE, CT 06467-0337
PHONE: (860) 621-3638
FAX: (860) 621-9609
EMAIL: INFO@KRATZERTJONES.CO...

DETAIL SHEET

for

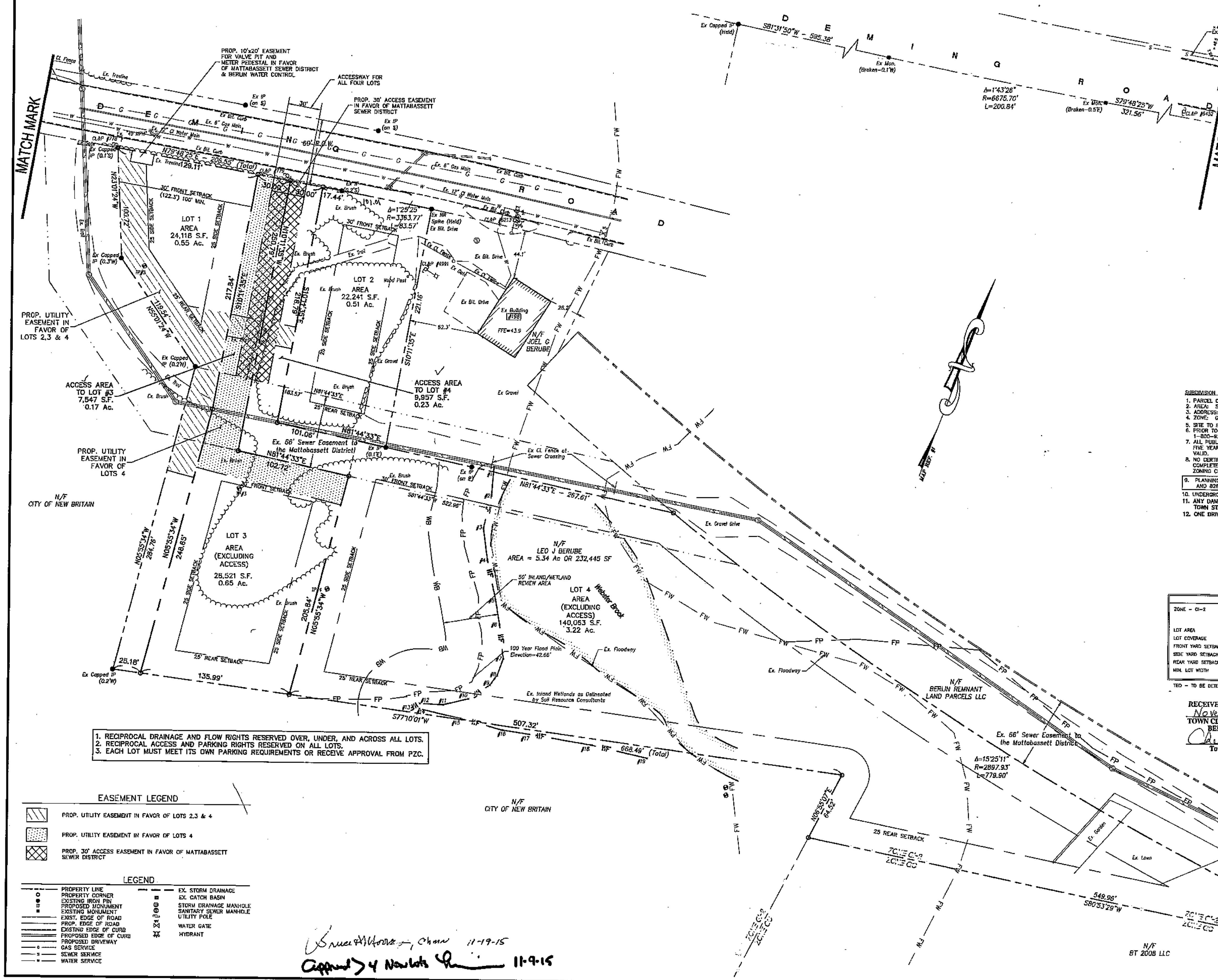
DEMING ROAD BUSINESS PARK,L...

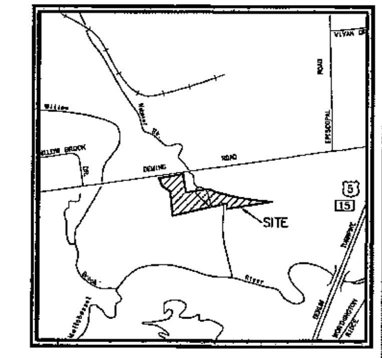
#180 DEMING ROAD
BERLIN, CT

SCALE: AS NOTED
DATE: MAY 6, 2013

HALF | ONE INCH | TWO INCH
INCHES ON ORIGINAL

KJA FILE NO.: 212-061
DRAWING NO.: D-1





KEYMAP; SCALE: 1"=1000'

Disclaimer:
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MAP REFERENCES:

1) LIMITED PROPERTY / BOUNDARY SURVEY MAP SHOWING DIVISION OF PROPERTY OF BERNADETTE BERUBE & ESTATE OF GILBERT E. BERUBE PROPERTY KNOWN AS LOT 3 / BLOCK 83 #198 DEMING ROAD BERLIN, CONNECTICUT MAP PREPARED BY: MBA ENGINEERING, INC. FEBRUARY 28, 1998
2) BOUNDARY SURVEY DEMING ROAD LANDFILL BERLIN, CONNECTICUT CITY OF NEW BRITAIN BUREAU OF ENGINEERING DEREK W. MORSE, DIRECTOR JAN. 1991
3) MATTABASSETT DISTRICT PLAN & PROFILE SANITARY TRUNK SEWER CAHN ENGINEERS SHEET NO.: 8 ASBUILTS JAN. 1970
4) BOUNDARY SURVEY PREPARED FOR THE METRO GROUP LTD SCALE: 1"=40' AUG. 19, 2009

SUBDIVISION NOTES:

1. PARCEL OWNER: LEO J. BERUBE
2. AREA: SEE MAP
3. ADDRESS: DEMING ROAD
4. ZONE: GI-2 (SEE ZOING TABLE)
5. SITE TO BE SERVICED BY PUBLIC WATER AND PUBLIC SEWER.
6. PRIOR TO EXCAVATION, CONTRACTOR TO NOTIFY "CALL BEFORE YOU DIG" 1-800-922-4455.
7. ALL PUBLIC WORK IN CONNECTION WITH THIS PLAN SHALL BE COMPLETED WITHIN FIVE YEARS OF THE DATE OF THE APPROVAL, OR THE APPROVAL IS NO LONGER VALID.
8. NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL ALL SITE WORK IS COMPLETED, OR WHEN SPECIFICALLY APPROVED BY THE PLANNING AND ZONING COMMISSION.
9. PLANNING AND ENGINEERING DEPARTMENTS TO BE NOTIFIED AT 828-7080 AND 828-7014, 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY.
10. UNDERGROUND PETROLEUM OR HAZARDOUS SUBSTANCE TANKS ARE PROHIBITED.
11. ANY DAMAGE TO CURB OR ROADWAY TO BE RESTORED TO TOWN STANDARDS
12. ONE DRIVEWAY TO SERVE ALL FOUR LOTS.

