

**AMENDED AGENDA**  
Regular Virtual Meeting  
Canton Planning and Zoning Commission  
Wednesday, November 18, 2020 at 7:00 pm  
**Call-In Number:** +1 (571) 317-3122  
**Access Code:** 152-792-853

*Application materials and meeting information can be found at the following location:  
<http://www.townofcantonct.org/agendas-minutes-meetings>*

**CALL TO ORDER:**

**ROLL CALL:**

**READING OF THE LEGAL NOTICE:**

**PUBLIC HEARINGS**

*We encourage those looking to submit public hearing testimony, to do so in advance of the meeting to the following email: [npade@TownofCantonCT.org](mailto:npade@TownofCantonCT.org)*

1. **File 475; ApIn 2000;** 9 and 15 Albany Turnpike; Assessor Map 32 and 36; Parcel 1010009 and 1010015; Zone: B; Special Permits: Section 4.1.C.1.a., retail/service businesses and personal service businesses greater than 2,500 square feet; Section 4.1.C.2.b., outdoor dining when accessory to restaurant classes I, II, or III; Section 4.1.C.3.a., drive-thru uses; Section 4.1.C.10.a., new car dealership, as defined by CGS Section 14-51(1); Section 4.1.C.10.e., gasoline filling stations; Section 7.3.F.8.a., sign approval by special permit; Section 7.5.D.3., earthwork and grading over 2,000 cubic yards; Section 7.7.C.3., retaining wall by special permit; Section 7.10.B.2, outdoor storage and display; and Site Plan Application: Section 4.1.B.3., restaurant classes I & II; Section 9.1.A., request to construct a 8,384 sq. ft. gas station/convenience store with restaurants and drive-thru, and 23,500 sq. ft. electronic vehicle showroom with 117 associated parking spaces; 9-15 Albany Turnpike, LLC, applicant/owner

**REGULAR MEETING**

**PUBLIC HEARING ACTIONS:**

1. **File 475; ApIn 2000;** 9 and 15 Albany Turnpike; Assessor Map 32 and 36; Parcel 1010009 and 1010015; Zone: B; Special Permits: Section 4.1.C.1.a., retail/service businesses and personal service businesses greater than 2,500 square feet; Section 4.1.C.2.b., outdoor dining when accessory to restaurant classes I, II, or III; Section 4.1.C.3.a., drive-thru uses; Section 4.1.C.10.a., new car dealership, as defined by CGS Section 14-51(1); Section 4.1.C.10.e., gasoline filling stations; Section 7.3.F.8.a., sign approval by special permit; Section 7.5.D.3., earthwork and grading over 2,000 cubic yards; Section 7.7.C.3., retaining wall by special permit; Section 7.10.B.2, outdoor storage and display; and Site Plan Application: Section 4.1.B.3., restaurant classes I & II; Section 9.1.A., request to construct a 8,384 sq. ft. gas station/convenience store with restaurants and drive-thru, and 23,500 sq. ft. electronic vehicle showroom with 117 associated parking spaces; 9-15 Albany Turnpike, LLC, applicant/owner

**OLD BUSINESS:** None

**NEW BUSINESS:** None

**NOTE TO PERSONS WITH SPECIAL NEEDS:**

The Town of Canton does not discriminate on the basis of disability. Individuals who need auxiliary aids or an interpreter at a Town meeting must notify the appropriate department in advance of the meeting as soon as they are able.

## **OTHER BUSINESS:**

1. Bond Release Request for File 392; ApIn 1773; 101 and 107 Albany Turnpike; Assessor's Map 32; Parcels 1010101 and 1010107; Zone B; Special Permits; Section 4.1.C.1.a.i, Retail no larger than 25,000 sq. ft.; Section 4.1.C.2.a, Class III restaurant; Section 4.1.C.3.a, Drive-through facilities for retail, service businesses, banks, offices or restaurants class I, II or III; Section 4.1.C.11.a, Off-street parking beyond the limitations of Section 4.1.B.7.d; and Section 7.5.D.3, Earthwork and grading over 2,000 cy.; and Site Plan Application, Section 9.1; request to construct a 22,000 sq. ft. retail building with 95 parking spaces and a 2,000 sq. ft. restaurant with 20 parking spaces; Phil Doyle, applicant; Canton Realty, LLC and New Broadway Realty, LLC, owners
2. **Referral 400**; 76 Simonds Avenue; Assessor Map 30; Parcel 4820076; Zone MCPF; New Replacement Softball Field; Connecticut General Statute Section 8-24 Review and Report on the relocation of softball field to unused municipal property site; Town of Canton, applicant/owner
3. Review of Minutes from October 21, 2020
4. 2021 Meeting Schedule
5. Staff Reports:
  - a. Town Planner's Report
  - b. ZEO Report

## **ADJOURNMENT:**



### **Exhibit List for:**

**File 475; Apln 2000;** 9 and 15 Albany Turnpike; Assessor Map 32 and 36; Parcel 1010009 and 1010015; Zone: B; Special Permits: Section 4.1.C.1.a., retail/service businesses and personal service businesses greater than 2,500 square feet; Section 4.1.C.2.b., outdoor dining when accessory to restaurant classes I, II, or III; Section 4.1.C.3.a., drive-thru uses; Section 4.1.C.10.a., new car dealership, as defined by CGS Section 14-51(1); Section 4.1.C.10.e., gasoline filling stations; Section 7.3.F.8.a., sign approval by special permit; Section 7.5.D.3., earthwork and grading over 2,000 cubic yards; Section 7.7.C.3., retaining wall by special permit; Section 7.10.B.2, outdoor storage and display; and Site Plan Application: Section 4.1.B.3., restaurant classes I & II; Section 9.1.A., request to construct a 8,384 sq. ft. gas station/convenience store with restaurants and drive-thru, and 23,500 sq. ft. electronic vehicle showroom with 117 associated parking spaces; 9-15 Albany Turnpike, LLC, applicant/owner

### **List as of November 18, 2020**

#### Drawings:

1. Cover Sheet; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/16/20
2. Property Survey 1 of 2; 9-15 Albany Turnpike; Prepared by Accurate Land Surveying, LLC; Prepared for 9-15 Albany Turnpike, LLC; dated 12/10/19
3. Property Survey 2 of 2; 9-15 Albany Turnpike; Prepared by Accurate Land Surveying, LLC; Prepared for 9-15 Albany Turnpike, LLC; dated 12/10/19
4. 2.10; Overall Site Layout Plan; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/16/20
5. 2.11; Site Layout Plan; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/16/20
6. 2.21; Grading & Drainage Plan; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/16/20
7. 2.31; Soil Erosion & Sediment Control Plan; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/16/20
8. 2.41; Soil Erosion & Sediment Control Plan Notes; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 9/24/20
9. 2.51; Site Utility Plan; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/16/20
10. 2.61; Landscape Plan; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/16/20
11. 2.62; Landscape Details Sheet; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 9/24/20
12. 2.71; Lighting Plan; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/16/20
13. 2.72; Lighting Details Sheet; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/16/20
14. 3.01; Detail Sheet; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/16/20

15. 3.02; Detail Sheet; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20
16. 3.03; Detail Sheet; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 9/24/20
17. 3.04; Detail Sheet; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20
18. 4.11; Preliminary Offsite Improvement Plan; 9-15 Albany Turnpike; Prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/16/20
19. Car Sales and Maintenance Building: Main Level Floor Plan; 9-15 Albany Turnpike; Prepared by Millennium Design Associates, Inc.; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20
20. Car Sales and Maintenance Building: Lower Level Floor Plan; 9-15 Albany Turnpike; Prepared by Millennium Design Associates, Inc.; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20
21. Exterior Elevations I; 9-15 Albany Turnpike; Prepared by Millennium Design Associates, Inc.; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20
22. CP1.1; Conceptual Plan; 9-15 Albany Turnpike; Prepared by Millennium Design Associates, Inc.; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/6/20
23. CP1.2; Conceptual Elevations; 9-15 Albany Turnpike; Prepared by Millennium Design Associates, Inc.; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/6/20
24. CP1.3; Conceptual Elevations: Colored; 9-15 Albany Turnpike; Prepared by Millennium Design Associates, Inc.; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 10/6/20
25. CP1.4; Fuel Dispenser Canopy Plan & Elevations; 9-15 Albany Turnpike; Prepared by Millennium Design Associates, Inc.; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20
26. A101; Proposed First Floor Plan; Prepared by Phase Zero Design; Prepared for 9-15 Albany Turnpike, LLC; dated 10/15/20
27. A102; Proposed Second Floor Plan; Prepared by Phase Zero Design; Prepared for 9-15 Albany Turnpike, LLC; dated 10/15/20
28. A103; Proposed Roof Plan; Prepared by Phase Zero Design; Prepared for 9-15 Albany Turnpike, LLC; dated 10/15/20
29. A201; Proposed First Floor Lighting Plan; Prepared by Phase Zero Design; Prepared for 9-15 Albany Turnpike, LLC; dated 10/15/20
30. A202; Proposed Second Floor Lighting Plan; Prepared by Phase Zero Design; Prepared for 9-15 Albany Turnpike, LLC; dated 10/15/20
31. A301; Exterior Elevation I; Prepared by Phase Zero Design; Prepared for 9-15 Albany Turnpike, LLC; dated 10/15/20
32. A302; Exterior Elevation II; Prepared by Phase Zero Design; Prepared for 9-15 Albany Turnpike, LLC; dated 10/15/20
33. A303; Materials List; Prepared by Phase Zero Design; Prepared for 9-15 Albany Turnpike, LLC; dated 10/15/20
34. A401; Building Sections; Prepared by Phase Zero Design; Prepared for 9-15 Albany Turnpike, LLC; dated 10/16/20
- 35-44. Car Showroom and Maintenance Building Renderings 1-10; dated 10/16/20

Correspondence:

1. Town of Canton Zoning Development Application: File 475; Apln 2000; 9 and 15 Albany Turnpike; Assessor Map 32 and 36; Parcel 1010009 and 1010015; Zone: B; Special Permits: Section 4.1.C.1.a., retail/service businesses and personal service businesses greater than 2,500 square feet; Section 4.1.C.2.b., outdoor dining when accessory to restaurant classes I, II, or III; Section 4.1.C.10.a., new car dealership, as defined by CGS Section 14-51(1); Section 4.1.C.10.e., gasoline filling stations; Section 7.3.F.8.a., sign approval by special permit; Section 7.7.C.3., retaining wall by special permit; and Site Plan Application, Section 9.1.A.; request to construct a 8,384 sq. ft. gas station/convenience store with drive-thru and 20,865 sq. ft. electronic vehicle showroom with 68 associated parking spaces; 9-15 Albany Turnpike, LLC, applicant/owner
  - 1a. Town of Canton Zoning Development Application: File 475; Apln 2000; 9 and 15 Albany Turnpike; Assessor Map 32 and 36; Parcel 1010009 and 1010015; Zone: B; Special Permits: Section 4.1.C.1.a., retail/service businesses and personal service businesses greater than 2,500 square feet; Section 4.1.C.2.b., outdoor dining when accessory to restaurant classes I, II, or III; Section 4.1.C.10.a., new car dealership, as defined by CGS Section 14-51(1); Section 4.1.C.10.e., gasoline filling stations; Section 7.3.F.8.a., sign approval by special permit; Section 7.5.D.3., earthwork and grading over 2,000 cubic yards; Section 7.7.C.3., retaining wall by special permit; and Site Plan Application, Section 9.1.A.; request to construct a 8,384 sq. ft. gas station/convenience store with drive-thru and 20,865 sq. ft. electronic vehicle showroom with 68 associated parking spaces; 9-15 Albany Turnpike, LLC, applicant/owner
  - 1b. File 475; Apln 2000; 9 and 15 Albany Turnpike; Assessor Map 32 and 36; Parcel 1010009 and 1010015; Zone: B; Special Permits: Section 4.1.C.1.a., retail/service businesses and personal service businesses greater than 2,500 square feet; Section 4.1.C.2.b., outdoor dining when accessory to restaurant classes I, II, or III; Section 4.1.C.3.a., drive-thru uses; Section 4.1.C.10.a., new car dealership, as defined by CGS Section 14-51(1); Section 4.1.C.10.e., gasoline filling stations; Section 7.3.F.8.a., sign approval by special permit; Section 7.5.D.3., earthwork and grading over 2,000 cubic yards; Section 7.7.C.3., retaining wall by special permit; Section 7.10.B.2, outdoor storage and display; and Site Plan Application: Section 4.1.B.3., restaurant classes I & II; Section 9.1.A., request to construct a 8,384 sq. ft. gas station/convenience store with restaurants and drive-thru, and 23,500 sq. ft. electronic vehicle showroom with 117 associated parking spaces; 9-15 Albany Turnpike, LLC, applicant/owner
2. Traffic Impact Study; prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20 (provided under separate cover)
3. Engineering Report; prepared by Solli Engineering; Prepared for 9-15 Albany Turnpike, LLC; dated 8/11/20; revised 9/4/20; revised 9/24/20; revised 10/16/20 (provided under separate cover)
4. Site Plan application checklist
5. Erosion and Sediment Control checklist
6. Special Permit application checklist
7. Letter from Lawrence LePere of Solli Engineering to Neil Pade regarding proposed zoning map amendment; dated 8/12/20
8. Email from Collene Byrne of Solli Engineering to Fire Marshal Tim Tharau regarding application submittal; dated 8/12/20

9. Email from Collene Byrne of Solli Engineering to Police Chief Arciero regarding application submittal; dated 8/12/20
10. Abutter list
11. Letter from Sarah Ridyard of CT Water to Anthony Capuano of Solli Engineering regarding water feasibility; dated 8/5/20
12. Email from Anthony Capuano of Solli Engineering to WPCF Superintendent Roger Ignazio regarding Canton's sewer shed; dated 8/3/20
13. Letter from Kevin Solli of Solli Engineering to Neil Pade regarding application submittal; dated 8/12/20
14. RAB Lighting Cut Sheet for Model: WPLED26N
15. Lithonia Lighting Cut Sheet for Model: LDN6
16. Emblem/Regalia Emblem Series Specifications
17. CREE Lighting Cut Sheet for Model: 304 Series
18. CREE Lighting Cut Sheet for Model: OSQ Series
19. Project Narrative
20. Letter of Transmittal from Solli Engineering; dated 9/1/20
21. Email communication between Solli Engineering, Attorney David Markowitz and Renee Deltenre regarding legal notice review; dated 9/1/20
22. Legal Notice posted to the Town of Canton Website on 9/1/20
23. Email from Renee Deltenre to Town Staff requesting application review; dated 9/3/20
24. Email from Roger Ignazio (WPCF) to Renee Deltenre regarding application feedback; dated 9/4/20
25. Email from Renee Deltenre to Town Staff requesting review of revised application materials; dated 9/9/20
26. Email of concern from Patricia Hamilton to Neil Pade; dated 9/10/20
27. Email of concern from Carolyn Woodard to Neil Pade; dated 9/10/20
28. Email of concern from Tim Kendzia to Neil Pade; dated 9/10/20
29. September 16, 2020 Canton PZC Agenda
30. Notice of Public Hearing Postponement; dated 9/15/20
31. Email from Glenn Cusano (DPW) to Renee Deltenre regarding application feedback; dated 9/14/20
32. Letter from CT Water to Neil Pade regarding application review; dated 9/15/20
33. Email from Chief of Police Chris Arciero to Renee Deltenre regarding application feedback; dated 9/29/20
34. Memorandum from Neil Pade to Planning and Zoning Commission, Staff Report; dated 9/29/20
35. Email from Neil Pade to Attorney Markowitz regarding staff review; dated 9/30/20
36. Email from Neil Pade to Renee Deltenre and Emily Kyle regarding 10-02-20 revised plan set submittal; dated 10/5/20
37. Email communication between Neil Pade and Fire Chief Bruce Lockwood regarding plan review; dated 10/5/20
38. Town of Simsbury approval letter for Application #ZC 20-10; 9-15 Albany Turnpike; dated 10/6/20
39. Email from Collene Byrne to Neil Pade regarding the submittal of a revised zoning development application; dated 10/6/20

40. Email from Collene Byrne to Neil Pade regarding the revised legal notice description for the 10/21/20 public hearing; dated 10/6/20
41. Email from Collene Byrne to Neil Pade regarding abutter notifications and posting of the public hearing sign; dated 10/7/20
42. Photos of public hearing signs on-site
43. Certificate of mailings from the USPS
44. Email from Attorney Markowitz to Neil Pade regarding special permit criteria; dated 10/14/20
45. Special Permit criteria narrative
46. Letter from Chairman Jay Kaplan of the Canton Conservation Commission to PZC Chairman Jonathan Thiesse regarding application review; dated 10/14/20
47. Project Narrative provided by Solli Engineering; received 10/6/20
48. Letter from Kevin Solli to Neil Pade regarding response to feedback from the CT Water Company; dated 10/2/20; received 10/6/20
49. Email communication between Neil Pade and Collene Byrne regarding the submittal of revised plans; dated 10/16/20
50. Special Permit criteria checklist
51. Request for Modification Letter from Solli Engineering to Neil Pade; dated 10/16/20
52. Response to Staff Comments Letter from Solli Engineering to Neil Pade; dated 10/16/20
53. Email of concern from John Pech to Neil Pade; dated 10/20/20
54. Email and photo renderings from Neil Pade to Attorney Markowitz regarding View-shed Considerations; dated 10/20/20
55. Email from Zoning Enforcement Officer Emily Kyle to Neil Pade regarding proposed signage review; dated 10/19/20
56. Email from Barbara Kelly of the NCCD to Neil Pade regarding the E&S Plan Certification; dated 10/20/20
57. Email and documentation from Fire Marshal Tim Tharau to Neil Pade regarding the issuance of blasting permits; dated 10/21/20
58. Email of concern from Melissa Antarsh to Neil Pade; dated 10/20/20
59. Email of support from Gary Adajian to Neil Pade; dated 10/19/20
60. Email from Collene Byrne to Neil Pade regarding the public hearing sign affidavit; dated 10/21/20
61. Email from Collene Byrne to Neil Pade regarding discrepancies with revised drawings; dated 10/21/20
62. Letter from Chairman Katie Lucas of the Canton Economic Development to Neil Pade regarding proposed development; dated 10/21/20
63. 10/21/20 Public Hearing presentation from Solli Engineering; received 10/28/20
64. Email of concern from Theresa Barger to Neil Pade; dated 10/21/20
65. Signed affidavit regarding the posting of a public hearing sign; received 10/21/20
66. Email from Theresa Barger to Neil Pade regarding the impact of blasting on wells; dated 10/25/20
67. Email from Project Administrator Glenn Cusano regarding review of the cost estimate; dated 10/29/20
68. Staff memorandum from Neil Pade to the Commission regarding application completion review; dated 11/2/20



69. Email communication between Jessica Demar of CT Water and Solli Engineering regarding project review; dated 11/9/20
70. Letter and associated email from Jessica Demar of CT Water to Neil Pade regarding review of revised plans and blasting concerns; dated 11/9/20
71. Email of concern from Jim Todd to Neil Pade; dated 11/9/20
72. Email from Theresa Barger to Neil Pade regarding blasting concerns; dated 11/12/20
73. Environmental Science & Technology article regarding groundwater nitrate contamination; published 12/28/15
74. State of Connecticut DEEP guidance document for evaluating potential hydrogeological impacts; dated 12/12/19
75. Email from Kim Czapla of CT DEEP to Neil Pade regarding blasting; dated 11/12/20
76. Email from Theresa Barger to Neil Pade regarding additional blasting concerns; dated 11/12/20
77. Staff comments from Chief of Fire and EMS Bruce Lockwood to Renee Deltenre; dated 11/12/20
78. Letter of concern from Julianne and John McCahill to the Commission; dated 11/9/20; received 11/13/20
79. Consent for extension of statutory time per CGS, Chapter 8-7d; received 11/16/20
80. Email of concern from Michael Ignatowicz to Neil Pade; dated 11/15/20
81. Email of concern from Peter and Diana Hiza to Neil Pade; dated 11/16/20
82. Email of concern from Seraphim Flaherty to Neil Pade; dated 11/16/20
83. Letter from Jane Latus of the Canton Advocates for Responsible Expansion, Inc. to the Commission; dated 11/15/20
84. Email of concern from the Eskay Family to Neil Pade; dated 11/16/20
85. Email of concern from Harald Bender to Neil Pade; dated 11/16/20
86. Email of concern from Michael Campbell to Neil Pade; dated 11/16/20
87. Email of concern from Adam Hagymasi to Neil Pade; dated 11/16/20
88. Letter from Deputy Historian David Leff to the Commission
89. Letter from Conservation Commission Chairman Jay Kaplan to the Commission; dated 11/15/20
90. Email of concern from John and Kerri Interlandi to Neil Pade; dated 11/16/20
91. Email of concern from Kerry and Christopher Stovall to Neil Pade; dated 11/16/20
92. Email of concern from Jane Manna to Neil Pade; dated 11/16/20
93. Email of concern from Gretchen Swibold to Neil Pade; dated 11/17/20
94. Email of concern from Tom Mason to Neil Pade; dated 11/17/20
95. Email of concern from Carolyn Woodard to Neil Pade; dated 11/17/20
96. Email of concern from Anne Duncan to Neil Pade; dated 11/17/20
97. *Email of concern from Mayre Miller to Neil Pade; dated 11/18/20*
98. *Email of concern from Marianne Burbank to Neil Pade; dated 11/18/20*
99. *Email of concern from Anne Hunter to Neil Pade; dated 11/18/20*
100. *Email of concern from Harold Mullins to Neil Pade; dated 11/18/20*
101. *Email from Fire Marshal Tim Tharau to Neil Pade regarding prior blasting permits; dated 11/18/20*
102. *Email of concern from Charlie DeWeese to Neil Pade; dated 11/18/20*
103. *Email of concern from Celeste Rockel to Neil Pade; dated 11/18/20*
104. *Email of support from Larry Vigil to Neil Pade; dated 11/18/20*

105. *Email of concern from Joshua Russell to Neil Pade; dated 11/18/20*
106. *Email of concern from Sarah Faulkner to Neil Pade; dated 11/17/20*
107. *Email of concern from Leesa Lawson to Neil Pade; dated 11/18/20*
108. *Email of concern from Jessica Giblin to Neil Pade; dated 11/18/20*
109. *Email of concern from Ellen Kenney to Neil Pade; dated 11/17/20*
110. *Email of concern from Wendy Baron to Neil Pade; dated 11/17/20*
111. *Letter of concern from David Shepard to Neil Pade; dated 11/18/20*

# Law Office of David C. Shepard

PHONE: (860) 379-3717

FAX: (860) 352-8900

Main Office:

The Jeanine Building  
8 Wickett Street, Suite 8G  
New Hartford, CT 06057

Mailing Address:

P.O. Box 81  
Canton, CT 06019

Licensed in CT & MI

November 18, 2020

Neil Pade  
Town of Canton

Re: 9 and 15 Albany Turnpike

Dear Neil;

I have been trying to get up to speed on this above referenced application. I have a few concerns and observations.

1. This application appears to be very complex, and while I appreciate the complexity, I am not sure that the application is complete. If the application is not complete, it should not be approved.
2. I have reviewed the concerns of many residents regarding the impact of the proposed blasting on drinking wells. Wetlands regulations allow for the Agency to hire an appropriate hydrogeologist or other professional to assess the risk to neighbors, and have the applicant pay the professional. If P&Z has a similar provision, I suggest this be considered.
3. I understand that this property has been long understood to be ripe for commercial development, but commercial development should be balanced against the natural character of the property. The removal of 80,000 +/- cubic yards of rock (which certainly could turn out to be much more) is not required for "commercial development," it is only required for this commercial development. It seems to me that approving this plan would fail to balance the development versus the natural character, but would entirely weigh towards development.

I will continue to review this plan for other observations, but I wanted to get my thoughts in as soon as I could.