ZONING TABLE

ZONE - GI-2	REQUIRED	PROPOSED LOT #1	PROPOSED LOT #2	PROPOSED LOT #3	PROPOSED LOT #4
LOT AREA	0.5 Acres	24,118 S.F.	22,241 S.F.	28,521 S.F.	140,063 S.F.
LOT COVERAGE	35%	TBD	TBD	TBD	TBD
FRONT YARD SETBACK	30'	30'	30'	30'	30'
SIDE YARD SETBACK	25'	25'	25'	25'	25'
REAR YARD SETBACK	25'	25'	25'	25'	25'
MIN. LOT WIDTH	100'	122.3'	101.01'	30.00' (REAR LOT)	30.00' (REAR LOT)

TBD - TO BE DETERMINED

RECEIVED FOR FILING
November 23, 2015
TOWN CLERK'S OFFICE
BERLIN, CT
[signature], Asst
Town Clerk

THIS MAP PRODUCED BY ORIGINAL INK DRAWING ON POLY FILM OR LINEN
Kratzert, Jones & Associates, Inc.
1755 MERIDEN-WATERBURY TNPK.
MILLDALE, CT 06467

1. RECIPROCAL DRAINAGE AND FLOW RIGHTS RESERVED OVER, UNDER, AND ACROSS ALL LOTS.
2. RECIPROCAL ACCESS AND PARKING RIGHTS RESERVED ON ALL LOTS.
3. EACH LOT MUST MEET ITS OWN PARKING REQUIREMENTS OR RECEIVE APPROVAL FROM PZC.

EASEMENT LEGEND

- PROP. UTILITY EASEMENT IN FAVOR OF LOTS 2,3 & 4
- PROP. UTILITY EASEMENT IN FAVOR OF LOTS 4
- PROP. 30' ACCESS EASEMENT IN FAVOR OF MATTABASSETT SEWER DISTRICT

LEGEND

- PROPERTY LINE
- PROPERTY CORNER
- EXISTING IRON PIN
- PROPOSED MONUMENT
- EXISTING MONUMENT
- EXIST. EDGE OF ROAD
- PROP. EDGE OF ROAD
- EXISTING EDGE OF CURB
- PROPOSED EDGE OF CURB
- PROPOSED DRIVEWAY
- GAS SERVICE
- SEWER SERVICE
- WATER SERVICE
- EX. STORM DRAINAGE
- EX. CATCH BASIN
- STORM DRAINAGE MANHOLE
- SANITARY SEWER MANHOLE
- UTILITY POLE
- WATER GATE
- HYDRANT

Bruce [signature], Chair 11-19-15
Approved 4 New lots [signature] 11-9-15

REVISIONS TO THESE PLANS BY ANYONE OTHER THAN KJA SHALL MAKE THESE PLANS NULL AND VOID. KJA SHALL TAKE NO RESPONSIBILITY FOR SAID REVISIONS.

REVISION-7:
REVISION-6:
REVISION-5: 8/4/15 - PLANNER COMMENTS
REVISION-4: 2/10/15 - TOWN COMMENTS
REVISION-3: 1/19/15 - TOWN COMMENTS
REVISION-2: 10/8/14 - REVISIONS
REVISION-1: 10/1/14 - REVISIONS
PROJECT: 212061-MUNSON
DB: MPT/AQ | SR: JS | DR: AT

SEAL:

SURVEY NOTES:
THIS MAP HAS BEEN PREPARED IN ACCORDANCE WITH THE "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED FOR USE BY THE REGULATIONS OF CONNECTICUT STATE AGENCIES ON SEPTEMBER 26, 1996. (CT SECTIONS 20-300b-1 TO 20-300b-20).

THE TYPE OF SURVEY PERFORMED IS AN: PROPERTY MAP.

BOUNDARY DETERMINATION IS BASED UPON: A DEPENDENT RESURVEY.

THIS SURVEY CONFORMS TO A: CLASS A-2 & T-2

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

[signature]
James N. Sakonchick
CT P.E. & L.S. #11302

kratzert, jones & associates, inc.
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SITE PLANNERS • BUILDING ENGINEERS
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PHONE: (860) 621-3638
FAX: (860) 621-9609
EMAIL: INFO@KRATZERTJONES.COM

SUBDIVISION PLAN

for

DEMING ROAD BUSINESS PARK

MAP 10-1 BLOCK 83
LOT 3A

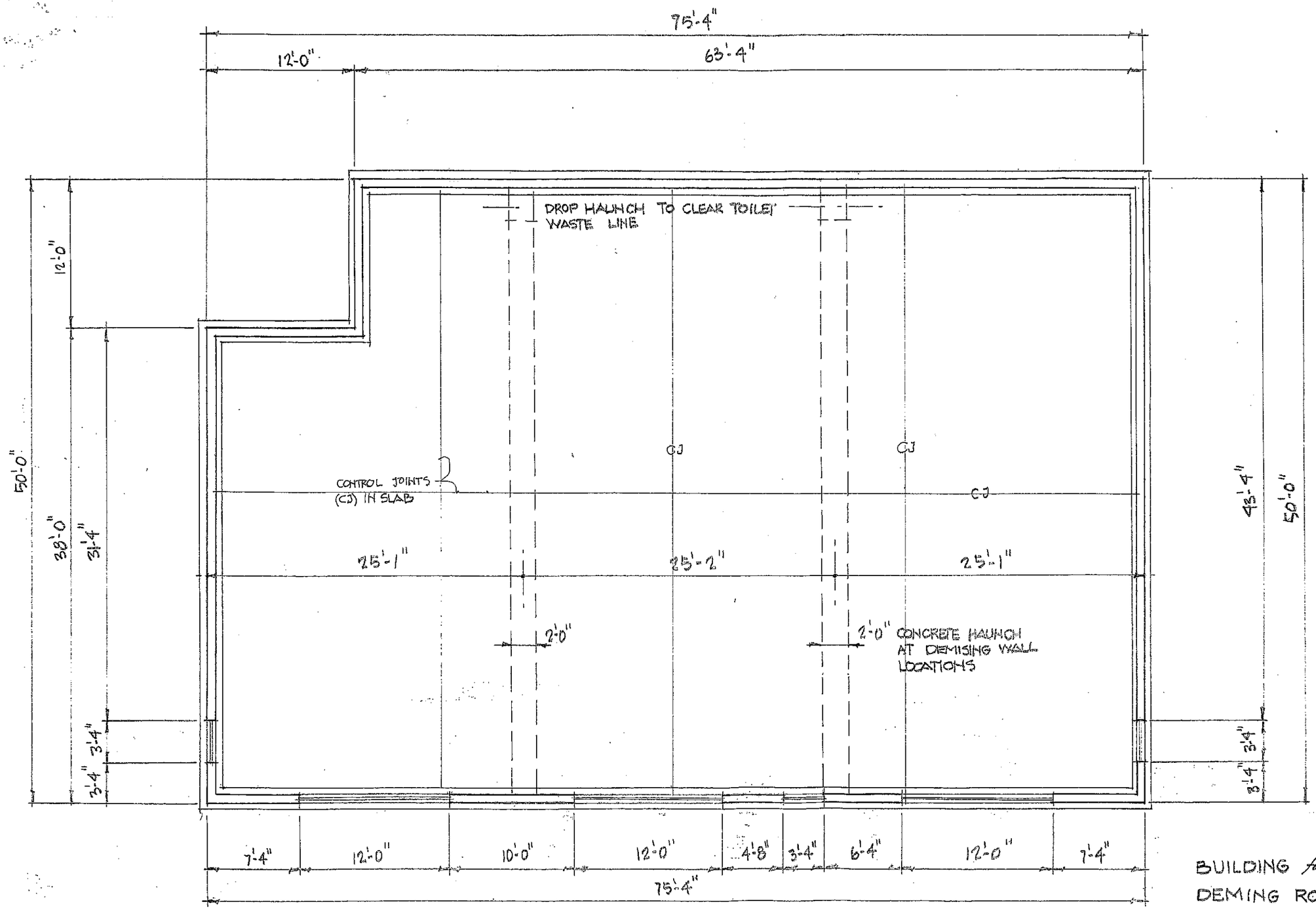
DEMING ROAD
BERLIN, CT

SCALE: 1"=40'
DATE: MAY 6, 2013
HALF | ONE INCH | TWO INCH
INCHES ON ORIGINAL
KJA FILE NO.: 212-061
DRAWING NO.: S-1

DRAWING NUMBER 4220

4220

4220



FOUNDATION PLAN

SCHAPLER SELNAU ASSOCIATES, P.C. / 5 WATERVILLE ROAD / FARMINGTON / CT. 06032

SEE WALL SECTIONS FOR FOUNDATION ALTERNATES:

BASE: 12" CMU FOUNDATION WALL ON CONCRETE FOOTING

ALTERNATE NO. 1
10" CONCRETE FOUNDATION ON CONCRETE FOOTING

ALTERNATE NO. 2
MONO SLAB EZ FORM LLC

A1

BUILDING for LOT 1
DEMING ROAD BUSINESS PARK
#180 DEMING ROAD
BERLIN, CT.

SCALE: 0 4 8 Ft.
DATE: 26 MAY 2020

75'-4"

12'-0"

63'-4"

6'-8" CLEAR

6'-8" CLEAR

15 Ft.

7'-2" CLEAR

8 Ft.

4 Ft.

3 Ft.

15 Ft.

12'-0"

8 Ft.

12 Ft.

7 Ft.

ADA TOILETS

WALL CONSTRUCTION:
2x4 COLD FORMED METAL FRAMING @ 16" O.C. WITH R-19 FIBREGLAS INSULATION BATTS, WITH 5/8" MOLD/MOISTURE RESISTANT GYP. BRD. ON INTERIOR and 1/2" PLYWOOD/PTD. ON EXTERIOR WALLS.

CEILING: @ 7'-6" CLR. ABOVE TOP/SLAB FRAME WITH 2x12's @ 16" O.C. WITH R-38 FIBREGLASS INSULATION, 5/8" MOLD RESISTANT GYP. BRD ON CEILING and 3/4" T&G ADVANTECH DECK, GLUED and SCREWED ON TOP OF 2x12's.

8" OMNI BLOCK WALLS. INSULATED R-19.6 REINFORCED

Travel Distance to one exit 71 Ft. / 100 Ft. Allowed

DEMISING WALLS as MAYBE REQUIRED PER TENANT FIT OUT

MIN. 1 HR CONSTRUCTION
Depending upon use group separation requirements
5/8" TYPE 'X' FIRE CODE GYPSUM BOARD - ONE LAYER EACH SIDE OF 6" 20 GA. COLD FORMED METAL FRAME @ 16" O.C. TIGHT TO 5/8" TYPE "X" GYPSUM BOARD CEILING. FIRE TAPE & PAINT.
FIRE BLOCK WALLS @ 8'-0
INSULATE WALLS WITH THERMA FIBER BATT INSULATION

Travel distance to one exit 57 Ft / 100' Allowed

40 Ft

Travel Distance to one exit 70 Ft / 100 Ft. / Allowed

42 Ft

5'-0"

38'-0"

3'-4"

3'-4"

3'-4"

3'-4"

3'-4"

43'-4"

50'-0"

5" CONCRETE SLAB (4,000 PSI @ 28 DAYS ON 10 MIL REINFORCED VAPOR BARRIER, LAP JOINTS AND TAPE MIN. 12" OH. MIN. OF 6" PROCESSED STONE COMPACTED TO 98% PROCTOR DENSITY, REINFORCED WITH 4x4 W2.9 x W2.9 WELDED WIRE FABRIC.

ALL ABOVE ON SUITABLE SUBGRADE & COMPACTED TO 98% PROCTOR DENSITY.

12x12 OH DOOR

12x12 OH DOOR

12x12 OH DOOR

25'-1"

25'-2"

25'-1"

7'-4" | 12'-0" | 10'-0" | 12'-0" | 4'-8" | 3'-4" | 6'-4" | 12'-0" | 7'-4"

75'-4"