Sincerely,

David C. Shepard  
7 Pondview Drive

**Archived:** Wednesday, November 18, 2020 1:44:45 PM  
**From:** [Pade, Neil](#)  
**Sent:** Tue, 17 Nov 2020 16:00:35  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Concerns About Development Project - Rt 44 Canton/Simsbury Line  
**Importance:** Normal

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Neil

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**From:** Wendy & Alasdair Baron/Hyndman [mailto:[wendyandalasdair@gmail.com](mailto:wendyandalasdair@gmail.com)]  
**Sent:** Tuesday, November 17, 2020 3:59 PM  
**To:** Pade, Neil  
**Subject:** Concerns About Development Project - Rt 44 Canton/Simsbury Line

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

To Whom It May Concern:

I am a resident of the Town of Canton, and my address is 19 Wickhams Fancy, Collinsville. I am writing to you in strong opposition to the development project that is being considered at the location of the large rock formation and old La Trattoria restaurant on Rt 44. While I support creating new jobs and businesses, there are far too many downsides to this project and it should not move forward.

1. Location: I do not want the first thing people see when they drive into my small, quaint town to be a massive commercial development. On Rt 44, there are already a number of car dealerships and gas stations - including EMPTY gas stations that already exist - in the area. We do not need more of these. Additionally, this is adjacent to two very high traffic areas already on either side of the proposed location, and 44 is congested at the best of times. We do not need additional lights and traffic clogging the area further.
2. Pollution/Environment: I have strong concerns about the several years of rock blasting required to bring this project to fruition. The noise pollution from trucks and blasting will drastically lower the value of homes in my area, as well as potentially pollute the aquifer and thus hundreds of wells for homes near the site. Additionally, this area is home to wildlife and we should not be destroying ecosystems for a development like this especially when, as mentioned, there are already car dealerships, convenience stores, gas stations, and empty buildings along Rt 44 in Canton that can be utilized for new businesses and development.
3. Canton's Charm: The proposed destruction of the rock formation is unacceptable. It is a landmark of the town. Additionally, a development of this size and scope is not fitting with our town's charm and appeal. We are not West Hartford, Bloomfield, Wethersfield...we are small town CT.

I am unable to attend the virtual committee meeting on 11/19 but hope that you take my comments into consideration. I love this town, and I do not want to see it irrevocably altered for the worse by this development project. Once removed, that rock formation can never be replaced.

Please let me know if you have any questions about my comments. I am happy to clarify as needed.

Respectfully,  
Wendy Baron

**Archived:** Wednesday, November 18, 2020 1:44:31 PM  
**From:** [Pade, Neil](#)  
**Sent:** Wed, 18 Nov 2020 08:53:50  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: File 475; Alpn 2000; 9 and 15 Albany Turnpike  
**Importance:** Normal

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Please add to the file record,

Thanks

Neil

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**From:** Ellen Kenney [mailto:[elvarike@gmail.com](mailto:elvarike@gmail.com)]  
**Sent:** Tuesday, November 17, 2020 7:01 PM  
**To:** Pade, Neil  
**Subject:** File 475; Alpn 2000; 9 and 15 Albany Turnpike

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

RE: File 475; Alpn 2000; 9 and 15 Albany Turnpike

Dear Members of the Canton Planning and Zoning Commission,

I am writing to express my opposition to the plans for the above-referenced site and to urge the Commission to reject the proposal.

That rocky outcropping with its surrounding greenery is one of the only remaining places along that stretch of Route 44 that is unbuilt and unpaved. It offers a brief – but important – respite from the sensory assault that precedes and follows it. It is a natural landmark that signals to Canton residents that we're almost home. Leveling and building over it would be a palpable loss.

As for the proposal itself, it is particularly out of step with the needs of our town and with current thinking on town planning more broadly. Additional automobile-centered businesses are not in order. I urge the Commission to explore ways to address Canton's many unoccupied commercial sites along Route 44 and to seek out innovative ways to expand our tax base that optimize the town's rich architectural heritage rather than overwhelm it.

Thank you all for your service.

Sincerely,

Ellen Kenney  
9 West Simsbury Rd.  
Canton, CT

**Archived:** Wednesday, November 18, 2020 1:44:17 PM  
**From:** [Pade, Neil](#)  
**Sent:** Wed, 18 Nov 2020 09:20:02  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: No to proposed site build on route 44  
**Importance:** Normal

---

Neil

-----Original Message-----

From: Jessica Giblin [<mailto:jgiblin13@att.net>]  
Sent: Wednesday, November 18, 2020 8:17 AM  
To: Pade, Neil  
Subject: No to proposed site build on route 44

CAUTION: This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Hello,

I am writing to you today to express my opinion in regards to the potential business proposed at the site of La Trattoria.

I am strongly opposed to this project for several reasons:

- 1) environmental. There is marsh land there, risk of contamination to the water supply. Natural elements that don't need to be destroyed- no real reason to blast away the mountain other than financial gain and profits. Have some respect for the uniqueness of the geology in this area.
- 2) another traffic light on 44? Already takes me forever to get to work in West Hartford. Negative impact to the commute for thousands of people that head in to Avon, West Hartford and Hartford. And constant trucks and blasting for TWO YEARS?! No thank you! The Whole Foods store has been a burden in Avon, this Canton project would be much worse!!
- 3) we have rules in place for a reason! This project is requesting special zoning exceptions. This project is beyond the scope of anything our small town wants or needs. We already have two gas stations in town and plenty more as we travel to Avon and simsbury.
- 4) Blight in our town; there are many existing, abandoned buildings and lots that could be used instead.
- 5) is there even demand for electric cars?!
- 6) as much as I hate the argument for esthetics, this project is an ugly eyesore. I really don't want this at the gateway to our wonderful town.
- 7) will this even generate that much income for our town?

We can do better for our town and our people. We need to vet these projects with many different things in mind for our town.

Please, do not allow this project in Canton.

Vote NO.

Thank you,

Jessica Giblin, RN  
13A Gildersleeve Ave.

**Archived:** Wednesday, November 18, 2020 1:43:57 PM  
**From:** [Pade, Neil](#)  
**Sent:** Wed, 18 Nov 2020 09:15:34  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Application on 9 - 15 Albany Turnpike  
**Importance:** Normal

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Neil

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**From:** Leesa Lawson [mailto:[leesa@lawsonhoke.com](mailto:leesa@lawsonhoke.com)]  
**Sent:** Wednesday, November 18, 2020 7:11 AM  
**To:** Pade, Neil  
**Subject:** Application on 9 - 15 Albany Turnpike

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Dear Mr. Pade,

I'm sorry I cannot join the Planning and Zoning call tonight on the application of 9-15 Albany Turnpike.

I have concerns about the impact of this development on the water in the area. I hope my questions can be addressed at a subsequent hearing.

I was remembering an application that came up during my decade on P&Z. That application involved a much smaller amount of excavation. Several residents came to the P& Z meeting with clogged pumps since the nearby excavation work had rendered their wells inoperable. The commission at that time determined the cause to be a hydraulic hoe ram used nearby to break up ledge.

The application before this commission is on a much larger scale with much greater impact. I urge this commission to require an independent evaluation from a hydrogeologist before going further.

Thank you, and thanks to the commission for your diligence in this matter.

Sincerely,

Leesa Lawson  
16 Spring Street  
Collinsville, CT 06019



**Archived:** Wednesday, November 18, 2020 1:43:38 PM  
**From:** [Pade, Neil](#)  
**Sent:** Wed, 18 Nov 2020 08:57:14  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Opposing Development File 475; Alpn 2000; 9 and 15 Albany Turnpike  
**Importance:** Normal

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Please add to the file record,  
Thanks,

Neil

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**From:** SARAH FAULKNER [mailto:sffaulkner@comcast.net]  
**Sent:** Tuesday, November 17, 2020 11:21 PM  
**To:** Pade, Neil  
**Subject:** Opposing Development File 475; Alpn 2000; 9 and 15 Albany Turnpike

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

25 Dyer Avenue  
Collinsville, CT 06019  
November 17,2020

Dear Planning and Zoning Commission,,

I am writing to express my vehement opposition to the proposed development in File 475; Alpn 2000; 9 and 15 Albany Turnpike. This enormous, extensive development proposal is entirely out of keeping with the town's Plan of Conservation and Development. It would create permanent damage to our homes, traffic, natural environment, and town, and should be either denied or substantially reduced. Specifically, this development would:

- 1) Have a devastating impact on the homes and businesses already in this area.
  - 2+ years of mining and traffic disruptions would be an enormous burden on the entire community, increase air pollution and health-related illness, add enormous noise to our quiet town, and result in the loss of a signature basalt ridge ;
  - Fracturing of the bedrock, which is common with blasting basalt ridges, would likely cause loss, damage and probably contamination of the water table/wells for myriad homes and businesses in the area. Should the Commission consider this proposal, I urge you to require the application to pay for the town to a hydrogeologist and conduct a thorough study of the impact of the blasting and traprock removal on the wells and aquifers within a 1 mile radius.
  - Tremendously increase traffic in a dangerous stretch of Route 44, even with yet another traffic light

2) Create a dangerous development that would cause permanent problems for Canton in the future.

- The special exceptions for the enormous retaining walls propose dangerous hydrological and engineering situations that our current zoning is written to avoid. These should never be approved.
- Access to the property for emergency vehicles and fire, especially should a residential develop be eventually added beyond it to the north, would be from a very dangerous section of Route 44. This is in no one's best interest.
- Again, traffic.

3) Radically diminish Canton's attractive and rural character at the entrance to our town. This trap rock ridge is part of our natural environment and character of the town. I am not opposed to development of this land, but strongly opposed to removal of the ridge that defines our eastern border. Our Town Plan of Conservation and Development specifically defends retaining our town's natural character, stating that we ought to have development that "respects the natural beauty and character" of town. This land is a significant example of exactly what ought to be conserved and not removed.

Furthermore, the special exceptions for signage would further degrade our town's character and should be denied.

4) Have a tremendous negative impact on the natural wetlands to the west of the ridge. We have already lost most of Canton's wetlands, which are critical for flood mitigation, groundwater recharge, and species diversity. This scope of development would greatly diminish or destroy this productive and extensive wetland system.

Commercial development in Canton is beneficial and necessary, but not at this scope and impact. I urge you to deny this application.

Sarah Faulkner

**Archived:** Wednesday, November 18, 2020 1:43:17 PM  
**From:** [Pade, Neil](#)  
**Sent:** Wed, 18 Nov 2020 10:09:03  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Development on Rt. 44  
**Importance:** Normal

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Neil

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**From:** Joshua Russell [<mailto:russell.joshu@gmail.com>]  
**Sent:** Wednesday, November 18, 2020 10:02 AM  
**To:** Pade, Neil  
**Cc:** [russell.meliss@gmail.com](mailto:russell.meliss@gmail.com)  
**Subject:** Development on Rt. 44

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Hello, Mr. Pade

I am a Canton resident. I live on Wright Rd. I am writing to express concern regarding the potential development of a car dealership and gas station on Rt. 44 at the Canton/Simsbury border. In addition to the issue of a large dealership in our town, I am most concerned about the potential impact on the ground water in the area. Given that our family as well as others are on well water, I hope that rigorous examination of the impact on the water table is being considered prior to allowing any such large building/excavation is allowed to proceed. Should public comment be considered, I hope that this concern will be raised and that Mr. Greenberg will need to find another area for his desired development.

Thank you for your consideration.

Joshua Russell, Ph.D.

**Archived:** Wednesday, November 18, 2020 1:43:04 PM  
**From:** [Pade, Neil](#)  
**Sent:** Wed, 18 Nov 2020 11:17:03  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Public Comment 44  
**Importance:** Normal

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Please add to the file record. I've already responded to Mr. Vigil.

Thanks,

Neil

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**From:** Larry Vigil [<mailto:lvigil0519@gmail.com>]  
**Sent:** Wednesday, November 18, 2020 10:54 AM  
**To:** Pade, Neil  
**Subject:** Public Comment 44

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Good Morning Neil,

Can you please provide the link for public comments to the planned project on route 44 that Mark Greenberg is planning with a gas station, EV showroom and convenience store?

I for one am in favor of this project, I believe it will generate revenue for the town, much needed revenue with what has developed out of COVID-19 restrictions.

Regards,

Larry Vigil  
16 Sweetheart Mountain Road  
Canton, CT 06019

**Archived:** Wednesday, November 18, 2020 1:42:51 PM  
**From:** [Pade, Neil](#)  
**Sent:** Wed, 18 Nov 2020 11:01:49  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: I oppose the 9-15 Albany Turnpike development  
**Importance:** Normal

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Neil

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**From:** celesterockel@comcast.net [mailto:celesterockel@comcast.net]  
**Sent:** Wednesday, November 18, 2020 10:56 AM  
**To:** Pade, Neil  
**Subject:** I oppose the 9-15 Albany Turnpike development

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Dear Mr Page,

I'm writing to oppose the special permits and development of 9-15 Albany Turnpike. There are several concerns I have with the proposed development.

1. The traprock that sits along Route 44 at the former La Trattoria site acts as a natural town break and is a Canton landmark. Removing this rock will impact noise, wildlife, and our town's character.
2. The blasting will occur within 1,500 ft. of the former Swift Chemical Superfund site. Disturbing the land in this area could release toxic chemicals into the aquifer and volatile organic compounds into air. As a 20 year resident, shouldn't our health and safety come first? I do not want the purity of our air and well water to be impacted by this development. The hazardous waste at 51 Albany Turnpike should be mediated before any development in the surrounding area is even considered.
3. Is a 23,500 sq ft electric vehicle showroom and 8,384 sq ft, 20 pump gas station keeping within the character of our town? We already have Citgo, Mobile and the defunct Gulf station. Our town needs more businesses like LaSalle's, Benidorm, and Giv Coffee, not mega shopping plazas.

My husband and I chose to live in Canton over 20 years ago because of it's rural nature, location to recreational activities, great schools and small town charm. Our children love our town and their schools. The beauty and charm of Canton should be preserved for future generations, not erased.

Sincerely,  
Celeste Rockel  
12 Trailsend Drive  
Canton, CT 06019

**Archived:** Wednesday, November 18, 2020 1:42:34 PM  
**From:** [Pade, Neil](#)  
**Sent:** Wed, 18 Nov 2020 12:03:16  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: 9-15 Albany Turnpike  
**Importance:** Normal

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Neil

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**From:** Charlie DeWeese [<mailto:deweesecc@gmail.com>]  
**Sent:** Wednesday, November 18, 2020 11:31 AM  
**To:** Pade, Neil  
**Subject:** 9-15 Albany Turnpike

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Dear Neil:

I have read with some dismay about the proposed development for this site. The traprock ridge there is a valuable part of the town's geology, natural setting and aesthetics. While I understand the need for commercial development, it seems like too big a sacrifice to permit a two-year blasting program to demolish a valuable feature of the town and end up with a car dealership, gas station and convenience store that could have been sited somewhere else. The plan seeks not to build in a way that considers the natural environment, but to demolish it. The inconvenience and nuisance to the town and its residents of turning the site into a quarrying operation for two years, with the attendant noise, pollution, traffic and water problems, all seems like too big a price for the town to pay, regardless of any enhancement of the tax base.

I understand there is a hearing scheduled for tonight. It would be valuable for the hearing to be conducted in a way that would permit significant public participation.

--

Charlie DeWeese  
263 Wright Rd  
Canton, CT 06019-3754  
860-778-8165

**Archived:** Wednesday, November 18, 2020 1:42:17 PM  
**From:** Pade, Neil  
**Sent:** Wed, 18 Nov 2020 11:28:37  
**To:** Deltenre, Renee  
**Cc:** Kyle, Emily  
**Subject:** FW: Blasting Permits  
**Importance:** Normal

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Please add to the hearing record.

Thanks,

Neil

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**From:** Tharau, Timothy  
**Sent:** Wednesday, November 18, 2020 11:26 AM  
**To:** Pade, Neil  
**Subject:** RE: Blasting Permits

The blasting that is plan for the site work on 44 is a major blasting operation that if different from most jobs that have done in Canton over the last two years. We have had very little problem with blasting in the past,. You can require zoning to have pre blast survey of nearby property and also make them provide a blast plan for the job as part of zoning

Timothy J. Tharau

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**From:** Pade, Neil  
**Sent:** Tuesday, November 17, 2020 9:05 AM  
**To:** Tharau, Timothy  
**Cc:** Deltenre, Renee  
**Subject:** Blasting Permits

Hi Tim:

We are receiving public input with concerns about a proposal that will include blasting.

Do you have a summary of blasting permits that have been issued in the last 24 months that includes locational information, and if any complaints have been received?

Thanks so much,

Neil S. Pade AICP  
Director of Planning and Community Development  
Town of Canton, Connecticut  
4 Market Street  
PO Box 168  
Collinsville, CT 06022-0168  
860-693-7891 Phone  
860-693-7884 Fax

**Archived:** Wednesday, November 18, 2020 1:41:59 PM  
**From:** [Pade, Neil](#)  
**Sent:** Wed, 18 Nov 2020 12:08:29  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Development on R. 44 Canton Simsbury Townline  
**Importance:** Normal

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Neil

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**From:** Harold Mullins [mailto:[harold.mullins@atlanticsportgroup.com](mailto:harold.mullins@atlanticsportgroup.com)]  
**Sent:** Wednesday, November 18, 2020 11:28 AM  
**To:** Pade, Neil  
**Subject:** Development on R. 44 Canton Simsbury Townline

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Dear Mr. Pade,

I am writing to you to ask Planning and Zoning to reject the proposed development by Mark Greenberg on the Canton Simsbury town line.

- The former [Swift Chemical Superfund](#) site is 1,500 ft. from the proposed blasting.
- There is a **very real risk that the blasting could release toxic chemicals into the aquifer** and volatile organic compounds into the air, says 35-year DEEP geologist, Bill Warzecha.
- **The wells within the area could be contaminated, making the water unsafe to drink.** (Trailsend Drive, Secret Lake, Pond Road, Pond View Drive, Michael Drive, Fiddlehead Farms, Down Avenue, Canton Springs Road.)
- Developer seeks special permits
- The town's Plan of Conservation & Development recommends that development be done that "respects the natural beauty and character" of the town.
- I don't want to risk the safety of well water, have all that added traffic, noise and dirt, have the rock removed -- all for a building that doesn't match the town's character.

Sincerely,  
Harold Mullins  
42 Case Street  
N.Canton, Ct.  
860-559-4474

•

Harold Mullins  
Atlantic Sport Group  
860-693-1777 office  
860-693-1423 fax



**Archived:** Wednesday, November 18, 2020 1:41:42 PM  
**From:** [Pade, Neil](#)  
**Sent:** Wed, 18 Nov 2020 12:36:56  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Opposition to special exceptions for proposed development  
**Importance:** Normal

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Neil

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**From:** Anne Hunter [mailto:[annehunter@gmail.com](mailto:annehunter@gmail.com)]  
**Sent:** Wednesday, November 18, 2020 11:28 AM  
**To:** Pade, Neil  
**Subject:** Opposition to special exceptions for proposed development

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Hello Mr. Pade and Members of the Board,

I am writing in opposition to giving the developer special expectations to our planning and zoning code for development at 9 and 15 Albany Turnpike Canton, CT.

While an electric car showroom sounds wonderful, this is not the right location. There is an empty car dealership across from the Shoppes at Farmington Valley which would deliver the same target market for the car companies. transform an empty space for the town in accordance with our form based code and allow the developer to build without the time and expense of blasting the mountain.

Mining the mountain would create massive traffic and disruption to people and the land. Traffic, potential water contamination and a gaping hole at the entrance to the town do not build economic value. If the developer decided to stop after he has finished his quarry operation for whatever reason, and there are a substantial number of risk of this happening - economic recession, inability to find tenants, unexpected expenses in development, change in electric car regulations, etc. - Canton will be left with an ugly scar on the face of our community, decreasing interest from future developers. All this risk on the backs of the townsfolk for what is estimated as \$103,000 in new tax revenue.

Why do we need a new 20 pump station? We have a closed gas station in town. Who will it attract? Truckers? People speeding into town as a cut through? What are the costs for policing this new mega gas station? Will this be tax positive at all?

Even if the full development is successful, electric car showrooms are a risky business. This will be the first in the area. Just recently the Tesla showroom in Greenwich shut down and left an empty building when Tesla moved to leasing cars out of their repair facilities instead. Imagine if it was 1990 and a developer wanted to build a building for the future of entertainment, a combined CD store and Blockbuster video. We'd have an outdated eyesore on our hands today. If the price of electricity keeps

going up electric cars in CT will be a hard sell. If gas goes up everyone will move to electric cars but they will be available at every dealership so there's no need for a showroom. The rock that mountain has held steady for thousands of years. Do we really want to risk blowing it up for a business model that might not even be valid in two years when the blasting is done? We already have a massive empty building we are trying to fill at the ax factory. Do we want to risk another?

There is a safer way to do this. The developer could adhere to our award-winning form based codes and use land already open for a car dealership, gas station and drive through, all of which we have empty in town today. This would allow development without placing making it such a risky endeavor for everyone involved.

Finally, I urge you to look at the seal of the town. This design was developed through an extensive process based on gathering community feedback about the nature of Canton. At its heart is a tree. The hills that dot our area are fundamental to our character. Replacing fall foliage as you drive into town with a gas station is in direct opposition to the values the residents of Canton have placed at the heart of our own seal.



Screen Shot 2020-11-18 at 11.27.40 AM.png

Thank you for your consideration,  
Anne Hunter  
37 Andrew Dr.

**Archived:** Wednesday, November 18, 2020 1:41:29 PM

**From:** Pade, Neil

**Sent:** Wed, 18 Nov 2020 12:35:09

**To:** Deltenre, Renee

**Cc:** Kyle, Emily

**Subject:** FW: Car dealership

**Importance:** Normal

---

Neil

-----Original Message-----

From: marianne Burbank [<mailto:mhbsox@hotmail.com>]

Sent: Wednesday, November 18, 2020 12:02 PM

To: Pade, Neil

Subject: Car dealership

CAUTION: This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Hi Neil,

I would like to state my opinion regarding this monstrosity that the developer wants to build at the entrance to our beloved and beautiful Canton. This electric car dealership would not be built to benefit the citizens of Canton but rather to benefit the developer. Electric cars are not practical for most Canton citizens and it would completely spoil the entrance AND character of the town. It would be like the Berlin Turnpike. An ugly mess!

Yes, there would be some tax benefits but they would not be worth it! Once done, there is no going back and who knows? It could go out of business at some point and we would be left with an ugly monstrosity that gets neglected and dilapidated, making it even worse.

Please remember all the promises for the Shoppes that they would become like a Main Street! The center of town! The barn would be incorporated! Etc. etc. While the Shoppes are lovely in their own way, the truth is that they are still just a shopping center, not our new Main Street. The barn is there which is nice but it has not been incorporated or used like advertised. Who amongst us would not trade it all in to have the golf course back?

I am also aware that there may be some environmental damage from the blasting of the rocks which could affect a species of plant as well as nearby people's wells. That is an outrage!

Please also remember that Simsbury only approved this monstrosity because they would get the tax benefits without it really affecting their actual town as the boundary of Simsbury juts out onto Rte. 44 in a most convenient way for them.

Let's not let Canton be taken advantage of!

Thank you,  
Marianne Humphrey Burbank  
84 N. Mountain Rd.

**Archived:** Wednesday, November 18, 2020 1:41:04 PM  
**From:** [Pade, Neil](#)  
**Sent:** Wed, 18 Nov 2020 12:53:47  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Gas Station and Dealership on Route 44  
**Importance:** Normal

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Neil

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**From:** Mayre Miller [mailto:mayremiller@gmail.com]  
**Sent:** Wednesday, November 18, 2020 12:48 PM  
**To:** Pade, Neil  
**Subject:** Gas Station and Dealership on Route 44

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

I have lived in Canton for 28 years and have seen a lot of the town's character eroded by development. The plan to blast the rock on Rte 44 and build a gas station and car dealership is a terrible idea that I feel will be a near fatal blow to the town's identity. The property is at the entrance to town and the proposal is out-of-place and lacks any charm.

The blasting that will need to be done and the environmental impact will be devastating.

To top it all off, there is no need for another gas station, convenience store and car dealership.

I understand that there is a need to expand the tax base, but destroying the town isn't the way to accomplish that.

Mayre Miller  
60 East Mountain Road  
Canton

**Archived:** Tuesday, November 17, 2020 2:49:55 PM  
**From:** Pade, Neil  
**Sent:** Tue, 17 Nov 2020 14:33:06  
**To:** Deltenre, Renee  
**Cc:** Kyle, Emily  
**Subject:** FW: Development, removal of traprock  
**Importance:** Normal

---

Please add to the file record, thanks

Neil

-----Original Message-----

From: Anne Duncan [<mailto:annesvd7@gmail.com>]  
Sent: Tuesday, November 17, 2020 1:32 PM  
To: Pade, Neil  
Subject: Development, removal of traprock

CAUTION: This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Please encourage P&Z to reject this plan entirely as we don't need 20 more gas pumps nor a spaceship overlooking our country town. Consider how many empty shops sit where once the town could have had a recreation site much like the town of Simsbury has. Consider our future instead of letting yet another greedy developer expunge the landscape of Canton.

Anne Duncan  
60 Case St.  
North Canton

Sent from my iPhone

**Archived:** Tuesday, November 17, 2020 2:49:39 PM

**From:** [Pade, Neil](#)

**Sent:** Tue, 17 Nov 2020 14:32:42

**To:** [Deltenre, Renee](#)

**Cc:** [Kyle, Emily](#)

**Subject:** FW: Rt. 44 Project

**Importance:** Normal

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Please add to the file record

Neil

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**From:** CAROLYN WOODARD [mailto:carolynwoodard@comcast.net]

**Sent:** Tuesday, November 17, 2020 1:08 PM

**To:** Pade, Neil

**Subject:** Rt. 44 Project

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Hi Neil -

I know I've already given my opinion to you on this subject, but I wanted to share with you what I posted on Theresa Sullivan Barger's presentation on social media in case I'm unable to call in tomorrow. There were many opinions posted both for and against this project, but I saw many more agreeing that this is not something we would like to see come to Canton.

"Though I respect everyone's point of view, I can't imagine that anyone who has a love for Canton would rather see yet another ugly glass car showroom as opposed to the serene beauty of the cliffs as you enter town. Not sure why anyone thinks this is an eyesore?? I'm tired of hearing about how much revenue it would bring the town - for what? More money needed to support these new businesses with police and town services? My taxes don't go down, do yours? Canton is a small New England town with much charm and history, and I certainly would support businesses that fit in with its character. Who's to say these unneeded businesses would even succeed? We're then left with more empty buildings to deal with and stare at, while a part of our beautiful landscape is gone forever. Businesses should blend with the landscape, not destroy it. For those who think we need more people and revenue, when exactly will we have enough to satisfy you - when every patch of green is paved over and traffic continues to build more than it does already? Another gas station and convenience store? Why, so we can put the ones we already have out of business? Every single day I hear sirens up and down Rt. 44 and this type of commercial business will only add to this. We've already destroyed many of the historical buildings that made our town so special. To name a few, no more Canton Golf Course, Mills Homestead (built in 1760) to make room for yet another pharmacy and walk-in center, the 1776 house, removed to make space for that unsightly building that houses Best Cleaners (other cleaners in town out of business). And this blasting away of the rocks, I can't imagine why this is even under consideration. Why don't we focus on revitalizing the buildings that already exist? Please

don't support turning Canton from a beautiful, quaint village into just another generic looking and overcrowded piece of real estate."

Carolyn Woodard

**Archived:** Tuesday, November 17, 2020 2:49:17 PM  
**From:** [Pade, Neil](#)  
**Sent:** Tue, 17 Nov 2020 11:30:30  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Planning and Zoning - Mark Greenberg  
**Importance:** Normal

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Please add to the file record

Neil

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**From:** Tom Mason [<mailto:tbmason70@yahoo.com>]  
**Sent:** Tuesday, November 17, 2020 11:22 AM  
**To:** Pade, Neil  
**Subject:** Planning and Zoning - Mark Greenberg

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

To Whom It May Concern;

Good afternoon, I hope you're well.

I wanted to voice my concern over a project that is being considered by the Planning and Zoning Committee at tomorrow evenings meeting. I understand that a developer is trying to get approval for a project directly behind my house/street. My family resides at 3 Michael Drive and I am concerned for the safety of my families drinking water and the possibility of noise and disturbances for the future.

One of the primary reasons that we chose to move to Canton was for the healthy community and the serene environment. Please do not allow this project to move forward.

Thanks for the opportunity to voice my opinion.

Tom

---

Tom Mason  
[tbmason70@yahoo.com](mailto:tbmason70@yahoo.com)  
(860) 550-1809



**Archived:** Tuesday, November 17, 2020 2:49:01 PM  
**From:** [Pade, Neil](#)  
**Sent:** Tue, 17 Nov 2020 10:42:55  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Application re 9 & 15 Albany Turnpike  
**Importance:** Normal

---

Please add to the file record, thanks!

Neil

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**From:** Gretchen Swibold [mailto:[swiboldgr@comcast.net](mailto:swiboldgr@comcast.net)]  
**Sent:** Tuesday, November 17, 2020 10:09 AM  
**To:** Pade, Neil  
**Subject:** Application re 9 & 15 Albany Turnpike

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Gretchen Swibold, 731 Cherry Brook Road  
November 17, 2002

Planning and Zoning Commission  
c/o Neil Pade, Director of Planning & Community Development  
Town of Canton, CT

Re: file 475; Alpn 2000; 9 & 15 Albany Turnpike

I write in opposition to this application to excavate 150,000 cubic yards of trap rock on land at the eastern entry to Canton on Route 44. The necessary blasting and removal is expected to take two years.

The town's Plan of Conservation and Development recommends this area for commercial development, but recommends also that any development be done with respect for the natural beauty and character of the town. Town Planner Pade notes the "substantial manipulation" required to accommodate the plan's development pad. Once this site is developed as proposed, the easternmost edge of the state's volcanic trap rock will be no more and the town's rural character will be greatly diminished.

CARE's (Canton Advocates for Responsible Expansion) information sheet notes that "the former Swift Chemical Superfund site is about 1500' from the proposed blasting site. A retired DEEP geologist says there is a very real risk that the blasting could cause the release of toxic chemicals into the aquifer there and volatile organic compounds into the air." We should be protecting our very valuable aquifer, not endangering it.

The Planning and Zoning Commission should deny Mr. Greenberg's application.

**Archived:** Tuesday, November 17, 2020 2:48:40 PM  
**From:** [Pade, Neil](#)  
**Sent:** Tue, 17 Nov 2020 08:45:06  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Proposed Car Dealership, Gas Station & Convenience Store  
**Importance:** Normal

---

Please add to the file record, thanks

Neil

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**From:** Jane Manna [mailto:[janegmanna@yahoo.com](mailto:janegmanna@yahoo.com)]  
**Sent:** Monday, November 16, 2020 9:38 PM  
**To:** Pade, Neil  
**Subject:** Proposed Car Dealership, Gas Station & Convenience Store

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Dear Mr. Pade:

I'm writing to you today to express my concern with the proposed car dealership, gas station, and convenience store that a developer is planning to build near the site of the former La Trattoria.

I am vehemently against this project. A project of this scope would be suitable in a big city ... not in a small town like Canton.

The rock formation that they are planning to blast away serves as a beautiful and scenic way to welcome drivers into our town. I can't even imagine how that property will look flattened, let alone with the abominable futuristically designed building that they are planning to put there. It doesn't fit the image of our town at all!

And when you think about the problems and difficulties of removing all that rock and the blasting and booming and disruption to the area, not to mention the environmental impact it would cause, I can't see how anyone would think this is a good idea.

I urge you and the Planning and Zoning Committee to vote no on allowing this project to go forward.

Best regards,  
Jane Manna  
[Sent from Yahoo Mail on Android](#)

**Archived:** Tuesday, November 17, 2020 2:47:52 PM  
**From:** [Pade, Neil](#)  
**Sent:** Tue, 17 Nov 2020 08:46:41  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Opposition to Blasting on Rte. 44  
**Importance:** Normal

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Please add to the file record, Thanks

Neil

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**From:** Kerry Stovall [<mailto:kerry@jmalogos.com>]  
**Sent:** Monday, November 16, 2020 10:37 PM  
**To:** Pade, Neil  
**Subject:** Opposition to Blasting on Rte. 44

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Good Morning Neil,

My husband and I reside at 10 Pond Road and have done so for over 25 years, The development along Rte. 44 has been disruptive and worrisome. We take extreme exception to the most recent project and want to tell the Planning & Zoning Commission that we don't want to risk the safety of well water, have all that added traffic, noise and dirt, or have the rock removed -- all for a building that doesn't match the town's character.

Sincerely,  
Kerry & Christopher Stovall



**KERRY S. STOVALL**  
Account Executive



**Archived:** Tuesday, November 17, 2020 2:47:12 PM  
**From:** [Pade, Neil](#)  
**Sent:** Tue, 17 Nov 2020 08:26:14  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Commercial Development Proposal for 9-15 Albany Turnpike  
**Importance:** Normal

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Please add to file record

Neil

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**From:** Kep Powers [mailto:kepworks@live.com]  
**Sent:** Monday, November 16, 2020 7:51 PM  
**To:** Pade, Neil  
**Subject:** Commercial Development Proposal for 9-15 Albany Turnpike

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

To: Neil Pade, Town Planner

Dear Neil,

As four-year residents of Canton, Connecticut, my husband and I have become aware of the recent commercial and development proposal for 9-15 Albany Turnpike. We would like to express our concern and plan to join the 11/18 Planning and Zoning virtual meeting. The following are key points we would like to bring forth:

1. We assume the meeting will be both in an audio and visual format so we as well as other Canton residents can fully understand the items discussed regarding the proposal.
2. We have well water and are deeply concerned about the blasting effects regarding The Swift Chemical Company Superfund site. Because of this, we strongly request an independent analysis of the blasting by a Licensed Environmental Professional and a hydrogeologist.
3. Being the gateway into the town of Canton, commercial development of this magnitude is questionable in terms of how it will fit in with the current aesthetic of our town. It's like The Jetson's meets Hollywood Hills. The design, elevation, and location are not indicative of the quaint and rural character of our town of Canton.

Respectfully, we are in opposition to this proposal.

Thank you for your time and consideration.

Regards,

John and Kerri Interlandi



Conservation Commission  
**Canton, Connecticut Inc. 1806**  
4 Market Street, Collinsville, Connecticut 06022

November 15, 2020

Jonathan Thiesse, Chairman  
Canton Planning & Zoning Commission  
P.O. Box 168  
Collinsville, CT 06022

Dear Jonathan:

At its 3 November 2020 meeting, the Canton Conservation Commission again reviewed File 475; 9 and 15 Albany Tpke; Assessors Map 32 and 36; Parcels 1010009 and 1010015; proposed retail/service and personal services businesses. Kevin Solli, of Solli & Associates, had provided our Commission with background information, plans and associated drawings for the project. Recently, however, the Commission has been provided additional details concerning the scope of the project, particularly with respect to blasting and removal of material from the trap rock ridge.

It is our understanding that blasting and removal of trap rock will continue for a period of two years, six days a week. To this Commission, this sounds more like a quarrying operation than a commercial development. The Commission has great concerns about "quality of life" issues for both residences and businesses in this area. There are also concerns regarding potential disruption of traffic on Route 44, the major corridor through Canton.

At its November meeting, the Canton Conservation Commission voted unanimously to oppose the project in its current form. While Commission members understand that economic development is right in this area of Canton, this is not an appropriate scale for development in this particular location.

Sincerely,

Jay Kaplan, Chair  
Canton Conservation Commission

c: Emily Kyle, Assistant Town Planner  
Town of Canton

4 The Green  
Collinsville, CT 06019  
[onktaadn@comcast.net](mailto:onktaadn@comcast.net)

RE: File 475; Alpn 2000; 9 and 15 Albany Turnpike

Dear Chairman Thiesse and Members of the Canton Planning and Zoning Commission:

I write in my capacity as deputy town historian to strongly oppose the above captioned matter because it calls for extensive destruction of the traprock ridge that is a unique and defining characteristic of Canton.

Some may think that history is limited to human interactions and constructions. However, natural landscape features set the context and often determine the course of human settlement, community development, and events. Rivers, slopes, soils, ledges, ridges, wetlands and other elements are important in determining the locations of farms, factories, houses, and the routes taken by our roads. Topography plays a large role in community destiny.

Some features, such as the traprock ridge in question, are signature landscape elements that root a community in a continuum that links past, present, and future. Simply put, such aspects of the countryside make Canton distinctive and say “home” to those who live and have lived here. No doubt, that is why the very first point made in the Plan of Conservation and Development advocates for “nurturing and promoting the image and identity of Canton” (POCD, Preface). I submit that this traprock ridge is critical to that image and identity.

Canton’s Plan of Conservation and Development is a well-balanced document with frequent references to the value of the town’s natural resources and the need to protect them. Pointing out each such reference would be needlessly repetitious, so I will just quote from the Plan’s “Fundamental Values” which include the following: “Natural resources are an integral component of what makes our town unique and attractive. We will encourage the protection and preservation of important natural resources, while balancing the rights of property owners.” The enormous amount of material proposed for removal in this case throws that balance in favor of protecting the ridge.

History teaches us that change and development are inevitable. While we may find some of those changes disconcerting, that alone is not reason enough to oppose every new building or alteration in land use. However, when such a change will so overwhelmingly damage a defining characteristic of a community, such as the destruction of this traprock ridge, it demands to be opposed.

I respectfully ask the Commission to deny this application.

Yours truly,  
David K. Leff  
Deputy Town Historian, Canton  
Town Historian (2015-2019)

**Archived:** Tuesday, November 17, 2020 2:45:47 PM

**From:** [Pade, Neil](#)

**Sent:** Mon, 16 Nov 2020 15:22:52

**To:** [Deltenre, Renee](#)

**Cc:** [Kyle, Emily](#)

**Subject:** FW: 9-15 Albany Turnpike

**Importance:** Normal

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Please add to the file record

Neil

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**From:** Adam Hagymasi [<mailto:adam.hagymasi@gmail.com>]

**Sent:** Monday, November 16, 2020 3:22 PM

**To:** Pade, Neil

**Subject:** 9-15 Albany Turnpike

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Dear Mr. Pade,

I am writing to you to express my concerns regarding the proposed construction of a gas station/convenience store/car showroom at 9-15 Albany Turnpike. While I can understand the desire for the town to broaden its tax base, the proposed site has several issues which lead me to oppose its development.

1. Its proximity to the Swift Chemical site and the need to do extensive blasting to prepare the site poses the potential for significant environmental impact. This definitely needs to be addressed through an independent study.
2. As a commuter who drives down Rt. 44 daily I cannot see how a large business, with or without an additional traffic signal, would not negatively affect traffic.
3. The proposed building design does not fit with the character of most of the buildings in Canton.

My wife and I moved to Canton from Torrington 12 years ago. I have seen how the sprawl of East Main St. has choked off the downtown area from people coming down Rt. 202. I feel the best way forward is encouraging the use/revitalization of commercial properties already in place along the Rt. 44 corridor.

Sincerely,

Adam Hagymasi  
26 Country Lane  
Collinsville, CT

**Archived:** Tuesday, November 17, 2020 2:45:23 PM  
**From:** [Pade, Neil](#)  
**Sent:** Mon, 16 Nov 2020 15:00:09  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Proposed Development on Route 44  
**Importance:** Normal

---

Please add to the file record,

Neil

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**From:** Michael L. Campbell [mailto:[mlcampbellct@gmail.com](mailto:mlcampbellct@gmail.com)]  
**Sent:** Monday, November 16, 2020 2:52 PM  
**To:** Pade, Neil  
**Subject:** Proposed Development on Route 44

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Hi Neil,

Just wanted you to know that Rie and I are closely watching the action on the car dealership/station and convenience store.

As always, I'm worried about our well and the noise that this would create...not to mention another traffic light.

Anyway, I know the town has to balance development with the loss of our town's character.

In this case, it would do the town well to ask for more studies to ensure this doesn't become a big money drain (for the town and residents) down the road.

Thank you for all you do!

Michael

Michael L. Campbell

9 Pond Road  
Canton, CT 06019-2624  
United States of America

860-930-5882

[MLCampbellCT@gmail.com](mailto:MLCampbellCT@gmail.com)

lcdrcampbell – SKYPE



**Archived:** Tuesday, November 17, 2020 2:44:53 PM  
**From:** [Pade, Neil](#)  
**Sent:** Mon, 16 Nov 2020 14:56:16  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Zoning application - File 475; Apin 2000  
**Importance:** Normal

---

Please add to the file record

Neil

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**From:** Harald Bender [mailto:[hbender@snet.net](mailto:hbender@snet.net)]  
**Sent:** Monday, November 16, 2020 2:43 PM  
**To:** Pade, Neil  
**Subject:** Zoning application - File 475; Apin 2000

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Mr. Neil Pade  
Director of Planning and Community Development  
Canton, CT

I have a number of concerns in the application for a gas station, convenience store and EV showroom.

First is a traffic concerns.

With two driveways, one with a traffic light, there is no consideration to prevent East bound vehicles from crossing lanes to turn into the site at the uncontrolled driveway. Double yellow lines WILL not prevent such a move. This will impact East bound traffic by stopping the flow in the left lane and increase the risk of incidents for both East and West bound vehicles. A proper median that is high enough will stop this hazard.

Is there any consideration to Old Albany Turnpike and the Western Brass Lantern Road. One should get consideration with the traffic light.

A few environmental considerations.

Since this development is uphill of a swampy area what is the plan on controlling spills and regular runoff from this area. The Hoffman Auto Park area has to filter all the storm drains and do an periodic reporting, at least once a year, on the filtering process.

The lighting is planned to be down lighting but is light trespass considered. Since Rt 44 is a well traveled road and the lighting must be such that the light element can not be seen directly.

Other thoughts.

It seems that there is no easy path for the fuel truck to come in and deliver fuel since the tanks are on the side of the gas station lot next parallel to the driveway. The truck would have to do some intricate driving and wold block some of the flow during the refueling time.

If pump lanes are narrow enough then one way traffic could ease the flow of traffic for the gas pumps.

Please let me know if these items are considered or the result of them included in the application.

If you have questions let me know.

Harald Bender  
6 Maureen Dr.  
Simsbury, CT

860-651-3036

Keep safe. Let corona bypass you.

**Thanks  
Harald**

**Constant Time - Variable Learning - Is the current model in education.**

**Constant learning - Variable Time - Is what the student needs.**

**Archived:** Monday, November 16, 2020 2:37:32 PM

**From:** Pade, Neil

**Sent:** Mon, 16 Nov 2020 10:14:52

**To:** Deltenre, Renee

**Cc:** Kyle, Emily

**Subject:** FW: Rock removal

**Importance:** Normal

---

Please add to file record

Neil

-----Original Message-----

From: ejeskay@comcast.net [<mailto:ejeskay@comcast.net>]

Sent: Monday, November 16, 2020 10:14 AM

To: Pade, Neil

Subject: Rock removal

CAUTION: This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

As a very concerned Canton citizen I ask that the proposed plan for the car dealership and gas station be rejected. Personal safety and well water issues need to be foremost in mind when entering into such a controversial issue. Such a monumental Project needs to be thoroughly researched, proven safe, and not put residents in any Physical or financial handicap.

Sincerely

Eskay family

Pond rd residents

Sent from my iPad

**Canton Advocates for Responsible Expansion, Inc.**

**C.A.R.E. ... It's your town, too.**

**P.O. Box 196, Canton CT 06019**

Nov. 15, 2020

To: Canton Planning and Zoning Commission  
4 Market St.  
Collinsville, CT 06022

Re: File 475; Apln 2000; 9 and 15 Albany Turnpike

Dear Commissioners:

This application causes us great concern.

This would be the perfect application to approve if Canton wished to tell those entering town on Route 44 from the east, "You are now entering Canton, a town that places no value on its natural landscape."

This would be the appropriate design and size of development if we wished to tell visitors, "Welcome to Canton, home of the universe's new Intergalactic Headquarters."

It would be the right mix of uses if we wish to adopt the motto, "Canton – Home of Irony", where we demolish a unique trap rock ridge in order to showcase green vehicles, and where we display cars of the future behind glass, but where the actual main feature is 20 pumps from the petroleum age.

However, this application is antithetical to the Plan of Conservation and Development. In its scale, design, proposed uses and – foremost – its assault on the natural character of the property, this proposed development is inappropriate for Canton, even on Route 44.

Beyond inappropriate, the application is, more precisely, pointless. What is the point of blasting and hauling away an iconic trap rock ridge, and conducting two years of preparatory site work, only to build a convenience store and gas station, uses that are already plentiful along Route 44?

This ridge dramatically defines Canton's eastern gateway. We assume the applicant was aware of the land's topography before advancing this proposal. The town has no obligation to allow a two-year, 6-day-a-week quarry operation in order to reshape the property to fit his preferred development. In fact, the POCD urges the opposite: to design *for* the land.

Aside from the noise and traffic impacts on adjacent property owners, blasting 1,500 feet away from the Swift Chemical Superfund site would be a reckless risk to the aquifer. This application should not be approved without financially guaranteeing the future availability of safe drinking water to nearby property owners.

We are fully in favor of commercial development on Route 44, but of a scale and design that suits the land and Canton's character. An appropriate development would *not* require two years of site work.

Thank you for your attention and your commitment to the town of Canton.

Sincerely,  
Jane Latus  
President

**Archived:** Monday, November 16, 2020 2:37:00 PM  
**From:** [Pade, Neil](#)  
**Sent:** Mon, 16 Nov 2020 09:36:28  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Opposition to 9-15 Albany Turnpike Project  
**Importance:** Normal

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Please add to hearing record,

Thanks,

Neil

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**From:** Seraphim Flaherty [<mailto:seraphimflaherty@gmail.com>]  
**Sent:** Monday, November 16, 2020 9:27 AM  
**To:** Pade, Neil  
**Subject:** Opposition to 9-15 Albany Turnpike Project

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Dear Mr. Pade,

It's been brought to our attention that developer Mark Greenberg proposes for 9-15 Albany Turnpike (Rte. 44 in Canton at Simsbury town line, near Avon) which has the risk of polluting a nearby aquifer.

Our family does not want to risk the safety of well water, have all that added traffic, noise and dirt, have the rock removed -- all for a building that doesn't match the town's character.

Please take this letter into consideration.

Seraphim Flaherty

**Archived:** Monday, November 16, 2020 2:36:41 PM  
**From:** [Pade, Neil](#)  
**Sent:** Mon, 16 Nov 2020 09:34:56  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: File 475; Alpn 2000; 9 and 15 Albany Turnpike.  
**Importance:** Normal

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Please add to the record

Neil

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**From:** Diana Hiza [mailto:[dhiza@snet.net](mailto:dhiza@snet.net)]  
**Sent:** Monday, November 16, 2020 8:17 AM  
**To:** Pade, Neil  
**Subject:** File 475; Alpn 2000; 9 and 15 Albany Turnpike.