FLOOR PLAN

SCHADLER SELMAN ASSOCIATES, P.C. / 5 WATERVILLE ROAD / FARMINGTON / CT. 06032

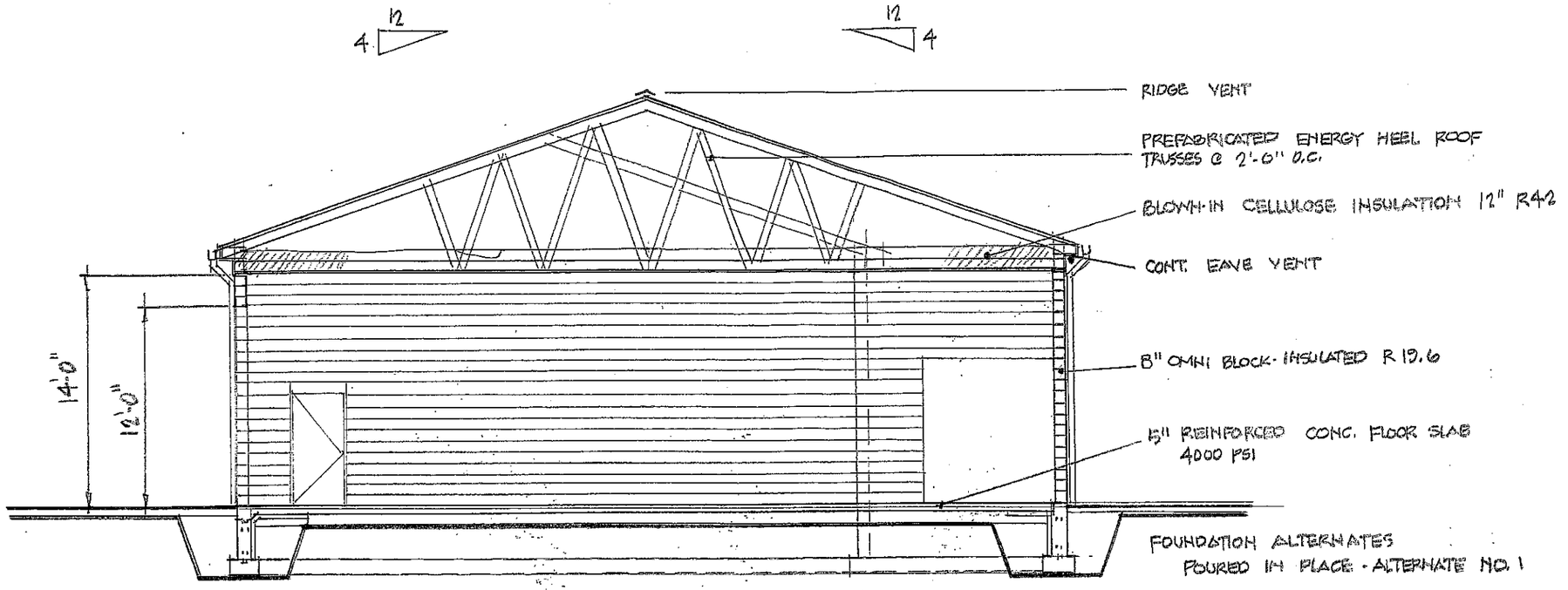
BUILDING for LOT 1

DEMING ROAD BUSINESS PARK
#180 DEMING ROAD
BERLIN, CT.

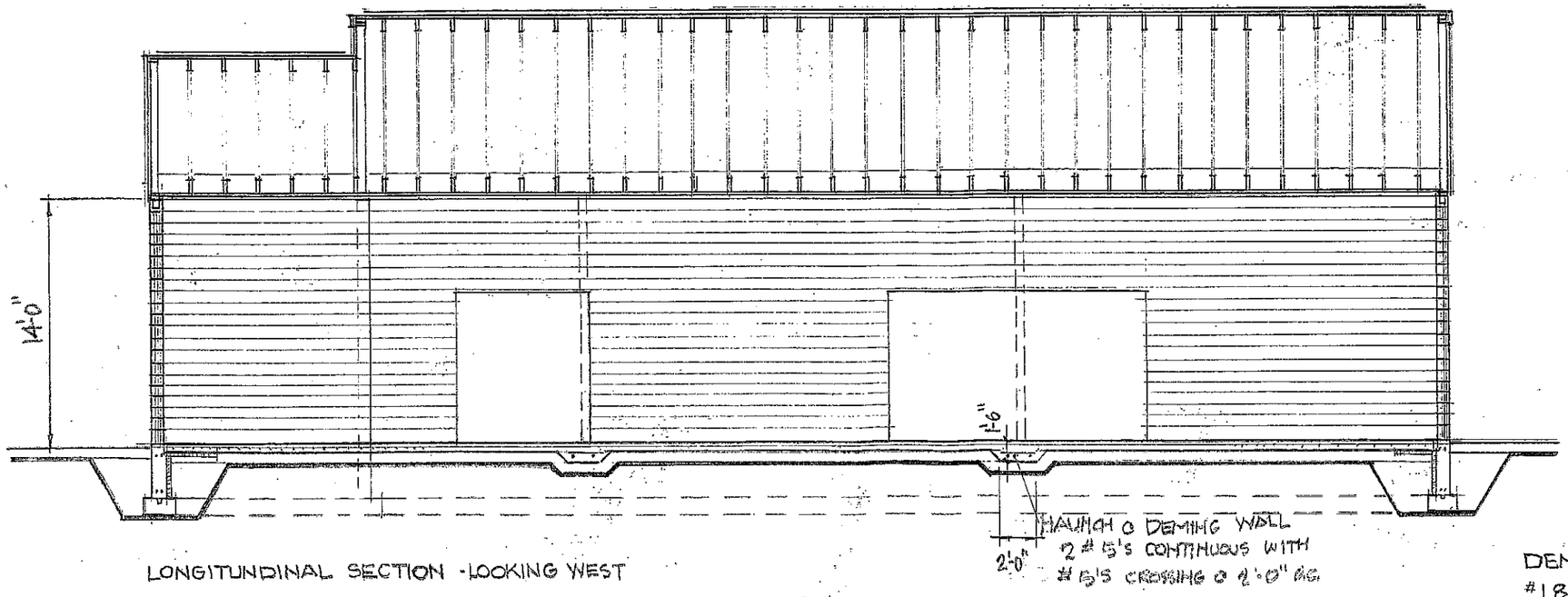
SCALE: 1/8" = 1 Ft.

DATE: 26 MAY 2020

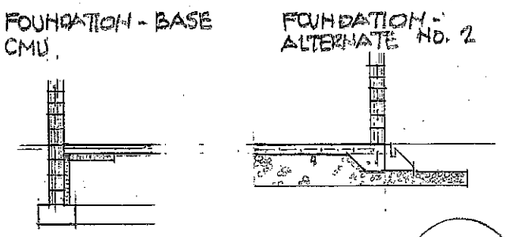
A2



TRANSVERSE SECTION - LOOKING SOUTH



LONGITUDINAL SECTION - LOOKING WEST



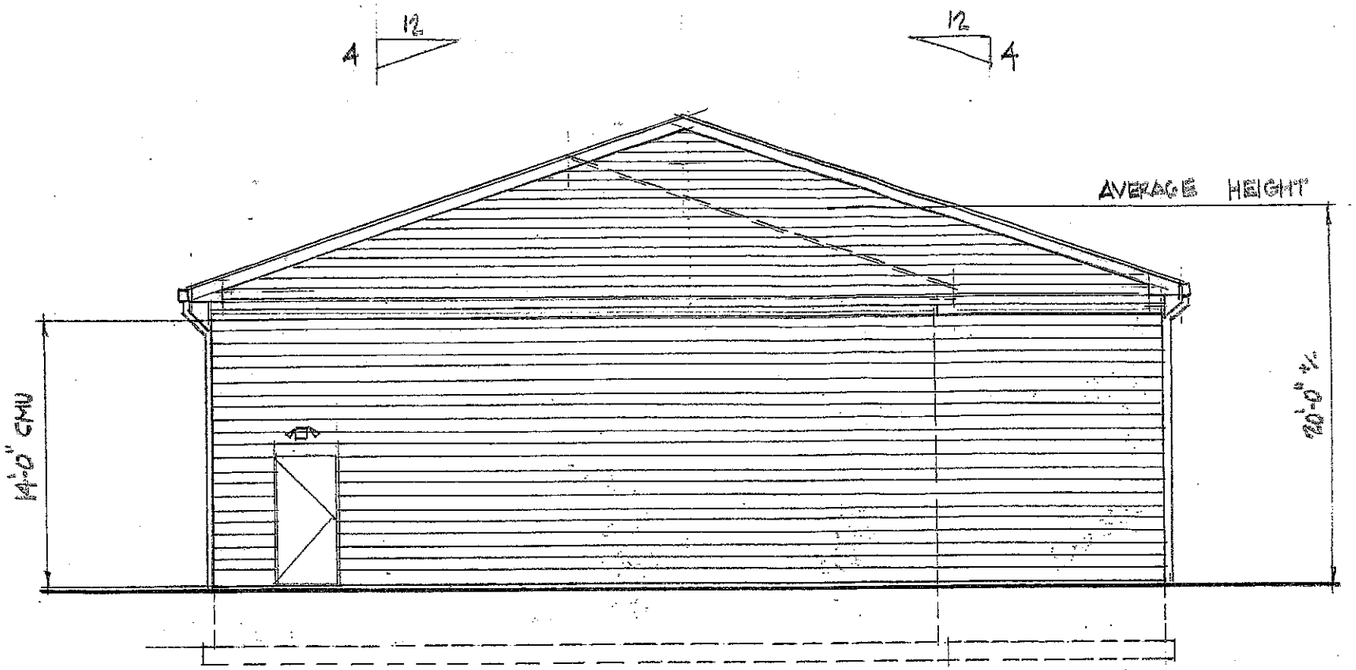
DEMING ROAD BUSINESS PARK
#180 DEMING ROAD
BERLIN, CT.