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Nov. 16, 2020  
To: Canton Planning and Zoning Commission  
4 Market St.  
Collinsville, CT 06022  
Re: File 475; Alpn 2000; 9 and 15 Albany Turnpike  
Dear Commissioners:

I am writing to express my concerns about the proposed development at the East entrance of Canton. The proposed development would destroy the trap rock ridge so prominent when you enter Canton. That volcanic trap rock ridge has been the true "Welcome to Canton" sign for my family for our 30 years of living in this bucolic area. I pity the immediate neighborhood affected by this development. What happens if the nearby Swift Chemical Superfund site does pollute the aquifers? That's forever. Will this company pay for a supply of Poland Springs in perpetuity? As if that wasn't bad enough, the entire area would have to suffer the sounds of jackhammering for two years. Living in Collinsville, my family has endured many months jackhammering on the hydroelectric facility at the upper dam in Collinsville, 200 yards from my house. It became one of those quality of life issues but at least we knew after a year, we would be able to gaze upon the historic hydroelectric facility complete with a fish ladder. The town wisely procured this added value, done at extra expense to the current developers. In a word, to design for the land. For generations to come, this project will be a source of pride. In contrast, what is being proposed near La Trattoria will not be a source of pride, nor in keeping with Canton's "rural nature", a quality specifically stated in the Plan of Conservation Development: "An overall ambience incorporating, respecting, and existing in harmony with the natural environment."

**So please protect our** "Prominent hills and ridgelines divided by the fertile valleys of brooks flowing to the scenic Farmington River, thousands of acres of open space, farms, and forest, scenic roadways and field·] stone walls, a bustling commercial corridor, and historic compact village centers help define the physical attributes of Canton's appeal."

Thank you for your attention to this matter and to your time on the board.  
Sincerely,

Diana and Peter Hiza

**Archived:** Monday, November 16, 2020 2:36:07 PM  
**From:** [Pade, Neil](#)  
**Sent:** Mon, 16 Nov 2020 09:29:43  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Application for 9 and 15 Albany Turnpike  
**Importance:** Normal

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Please add to the record

Neil

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**From:** Michael Ignatowicz [mailto:[pedalmike@comcast.net](mailto:pedalmike@comcast.net)]  
**Sent:** Sunday, November 15, 2020 4:17 PM  
**To:** Pade, Neil  
**Subject:** Application for 9 and 15 Albany Turnpike

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Hello Mr. Pade.

I'm writing to express my opposition to the captioned application as it is currently proposed.

I think that the trap rock ridge on this site is a distinctive geological feature welcoming visitors and residents to the Town of Canton and deserves to be preserved for future generations.

The excavation of 150,000 cubic yards of rock to accommodate the development is detrimental to the site and cannot be put back at a later date.

I understand that there is a retired CT DEEP geologist that has expressed concern that disturbing the site to that extent could have a detrimental effect on the local aquifer in this area. The former Swift Chemical Superfund site is 1,500 feet away.

Aesthetically, I understand that an Electric Vehicle business wants a futuristic looking building. I think the design proposed is not in character with other structures that we have in town. There are probably modifications that could be made to meet the tenant's and the town's objectives.

I read this passage from John Fitts' recent article in the Valley Press-

*"The development team also touted the proposal's use of bike racks, sidewalks into and throughout the property, benches, crosswalks and other pedestrian and bicycle friendly measures."*

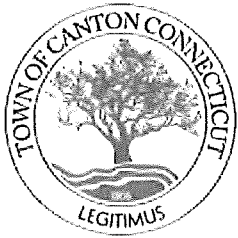
This is really meaningless unless the proposed bicycle and pedestrian features connect safely to other destinations in town. As a lifelong bicyclist and Canton resident since 1989, I can tell you that Rt 44 from the Canton line west to Lawton road is the most dangerous stretch of public road in town for safe travel by bicyclists and pedestrians.

It is really unfortunate that we have plenty of available commercial space elsewhere in town that could easily accommodate these businesses. The area in and around Canton Village comes to mind. It seems that these vacant spaces could accommodate the proposed tenants at a dollar and environmental impact cost much lower than that required by the applicant site.

Very Truly Yours,

Michael Ignatowicz  
9 Uplands Drive  
Canton  
[pedalmike@comcast.net](mailto:pedalmike@comcast.net)





# TOWN OF CANTON

4 Market Street  
PO Box 168  
Canton, CT 06019

## Land Use Department

(860) 693-7856  
(860) 693-7884 (fax)

### CONSENT FOR EXTENSION OF STATUTORY TIME CGS, CHAPTER 8-7d

Name of Application: 9 and 15 Albany Turnpike

Application # 2000 file 475

Applicant: 9-15 Albany Turnpike, LLC

Extension requested for (check one):

- Deadline for commencement of public hearing \_\_\_\_\_
- Deadline for closure of public hearing \_\_\_\_\_
- Deadline for action \_\_\_\_\_
- General extension X

Number of days granted 65 OR, date to which extension granted: 1/29/2021 if needed.

Date of authorization: 11/13/2020

Authorizing agent signature: [Signature]

Authorizing agent name (Printed) David J. Markowitz  
attorney for applicant



November 9, 2020

Canton Planning and Zoning Commission  
P.O. Box 168  
4 Market Street  
Canton, CT 06022

CANTON TOWN HALL  
LAND USE OFFICE  
NOV 19 2020  
DATE OF RECEIPT IN OFFICE  
13

Dear Members of the Commission,

As residents of 39 Forest Lane, we listened eagerly to your October 21, 2020 public hearing on the proposed project at 9-15 Albany Turnpike. We don't have strong feelings about the project itself but, as close neighbors of the property, we'd like to see the best possible outcome for the town.


It is also worth noting that we were disheartened that this far into the COVID-19 pandemic, the Commission has not put into place a platform for residents to be able to see the presentation and accompanying visuals. That being said, we thank you for the opportunity to express our two major concerns with the project:

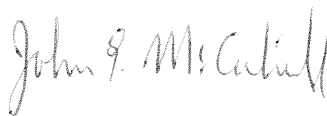
Traffic Safety – We are looking forward to the much-needed safety improvements that this project could bring. Living on Forest Lane, we and our neighbors experience fear and vulnerability on a daily basis when making the left hand turn across traffic from Route 44 onto Old Albany Turnpike heading west. We also see people risking their lives walking in the area. The current proposal doesn't seem to offer the comprehensive fix to these problems that it could. Additionally, the tremendous amount of site work requisite of the project and including blasting would amount to months, if not years, of disruption in the area prior to any traffic improvement infrastructure completion.

Appearance – When questioned about the sleek and modern look of the proposed electric vehicle showroom the spokesperson for the developer indicated that it was designed as an initial “prototype” for the company. While understanding the need for a healthy commercial tax base, does Canton really want to allow this type of building, at the gateway to town no less, that is so completely incongruous to its small-town and historic nature? And would the town want to be left with this type of development should the company not survive? Secondly, we would urge the Commission to require application of their adopted form-based code. As much as the same spokesperson liked to hearken the phrase “so much more” when referring to the proposed convenience store and 20-pump gas station, let's not lose site of the fact that it is what it is, a chain convenience store and gas station, and any and all improvements that can be made to its appearance and function by applying form-based code should be required.

Thank you for the important work you do and for taking these serious issues into account during your deliberations.

Sincerely,

  
Julianne and John McCahill  
39 Forest Lane



**Archived:** Thursday, November 12, 2020 3:26:09 PM

**From:** Lockwood, Bruce

**Sent:** Thu, 12 Nov 2020 15:24:07

**To:** Deltenre, Renee

**Subject:** Re: 9-15 Albany Turnpike Staff Review

**Importance:** Normal

**Attachments:**

[10-21-20 Meeting Slides FIRE review.pdf](#) 

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Fire lane designated on drawing. Also we have question about three foot parapet wall, where is it intended for? Our concern is FD access to the roof. A three foot parapet wall is a 4 foot drop from a ladder with over 100 lbs of gear and no ability to quickly get back on if there is an issue.

Bruce A. Lockwood  
Chief of Department  
Canton Fire and EMS  
(860) 883-4280

"The Name on your helmet represents your department, the name on your coat represents who raised you,  
MAKE THEM BOTH PROUD"

---

**From:** Deltenre, Renee

**Sent:** Thursday, November 12, 2020 3:10 PM

**To:** Lockwood, Bruce

**Subject:** 9-15 Albany Turnpike Staff Review

Good Afternoon Bruce,

Do you have any additional comments for the 9-15 Albany Turnpike development proposal?

Just wanted to check before I send out the meeting packet tomorrow morning to the Commission.

Thank you,  
Renée

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Renée Deltenre  
Community Development Coordinator  
Town of Canton  
P.O. Box 168  
Collinsville, CT 06022  
860-693-7856

**Archived:** Thursday, November 12, 2020 3:25:03 PM  
**From:** [Pade, Neil](#)  
**Sent:** Thu, 12 Nov 2020 15:20:52  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: More information for consideration regarding 9-15 Albany Turnpike  
**Importance:** Normal

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Neil

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**From:** Theresa Barger [<mailto:tsullivanbarger@gmail.com>]  
**Sent:** Thursday, November 12, 2020 3:08 PM  
**To:** Pade, Neil  
**Subject:** Re: More information for consideration regarding 9-15 Albany Turnpike

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Hi, Neil,

I emailed Margaret Thomas and she, like Tiziana Shea with the state Dept. of Public Health, both forwarded me the DEEP document I sent you about Blasting Guidance for towns. I've also been in touch with the U.S. Geological Services, whose representative supplied the research document relating to New Hampshire.

I spoke to a geologist with WSP in Farmington, and he suggested the town hire an independent geologist, paid for by the developer, to evaluate the blasting plan and the risk to the aquifer and well water, taking into consideration the contaminated Swift Chemical superfund site.

As I believe I've said already, it's cheaper and better to prevent the problem than to have to deal with well water contamination after the fact. Installing tanks for a 20-pump gas station and conducting the proposed rock mining operation are huge undertakings, and I urge the town to engage the experts necessary -- at the developer's expense -- to protect the aquifer serving hundreds, if not thousands, of residents.

Thank you,

Theresa

On Thu, Nov 12, 2020 at 2:47 PM Pade, Neil <[NPade@townofcantonct.org](mailto:NPade@townofcantonct.org)> wrote:

Hi Theresa,

I know you called but I was checking with my contact at CT DEEP about the concerns you raise below. (We are including your comments and concerns into the hearing record now for tomorrow's meeting packet).

**Archived:** Thursday, November 12, 2020 3:14:27 PM  
**From:** [Pade, Neil](#)  
**Sent:** Thu, 12 Nov 2020 14:43:08  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: More information for consideration regarding 9-15 Albany Turnpike  
**Importance:** Normal

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Neil

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**From:** Czapla, Kim [<mailto:Kim.Czapla@ct.gov>]  
**Sent:** Thursday, November 12, 2020 2:37 PM  
**To:** Pade, Neil  
**Subject:** RE: More information for consideration regarding 9-15 Albany Turnpike

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Hi Neil,

I support the CT Water Company's comments. Thanks for sending the guidance documents. I actually was not aware of the CT DEEP Remediation's guidance.

I did talk with Corinne Fitting, our hydrogeologist, and she said that blasting can affect well water quality, but there are a lot of factors that come into the equation and it's difficult to prove the blasting was the culprit. And it can be temporary or permanent. When there is blasting near private wells, we usually recommend homeowners get a water quality sample before it begins so if problems arise, they have something to compare it to. There are no laws that address it, just civil suits if there is a problem. We suggest talking to Margaret Thomas at the CT Geologic Survey ([Margaret.thomas@ct.gov](mailto:Margaret.thomas@ct.gov)) who may have more experience with this.

Thanks,  
Kim

**Kim Czapla**  
Environmental Analyst 3  
Aquifer Protection Area Program  
Land and Water Resources Division  
Bureau of Water Protection and Land Reuse  
Connecticut Department of Energy and Environmental Protection  
79 Elm Street, Hartford, CT 06106-5127  
P: 860.424.3335 | F: 860.424.4054 | E: [kim.czapla@ct.gov](mailto:kim.czapla@ct.gov)

**Archived:** Thursday, November 12, 2020 3:14:06 PM  
**From:** [Pade, Neil](#)  
**Sent:** Thu, 12 Nov 2020 13:53:35  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: More information for consideration regarding 9-15 Albany Turnpike  
**Importance:** Normal  
**Attachments:**  
[acs.est.5b03671.pdf](#)  [Blasting-Guidance-Dec2019.pdf](#) 

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Please add to the file record

Neil

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**From:** Theresa Barger [<mailto:tsullivanbarger@gmail.com>]  
**Sent:** Thursday, November 12, 2020 1:42 PM  
**To:** Pade, Neil  
**Subject:** More information for consideration regarding 9-15 Albany Turnpike

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Hi, Neil,

Please include the two documents attached in the file for consideration by the Planning & Zoning Commission.

One is the DEEP's guidance document to towns when blasting is proposed. The other is a research paper about groundwater nitrate contamination caused by the use of explosives.

If wells outside the 1,500-foot radius of the development site are contaminated, I urge the Town of Canton to require a bond from the developer to cover the cost of extending public water to all the homes in the aquifer whose well water is no longer potable.

Sincerely,

Theresa

--

**Theresa Sullivan Barger**  
*8 Pond Road*  
*Canton, CT 06019*

**STATE OF CONNECTICUT**

**DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION**

**GUIDANCE DOCUMENT FOR EVALUATING  
POTENTIAL HYDROGEOLOGIC IMPACTS  
ASSOCIATED WITH BLASTING &  
DEVELOPMENT ACTIVITIES**



**Bureau of Water Protection and Land Reuse  
Remediation Division**

**December 2019**

(Rev. 12-12-19)

The following guidance is provided by the Department of Energy & Environmental Protection's Remediation Division for use by municipal land-use officials when evaluating proposed developments, road construction projects, or quarries where significant earth removal and/or blasting activities are likely to occur. Because of those types of activities, there is concern for possible negative impacts to the quality and quantity of water in neighboring drinking water wells, as well as other environmental factors such as erosion, sedimentation, and decreased surface water quality conditions.

One of the primary concerns is acid rock drainage (ARD), which is a natural process, but can be exacerbated when rock is crushed and used for fill or other purposes that expose the freshly crushed rock to precipitation. ARD is caused by the presence of bedrock containing high levels of iron sulfide (which is present in Eastern and Western Highlands and sometimes the central valley of CT), especially such rock that is freshly exposed or crushed and has been subjected to the elements/precipitation. Under these conditions, there is an elevated risk for mobilizing naturally-occurring iron, manganese, and sulfur, which may adversely affect groundwater and drinking water quality. In addition, increased mobilization of arsenic, uranium and/or radon can occur in areas where these naturally-occurring minerals are present in the bedrock formation.

The Department recommends that land use officials consider the following as part of the overall application review process:

1. The developer or applicant (the Applicant) should retain a geologist/hydrogeologist or engineer (Environmental Professional) to evaluate the underlying bedrock in terms of its potential to cause ARD. The town's land-use office should make sure that the Applicant acquires the services of a qualified Environmental Professional that has experience testing the mineralogy and chemistry of the rock material and evaluating the potential impacts of ARD. As such, there needs to be a detailed site plan developed by the Applicant's Environmental Professional that addresses best management practices for minimizing ARD conditions by ensuring proper handling, storage or disposal of the rock material on- and off- site and minimizing its contact with infiltrating precipitation and surface water runoff at the site.
2. After identifying all drinking water wells within a 500-foot radius of the area to be disturbed by proposed construction activities, the Applicant's Environmental Professional should evaluate which drinking water wells need to be sampled in order to establish baseline drinking water quality conditions prior to any active earth work or blasting activity. Consideration should be given to factors such as: well type and construction details; the nature, geologic structure, and mineral make-up of the underlying bedrock; and blasting/rock removal techniques. The town's land-use office, as part of the permit application review process, or as part of the pre-blast survey if blasting is necessary, should also require that the Applicant document the yield and capacity of the wells before the site work or blasting commences. Testing the raw water quality (prior to any water treatment devices) of nearby drinking water wells prior to construction or blasting activities will establish a baseline for comparing post-project test results, in the event a property owner makes a complaint that the project activities negatively impacted their well.



3. In the absence of drinking water wells within 500 feet of the area to be disturbed, the Applicant's Environmental Professional should identify the closest drinking water wells, if any, within a 1,000-foot radius. Depending on the location, proximity, well construction and other factors, consideration should be made as to whether the proposed blasting activity poses a concern to the quantity or quality of water at these locations. Should a concern exist, and in the absence of closer drinking water wells to monitor, the Department recommends a minimum of annual monitoring of water levels and water quality of the closest drinking water well until the development project is completed and the site has been stabilized.
4. The Department recommends that drinking water wells at risk of ARD from proposed blasting and earth removal activities be analyzed for the following drinking water quality parameters:
  - pH
  - odor
  - color
  - turbidity
  - total iron
  - total manganese
  - nitrate
  - nitrite
  - sulfate
  - coliform bacteria
  - arsenic
  - uranium
  - radon
  - ammonia perchlorate (*if the salts ammonium, potassium, magnesium, or sodium perchlorate is an ingredient of the blasting agent*)
  - total petroleum hydrocarbons using the CT extractable total petroleum hydrocarbons test method (*if the blasting materials contain ammonium nitrate fuel oil mixtures*)

All testing should be performed in an approved laboratory certified to test drinking water by the Connecticut Department of Public Health's Laboratory Certification Program.

5. Follow-up well water sampling should occur within one to two months following the blasting activity and again once the site has stabilized and ground cover has been established. The plan for such water sampling should be part of the Applicant's land-use application. Should the development project and site work continue over a prolonged period of time, annual testing of the potentially impacted drinking water wells should be performed to ensure there are no adverse effects to the drinking water quality.
6. If there is a change in drinking water quality during or after the blasting activity, the well owner should notify the Applicant and/or blasting contractor of the condition, and also

notify their local health department and DEEP's Remediation Division (860-424-3705) of the condition.

7. The static water level in potentially affected drinking water wells should also be monitored during and following completion of the site work and blasting activity to determine if the static water level in the well decreases to the extent there is a problem for domestic use. Major site work that significantly alters infiltration rates, diverts surface water flow, or creates deep rock cuts or fractures may seriously deplete the volume of water in nearby overburden or drilled bedrock drinking water wells. Wells accessed for purposes of water level monitoring will require the well to be properly disinfected prior to being reactivated following the Department of Public Health's [Publication #27: \*Disinfection Procedure for Private Wells\*](#).

***Other Considerations:***

- There may be additional issues relating to blasting activities that the town, through its Fire Marshal, may need to address by the pre-blast survey. Such issues may include the potential for structural damage to neighboring properties due to air blasts and vibrations, and/or noise and dust control. Additionally, if municipal officials receive complaints regarding fugitive dust emissions due to the blasting and/or earth removal activities, DEEP's Bureau of Air Management (860-424-3436) can be contacted for guidance and possible follow-up inspection.
- The municipality may want to consider having large-scale developments, where significant site work including blasting is planned, be evaluated by the Connecticut Environmental Review Team (CTERT). A request for an ERT review must come from the municipality's chief elected official or the chairperson of one of the town's land-use or economic development commissions. Information regarding the CTERT and applying for an ERT review can be found at [www.ctert.org](http://www.ctert.org) or by calling 860-345-3977.
- Activities with proposed soil disturbances of one (1) acre or more that have not obtained local approval involving an erosion and sediment control review must register for the DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. The Applicant can obtain information regarding the general permit at [www.ct.gov/deep/stormwater](http://www.ct.gov/deep/stormwater).

# Identification of Groundwater Nitrate Contamination from Explosives Used in Road Construction: Isotopic, Chemical, and Hydrologic Evidence

James R. Degnan,<sup>\*,†</sup> J. K. Böhlke,<sup>‡</sup> Krystle Pelham,<sup>§</sup> David M. Langlais,<sup>||</sup> and Gregory J. Walsh<sup>⊥</sup>

<sup>†</sup>U.S. Geological Survey, New England Water Science Center, 331 Commerce Way, Suite 2, Pembroke, New Hampshire 03275, United States,

<sup>‡</sup>U.S. Geological Survey, 12201 Sunrise Valley Drive, 431 National Center, Reston, Virginia 20192 United States

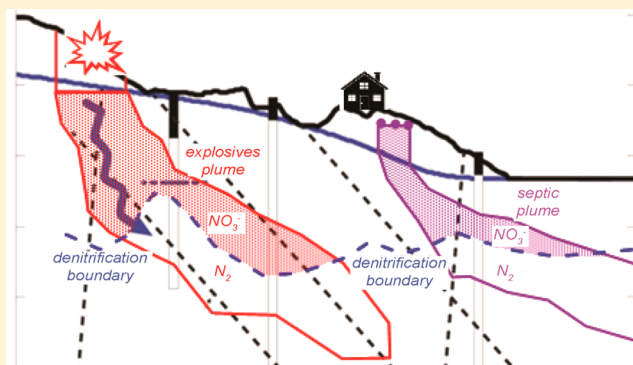
<sup>§</sup>New Hampshire Dept. of Transportation, Bureau of Materials and Research, 5 Hazen Drive, Concord, New Hampshire 03301, United States

<sup>||</sup>Hoyle, Tanner & Associates, Inc., I-93 Exit 3 Project Field Office, 77 Indian Rock Road, Windham, New Hampshire 03087, United States

<sup>⊥</sup>U.S. Geological Survey, Box 628, Montpelier, Vermont 05602, United States

## Supporting Information

**ABSTRACT:** Explosives used in construction have been implicated as sources of  $\text{NO}_3^-$  contamination in groundwater, but direct forensic evidence is limited. Identification of blasting-related  $\text{NO}_3^-$  can be complicated by other  $\text{NO}_3^-$  sources, including agriculture and wastewater disposal, and by hydrogeologic factors affecting  $\text{NO}_3^-$  transport and stability. Here we describe a study that used hydrogeology, chemistry, stable isotopes, and mass balance calculations to evaluate groundwater  $\text{NO}_3^-$  sources and transport in areas surrounding a highway construction site with documented blasting in New Hampshire. Results indicate various groundwater responses to contamination: (1) rapid breakthrough and flushing of synthetic  $\text{NO}_3^-$  (low  $\delta^{15}\text{N}$ , high  $\delta^{18}\text{O}$ ) from dissolution of unexploded  $\text{NH}_4\text{NO}_3$  blasting agents in oxic groundwater; (2) delayed and reduced breakthrough of synthetic  $\text{NO}_3^-$  subjected to partial denitrification (high  $\delta^{15}\text{N}$ , high  $\delta^{18}\text{O}$ ); (3) relatively persistent concentrations of blasting-related biogenic  $\text{NO}_3^-$  derived from nitrification of  $\text{NH}_4^+$  (low  $\delta^{15}\text{N}$ , low  $\delta^{18}\text{O}$ ); and (4) stable but spatially variable biogenic  $\text{NO}_3^-$  concentrations, consistent with recharge from septic systems (high  $\delta^{15}\text{N}$ , low  $\delta^{18}\text{O}$ ), variably affected by denitrification. Source characteristics of denitrified samples were reconstructed from dissolved-gas data ( $\text{Ar}$ ,  $\text{N}_2$ ) and isotopic fractionation trends associated with denitrification ( $\Delta\delta^{15}\text{N}/\Delta\delta^{18}\text{O} \approx 1.31$ ). Methods and data from this study are expected to be applicable in studies of other aquifers affected by explosives used in construction.



## INTRODUCTION

Fragmentation of bedrock with explosives for construction and mining projects is a potential source of nitrate ( $\text{NO}_3^-$ ) contamination of groundwater.<sup>1–4</sup> Hundreds to tens of thousands of kg of  $\text{NO}_3^-$  are typically used at a construction site. Nitrate is a component of ammonium nitrate ( $\text{NH}_4\text{NO}_3$ ), which is approximately 90% of commonly used commercial explosives by weight.<sup>5</sup> Bulk emulsions injected into blasting holes typically consist of  $\text{NH}_4\text{NO}_3$  and fuel oil (ANFO). High  $\text{NO}_3^-$  concentrations in groundwater affected by explosives could be related to several different processes, including (1) leaching of  $\text{NO}_3^-$  from unexploded  $\text{NO}_3^-$ -bearing explosive compounds such as  $\text{NH}_4\text{NO}_3$ ;<sup>1</sup> (2) oxidation (nitrification) of reduced N components of explosives such as  $\text{NH}_4\text{NO}_3$ , TNT, RDX, etc.; and (3) injection of soluble  $\text{NH}_3$  or  $\text{NO}_x$  gases into

the subsurface by blasting.<sup>4</sup> The mass of explosive N remaining in the ground after blasting is unknown; estimates suggest that up to 6% of ANFO slurry may escape detonation,<sup>1,6</sup> which could be a substantial contribution to groundwater recharge locally.

Previous studies have reported (1) high concentrations of  $\text{NO}_3^-$  and related compounds in groundwater at mines, quarries,<sup>2,3</sup> and other environments exposed to heavy explosives use; (2) isotopic fractionation of N in explosive compounds caused by biodegradation;<sup>7</sup> (3) occurrence of isotopically

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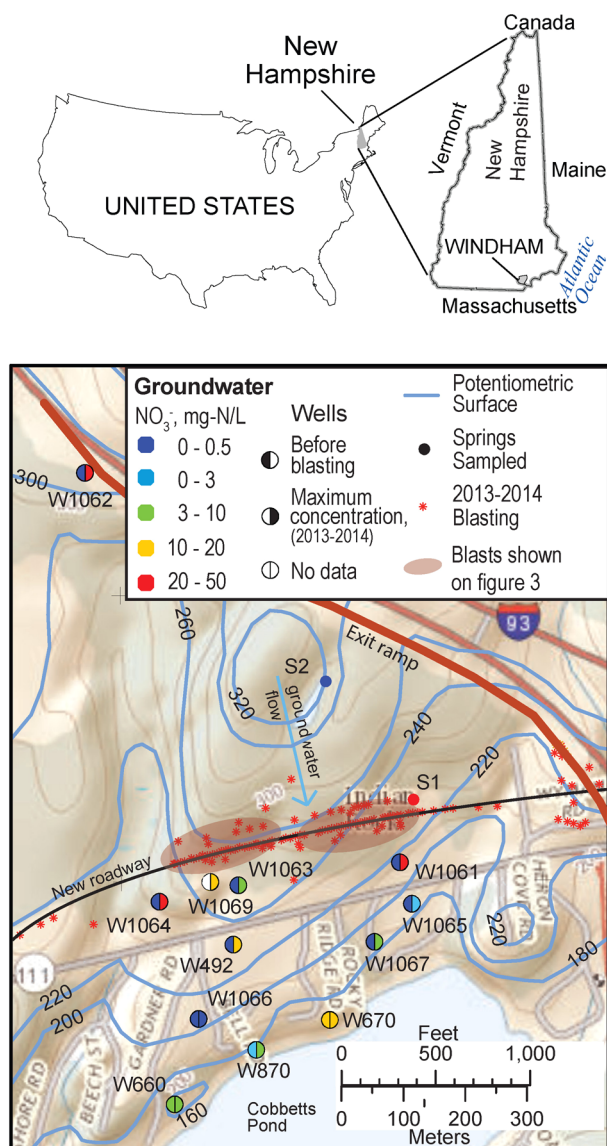
anomalous  $\text{NO}_3^-$  that may have been derived from nitrification of reduced N in explosive compounds,<sup>8,9</sup> and (4) elevated concentrations of dissolved constituents from enhanced weathering of blasted rock fragments.<sup>1</sup> In New Hampshire and elsewhere, rock excavation for highway construction commonly requires blasting with  $\text{NH}_4\text{NO}_3$ -based explosive emulsions. Elevated concentrations of  $\text{NO}_3^-$  in groundwater have been attributed to blasting in New Hampshire,<sup>10–15</sup> but direct forensic evidence of  $\text{NO}_3^-$  sources is lacking. Nitrate concentrations in groundwater in the region typically are low (<1 mg-N/L),<sup>16,17</sup> whereas concentrations of the order of 5–170 mg-N/L have been observed in shallow groundwater sampled in wells and springs near blasting sites. Potential nonblasting  $\text{NO}_3^-$  sources include wastewater disposal (e.g., septic systems), fertilizers used in landscaping and agriculture, atmospheric deposition, and weathering of soils and rocks.<sup>18–22</sup>

Isotope ratios of N ( $\delta^{15}\text{N}$ ) and O ( $\delta^{18}\text{O}$ ) have been used to evaluate sources of groundwater  $\text{NO}_3^-$  contamination in agricultural, urban, and other settings,<sup>23–29</sup> but apparently have not been thoroughly tested for identifying sources of  $\text{NO}_3^-$  near blasting sites in fractured-bedrock aquifer settings. Nitrate from unexploded  $\text{NH}_4\text{NO}_3$  may be recognizable isotopically as synthetic  $\text{NO}_3^-$  if not altered by biologic activity. However, denitrification (microbial reduction of  $\text{NO}_3^-$  to  $\text{N}_2$  gas) can alter the isotopic composition of the remaining  $\text{NO}_3^-$ . Blasting-related reduced N may be microbially oxidized (nitrified), yielding biogenic  $\text{NO}_3^-$  with an isotopic composition different from that of synthetic  $\text{NO}_3^-$ . In addition, groundwater transport of  $\text{NH}_4^+$  from blasting sites can be retarded by ion exchange with solid phases in soils and aquifers. Thus, it is possible that synthetic  $\text{NO}_3^-$  could move away from a source first, followed by  $\text{NH}_4^+$  that, if oxidized gradually, could generate a secondary and possibly more persistent  $\text{NO}_3^-$  pulse with modified isotopic composition. Despite these potential complications, blasting-related  $\text{NO}_3^-$  may be distinguishable from other  $\text{NO}_3^-$  contamination sources including agriculture and wastewater disposal.

This study tested whether isotopic analyses can identify blasting-related  $\text{NO}_3^-$  in groundwater in an area of road construction. Stable isotope ratios in  $\text{H}_2\text{O}$ ,  $\text{NO}_3^-$ ,  $\text{NH}_4^+$ , and  $\text{N}_2$  were used to identify sources, transport pathways, and transformation processes of  $\text{NO}_3^-$ . Geochemical, hydrologic, geologic, roadway-construction, and land-use data were used to corroborate the transport and fate of the N compounds. Time-series sampling of wells revealed contaminant response times and assisted isotopic identification of multiple  $\text{NO}_3^-$  sources including an unmodified synthetic  $\text{NO}_3^-$  end member from explosives that is not commonly found in groundwater. Varying degrees of denitrification were quantified, and corrections for denitrification were made to reconstruct initial (recharge)  $\text{NO}_3^-$  characteristics and reduce uncertainties in source attributions. Approaches used to identify  $\text{NO}_3^-$  sources in groundwater here can be used in fractured-rock aquifers elsewhere to determine the impacts of blasting.

## STUDY DESIGN AND METHODS

**Study Area.** The study area was a New Hampshire Department of Transportation (NH DOT) highway construction site in Windham, NH (Figure 1), where 2.6 million  $\text{m}^3$  of bedrock was removed by blasting.<sup>30</sup> Blasting was done in 2009 to create an exit ramp<sup>31</sup> and was resumed in 2013–2014 to create a new roadway.<sup>30,32</sup> The total mass of blasting compounds used in 2013–2014 was approximately 221 000



**Figure 1.** Map<sup>40</sup> of the study area near Windham, New Hampshire, showing the groundwater potentiometric surface, locations of blasting sites, wells, and springs with preblasting and maximum postblasting  $\text{NO}_3^-$  concentrations (Table S2)<sup>41–43</sup> indicated by colors on the left and right sides of the symbols, respectively.

kg, largely in the form of bulk emulsions of ANFO ( $\text{NH}_4\text{NO}_3$  plus additives) (Supporting Information Table S3).

Thin (<3 m) glacial till overlies igneous and metamorphic bedrock in the study area.<sup>33</sup> The bedrock is Silurian-age metasedimentary rock intruded by multiple phases of Devonian-age granite.<sup>34–36</sup> A potentiometric-surface map (Figure 1) was produced from existing water level-data,<sup>37–39</sup> topography, and surface water features. In general, groundwater flow was southward through the till and fractured bedrock toward Cobbetts Pond but with considerable local variation related to topography. Forest was the dominant land cover at the blasting sites (Figure 1), whereas residential development (low to medium density) was predominant to the south.<sup>40</sup> Bedrock aquifer water-supply wells and septic systems for residential and commercial wastewater disposal are present in developed areas.

**Well Selection and Sampling.** Groundwater samples for chemical and isotopic analyses were collected between April 2013 and October 2014 in areas upgradient and downgradient

from blasting sites. Blasting related to construction of the new roadway during 2013 and 2014 was the main focus of this study; some wells also may have been affected by blasting from the 2009 construction. The selection of wells for sampling was guided in part by results from NHDOT's on-site water-quality monitoring.<sup>41,42</sup> Nineteen open-bedrock-borehole drinking-water wells were sampled monthly during blasting activities (2013–2014) for analyses including  $\text{NO}_3^-$ ,  $\text{NO}_2^-$ , and  $\text{NH}_4^+$  concentrations. U.S. Geological Survey (USGS) conducted one round of isotope sampling from five wells prior to blasting (W660, W670, W1061, W1063, and W1064, Figure 1) to characterize background conditions. Subsequently, wells were selected and sampled at 2 month intervals for stable isotopes and additional analytes. Quality-control samples included eight replicates (12%) and 2 field blanks (3%).

Twelve wells and two springs were sampled for the isotope study. Eleven of the wells were drinking-water supplies (public and private) and had dedicated submersible pumps. Open intervals of these wells ranged from 3 to 154 m below land surface, and the potentiometric surface was 0.3–23 m below land surface. Seven of the drinking-water wells were located in a lakeside neighborhood where elevated  $\text{NO}_3^-$  concentrations had been reported.<sup>41</sup> One monitoring well (W1062) was sampled by using a peristaltic pump; it had an open interval 3–30 m below land surface and a potentiometric surface 3.4 m below land surface. The monitoring well was upgradient of the 2013–2014 blasting and adjacent to the exit ramp where blasting occurred in 2009.<sup>43</sup> Samples of explosives used in the study area were not available for analysis; samples of rock chips from a recently blasted area and water discharging from a small spring (S1) draining a pile of recently blasted rock, were collected as possible representatives of materials most likely to be affected by blasting. Samples of hydroseed fertilizers used with reclamation planting were also obtained. Selected solid samples were analyzed for total N (blasted rock chips and fertilizers) and leachable N species ( $\text{NO}_3^-$ ,  $\text{NH}_4^+$  in blasted rock chips). An upgradient spring (S2) in a forested area was sampled to represent background conditions.

**Chemical and Stable Isotopic Analyses.** Temperature, specific conductance, pH, and dissolved oxygen ( $\text{O}_2$ ) concentrations were measured in the field.<sup>44</sup> Water samples were analyzed in the laboratory for selected major elements and ions (B, Ca, Mg, Na,  $\text{Br}^-$ ,  $\text{Cl}^-$ ,  $\text{NH}_4^+$ ,  $\text{NO}_3^-$ ,  $\text{NO}_2^-$ ,  $\text{PO}_4^{3-}$ ,  $\text{SO}_4^{2-}$ ), dissolved gases ( $\text{O}_2$ , Ar,  $\text{N}_2$ ,  $\text{CH}_4$ ), VOCs, and stable isotope ratios ( $\delta^2\text{H}$  and  $\delta^{18}\text{O}$  of  $\text{H}_2\text{O}$ ,  $\delta^{15}\text{N}$  and  $\delta^{18}\text{O}$  of  $\text{NO}_3^-$ ,  $\delta^{15}\text{N}$  of  $\text{NH}_4^+$  and  $\text{N}_2$ ). Samples from drinking-water wells were collected and analyzed by the NHDOT contractor for major elements and ions, and VOCs,<sup>41,42,45</sup> NHDOT data included alkalinities and total Fe concentrations for a limited number of samples, yielding charge balances given by: anion equivalents =  $1.11 \times$  cation equivalents ( $R^2 = 0.98$ ,  $n = 10$ ). Selected major elements and ions in samples from the monitoring well, springs, solid samples, and leachates were analyzed in USGS laboratories.<sup>46,47</sup> Redox conditions relevant to  $\text{NO}_3^-$  transport were evaluated using a combination of  $\text{O}_2$ ,  $\text{NO}_3^-$ ,  $\text{NO}_2^-$ ,  $\text{NH}_4^+$ , Fe, and excess  $\text{N}_2$  data<sup>48,49</sup> (see below).

Dissolved-gas concentrations were measured in the USGS Reston Groundwater Dating Laboratory.<sup>50</sup> Stable isotope ratios were measured in the USGS Reston Stable Isotope Laboratory.<sup>46</sup> Isotopic measurement uncertainties varied by analysis between 0.1 and 1‰. Analytical methods and calibrations for stable isotopes and dissolved gases are described in the Supporting Information (text). Dissolved gas data (Ar,

$\text{N}_2$ , and  $\delta^{15}\text{N}$  of  $\text{N}_2$ ) for each sample were used to quantify the effects of denitrification on the concentration and isotopic composition of  $\text{NO}_3^-$  by reconstructing the initial recharge (predenitrification)  $\text{NO}_3^-$  concentration and isotopic composition using methods described in previous studies<sup>51–54</sup> as described below and in the Supporting Information.

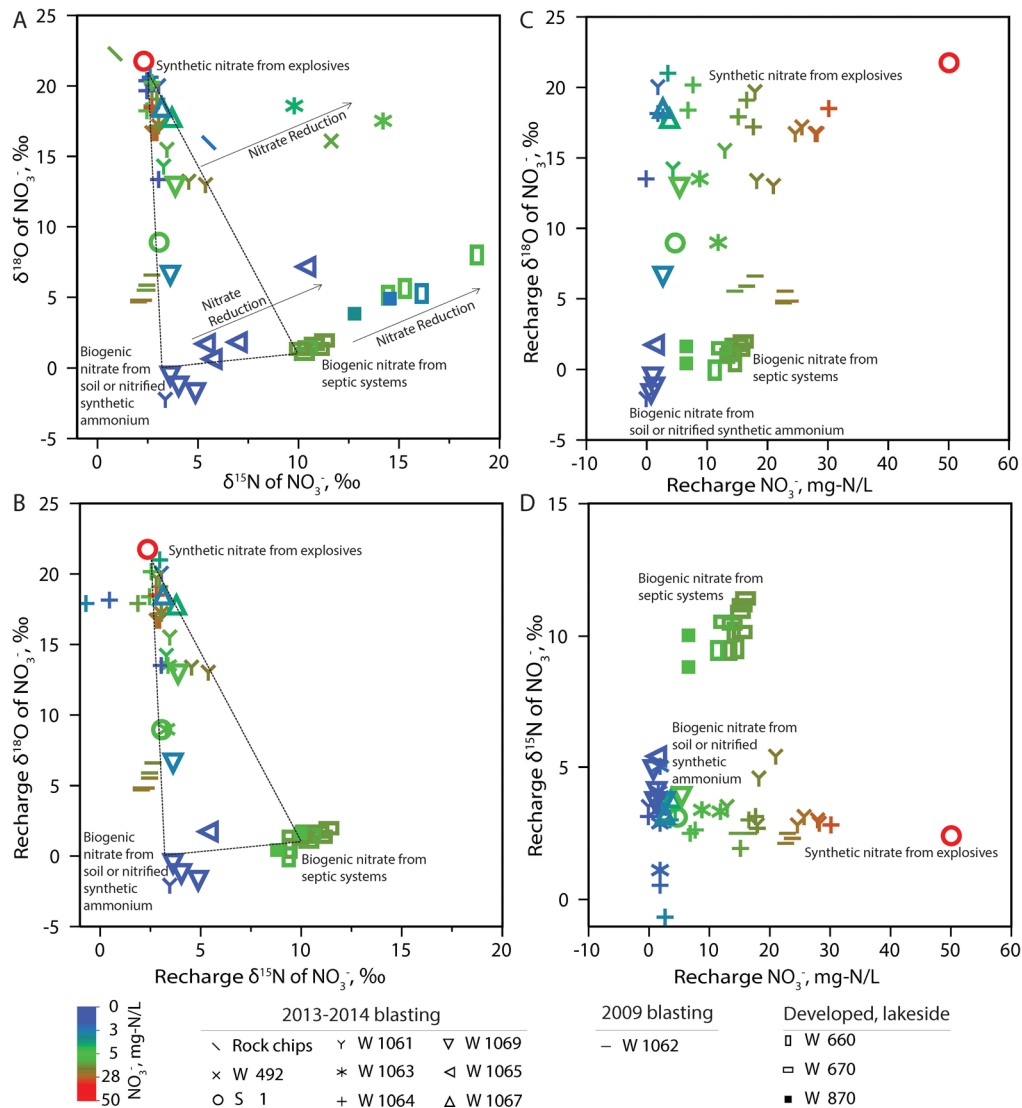
## RESULTS AND DISCUSSION

Nitrate concentrations and isotopic compositions of many samples were affected by blasting. Isotope data indicated multiple  $\text{NO}_3^-$  sources (synthetic and biogenic), but reducing conditions in the aquifer caused substantial changes in  $\text{NO}_3^-$  concentrations and isotopic characteristics in many cases. Reconstruction of initial (recharge)  $\text{NO}_3^-$  concentrations and isotopic compositions using dissolved gas data improved the definition and attribution of  $\text{NO}_3^-$  sources. Temporal variations in blasting activities and groundwater responses at the wells supported source identifications. Summaries of these results are described below and results for individual wells are given in the Supporting Information.

**Distribution and Potential Sources of Nitrate.** Prior to blasting (Figure 1), distributions of  $\text{NO}_3^-$  concentrations reflected land use.<sup>40</sup> Groundwater beneath forested land cover adjacent to the new roadway did not have detectable  $\text{NO}_3^-$  ( $\leq 0.04$  mg-N/L, W1063, W1064) before blasting. Nitrate was not detected ( $\leq 0.04$  mg-N/L, S2) in groundwater discharging from an upgradient spring on forested land. Groundwater beneath developed land had moderate to-high  $\text{NO}_3^-$  concentrations (e.g., 5.3 mg/L W660, 15.6 mg/L W670) throughout the study period. Groundwater  $\text{NO}_3^-$  concentrations increased (ranging from 0.05 to 30 mg-N/L) in 6 of 11 wells after blasting began (April 2013). The 6 wells were located <200 m downgradient from the new roadway (Figure 1). The  $\text{NO}_3^-$  concentration in groundwater discharging from a pile of recently blasted rock within the new roadway (spring S1, which did not exist before blasting) was 50 mg-N/L in June, 2013.

Blasting compounds were a major potential  $\text{NO}_3^-$  source to groundwater in this study (Tables S3 and S4). The blasting compounds used in 2013–2014 contained approximately 60 000 kg total N, of which 27 000 kg was in the form of  $\text{NO}_3^-$ -N. Explosives were largely in the form of bulk emulsions of ANFO. Material safety data sheets indicate that smaller masses of other N compounds were present (Table S4). If 0.1 to 6% of the mass of ANFO slurry was undetonated<sup>1,6</sup> then there could have been as much as 60–3600 kg of N from blasting compounds released in the study area, approximately half in the form of  $\text{NO}_3^-$  and half in the form of  $\text{NH}_4^+$ . That much total N dissolved in groundwater within the blasting-affected area downgradient from the blasting sites (500 m E-W by 220 m N-S by 110 m deep) with estimated porosity of 0.0005<sup>55</sup> could yield a mean concentration between 10 and 600 mg-N/L, more than enough to account for documented occurrences of transient, heterogeneously distributed  $\text{NO}_3^- \pm \text{NH}_4^+$  in wells, given large unknown uncertainties about the affected volume and porosity of the aquifer, and various forms of N released from exploded or unexploded blasting compounds.

Nitrogen from hydroseeding fertilizer used for reclamation of road construction sites was another potential transient source of groundwater  $\text{NO}_3^-$ . Hydroseeding fertilizer did not contain  $\text{NO}_3^-$  and was mostly in the form of  $\text{CO}(\text{NH}_2)_2$ , but portions not assimilated by plants could have been nitrified in soils.



**Figure 2.** Isotopic and chemical data for  $\text{NO}_3^-$ . (A) Measured  $\delta^{15}\text{N}$  and  $\delta^{18}\text{O}$  values of  $\text{NO}_3^-$  indicating various sources and varying effects of denitrification (nitrate reduction), with  $\Delta\delta^{15}\text{N}/\Delta\delta^{18}\text{O} \approx 1.31$  (best fit to data from W660, W670, and W870); (B) Recharge (including measured and reconstructed, predenitrification)  $\delta^{15}\text{N}$  and  $\delta^{18}\text{O}$  values of  $\text{NO}_3^-$  indicating three major sources (end members) and possible mixtures (i.e., adjusted version of panel A); (C) Recharge  $\text{NO}_3^-$  concentrations and  $\delta^{18}\text{O}$  values; (D) Recharge  $\text{NO}_3^-$  concentrations and  $\delta^{15}\text{N}$  values.

However, the total documented mass of N (<240 kg) in hydroseeding fertilizer applied along the new roadway was less than 0.5% of the total synthetic N used for blasting in the study area.