SCALE: 0 4 8 Ft.

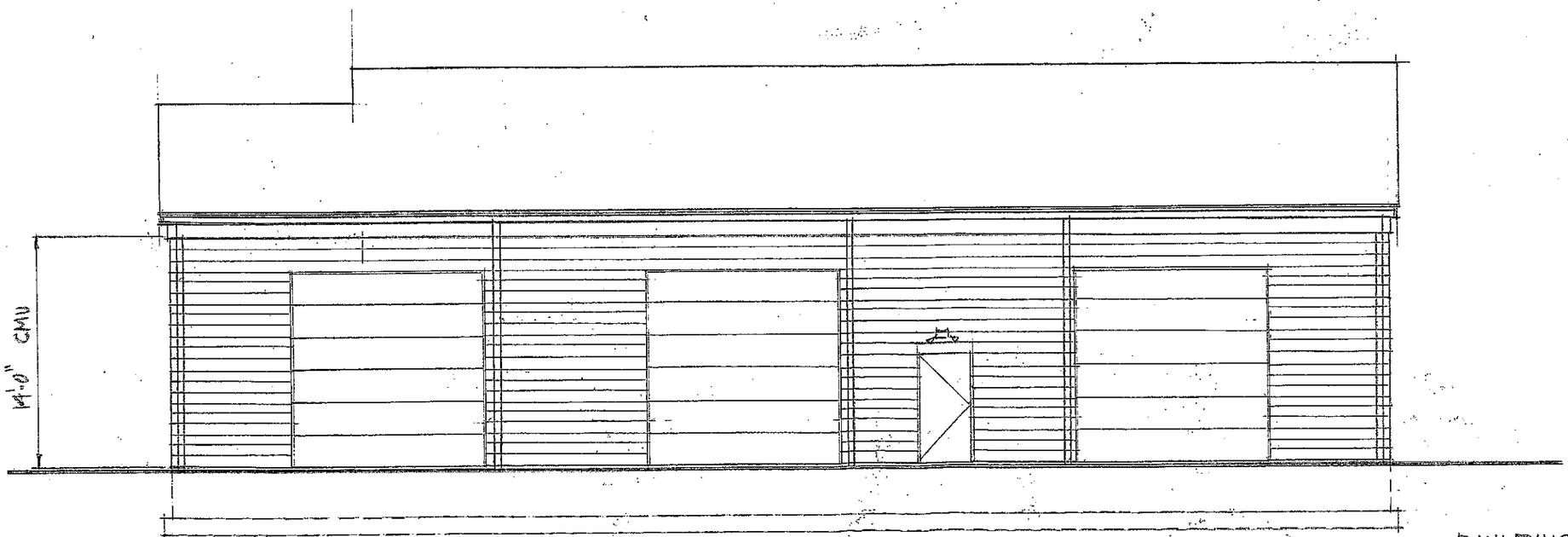
DATE: 26 MAY 2020

A3

SCHADLER SELNAU ASSOCIATES, P.C. / 5 WATERVILLE ROAD / FARMINGTON / CT. 06032



NORTH ELEVATION



EAST ELEVATION

CODE INFORMATION

2015 IBC

USE GROUP : SECTION 311 STORAGE GROUP 'S'
311.3 S-2 LOW HAZARD

NOT SPRINKLERED

TYPE 2B CONSTRUCTION - Masonry Exterior Walls / Wood Truss Roof

ALLOWABLE : 3 STORY / 26,000 SF

PROVIDED : 1 STORY / 3,606 SF

OCCUPANTS : TABLE 1004.1.2 WAREHOUSES
500 SF GROSS equals 7.2 occupants
ROUND UP - SAY THREE (3) OCCUPANTS PER SPACE

SPACES WITH ONE EXIT
'S' USE GROUP Without Sprinklers
OL Under 30 Travel Distance 100 ft.
See plan A2 for Travel Distance

HEATED
WALL CONSTRUCTION R 19.6
ROOF CONSTRUCTION R 42.0

BUILDING for LOT 1.

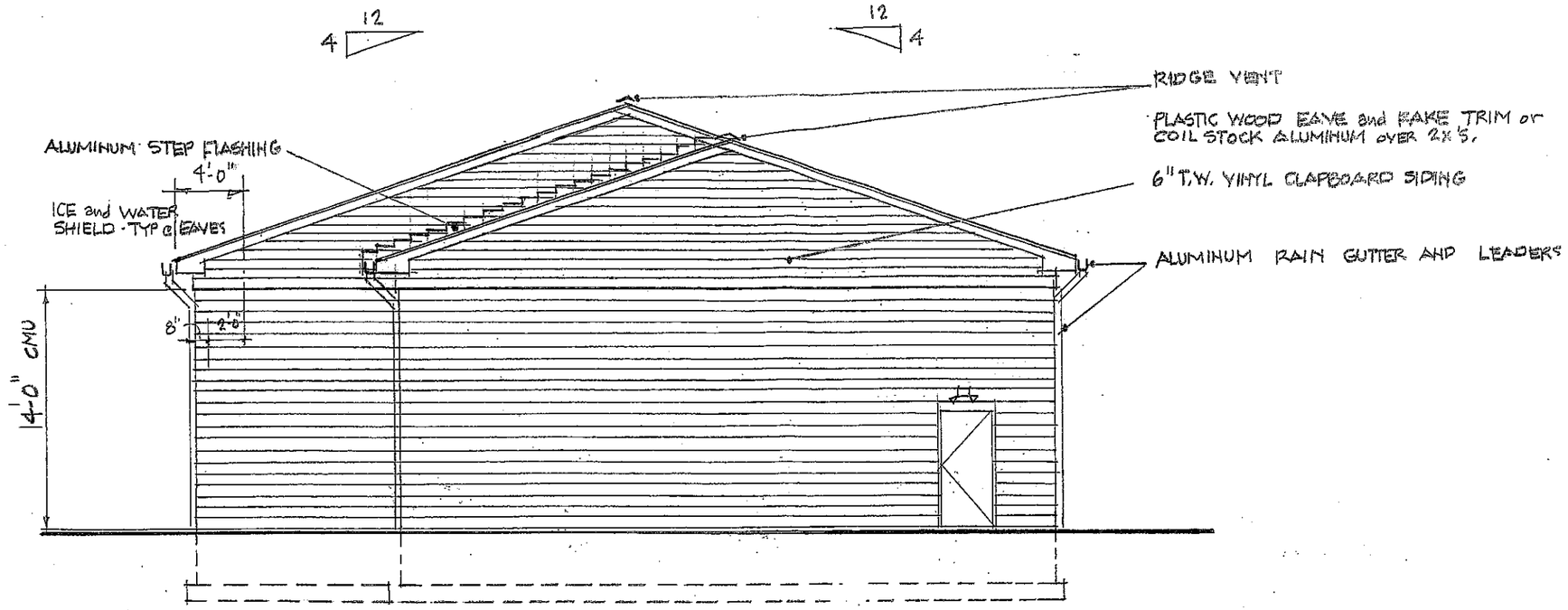
DEMING ROAD BUSINESS PARK
#180 DEMING ROAD
BERLIN, CT.