Septic systems are known to be potential sources of  $\text{NO}_3^-$  in groundwater,<sup>56</sup> and the distributions of  $\text{NO}_3^-$  before and after blasting were consistent with septic-system sources in some residential wells.  $\text{NO}_3^-$  concentrations in residential areas were inversely proportional to lot size (Tables S1). Groundwater  $\text{NO}_3^-$  concentrations similar to those observed in developed areas in this study (of the order of 2–16 mg-N/L) commonly occur in groundwater affected by septic systems elsewhere.<sup>21,22,56</sup>

Another potential source of  $\text{NO}_3^-$  is atmospheric deposition, but total maximum annual N deposition fluxes (Table S5) are small ( $\leq 10$  kg/ha) compared to the locally high fluxes from blasting and septic systems. Background  $\text{NO}_3^-$  concentrations in oxic groundwater not affected locally by human activities are expected to be relatively low. Nitrate concentrations in New England groundwater in crystalline rock aquifers with minimal

anthropogenic influence are typically less than 1 mg/L as N or lower,<sup>16,17</sup> consistent with relatively small  $\text{NO}_3^-$  inputs from atmospheric deposition, or from decay of organic matter, or weathering of minerals (e.g., illite, biotite) containing  $\text{NH}_4^+$  in soils or metamorphic rocks.<sup>57,58</sup>

#### Isotopic Composition of Nitrate and Ammonium.

Stable isotope ratios of N and O in groundwater  $\text{NO}_3^-$  provided evidence of multiple sources of  $\text{NO}_3^-$  (Figure 2A).  $\delta^{18}\text{O}$  values ranged from  $-2.2$  to  $+21.7$ ‰ and  $\delta^{15}\text{N}$  values ranged from  $+2.1$  to  $+18.9$ ‰. Most samples with high  $\text{NO}_3^-$  concentrations, including samples from the blasting-site spring (S1) and wells adjacent to, and downgradient from blasting (W1061 and W1064), had relatively low  $\delta^{15}\text{N}$  values ( $+1$  to  $+3$ ‰) and high  $\delta^{18}\text{O}$  values ( $+17$  to  $+23$ ‰) (Figure 2A). Similarly, leachate from blasted rock chips had  $\text{NO}_3^-$  with  $\delta^{15}\text{N} = 1$ – $6$ ‰ and  $\delta^{18}\text{O} = 16$ – $22$ ‰ (Table S2). These isotope ratios are different from those of biogenic soil  $\text{NO}_3^-$  (formed by nitrification) and more like those of common synthetic  $\text{NO}_3^-$  sources.<sup>59,60</sup> Some samples with relatively low  $\delta^{15}\text{N}$  also had low  $\delta^{18}\text{O}$ , indicating sources such as nitrification of N from

Table 1. Chemical and Isotopic Data for a Subset of Representative Settings and Sample Dates<sup>a</sup>

ID	sample date	comment	O <sub>2</sub>	SC	NH <sub>4</sub> <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	NO <sub>3</sub> <sup>-</sup>	NO <sub>3</sub> <sup>-</sup>
			mg/L	μS/cm	mg-N/L	mg-N/L	δ <sup>15</sup> N ‰	δ <sup>15</sup> N ‰	δ <sup>18</sup> O ‰
S2	4/15/2014	upgradient spring, background		68	<0.010	<0.04			
W1064	4/18/2013	2013 preblasting, forest	7.5	95	<0.010	<0.04			
W1063	4/18/2013	2013 preblasting, forest, low O <sub>2</sub>	0.3	324	<0.010	<0.04			
W1061	4/18/2013	2013 preblasting, developed	4.0	116	<0.010	0.13		3.5	-2.2
S1	6/25/2013	2013 postblast, synthetic NO <sub>3</sub> <sup>-</sup>	5.6	610	21.16	50.23	2.0	2.4	21.7
W1061	2/4/2014	2013 postblast, synthetic NO <sub>3</sub> <sup>-</sup>	6.0	412	0.05	28.43		2.9	16.7
W1064	10/16/2014	2013 postblast, synthetic NO <sub>3</sub> <sup>-</sup>	1.2	596	0.04	30.31		2.8	18.5
W492	10/16/2014	2013 postblast, low O <sub>2</sub>	0.1	580	0.01	13.71		11.7	16.1
W1063	10/16/2014	2013 postblast, low O <sub>2</sub>	0.1	378	< 0.010	5.20		14.3	17.5
S1	4/15/2014	2013 postblast, mixed source		215	0.02	4.82		3.1	8.9
W1061	10/16/2014	2013 postblast, mixed source	4.8	636	< 0.010	21.13		5.4	13.0
W1062	6/10/2014	2009 postblast	2.1	2117	0.34	14.70	11.1	2.5	5.5
W1062	10/16/2014	2009 postblast, low O <sub>2</sub>	0.1	2121	0.33	18.00		2.7	6.5
W670	6/25/2013	septic, developed	4.9	454	0.02	16.13		11.4	1.9
W660	6/25/2013	septic, developed, low O <sub>2</sub>	0.6	590	0.01	5.32		15.3	5.6

<sup>a</sup>SC = specific conductance. Normal and bold fonts indicate groups of samples with common sources, settings, or O<sub>2</sub> concentrations as indicated in the comment column.

soils or reduced N components of explosive compounds. Other samples had isotopic characteristics more like those common in wastewater NO<sub>3</sub><sup>-</sup>, such as W670 in a residential area near Cobbetts Pond with δ<sup>15</sup>N = +10.7 ± 0.5‰ and δ<sup>18</sup>O = +1.4 ± 0.3‰ prior to blasting and throughout the study.

Ammonium was present in groundwater adjacent to blasting sites and had variable N isotopic ratios. Groundwater NH<sub>4</sub><sup>+</sup> concentrations generally were low (<0.01 mg-N/L), but a few samples near blasting sites had elevated NH<sub>4</sub><sup>+</sup> (0.01–21.1 mg-N/L) that may represent ANFO contamination (Table 1). For example, blasting-site spring S1 had NH<sub>4</sub><sup>+</sup> = 21.1 mg-N/L with δ<sup>15</sup>N = +2.0‰, which is consistent with contamination by synthetic NH<sub>4</sub><sup>+</sup>. Blasted rock chips had δ<sup>15</sup>N = +1 to +4‰ in leachate-extractable NH<sub>4</sub><sup>+</sup> and δ<sup>15</sup>N = +2 to +5‰ in total N. This material apparently contained residues of synthetic NO<sub>3</sub><sup>-</sup> and NH<sub>4</sub><sup>+</sup> from explosives, plus nonextractable N that could include soil, rock, or other explosive components, which may have been partially oxidized to NO<sub>3</sub><sup>-</sup>. Hydroseeding fertilizer samples had bulk δ<sup>15</sup>N values of -1.8‰ (N-P-K of 24-0-5) and +1.5‰ (N-P-K of 19-19-19) (Table S2), potentially similar to ANFO values, but the fertilizers did not contain NO<sub>3</sub><sup>-</sup> and the relatively small masses used in the area suggest that this was not likely a major N source.

Monitoring well W1062, downgradient from the 2009 blasting in a forested area (nonresidential, northwest corner of Figure 1) area, had a relatively high concentration of NH<sub>4</sub><sup>+</sup> (0.8 mg-N/L) with δ<sup>15</sup>N = +8.7‰. This δ<sup>15</sup>N value is higher than those of likely NH<sub>4</sub><sup>+</sup> sources in that area, such as atmospheric deposition, forest soils, or blasting compounds, but it could indicate isotopic fractionation caused by partial nitrification of NH<sub>4</sub><sup>+</sup>. Nitrate in W1062 had relatively low δ<sup>15</sup>N (2.4 ± 0.2‰) and δ<sup>18</sup>O (5.4 ± 0.7‰) values; the δ<sup>18</sup>O value was low compared to most blasting-related NO<sub>3</sub><sup>-</sup>. Data from this well may indicate that residual synthetic NH<sub>4</sub><sup>+</sup> from blasting was being gradually nitrified, yielding groundwater with a mixture of blasting-related NH<sub>4</sub><sup>+</sup> and NO<sub>3</sub><sup>-</sup>, both of which were isotopically modified in comparison to the original synthetic explosive ratios. Nitrite concentrations generally were less than 0.05 mg-N/L, but some samples with blasting-related NO<sub>3</sub><sup>-</sup> had slightly elevated NO<sub>2</sub><sup>-</sup> (up to 2 mg-N/L in S1 and W492) providing additional evidence of active nitrogen

redox reactions (nitrification/denitrification) associated with the contamination.

While isotope data clearly indicated multiple sources of NO<sub>3</sub><sup>-</sup> with spatial and temporal variability, the NO<sub>3</sub><sup>-</sup> also was variably affected by isotopic fractionation associated with denitrification as indicated by excess N<sub>2</sub> gas in some samples with low O<sub>2</sub> concentrations. Because denitrification locally affected NO<sub>3</sub><sup>-</sup> from various sources, the NO<sub>3</sub><sup>-</sup> isotope data could not be fully evaluated on the basis of the measured values. Quantifying the effects of denitrification allowed for the reconstruction of initial NO<sub>3</sub><sup>-</sup> concentrations and associated isotope ratios in recharge, which, in turn, allowed for improved source attribution of NO<sub>3</sub><sup>-</sup>, as described below.

**Effects of Denitrification and Reconstruction of "Initial" Nitrate Concentrations and Isotope Ratios.** Chemical and isotopic data indicated that denitrification lowered groundwater NO<sub>3</sub><sup>-</sup> concentrations and altered NO<sub>3</sub><sup>-</sup> isotope ratios locally, complicating NO<sub>3</sub><sup>-</sup> source identification. Low O<sub>2</sub> concentrations (<1 mg/L) and positive correlations between δ<sup>18</sup>O and δ<sup>15</sup>N values of NO<sub>3</sub><sup>-</sup> indicated denitrifying conditions and isotope fractionation effects in some wells (Figure 2A). For example, δ<sup>15</sup>N and δ<sup>18</sup>O values of NO<sub>3</sub><sup>-</sup> in wells in residential areas (W660, W670, W870) were positively correlated (R<sup>2</sup> = 0.96, N = 10) and generally increased with decreasing NO<sub>3</sub><sup>-</sup> concentrations, consistent with varying degrees of denitrification.<sup>61</sup> Similar fractionations apparently affected NO<sub>3</sub><sup>-</sup> isotopic composition in other wells such as W1065 and W492 (Figure 2A).

For each sample the concentration of excess N<sub>2</sub> attributable to denitrification was estimated from concentrations of Ar and N<sub>2</sub> (assuming a narrow range of excess air concentrations and seasonally varying recharge temperatures, discussed further in the Supporting Information). Subsequently, the estimated concentration and δ<sup>15</sup>N value of excess N<sub>2</sub> were combined with measured values for NO<sub>3</sub><sup>-</sup> to reconstruct the initial values for NO<sub>3</sub><sup>-</sup> (NO<sub>3</sub><sup>-o</sup> in recharge, prior to denitrification in the saturated zone), according to methods described previously.<sup>51,52,54</sup> Measured δ<sup>15</sup>N values of total N<sub>2</sub> gas were +0.7 ± 0.1‰ in oxic samples, consistent with undenitrified atmospheric sources, and ranged from -0.4 to +2.5‰ in suboxic samples, indicating partial to complete denitrification

(Figure S2). Precision of excess  $N_2$  calculations was limited in part by apparent variation in groundwater recharge conditions (temperature and excess air entrainment). Oxidic samples (assumed to have no excess  $N_2$ ) had calculated recharge temperatures ranging from about 4–15 °C and excess air concentrations of approximately 1 to 4  $cm^3STP/L$  (Figure S2). Excess  $N_2$  concentrations for all samples were calculated by assuming excess air = 2.5  $cm^3STP/L$  and allowing temperature to vary accordingly. Reconstructed  $\delta^{15}N$  values of  $NO_3^-$  were determined by mass balance and reconstructed  $\delta^{18}O$  values were estimated by using the observed correlation between  $\delta^{15}N$  and  $\delta^{18}O$  (Figure 2A). Laboratory studies indicate that the relative rates of change of  $\delta^{15}N$  and  $\delta^{18}O$  during denitrification are approximately equal ( $\Delta\delta^{15}N/\Delta\delta^{18}O \approx 1$ ),<sup>61</sup> and analyses of  $NO_3^-$  in reducing groundwater commonly yield apparent  $\Delta\delta^{15}N/\Delta\delta^{18}O$  ratios between 1 and 2.<sup>26,59,62</sup> In the current study, we derived a local  $\Delta\delta^{15}N/\Delta\delta^{18}O$  ratio of 1.31 from the array of data representing residential wells (Figure 2A). In tables, figures, and text, “recharge”  $NO_3^-$  concentrations and isotopic compositions were reconstructed for samples with more than 1.2 mg/L excess  $N_2$  and were left equal to measured values for samples that had no detectable excess  $N_2$ . Considering the variation of excess  $N_2$  in oxidic samples ( $\pm 0.6$  mg-N/L), estimated typical uncertainties associated with the reconstruction method were approximately  $\pm 0.6$  mg-N/L for  $NO_3^-$ ,  $\pm 0.5\%$  for  $\delta^{15}N$ , and  $\pm 0.5\%$  for  $\delta^{18}O$  (see Supporting Information text and Table S2), overall uncertainties could be larger, especially for samples with low recharge  $NO_3^-$  concentrations.

Wells with groundwater considered most likely to have been affected by denitrification (W492, W660, W870, W1063, W1064, W1065, and W1066, see Supporting Information text) were characterized by measurable excess  $N_2-N$  concentrations ( $>1$  mg/L), low  $O_2$  concentrations ( $<1$  mg/L), and/or elevated  $\delta^{18}O[NO_3^-]$  and  $\delta^{15}N[NO_3^-]$  values. Some samples without measurable excess  $N_2$  may have been denitrified if their initial  $NO_3^-$  concentrations were low. Samples with low  $O_2$  ( $<1$  mg/L) had excess  $N_2$  concentrations ranging from near zero to approximately 10 mg-N/L, indicating up to 10 mg-N/L of  $NO_3^-$  loss by denitrification.

Reducing conditions are common in fractured metamorphic bedrock aquifers in the region,<sup>16</sup> but it is not clear what controlled the distribution of denitrified and undenitrified samples locally. Wells exhibiting evidence of denitrification were greater than 50 m deep, suggesting deep, long aquifer flow paths encountered reducing conditions. Six wells with anoxic groundwater and evidence of denitrification were in an area adjacent to and downgradient from the new roadway, and in residential areas toward the lake. Relatively high alkalinities in some reduced samples could indicate reactions with carbonate or organic C phases in the aquifer; whereas total dissolved Fe concentrations in a few samples were not clearly related to  $O_2$  or excess  $N_2$  concentrations (Table S2). It is considered likely that some wells sampled groundwater from multiple depths and redox conditions, reflecting heterogeneity of flow paths and reactions.

Reconstructed initial  $NO_3^-$  concentrations and isotopic compositions (Figures 2B–D) produced a more coherent picture of  $NO_3^-$  sources and mixing than the unadjusted measured data (Figure 2A). For example, isotope data from 3 residential-area wells that were variably affected by denitrification (W660, W670, W870) had variable  $NO_3^-$  concentrations (6.6–16.1 mg-N/L) but similar  $\delta^{15}N[NO_3^-]$  values ( $+10\%$ )

after reconstruction (Figure 2B–D, Table S2). Approximately half of the  $NO_3^-$  in the groundwater at well W660 had been lost to denitrification after recharge. Wells W1066 and W1063 had similar excess  $N_2$  concentrations, similar reconstructed  $NO_3^-$  concentrations and  $\delta^{15}N$  values (Table S2), consistent with a shared source and flow path.

**Evidence for Multiple Sources of Nitrate and Source Mixing.** After adjustment for effects of denitrification (Figure 2B), the “reconstructed-initial”  $NO_3^-$  isotopic compositions plot nearly within a triangular area in the dual isotope plot, providing evidence for three distinct sources (end members define a triangle) of  $NO_3^-$  in groundwater recharge: (1) synthetic  $NO_3^-$  from blasting, (2) biogenic  $NO_3^-$  from microbial nitrification of synthetic  $NH_4^+$ , limited contributions from soil  $NH_4^+$ , and possibly other explosive or fertilizer compounds, and (3) biogenic  $NO_3^-$  from septic systems. Values of  $\delta^{18}O$  and  $\delta^{15}N$  of  $NO_3^-$  that do not plot near end members may represent mixed sources of  $NO_3^-$  (Figure 2B), in some cases related to temporal effects of blasting-related  $NO_3^-$  transport or mixing of water from fractures within open boreholes.<sup>63</sup>

The synthetic  $NO_3^-$  end member in our study is at the apex of the dual isotope plot with  $\delta^{15}N \approx +2.5 \pm 0.5\%$  and  $\delta^{18}O \approx +21 \pm 1\%$  and is well represented by groundwater draining a blasted rock pile at S1 ( $\delta^{15}N = +2.4\%$ ,  $\delta^{18}O = +21.7\%$ ) (Figure 2B), consistent with reported isotope data for synthetic  $NO_3^-$ . Although samples of explosives were not available for this study, literature data indicate most such products have fairly distinctive isotopic compositions, whereas limited sampling in a given area may or may not be representative of all products used locally. Synthetic  $NO_3^-$  and  $NH_4^+$  reagents and fertilizers, including  $NH_4NO_3$ , typically have  $\delta^{15}N$  values near that of atmospheric  $N_2$  (0%), mostly to within  $\pm 2\%$  and almost all to within  $\pm 4\%$ .<sup>20,59,64–67</sup> For example, one compilation yielded mean  $\delta^{15}N$  values for synthetic fertilizer components (including  $NH_4^+$  and  $NO_3^-$  separated from  $NH_4NO_3$  but not including lab reagents) of  $-0.9 \pm 1.9\%$  for  $NH_4^+$  and  $+2.8 \pm 1.8\%$  for  $NO_3^-$ .<sup>65</sup> Synthetic  $NO_3^-$  typically has  $\delta^{18}O$  values near that of atmospheric  $O_2$  ( $+24\%$ ) or slightly lower. One study reported  $\delta^{18}O$  values for nitrate in  $NH_4NO_3$  ranging from  $+17$  to  $+25\%$ , with the “majority” between  $+21$  and  $+24\%$ .<sup>64</sup> Other reported mean values were  $+23 \pm 3\%$  for  $\delta^{18}O$  and  $0 \pm 2$  for  $\delta^{15}N$  for  $NO_3^-$  in synthetic fertilizer and reagent sources.<sup>60</sup> In some environments,  $NO_3^-$  with low  $\delta^{15}N$  and high  $\delta^{18}O$  could indicate direct atmospheric contributions. However, atmospheric deposition is not a likely source for the  $NO_3^-$  in S1 or the wells adjacent to blasting (Table 1) because the  $NO_3^-$  concentrations in these samples were much higher than  $NO_3^-$  concentrations in atmospheric deposition or uncontaminated groundwater in the area of the study. Also, high atmospheric  $NO_3^-$   $\delta^{18}O$  values typically are not observed in groundwater except in arid regions.<sup>68</sup>

A previous study reported “post-blast” solid residues and water extracts had total-N  $\delta^{15}N$  values of the order of 2–30% higher than preblast  $NH_4NO_3$  prills, presumably because of various isotope effects of the explosions.<sup>69</sup> With the possible exception of one blasted rock sample with elevated  $\delta^{15}N[NO_3^-]$ , our data indicate that most of the  $NO_3^-$  entering groundwater from blasting sites was not affected substantially by blasting reactions. Our data were interpreted to indicate that much of the blasting-related  $NO_3^-$  came from unexploded  $NH_4NO_3$  that dissolved in the groundwater recharge and moved away from blasting sites.



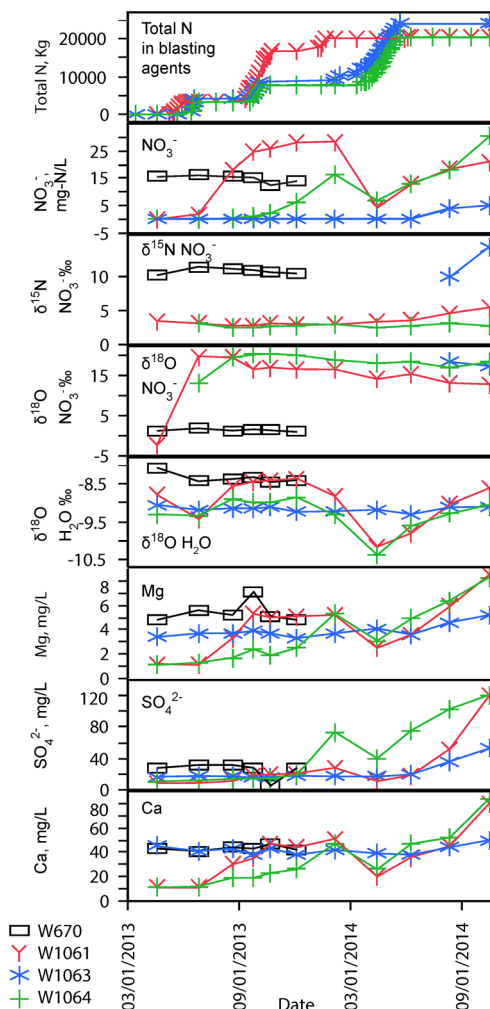
The second  $\text{NO}_3^-$  isotopic end member (Figure 2B, lower left corner of triangle), with low  $\delta^{18}\text{O}$  (Figure 2C) and low  $\delta^{15}\text{N}$  (Figure 2D), apparently occurred in some wells affected by blasting, in which case the  $\text{NO}_3^-$  may have formed by nitrification of synthetic  $\text{NH}_4^+$  or other reduced N compounds in explosives or in soils disturbed by blasting. For example, whereas recent (2013, S1) blasting produced groundwater dominated by synthetic  $\text{NO}_3^-$  with low  $\delta^{15}\text{N}$  and high  $\delta^{18}\text{O}$ , some older blasting-related  $\text{NO}_3^-$  (2009, W1062) had low  $\delta^{15}\text{N}$  and low  $\delta^{18}\text{O}$  ( $+2.4\text{‰} \pm 0.2$  and  $+5.4\text{‰} \pm 0.7$ ,  $N = 7$ ), indicating a substantial component of the  $\text{NO}_3^-$  may have been nitrified synthetic  $\text{NH}_4^+$ . Nitrification of blasting-related  $\text{NH}_4^+$  was indicated in some wells by temporal sampling (see below). The isotopic composition of this biogenic  $\text{NO}_3^-$  endmember was not well constrained and may be somewhat variable ( $\delta^{15}\text{N} \approx +3 \pm 2\text{‰}$ ,  $\delta^{18}\text{O} \approx 0 \pm 2\text{‰}$ ). Slightly positive  $\delta^{15}\text{N}$  values were higher than those of most synthetic  $\text{NH}_4^+$  products, possibly indicating mixed reduced N sources or late products of previously fractionated synthetic  $\text{NH}_4^+$ . Nitrate at W1062 appeared to be a mixture of synthetic and biogenic sources, and was accompanied by elevated  $\text{NH}_4^+$  that apparently was isotopically fractionated (enriched in  $^{15}\text{N}$ ) by partial nitrification. This end member may be difficult to distinguish from  $\text{NO}_3^-$  produced by nitrification of reduced N from inorganic fertilizers or plant residues in an agricultural setting. Similar isotopic characteristics in wells with low  $\text{NO}_3^-$  concentrations could indicate natural background  $\text{NO}_3^-$  from soil sources.<sup>70</sup>

The third  $\text{NO}_3^-$  isotopic end member was identified in samples that were interpreted to be affected by septic systems. Samples from septic-proximal well W670 did not have measurable excess  $\text{N}_2$ , indicating no denitrification and that W670 might stand alone as a representative of this end member. After adjustment for effects of denitrification at wells W660 and W870, the calculated  $\delta^{15}\text{N}$  and  $\delta^{18}\text{O}$  values of reconstructed  $\text{NO}_3^-$  were indistinguishable from the measured values at W670 (no denitrification); thus a septic-system  $\text{NO}_3^-$  end member was derived from measured data for W670 and reconstructed data for W660 and W870, giving  $\delta^{15}\text{N}$  of  $+10.1 \pm 0.8\text{‰}$  and  $\delta^{18}\text{O}$  of  $+1.1 \pm 0.6\text{‰}$  (Figure 2B, lower right corner of triangle).

Mixing of  $\text{NO}_3^-$  from various combinations of these sources can result in isotope ratios that plot inside the triangle formed by end members (Figure 2B). For example, moderate  $\delta^{15}\text{N}$  and  $\delta^{18}\text{O}$  of  $\text{NO}_3^-$  values in late samples from spring S1 (April, 2014) and wells W1062, W1063, and W1069 could indicate mixtures of synthetic  $\text{NO}_3^-$  with biogenic  $\text{NO}_3^-$  derived from nitrification of synthetic  $\text{NH}_4^+$  or other reduced N. Nitrate with a wide range of  $\delta^{15}\text{N}$  and  $\delta^{18}\text{O}$  values may also come from nitrification, degradation, or from the postblast residues of other more complex explosive compounds containing reduced N,<sup>8,9,71</sup> but these compounds were not used in a large quantity at this site (Tables S3 and S4).

Other (nonisotopic) indicators of  $\text{NO}_3^-$  sources also were evaluated (Table S2). Perchlorate ( $\text{ClO}_4^-$ ) was analyzed in representative samples because it is a common blasting-agent component, though its use was not documented in the study area.  $\text{ClO}_4^-$  concentrations ranged from 0.03 to 0.80  $\mu\text{g/L}$ , which is within the range of values reported elsewhere for groundwater not affected substantially by local contamination sources but including domestic wastewater.<sup>72–74</sup> Thus, although  $\text{ClO}_4^-$  is a component of explosives in some settings, it apparently was not substantially enriched in blasting-affected

groundwater at this site (Table S2).<sup>1,75</sup> Some wells affected by blasting had elevated concentrations of Ca, Mg, and  $\text{SO}_4^{2-}$  (Figure 3), possibly from enhanced weathering of blasted rock.<sup>1</sup>



**Figure 3.** Temporal variations in cumulative total N used in blasting compounds compared with selected chemical and isotopic data from representative wells, illustrating various response patterns. Chemical and isotopic data are from well W670 (septic source), and wells W1061, W1063, and W1064 (adjacent to blasting). Blasting N records are from hypothetical potential recharge contributing areas (buffers) extending 100 m on both sides of a flow vector upgradient from the wells (see Figure 1).  $\text{NO}_3^-$  concentrations and isotopic compositions are as measured.