SCALE: 0 4 8 Ft.

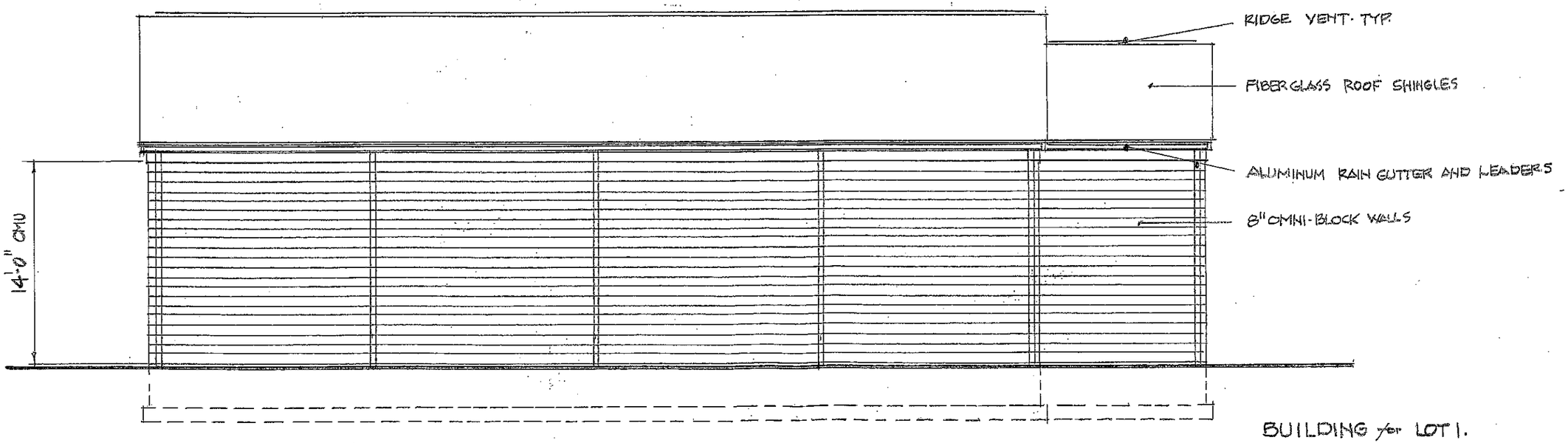
DATE: 26 MAY 2020

A4

SCHADLER SELNAU ASSOCIATES, P.C. / 5 WATERVILLE ROAD / FARMINGTON / CT. 06032



SOUTH ELEVATION



WEST ELEVATION

BUILDING for LOT 1.

DEMING ROAD BUSINESS PARK
#180 DEMING ROAD
BERLIN, CT.

SCALE: 0 4 8 Ft.
DATE:

A5

SCHADLER SELNAU ASSOCIATES, P.C. / 5 WATERVILLE ROAD / FARMINGTON / CT. 06032

ICE and WATER SHIELD

12
4

TOP CMU

2-2x6 TOP-PLATE WITH ½" GALVANIZED BOLTS @ 4'-0" O.C.

8"

2'-0"

CONTINUOUS CMU BOND BEAM WITH TWO #4 BARS CONTINUOUS WITH CORNER SPLICE BARS. GROUT SOLID WITH NON-SHRINK GROUT.

LADDER TYPE HOT DIPPED GALVANIZED REINFORCING - EVERY TWO COURSES

14'-0"

8" WESTERN OMNI BLOCK CORES WITH EPS INSERTS U 0.056 R 19.6

#4 BARS EVERY 2'-0" TIED TO #5

TOP SLAB 48.00'

2" RIGID INSULATION R-10

#5 BARS @ 2'-0" O.C. TIED TO #5 @ FOOTING

5"

6"

GRADE

4'-4"

12" CMU FOUNDATION WALL GROUT ALL CELLS SOLID WITH NON-SHRINK GROUT

6"

6"

TWO #5 BARS CONTINUOUS WITH CORNER SPICE BARS #5 BARS CROSSING @ 4'-0" O.C.

REAR WALL

CMU FOUNDATION WALL - SEE ALTERNATES NO. 1 POURED IN PLACE STEM WALL NO. 2 MONO SLAB EZ FORM WALL SECTIONS

ROOF CONSTRUCTION

- PRE-FABRICATED ENERGY HEEL ROOF TRUSSES @ 2'-0" WITH SIMPSON HURRICANE CLIPS TO TOP PLATE
- 5/8" PLYWOOD ROOF SHEATING WITH CLIPS.
- #15 ROOFING PAPER WITH ICE & WATER SHIELD @ 2'-0" IN FROM OUTSIDE WALL.
- 25 YR. FIBREGLAS ROOF SHINGLES WITH PRE-FORMED RIDGE VENT

CONTINUOUS EAVE VENT.

12" BLOWN IN CELLULOSE INSULATION R-42 @ 3.5 per INCH

5/8" Type 'X' GYP BOARD.

CAST CRETE PRECAST 8" U-LINTEL:

- FOR 12'-0" DOOR OPN'G USE 13'-4" OVERALL LENGTH
- FOR 3'-4" DOOR FRAME USE 5'-4 OVERALL LENGTH

8"

#5 BAR @ 1'-0" O.C. TURN DOWN INTO SLAB

"L" SHAPED #5 BARS EVERY 2'-0" o.c.

SUITABLE BEARING

FRONT WALL

½" PLYWOOD SHEATHING

VINYL CLAPBOARD SIDING 6" T.W. ON AIR BARRIER LAPPED AND TAPED.. MIN 6"

GALVANIZED HM DOOR AND FRAME ASSEMBLY

END WALL

FOUNDATION WALL ALTERNATE NO. 2

OMNI BLOCK - TYP. (8")

#4 BARS @ 2'-0" O.C. TIED TO #5 BARS @ 2'-0" O.C.

5"

REINFORCE SLAB WITH 4'x4' W.2.9 x W2.9 WELDED WIRE FABRIC

16"

45°

THREE #5 BARS CONT. WITH CORNER SPLICE BAR

EZ FORM R 61.6

12"

16"

4'-0"

COMPACTED SUBGRADE TO 98% PROCTOR DENSITY - MIN. FREE DRAINING BACK FILL COMPACTED TO 98% PROCTOR DENSITY MIN.

OMNI BLOCK - TYP. (8")

#4 BARS @ 2'-0" O.C. TIED TO #5 BARS @ 2'-0" O.C.

2 #5 BARS CONTINUOUS TOP and BOTTOM WITH CORNER SPLICE BARS

5"

10"

5"

4'-4"

CONTINUOUS 2x4 KEYWAY

SUITABLE BEARING

4"

10"

20"

TWO #5 BARS CONTINUOUS WITH CORNER SPICE BARS #5 BARS CROSSING @ 4'-0" O.C.

FOUNDATION WALL ALTERNATE NO. 1

A6

BUILDING 6 & LOT 1
DEMING ROAD BUSINESS PARK
#180 DEMING ROAD
BERLIN, CT.

SCALE: 0 1 2 3 4 Ft.
DATE: 26 MAY 2020

SCHAPLER SENIUK ASSOCIATES, P.C. / 5 [illegible] / FARMINGTON / CT. [illegible]

VLIET & O'NEILL, LLC
CRASH RECONSTRUCTION
TRAFFIC ENGINEERING

41 PROSPECT STREET
MANCHESTER, CT 06040-5801
TELEPHONE 860.533.1210
FACSIMILE 860-533-1374

October 12, 2020

Mr. Timothy Sullivan, Esq.
Wisniowski & Sullivan, LLC
35 North Main Street
Suite 2F
Southington, CT 06489

Re: Traffic Study - ADDENDUM
Deming Road Business Park
198 Deming Road, Berlin CT

Dear Attorney Sullivan:

As requested and as we discussed during our telephone conversation, VLIET & O'NEILL, LLC has reviewed our previously submitted January 20, 2015 Traffic Study submitted for the subject project (copy attached). This letter has been prepared as an Addendum to the submitted previously Traffic Study.

As part of my review, specific focus has been on updated traffic and accident data since the time of the submitted Traffic Study. Also, updated review of the Site Access Intersection location relative to Intersection Sight Distance (ISD) has been performed. The following is a summary of my updated review:

Traffic & Accident Data

I have accessed and reviewed available Connecticut Department of Transportation (ConnDOT) traffic and accident data. The data has revealed that traffic volumes in the area have not grown as fast as the projections in the original traffic study.

Although the original study projected traffic to a Build Year of 2016, the current traffic levels have not reached those projections. Traffic volumes, during peak hours in Connecticut, have seen a minimal increase and in many cases a slight decline over the past few years. This can be attributed to work related traffic during peak travel hours associated with flexible work hours as well as an ever increasing "work from home" work force.

Updated accident data for the area reveled once again that there is no significant identifiable accident rates or patterns on the roadways/intersections within the project study area.

Sight Distance at the Site Access Intersection with Deming Road

In my originally submitted Traffic Study, I indicated that Intersection Sight Distances (ISD) for vehicles entering and exiting the proposed site access driveway intersection with Deming Road were field measured. Based on review of existing available mapping, the proposed location of the Site Driveway Intersection still provide for safe and efficient to and from the development parcel in consideration of the level of site generated traffic. Below are updated images from current available sources that show conditions along Deming Road have remained unchanged:

ISD to the Left looking west at east bound traffic

ISD to the Right looking east at west bound traffic

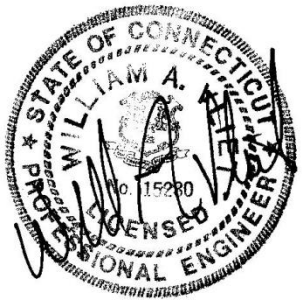
CONCLUSION

In summary, it is still the professional opinion of VLIET & O'NEILL, LLC that the probable expected traffic to be generated by the proposed Deming Road Business Park can be safely and efficiently introduced into as well as accommodated by the adjacent roadway system. The development traffic will not disrupt the continuity of weekday peak hour traffic flow on Deming Road or the area roadway system.

Thank you for choosing VLIET & O'NEILL, LLC to work on this matter and please feel free to call with any questions.

Very truly yours,

William A. Vliet, P.E.
Manager for VLIET & O'NEILL, LLC



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MANCHESTER, CT 06040-5801
TELEPHONE 860.533.1210
FACSIMILE 860-533-1374

WILLIAM A. VLIET, P.E.

Curriculum Vitae

Mr. Vliet is a licensed Professional Engineer, experienced in traffic and transportation engineering. He has conducted traffic studies; analyzed traffic flows and roadway requirements; and designed roadways and traffic signals. He has designed mitigative roadway improvements associated with site generated development traffic. Mr. Vliet has also been a land surveyor as well as an inspector on traffic control signal and roadway construction projects.

He is an ACTAR Accredited Traffic Accident Reconstructionist, providing accident evidence collection assistance to the Manchester Police Department and accident reconstruction services to private sector clients in both civil and criminal cases. He has provided expert witness testimony in Connecticut and New Jersey.

License/Accreditation

Licensed Professional Engineer
Connecticut, since 1988

Accredited Traffic Accident Reconstructionist
ACTAR, since 1993

Education

Bachelor of Science, Civil Engineering, 1982
University of Hartford, West Hartford, CT

Professional Experience

Vliet & O'Neill, LLC
1998 – Present

Motor Vehicle Crash Reconstruction

- Review case files.
- Conduct on-site investigations.
- Conduct vehicle testing.
- Obtain "Black Box" data from vehicles.
- Reconstruct crashes.
- Analyze driver and pedestrian actions.
- Provide reports.
- Provide diagrams and exhibits.
- Provide 2D and 3D animations and/or simulations.
- Provide expert witness testimony.

Traffic Planning and Engineering

- Assess traffic flow conditions.
- Devise solutions to traffic problems.
- Design geometric modifications and traffic control signals.
- Conduct traffic impact studies for residential and commercial developments.
- Represent clients at Planning & Zoning meetings.

Traffic Consultant to the Town of Manchester, CT (1998 – 2002)

- Review applications to the Planning and Zoning Commission.
- Respond to citizen complaints.
- Design traffic control devices and traffic signals.
- Construction Management.

Manchester Police Department
(Volunteer Position)
1994 – Present

Member of the Accident Reconstruction Team

- Respond to serious and fatal accidents
- Assist with on-scene evidence identification and collection.
- Occasional follow-up reconstruction assistance.

Professional Experience
(continued)

Fuss & O'Neill, Inc.
1985 - 1998

Private Developer Work

- Prepared over 100 traffic impact studies for projects ranging from single family homes to regional shopping malls to University Campuses to Major Pharmaceutical Companies and complex office developments.
- Identified and designed necessary roadway and intersection improvements to mitigate the impact of development traffic. Work included traffic control signal system design.
- Complete applications to local Planning & Zoning Commissions for approvals.
- Represent clients at Planning & Zoning meetings.
- Work with municipal staff members to resolve design issues.
- Oversaw construction activities for designed improvements.

Public Agency Work

Project Manager for ConnDOT closed-loop traffic signal systems.

- Coordinated design work with local officials/Legal Traffic Authorities.
- Provided final design documents in accordance with ConnDOT and MUTCD design guidelines.
- Review design plans for conformance with federal and state design requirements.
- Attend meetings with federal, state and local officials to resolve project issues.

Project Traffic Engineer for ConnDOT Interstate Ramp System modifications.

- Provided traffic engineering volume projections.
- Analyzed future traffic flow conditions.
- Determined lane geometry for future traffic flow conditions.
- Assessed current accident data.
- Presented project information to local officials.