Chloride concentrations and Cl/Br ratios were highest in some wells containing synthetic  $\text{NO}_3^-$ , consistent with proximity to roads and construction sites affected by both blasting and road salt, but this was not a consistent feature of blasting-contaminated samples (Figure S4). Chloride concentrations, specific conductance, Cl/Br ratios, and B concentrations were elevated above background values in some residential-area wells, consistent with domestic wastewater  $\text{NO}_3^-$  from septic systems.

**Timing of Groundwater Responses to Contamination Sources.** Temporal variations in chemistry and isotopes at some wells provided additional evidence of  $\text{NO}_3^-$  sources, transformations, and transport processes. Blasting along a 500 m section of new roadway (Figure 1) occurred over a period of 18 months (April 2013 to October 2014). The timing of  $\text{NO}_3^-$

concentration changes in some wells was related to recorded changes in the cumulative mass of N compounds used for blasting upgradient of wells (Figures 1 and 3; Tables S3 and S4).

Wells W1061 and W1064 were adjacent to blasting areas, had short, fractured-bedrock flow paths from local recharge zones, and were therefore representative of rapid temporal changes in groundwater in response to changing blasting inputs. Nitrate concentrations increased abruptly at W1061 after June 2013, within 1–3.5 months after upgradient blasting began, and more gradually (3–5 months) at W1064 (Figure 3). Initial  $\text{NO}_3^-$  increases at both wells were accompanied by rapid increases in  $\delta^{18}\text{O}$  of the  $\text{NO}_3^-$ , indicating that small amounts of synthetic  $\text{NO}_3^-$  quickly dominated the low background  $\text{NO}_3^-$  that had biogenic isotopic characteristics. Nitrate concentrations decreased briefly in these wells in March–April 2014 possibly due to recharge driven dilution, and then subsequently increased (Figure 3). Coincident variations were recorded in the  $\delta^2\text{H}$  and  $\delta^{18}\text{O}$  values of  $\text{H}_2\text{O}$  indicating changing recharge conditions, and in Mg,  $\text{SO}_4^-$ , and Ca concentrations indicating transient dilution. The  $\text{H}_2\text{O}$  isotope data could indicate rapid infiltration of cold-season meteoric water in March–April 2014, possibly associated with dilution of the solutes. The early spring dilution followed a winter without blasting and may have been facilitated by enhanced recharge from till removal and rock fracturing and removal. Sulfate trends lagged behind  $\text{NO}_3^-$ , Mg, and Ca trends, possibly because of the time or geochemical conditions required to oxidize sulfide minerals in blasted rock.

Nitrification of sorbed or recharged  $\text{NH}_4^+$  in oxic groundwater produced  $\text{NO}_3^-$  with different isotopic composition than  $\text{NO}_3^-$  leached directly from blasting compounds. For example, after blasting operations progressed westward, away from W1061 and toward W1064,  $\text{NO}_3^-$  concentrations at W1061 remained elevated but the  $\text{NO}_3^-$  had progressively lower  $\delta^{18}\text{O}$  values and higher  $\delta^{15}\text{N}$  values (Table 1, Figure 3). Spring S1 had a similar temporal trend (not shown, see Table 1). Some samples of groundwater taken in 2014 that were affected by 2013 blasting had lower  $\delta^{18}\text{O}$  of  $\text{NO}_3^-$  (S1, 8.9‰), closer to the W1062 values (Figures 2A and 3), indicating a mixture of synthetic  $\text{NO}_3^-$  with biogenic  $\text{NO}_3^-$  from nitrification of reduced N. These changes are interpreted as evidence for delayed arrival of  $\text{NO}_3^-$  that was related indirectly to blasting and derived from microbial nitrification of reduced N from explosives, disturbed soils, or rocks.

Nitrate concentrations measured in well W1062 varied between 14.7 and 23.8 mg/L and increased with increasing  $\text{O}_2$  concentrations. This response is interpreted to indicate nitrification of sorbed  $\text{NH}_4^+$  left over from blasting. These observations may indicate that initial flushing of the synthetic  $\text{NO}_3^-$  component of the explosives was followed by delayed and longer-lived flushing of biogenic  $\text{NO}_3^-$  derived from the synthetic  $\text{NH}_4^+$  component of the explosives, possibly accompanied by some fraction of the  $\text{NH}_4^+$  itself after partial nitrification and retardation during transport. The low yield of this well, likely associated with low-transmissivity fractures in the bedrock, may have contributed to a delay in  $\text{NH}_4^+$  flushing, providing an example of possible results in other low transmissivity rocks.

Another type of delayed response was exhibited by W1063. Although blasting occurred adjacent to well W1063,  $\text{NO}_3^-$  was not detected in this well for the first 1.5 years of this study (Figure 3); however, anoxic conditions and excess  $\text{N}_2$  gas provided evidence that denitrification had occurred. Recon-

structed data (before denitrification) indicate that well W1063 originally had approximately 2 mg-N/L  $\text{NO}_3^-$  with 1–5‰  $\delta^{15}\text{N}$  (Table S2) consistent with a synthetic or natural N source, prior to direct  $\text{NO}_3^-$  detection (5.2 mg/L, Table 1). Initial  $\text{NO}_3^-$  concentrations were present before the start of the 2013–2014 blasting and may have been related to upgradient blasting in 2009. Nitrate concentrations subsequently increased with corresponding increases in excess  $\text{N}_2$  approximately 1.5 years after 2013–2014 blasting commenced. This sequence appears to indicate denitrification protected W1063 from earlier low-level  $\text{NO}_3^-$  contamination, but the higher flux of  $\text{NO}_3^-$  after 2013 eventually exceeded the sustainable denitrification rate in the aquifer, causing delayed breakthrough of partially denitrified synthetic  $\text{NO}_3^-$  from blasting. Fractures intersecting well W1063 (12 m of casing, Table S1) are connected to a deeper anaerobic flow system that may have promoted denitrification of blasting-related  $\text{NO}_3^-$  for a period of time (Figure 3 and Figures S1 and S5).

In contrast to the relatively rapidly changing  $\text{NO}_3^-$  concentrations and isotope ratios in wells affected by blasting,  $\text{NO}_3^-$  concentrations and isotope ratios at wells in developed areas affected by septic-systems were relatively stable throughout the study. Wells W660 and W670 in developed land-use settings adjacent to many homes with small lot sizes and septic systems had moderately high  $\text{NO}_3^-$  with elevated Mg, Cl, and Ca, that changed by less than 25% between April 2013 and October 2014 (Figure 3, Table S2). Magnesium and Ca were consistently elevated in the septic-affected wells, possibly indicating contributions from water softeners. Although  $\delta^{15}\text{N}$  and  $\delta^{18}\text{O}$  values of  $\text{NO}_3^-$  were affected by denitrification more in some wells and less in others, they were relatively constant over time in each well. Similarly,  $\delta^2\text{H}$  and  $\delta^{18}\text{O}$  values of  $\text{H}_2\text{O}$  were relatively constant in these wells (Figure 3 and Figure S3), consistent with recharge containing larger components of recycled groundwater and less responsive to rapid infiltration of precipitation or snowmelt (at seasonal or event time scales) than in some of the blasting-affected wells.

#### Implications for Nitrate Source Identification Studies.

In an area with multiple sources of groundwater  $\text{NO}_3^-$  contamination (including construction-related explosives), combined use of various chemical and isotopic analyses, reconstruction of  $\text{NO}_3^-$  affected by denitrification, mass balance calculations, and hydrogeologic information helped to resolve  $\text{NO}_3^-$  sources and transport processes. Four groundwater  $\text{NO}_3^-$  contamination scenarios were identified in this study: (1) rapid breakthrough of synthetic  $\text{NO}_3^-$  in proximal wells downgradient of blasting (low  $\delta^{15}\text{N}$  and high  $\delta^{18}\text{O}$ ), (2) reduced and delayed blasting-related  $\text{NO}_3^-$  concentration responses in wells with anoxic (denitrifying) conditions, (3) persistent  $\text{NO}_3^-$  in wells adjacent to blasted rock from nitrification of  $\text{NH}_4^+$  (low  $\delta^{15}\text{N}$  and low  $\delta^{18}\text{O}$ ), (4) relatively stable  $\text{NO}_3^-$  concentrations and isotopic compositions consistent with septic sources (high  $\delta^{15}\text{N}$  and low  $\delta^{18}\text{O}$ ). Because of the small scale and multidisciplinary approach of this study, likely  $\text{NO}_3^-$  sources could be distinguished by various lines of evidence; the isotopic evidence could be especially useful in areas where some of the other evidence may be lacking or ambiguous. Synthetic  $\text{NO}_3^-$  with high  $\delta^{18}\text{O}$  is unusual in groundwater and indicates rapid transmission and lack of cycling in soils.

Denitrification caused isotopic fractionation of residual  $\text{NO}_3^-$  with both septic and blasting sources. Wells that apparently were “protected” from  $\text{NO}_3^-$  contamination by denitrification

in anoxic conditions exhibited increases in blasting-related  $\text{NO}_3^-$  only after extended periods of blasting, possibly indicating high fluxes of synthetic  $\text{NO}_3^-$  locally exceeded the supply of electron donors in the aquifer. Groundwater with blasting-related  $\text{NO}_3^-$  moved rapidly, within six months of blasting, from construction sites to downgradient wells with oxic conditions. Elevated  $\text{NO}_3^-$  was flushed over a time scale of months to years. Nitrate breakthrough times in denitrifying groundwater (Wells W1063 and W492) were on the order of a year, but may depend on loading rates. Groundwater from septic systems had persistent  $\text{NO}_3^-$  concentrations, distinctive isotopic compositions, and elevated specific conductance.

These results highlight the transient, heterogeneous, and complex nature of groundwater contamination associated with blasting-related construction in crystalline rock terrains. However, with careful study design and appropriate choices in monitoring of isotopes and gases in concert with general chemistry, it is possible to determine N sources to groundwater near blasting operations and to disentangle the complexities associated with multiple sources and geochemically altered N compounds in many aquifer systems.

## ■ ASSOCIATED CONTENT

### 📄 Supporting Information

The Supporting Information is available free of charge on the ACS Publications website at DOI: [10.1021/acs.est.5b03671](https://doi.org/10.1021/acs.est.5b03671).

Descriptions of sampling protocols, quality control, stable isotopic analyses, nitrate reconstruction calculations, and additional observations about individual wells (text); a map and cross sections of the study area and figures summarizing selected chemical and isotopic data (Figures S1–S5) (PDF)

Well construction information (Table S1) (XLSX)

Chemical and isotopic data (Table S2) (XLSX)

Blasting records and masses of blasting agents used (Table S3) (XLSX)

Concentrations of total N and  $\text{NO}_x\text{-N}$  in blasting agents (Table S4) (XLSX)

Potential nitrogen sources upgradient of wells (Table S5) (XLSX)

## ■ AUTHOR INFORMATION

### Corresponding Author

\*Phone: 603-226-7826; fax: 603-226-7894; e-mail: [jrdegnan@usgs.gov](mailto:jrdegnan@usgs.gov).

### Notes

The authors declare no competing financial interest.

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**Archived:** Tuesday, November 10, 2020 3:49:27 PM  
**From:** [Pade, Neil](#)  
**Sent:** Tue, 10 Nov 2020 09:00:23  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: EV Showroom Project  
**Importance:** Normal

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Please add to the file record

Neil

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**From:** jtodd [mailto:clarke44@att.net]  
**Sent:** Monday, November 9, 2020 4:07 PM  
**To:** Pade, Neil  
**Subject:** EV Showroom Project

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Good Afternoon:

I am submitting the following comments on the EV showroom project.

1. According to The Valley Press articles, this project is being positioned as an Electric Vehicle (EV) showroom which also has a nearby gas station and convenience store. I would like to encourage you to also look at this from a point of view 180 degrees from this one, namely to look at this project as a gas station and convenience store which also has a nearby EV showroom. It certainly provides a different perspective on this project.
2. It also hits me that this project is incorporating seemingly contradictory elements together in the same place - electric vehicles and fossil fuel gas pumps, which are to be located about 1/3 mile from 2 existing gas stations at the corner of Rte 44 and Bushy Hill Rd in Simsbury. Does Rte 44 REALLY need more gas stations?
3. Of the 26 acres mentioned in the newspaper, only 6 are in Canton and the majority are in Simsbury. Yet Canton will have to bear the major burden of any issues involving the proposed traffic light as we do with any other traffic light in town. To me this indicates that Canton will have to bear primary first responder coverage for incidents (accidents) at the traffic light. Also, does Canton have to provide primary fire and ambulance/emergency response, even if an incident is located across the Simsbury line on this property?

What will be the projected impact on our emergency response structure and costs?

Just some things you may wish to consider.

Jim Todd  
19 Dyer Ave

Connecticut Water Company  
93 West Main Street  
Clinton, CT 06413-1600  
Customer Service: 800.286.5700



November 9, 2020

VIA EMAIL

Neil Pade  
Planning and Zoning  
Canton Town Hall  
P.O. Box 168  
4 Market Street  
Collinsville, CT 06022

**Re: 9-15 Albany Turnpike Simsbury and Canton, Blasting and Revised Plans**

Mr. Pade,

It was brought to our attention that the proposed Gas Station/Convenience Store and Electric Vehicle Showroom/Service Shop located at 9-15 Albany Turnpike in the Towns of Simsbury and Canton includes revised plans and a blasting schedule. Since this property is partially located within the aquifer recharge area of our Well #5 Wellfield for our Avon System, we are concerned with potential impacts that this development may have in the integrity of the drinking water supply.

We have reviewed sheet 2.21 of the revised plans, dated 10/16/20, which describes the limits of the blasting. We understand that 81,119 cubic yards of material will be excavated and exported from the property during a 24 month period. Blasting can affect well water quality as it can open new fractures, cause others to close, and dislodge sediment.

In addition to our initial comments, dated 9/15/20, we request the applicant conduct a pre-blast survey that includes Well #5 in the scope of that analysis. Specifically, we request that the pre-blast survey provide baseline well yield, specific capacity, and pre-blast well water quality conditions. It is important that a baseline is established to measure potential impacts of blasting on the well performance in both water quality and quantity.

We request the opportunity to review and comment on the scope of the pre-blast survey prior to approval. We also request additional time to review the full revised plan set, as our initial comments addressed the plans dated 8/11/20. A full size plan set has been requested from the applicant.

Source protection is a vital concern of the Connecticut Water Company and we appreciate the opportunity to comment on proposals that may affect our sources of supply.




Sincerely,

A handwritten signature in blue ink, appearing to read 'JD', with a long, wavy horizontal line extending to the right.

Jessica Demar  
Environmental & Regulatory Compliance Coordinator

CC: Kim Czapl, Aquifer Protection Area Program, Dept. of Energy and Enviro. Protection  
Gerry McDermott, Developer Services Supervisor, CT Water Company  
Anthony Capuano, Design Engineer, Solli Engineering

**Archived:** Tuesday, November 10, 2020 3:55:14 PM  
**From:** [Pade, Neil](#)  
**Sent:** Mon, 9 Nov 2020 13:37:28  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: CT Water Comments 9-15 Albany Turnpike - Blasting  
**Importance:** Normal  
**Attachments:**  
[Canton and Simsbury 9-15 Albany Turnpike 11.9.2020.pdf](#) 

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Please add to the file record.

Thank you

Neil

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**From:** Jessica Demar [mailto:Jessica.Demar@ctwater.com]  
**Sent:** Monday, November 9, 2020 1:36 PM  
**To:** Pade, Neil  
**Cc:** kim.czapla@ct.gov; 'Anthony Capuano'; Gerald McDermott  
**Subject:** CT Water Comments 9-15 Albany Turnpike - Blasting

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Neil,  
Attached please find CT Water comments regarding the proposed blasting associated with the development proposal located at 9-15 Albany Turnpike.  
Thanks,  
Jessica

*Jessica Demar  
Regulatory & Environmental Compliance Coordinator  
Connecticut Water Company  
O: 860-664-6190  
C: 203-623-8657*

**Archived:** Tuesday, November 10, 2020 3:55:52 PM  
**From:** [Pade, Neil](#)  
**Sent:** Mon, 9 Nov 2020 10:12:46  
**To:** [Deltenre, Renee](#)  
**Subject:** FW: 9-15 Albany Turnpike - Canton CT - CT Water Notification  
**Importance:** Normal

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**From:** Jessica Demar [mailto:Jessica.Demar@ctwater.com]  
**Sent:** Monday, November 9, 2020 10:06 AM  
**To:** 'Anthony Capuano'  
**Cc:** Collene Byrne; Kevin Solli; Gerald McDermott; Pade, Neil  
**Subject:** RE: 9-15 Albany Turnpike - Canton CT - CT Water Notification

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Anthony,  
Thank you for providing responses to CWCs initial letter as well as providing updated plans. I understand however that the plans have since been revised again, dated 10/16/20, and include a schedule for blasting.

Can you please mail me a full sized plan set with the most current revisions so that I can review?

93 W. Main St  
Clinton, CT 06413

I will be submitting comments to the town today (copying you) regarding the blasting proposal.  
Thanks,  
Jessica

*Jessica Demar*  
*Regulatory & Environmental Compliance Coordinator*  
*Connecticut Water Company*  
*O: 860-664-6190*  
*C: 203-623-8657*

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**From:** Anthony Capuano <Anthony@solllc.com>  
**Sent:** Monday, October 12, 2020 4:57 PM  
**To:** Gerald McDermott <Gerald.McDermott@ctwater.com>; Jessica Demar <Jessica.Demar@ctwater.com>  
**Cc:** Collene Byrne <Collene@solllc.com>; Kevin Solli <Kevin@solllc.com>  
**Subject:** RE: 9-15 Albany Turnpike - Canton CT - CT Water Notification

**Please note: THIS EMAIL ORIGINATED FROM AN EXTERNAL SOURCE.**

Good Afternoon Jessica & Gerry,

As part of the permitting process with the Town of Canton, we submitted revised materials for the project at 9-15 Albany Tpke on October 2 to the Land Use Department. For your reference, we've compiled one of the letters that was sent in with these revised materials as well as the current status of the plans we originally sent to you back in August.

[9-15 Albany Turnpike - Canton CT - CT Water \(2020-10-12\)](#)

Please let me know if there are any questions.

Thanks,  
Anthony

**Anthony Capuano**

Design Engineer



501 Main Street, Suite 2-A  
Monroe, CT 06468  
Office: (203) 880-5455  
Fax: (203) 880-9695  
Cell: (203) 668-9384

[Anthony@SolliLLC.com](mailto:Anthony@SolliLLC.com)  
[www.SolliEngineering.com](http://www.SolliEngineering.com)

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**From:** Gerald McDermott <[Gerald.McDermott@ctwater.com](mailto:Gerald.McDermott@ctwater.com)>  
**Sent:** Wednesday, September 16, 2020 3:44 PM  
**To:** Anthony Capuano <[Anthony@solliillc.com](mailto:Anthony@solliillc.com)>; Jessica Demar <[Jessica.Demar@ctwater.com](mailto:Jessica.Demar@ctwater.com)>  
**Cc:** Collene Byrne <[Collene@solliillc.com](mailto:Collene@solliillc.com)>  
**Subject:** RE: 9-15 Albany Turnpike - Canton CT - CT Water Notification

Anthony, email is fine for me. We're still working remotely so picking up mail at the office has its own challenges.

Gerry McDermott  
Developer Services Supervisor  
CT Water Company  
93 West Main Street  
Clinton, CT 06413  
(860) 664-6125

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**From:** Anthony Capuano <[Anthony@solliillc.com](mailto:Anthony@solliillc.com)>  
**Sent:** Wednesday, September 16, 2020 2:55 PM  
**To:** Jessica Demar <[Jessica.Demar@ctwater.com](mailto:Jessica.Demar@ctwater.com)>; Gerald McDermott <[Gerald.McDermott@ctwater.com](mailto:Gerald.McDermott@ctwater.com)>  
**Cc:** Collene Byrne <[Collene@solliillc.com](mailto:Collene@solliillc.com)>  
**Subject:** RE: 9-15 Albany Turnpike - Canton CT - CT Water Notification

**Please note: THIS EMAIL ORIGINATED FROM AN EXTERNAL SOURCE.**

Good Afternoon Jessica & Gerry,

The hearing for our project at 9-15 Albany Turnpike has been postponed until October 21, 2020, per the following legal notice:

[http://www.townofcantonct.org/filestorage/6662/17720/48251/48253/09-16-20\\_P%26Z\\_Hearing - Notice of Postponement.pdf](http://www.townofcantonct.org/filestorage/6662/17720/48251/48253/09-16-20_P%26Z_Hearing_-_Notice_of_Postponement.pdf)

We greatly appreciate your time so far and the comments you've issued and we are excited to get the process started for this project. With all this being said, the Town is looking to have us re-issue notices to all parties involved. For CT Water Company, would you like us to re-submit the Standard Notification Form in the mail or is there a different approach you'd like us to take.

Please let us know if you have any questions.

Thank you,  
Anthony

**Anthony Capuano**

Design Engineer



501 Main Street, Suite 2-A  
Monroe, CT 06468  
Office: (203) 880-5455  
Fax: (203) 880-9695  
Cell: (203) 668-9384

[Anthony@SolliLLC.com](mailto:Anthony@SolliLLC.com)  
[www.SolliEngineering.com](http://www.SolliEngineering.com)

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**From:** Jessica Demar <[Jessica.Demar@ctwater.com](mailto:Jessica.Demar@ctwater.com)>  
**Sent:** Tuesday, September 15, 2020 10:09 AM  
**To:** Anthony Capuano <[Anthony@solliillc.com](mailto:Anthony@solliillc.com)>  
**Subject:** RE: 9-15 Albany Turnpike - Canton CT - CT Water Notification

Who should I direct my comments to? Town contact? Neil Pade, Director of Planning and Community Development?

*Jessica Demar*  
*Regulatory & Environmental Compliance Coordinator*  
*Connecticut Water Company*  
*860-664-6190*

---

**From:** Anthony Capuano <[Anthony@solliillc.com](mailto:Anthony@solliillc.com)>  
**Sent:** Thursday, September 3, 2020 8:21 AM  
**To:** Jessica Demar <[Jessica.Demar@ctwater.com](mailto:Jessica.Demar@ctwater.com)>; Gerald McDermott <[Gerald.McDermott@ctwater.com](mailto:Gerald.McDermott@ctwater.com)>  
**Cc:** Collene Byrne <[Collene@solliillc.com](mailto:Collene@solliillc.com)>  
**Subject:** RE: 9-15 Albany Turnpike - Canton CT - CT Water Notification

**Please note: THIS EMAIL ORIGINATED FROM AN EXTERNAL SOURCE.**

Good Morning Jessica & Gerry,

Just providing an update on our application for 9-15 Albany Turnpike in Canton/Simsbury, which will be heard via **Virtual Meeting on September 16<sup>th</sup> at 7:00 P.M.** You can visit the Town of Canton's website [www.townofcantonct.org](http://www.townofcantonct.org) for more information on the meeting.