Project Traffic Engineer for Town of Manchester Main Street Reconstruction.

- Assessed and analyzed traffic volume data.
- Determined intersection and corridor geometry for future conditions.
- Designed traffic signal plans and system for corridor intersections.

Professional Experience
(continued)

Consultant Engineer to Town of Southington Planning/Zoning Commission.

- Provided traffic impact review/analysis of development applications.
- Presented review comments to town staff and applicants.
- Presented review findings to the Planning/Zoning Commission.

Motor Vehicle Crash Reconstruction

- Reviewed case files
- Conducted on-site investigations.
- Conducted vehicle testing.
- Obtained "Black Box" data from vehicles
- Reconstructed crashes.
- Analyzed driver and pedestrian actions.
- Provided reports.
- Provided diagrams and exhibits.
- Provided expert witness testimony

Township of Wayne, New Jersey
1983 – 1985

Town Traffic Engineer/Traffic Engineering

- Reviewed all site plan and sub-division development applications.
- Reviewed Traffic impact studies submitted in support of development application approval by the Planning and Zoning Commission.
- Provided planning department staff with comments and recommendations concerning traffic impact associated with the development applications.
- Met with planning department staff, other town staff and the applicant to discuss and resolve traffic issues prior to Planning and Zoning Commission meetings.
- Presented traffic engineering review findings to the Planning and Zoning Commission.
- Implemented a joint review process between the town police department and the traffic engineering office for high accident locations.
- Responded with the town police department to serious and fatal traffic accidents as part of the on-scene evidence collection team.

Professional Experience
(continued)

- Maintained signal timings for all town owned signalized intersections.
- Coordinated all signing, striping and signal maintenance for town roadways.
- Acted as Project Manager for consultant designed transportation projects.
- Coordinated town development and improvement projects with the New Jersey Department of Transportation as required.

County of Passaic, New Jersey
1982 – 1983

Civil Engineer/Civil Engineering

- Worked with the County Engineer and County Traffic Engineer in performing various civil engineering duties.
- Reviewed land development applications affecting county roadways/facilities for traffic and drainage impacts.
- Prepared and presented review comments to county planning department staff and development applicants as required.
- Assisted the County Traffic Engineer concerning maintenance and improvements to signing and striping of county roadways.
- Designed minor structural improvements for county buildings and facilities.

Specialized Training

Highway Safety Evaluation, 1982
Federal Highway Administration

Traffic Control Devices Handbook, 1984
Federal Highway Administration

Accident Investigation, 1984
The Police Academy of Passaic County, New Jersey

Special Problems in Accident Reconstruction, 1985
Institute of Police Technology & Management, University of North Florida

Specialized Training
(continued)

Traffic Signal Design, 1985
Institute of Transportation Engineers

Intersection Traffic Signal Controllers, 1989
Federal Highway Administration

Traffic Accident Reconstruction I, 1992
The Traffic Institute, Northwestern University

Traffic Accident Reconstruction II, 1992
The Traffic Institute, Northwestern University

Intersection Design and Channelization, 1992
The Traffic Institute, Northwestern University

Work Zone Safety, 1994
Technology Transfer Center, University of Connecticut

Microcomputer/Edcrash Accident Reconstruction, 1997
The Traffic Institute, Northwestern University

Acceleration and VC200 Familiarization, 1999
Vericom Computers, Inc.

Inspection and Investigation of Commercial Motor Vehicle Accidents, 1999
Institute of Police Technology and Management, University of North Florida

Traffic Calming, 2000
Center for Public Safety, Northwestern University

Pedestrian/Bicycle Crash Investigation, 2000
Institute of Police Technology and Management, University of North Florida

World Reconstruction Exhibition 2000, 2000
Texas A&M University

Millennium Manual on Uniform Traffic Control Devices Workshop, 2002
Transportation Institute, University of Connecticut

Specialized Training
(continued)

Introduction to Event Data Recorders & Crush Documentation, 2002
National Association of Professional Accident Reconstruction Specialists

Joint Annual Conference, 2002
NAPARS, NATARI, NJAAR, MATAI, CSI, NYSTARS, Ocean City, MD

Crash Data Retrieval (CDR) System Operator Certification, 2004
Collision Safety Institute

Human Vehicle Environment (HVE) Forum, 2004
Engineering Dynamics Corporation

One Day Driving School, 2005
Dodge/Skip Barber Driving School, Lime Rock Park, CT

One Day Racing School, 2006
Dodge/Skip Barber Advanced Driving School, Lime Rock Park, CT

Conservation of Linear Momentum Refresher Course, 2007
SRR Traffic Safety Consulting

Highway Vehicle Event Data Recorder Symposium, 2007
Society of Automotive Engineers

Basic/Advanced Diagramming and 3D Animation, 2007
Visual Statement

ARC-CSI Crash Conference, 2009
Las Vegas, NV

Human Factors for Traffic Accident Reconstruction, 2010
Accident Dynamics Research Center

Advanced 3D Computer Diagramming for Crash Reconstruction, 2011
ARAS 360

Investigating Motorcycle Collisions, 2012
Annual Joint Conference/NYSTARS

Case Presentation – Computer Simulation/Animation
30th Annual CTLA College of Evidence Seminar, 2012

Specialized Training
(continued)

Advanced 3D Computer Diagramming for Crash Reconstruction, 2013
ARAS 360 HD

Crash Data Retrieval Data Analyst, 2013
Northwestern University Center for Public Safety

Crush Damage Energy; Memory Formation, 2014
NAPARS Combined Annual Joint Conference

Investigating Motor Vehicle Crashes with Utility Poles and Trees, 2014
SRR Traffic Safety Consulting

World Reconstruction Exhibition 2016
Orlando, Florida

Investigating Pedestrian Collisions, 2018
NYSTARS Combined Annual Joint Conference

Video Analysis, 2019
NJAAR Seminar

FARO Zone Crash, 2019
FARO Zone 3D

Human Factors, 2019
NJAAR Combined Annual Joint Conference

Speaking/Teaching Activities

Accident Evidence Collection - Instructor (16)
Suhaka & Associates, Inc., 1989-1997

Transportation Engineering/Accident Reconstruction - Lecturer (10)
University of Hartford, 1992-2003

Accident Investigation – Instructor
Bergen County Police Academy, New Jersey, 1993

Speaking/Teaching Activities
(continued)

Accident Litigation Mitigation – Speaker
American Public Works Association, N.E. Chapter Annual Convention, 1995

Accident Evidence Collection – Speaker
American Public Works Association, National Convention, 1996

DPW/Police Partnering in Municipal Vehicle Accident Evidence Collection – Instructor
Transportation Institute, University of Connecticut, 1997

Accident Evidence Collection – Speaker
Connecticut Conference of Municipalities Convention, 1998

Professional Memberships

American Society of Civil Engineers, since 1982
Institute of Transportation Engineers, since 1985
National Association of Professional Accident Reconstruction Specialists, since 1992
Society of Automotive Engineers, since 1992
Society of Accident Reconstructionists, since1996
Accident Reconstruction Communications Network, 2001 – 2019
The Crash Hub, since 2019