Thank you,  
Anthony

**Anthony Capuano**

Design Engineer



501 Main Street, Suite 2-A  
Monroe, CT 06468  
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Fax: (203) 880-9695  
Cell: (203) 668-9384

[Anthony@SolliLLC.com](mailto:Anthony@SolliLLC.com)  
[www.SolliEngineering.com](http://www.SolliEngineering.com)

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**From:** Anthony Capuano  
**Sent:** Wednesday, August 19, 2020 3:17 PM  
**To:** Jessica Demar <[Jessica.Demar@ctwater.com](mailto:Jessica.Demar@ctwater.com)>; Gerald McDermott <[Gerald.McDermott@ctwater.com](mailto:Gerald.McDermott@ctwater.com)>  
**Cc:** Kevin Solli <[Kevin@solliillc.com](mailto:Kevin@solliillc.com)>; Collene Byrne <[Collene@solliillc.com](mailto:Collene@solliillc.com)>; Mary Blackburn <[Mary@solliillc.com](mailto:Mary@solliillc.com)>  
**Subject:** RE: 9-15 Albany Turnpike - Canton CT - CT Water Notification

Jessica & Gerry,

Please accept the following as additional information to the initial "notice" as required pursuant to CGS §8-3i in regard to our submission of a Site Plan / Special Permit Application to the Town of Canton pertaining to work to be done within the "Well 5" Aquifer Protection Area.

[9-15 Albany Turnpike - Canton CT - CT Water Notification Additional Information \(2020-08-19\)](#)

The information has also been sent by Certified Mail as requested on the Notification Form. We will provide an update when the Town sets a date for the project to be heard.

Thank you,  
Anthony

**Anthony Capuano**

Design Engineer



501 Main Street, Suite 2-A  
Monroe, CT 06468  
Office: (203) 880-5455  
Fax: (203) 880-9695  
Cell: (203) 668-9384

[Anthony@SolliLLC.com](mailto:Anthony@SolliLLC.com)  
[www.SolliEngineering.com](http://www.SolliEngineering.com)

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**From:** Jessica Demar <[Jessica.Demar@ctwater.com](mailto:Jessica.Demar@ctwater.com)>  
**Sent:** Wednesday, August 19, 2020 8:49 AM  
**To:** Anthony Capuano <[Anthony@solliillc.com](mailto:Anthony@solliillc.com)>; Gerald McDermott <[Gerald.McDermott@ctwater.com](mailto:Gerald.McDermott@ctwater.com)>  
**Cc:** Kevin Solli <[Kevin@solliillc.com](mailto:Kevin@solliillc.com)>; Collene Byrne <[Collene@solliillc.com](mailto:Collene@solliillc.com)>; Mary Blackburn <[Mary@solliillc.com](mailto:Mary@solliillc.com)>  
**Subject:** RE: 9-15 Albany Turnpike - Canton CT - CT Water Notification

Received. Thank you. Please complete the attached notification form and let me know when this project is scheduled to be heard by the town boards so that I can have comments prepared in time.

Thanks,  
Jessica

*Jessica Demar  
Regulatory & Environmental Compliance Coordinator  
Connecticut Water Company  
860-664-6190*

---

**From:** Anthony Capuano <[Anthony@solliillc.com](mailto:Anthony@solliillc.com)>  
**Sent:** Wednesday, August 19, 2020 8:38 AM  
**To:** Jessica Demar <[Jessica.Demar@ctwater.com](mailto:Jessica.Demar@ctwater.com)>; Gerald McDermott <[Gerald.McDermott@ctwater.com](mailto:Gerald.McDermott@ctwater.com)>  
**Cc:** Kevin Solli <[Kevin@solliillc.com](mailto:Kevin@solliillc.com)>; Collene Byrne <[Collene@solliillc.com](mailto:Collene@solliillc.com)>; Mary Blackburn <[Mary@solliillc.com](mailto:Mary@solliillc.com)>  
**Subject:** 9-15 Albany Turnpike - Canton CT - CT Water Notification

**Please note: THIS EMAIL ORIGINATED FROM AN EXTERNAL SOURCE.**

Dear Mr. McDermott & Ms. Demar:

Please accept the following "notice" as required pursuant to CGS §8-3i in regard to our submission of a Site Plan / Special Permit Application to the Town of Canton pertaining to work to be done within the "Well 5" Aquifer Protection Area.

The proposed application involves the following activities:

The project entails the development of an 8,384 square-foot gas station/convenience store and a 20,865 square-foot electric vehicle showroom/service shop at 9-15 Albany Turnpike in Canton & Simsbury, Connecticut.

Copies of the application are enclosed in the mailing today. Please feel free to reach out with any questions or comments you may have regarding the properties and the proposed site improvements.

Thank you for your consideration in this matter.

**Anthony Capuano**

Design Engineer



501 Main Street, Suite 2-A  
Monroe, CT 06468

Office: (203) 880-5455  
Fax: (203) 880-9695  
Cell: (203) 668-9384

[Anthony@SolliLLC.com](mailto:Anthony@SolliLLC.com)  
[www.SolliEngineering.com](http://www.SolliEngineering.com)





PLANNING & ZONING COMMISSION  
**Canton, Connecticut Inc. 1806**  
4 Market Street, Collinsville, Connecticut 06022

TO: Planning and Zoning Commission

FROM: Neil S. Pade, AICP, Director, Planning & Community Development

CC: Attorney David Markowitz, Applicant Representative  
File #475; Apln #2000

SUBJECT: Staff Review - Site Plan and Special Permit Uses at 9-15 Albany Turnpike –  
Summary of comments from applicants 10-16-20 submittal/ response to the  
September 29, 2020 staff report.

DATE: November 2, 2020

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Please see the September 29, 2020 memorandum from staff ('staff report'). The following is an evaluation of the plans presented by the applicants at the October 18, 2020 meeting (10-16-20 submittal).

The application form and associated notices have been updated as requested.

The application fee has been recalculated, submitted, and determined to be complete.

At the moment additional fees have not been required by the Commission under Chapter 248 of the Canton Town Code, additional fees may still be required by the Commission if determined to be necessary.

**Consultants/ Referrals**

The review of the required Certified Erosion and Sediment Control Plan and Excavation and Grading request is occurring at the North Central Conservation District. Review comments from the District were anticipated for November 9, 2020. However after checking on the status this week, it was identified that the District was working off of the September 24, 2020 plan set and not provided a copy of the current plans before the Commission and public. An up-to-date set should be provided to the District as soon as possible.

A third party stormwater review was not required. However the Commission requested the applicant to provide published comments from the Simsbury Town Engineer's review of the proposed stormwater system. Those have not yet been provided.

A third party review of traffic was not required. The Commission did discuss however, that if the project is approved, they will formulate comments to the Local Traffic Authority, CTDOT District, and OSTA at that time.

Sitewalk – at the October public hearing the Commission began discussing the need for a sitewalk but the conversation went down a tangent and did not circle back. If the Commission desires a sitewalk it should be raised as early as possible.

### **Checklist Review**

1. Page A-12, Item #2, Application Form – The application form, as noted above has been updated. With the exception of Town permission it is complete. It is understood the process of conveying the road will occur through town leaders and the public at a later point after the zoning review process has been completed.
2. Page A-12, Item #5, Deeds and Easements – A proposed easement plan has now been included in the appendix of the engineering report. We are not sure that it is complete. Also, the other items required by this section have not been identified.

A common property line has also been added to the plans in this submittal. The proposed easement plan suggests it is the intent for the property line to remain. This results in the creation of non-conformities. Much like occurred for 101 and 107 Albany Turnpike, now 101 Albany Turnpike (Aldi's) the lots should be required to be combined as a condition of approval. The applicant may also seek a consolidated parcel under Section 8.3 of the regulations. If this is intended, it should be declared and the associated deeds and easements provided and submitted to the Town Attorney for review consistent with past practice.

3. Page A-14, Item #17 Sewer – Copies of approval from the Canton Water Pollution Control Authority not yet provided. – Pending Canton WPCA Review.
4. Page A-14, Item #18. State Traffic Administration/ Local Traffic Authority – The applicant has now confirmed OSTA review is applicable. An encroachment permit will also be required by CTDOT District 4. It is not clear what changes may be required by either entity to what is proposed to the Commission. A list of traffic related concerns were raised in review of the project with the Town Planner, Canton Local Traffic Authority (LTA), Fire Chief and Project Administrator documented in the September 29, 2020 staff review. If the application is approved, the Commission is to submit comments to the LTA, CTDOT District and OSTA. Comments relayed in this motion should also be consistent with those that may necessary for a CGS 8-24 review. The Commission may want to vet those comments thoroughly now through this process.

5. Page A-15, Item #20 Bonds – Cost estimates are provided in Appendix H of the engineering report. Just as information to understand the extent of the project, costs associated with the rock removal are estimated in excess of \$3.4 million dollars.

Estimates include a factor for extruded asphalt curbing (2,400 lf). The Applicant needs to clarify where this would be applied in compliance with the regulations?

Estimates include only 20 lf for silt fence which does not appear to be accurate.

6. Page A-15, Item #22 Stormwater – Pending comments from Simsbury Town Engineer as part of determining compliance with Section 7.13.
7. Page A-15, Item #23, Erosion Control – Defer to review comments from the North Central Conservation District. – See concerns raised by staff in this report.
8. Page A-18, Item #25.7, Zoning Schedule:
  - a. Not complete. A row with associated data to be provided for each of the items listed #1 - #12. – Previously relayed. Information has now been provided in separate tables on Sheet 2.11.
9. Page A-17, Item #25.11, Easements/ Restrictions – Locations of any necessary easements to be shown on the submitted plans. If easements are necessary (easements and agreements between properties and owners or for consolidation or shared access, rights to pass, repass, etc...) the associated legal documents would need to be reviewed as previously relayed. - Not fully addressed
10. Page A-17, Item #25.14, Water Supply Areas – Due to public inquiries regarding rock removal process and concerns of impact on wells, the CT Water Company was asked to clarify their comments in relation to this portion of the proposal. A response is anticipated prior to November 9<sup>th</sup>.
11. Page A-19, Item #25.27, Landscaping: The required number of shade trees along the frontage is not provided. A waiver is now requested citing site constraints and additional trees elsewhere. Site constraints are being overcome or removed throughout the proposed development for a variety of improvements. The Commission should look at the compliant frontage plantings of the recently constructed 101 Albany Turnpike and compare to the proposed plans with an eye towards consistency.

The applicant has also proposed planting in the State ROW to supplement required on-site landscaping on the western portion of the site. Landscaping is required to be installed on site. Landscaping in the State ROW has not been allowed in the past. If the Commission seeks to allow this as a modification, it should be clear that permission has been granted by the State and that it will not be removed.

- a. The Landscape Area Compliance Table should be updated to include a value for Section 7.1.E.2. – Provided in progress prints but not identified in the submission. This was discussed with the project Landscape Architect who will add the tables to the final plan set in the zoning schedule, where required, and also will correct some minor discrepancies in the planting schedule.

12. Page A-19 Item #25.28, Section 7.2 Parking and Loading

The Applicant has submitted a request under 7.2.c.10 for permanent deferment. Staff believes the Commission was requesting information to be provided under 7.2.c.2.b. This is a unique compilation of uses. Regardless of the mechanism, the Commission should be comfortable that adequate (but not unnecessary) parking is provided to avoid future issues. (Staff does not have concerns with the amount provided.)

- a. Based on the parking data proposed for the gas/ convenience building, the layout does not comply with Section 7.2.D.3.d which requires reduction of parking lot mass and at least 75% of the parking to be provided behind the building line associated with that parking. The Commission should review this interpretation and confirm its application. The majority of parking is behind the building line for the larger building on the site. – **Previously relayed, Commission to evaluate.**
- b. Section 7.2.D.5 – Access Management – Section 7.2D.5 prohibits the Commission from approving the plan unless it meets the criteria of this section. See comments on Page 1 for Checklist Page A-14 Item #18. Are reasonable efforts being made to:
  - i. reduce curb-cuts and provide shared access on abutting lots,
  - ii. establishing lot inter-connections using internal driveways and walkways,
  - iii. locate turning movements to the most appropriate locations,
  - iv. separate driveways from nearby intersections, and
  - v. provide more than one means of access, ingress and/ or egress.

Note: There appears to be some access management considerations for 21 Albany Turnpike but it is not clear as presented. – **Previously raised. Physical improvements have been added to the plans to benefit 21 Albany Turnpike. No easement information is provided if required.**

- c. Section 7.2.D.6 – Fire lanes to be added to the plans and marked on pavement per the comments from the Fire Chief (*written comments pending*). – Defer to comments from the Fire Chief.
- d. Section 7.2.D.8 – Snow storage areas not provided. – **Previously raised. Snow storage has been added to plans but on uphill slopes greater than 33% to be planted with trees, and are not comparable to the area of snow management. It is not clear how this works.**

13. Page A-19 Item #25.29, Section 7.3 Signage – **The ZEO’s 10-19-20 signage review comments have not yet been addressed.**

- a. Additional signage is anticipated beyond what has been provided based on the nature of gasoline service stations, convenience stores, restaurants and automobile dealers. – **Previously raised. Confirm no additional signage than what is shown?**

14. Page A-20, Item #25.30 – Outdoor Lighting

- a. A photometric survey inclusive of a “non-business hour lighting plan” is required by Section 7.4.C.10 and Section 7.12. Non-business hour lighting plan not provided. – **Previously raised. The required non-business hour lighting plan was not identified in the revised submission.**
- b. Wall mounted light fixtures shown on the Lighting Plan conflict with those shown on the Elevations. – **Addressed by Applicant but do not appear to match? (Lights shown on Sheets CP 1.2 and CP 1.3 would appear to be non-compliant as drawn, but appears inconsistent with what is shown on sheets 2.71.)**
- c. Why is the more decorative lighting used in only two locations on each building? This is not consistent with other recent buildings constructed within the Business District in the East Gateway. – **Previously raised. The decorative lighting previously identified in only two locations appears to have been removed or staff did not identify them? (Somewhat contrary to the intent of the comment if removed).**
- d. Lighting plan photometric includes light levels greater than **43 fc’s**. The Commission should be aware of these **exceptionally high** levels and confirm compliance with Section 7.4.c.1.c and d.
- e. Off building, pedestrian scale lighting as applied at 115 Albany Turnpike should be considered, consistent with lighting of other sites in the East Gateway – Previously raised. No response provided.
  - a. The Lighting Plans for Business zoned properties in the East Gateway, inclusive of signage, pedestrian scale lighting and general parking lot lighting, was carefully considered and approved by the Commission with the cooperation of the applicant and members of the public. The Commission may wish to discuss additional coordination for the purpose of design continuity. – Previously raised, defer to Commission.

15. Page A-20, Item #25.31, Earthwork and Grading – Previously raised.

- a. A performance/ maintenance bond estimate for an amount to be associated with the Excavation and Grading Permit is to be provided in accordance with Section 7.5.E.7. – **Opinion of costs provided. Additional information necessary to determine an adequate amount to stabilize the site into a stable ‘pad’ if work is interrupted midstream or at various stages of progress.**
- b. A special permit is required for the amount of earthwork proposed.
- c. The zoning compliance table needs to be updated to reference the quantities proposed. **Information provided on separate table within Sheet 2.11.**
- d. Due to the volume of earthwork proposed the Commission should seek additional review comments from the North Central Conservation District. – **Pending.**
- e. The Commission must consider the criteria of Section 7.5.E, Additional Special Permit Considerations, in addition to the criteria of Section 9.2.E. The Special Permit Criteria has been included as Appendix B. **It is the responsibility of the applicant to demonstrate that this criteria is met.**
- f. The required Checklist 1.7, Additional Requirements for Earth Removal in Connection with a Special Permit Activity was not provided. – **The checklist has been provided. Submission materials for check list items 7-15 have not been identified. It is possible the applicant is confusing information submitted that is associated with the development of the pad once the rock is removed, as opposed to providing this information that is required specific to the requested rock removal and associated process. This is incomplete.**

The required project schedule and processing plan was not identified. - **Additional information has been provided by the applicant on Sheet 2.21. This information is minimal in evaluating the substantial scope of rock removal proposed. Additional information should be provided for the Commission’s review such as:**

- **A proposed excavation sequence inclusive of:**
  - **Where and how the site will be accessed**
  - **Where and how processing activities will occur. Location of processing equipment, how it will be accessed, and from where**
  - **How stormwater will be managed during various stages of excavation**
  - **Proposed contours during and at the end of the excavation activities**
  - **How excavation practices will be managed in such close proximity to the state highway and Brass Lantern Road**
  - **Proposed vehicular circulation within, and two and from, the project area during stages of excavation**
  - **The groundwater table and any potential “ponding” that may result from excavation**

The submitted engineering report does not appear to provide the information required under Checklist 1.7 as it pertains to the earth removal permit requested.

The required engineered plan detailing over a period of time the manner in which the excavation would progress and extraction of earth material would occur has not been identified.

Checklist 1.7 as it pertains to the earth removal operation needs to be revisited and pertinent information provided.

The applicant alluded to rock removal and processing activities to occur in Simsbury. Copies of Simsbury approvals of the rock removal and processing should be provided.

If rock processing activities are approved in Simsbury, but not in Canton, the Commission may wish to understand the manner in which activities that may cross the town line will be managed or addressed.

The application is asking for a 24 month permit. Staff calculations indicate that the removal of material should take approximately 10 months, inclusive of 5,466 truck trips. The Commission should be cautious in considering a permit greater than 12 months in duration.

The Erosion Control Plan Construction Sequence is for a period of 18 months, the Excavation and Grading permit is requested for 24 months. The construction sequence listed in the request for a Certified Erosion Control Plan does not appear to account for the rock removal process associated with the requested Excavation and Grading permit.

16. Page A-20, Item #25.33, Section 7.7 Fences and Walls – Previously relayed.
  - a. A special permit is required for walls of this nature per this section.
  - b. Standard maximum height of a retaining wall is 8' per Section 7.7.C.2. The application proposes a wall at a maximum height of 52' on top of a 5' slope. For comparison, below are examples of the two tallest retaining walls within the Town of Canton. The proposed wall maximum height is approximately three hundred percent greater.
  - c. Top of Wall and Bottom of Wall elevation references should be provide along the proposed wall layout. – **Response from Applicant is not clear. Top of Wall (TOW) and Bottom of Wall (BOW) elevations provided indicate retaining walls that do not match what is shown in the renderings. It appears that the Applicant may be combining both the rock wall and retaining wall into the TOW and BOW elevations provided. The Applicant needs to confirm this.**

The location/ demarcation between and height of retaining walls vs exposed rock walls are not clear on the grading plan. Typically a TOW and BOW apply to the retaining wall and the amount of exposed rock face would be a separate measurement.

Per 7.7.c this may be a “series” of walls, or “stepped” walls which would require separation and grading between. See 7.7.c.2.b. Applicant to clarify.

- d. A fence will be provided at the top of the retaining wall, the height of which is not identified. – **Not identified.**
- e. The Special Permit Criteria of 9.2.E must be evaluated in relation to the proposed walls – **The Commission must be able to clearly understand what is occurring regarding the proposed walls.**
- f. Proposed walls.

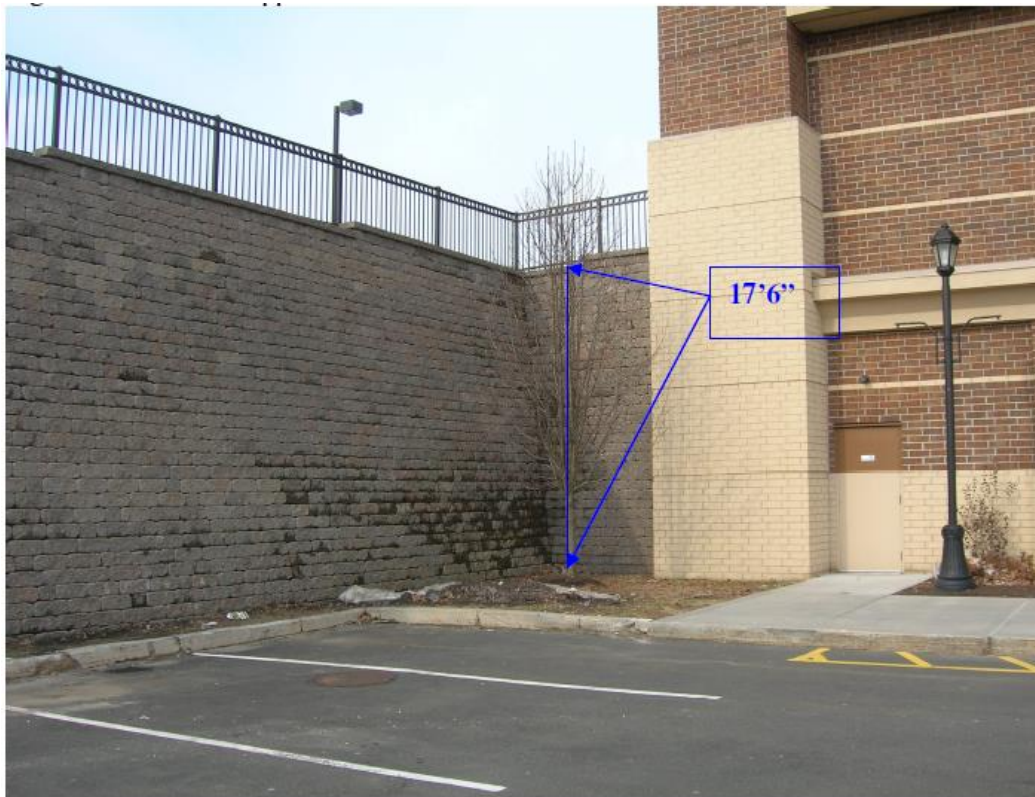
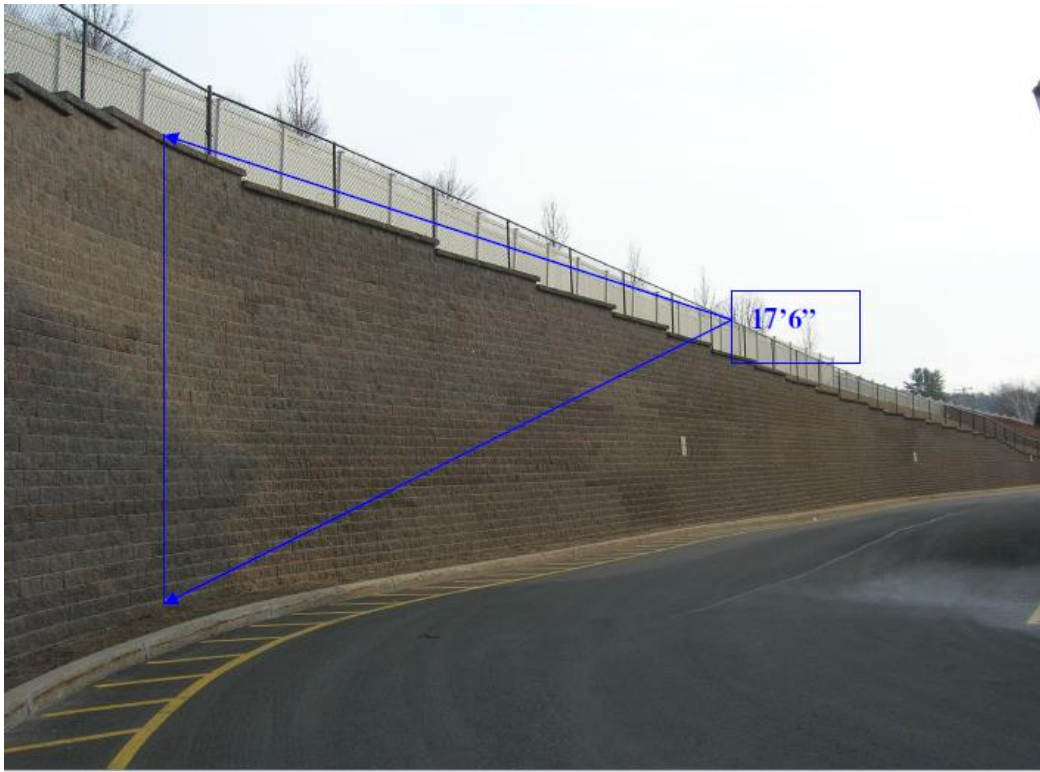


Figure 1 - Retaining wall next to Kohl's at The Shop's





*Figure 2 - Retaining Wall along Route 44, Behind Shoprite*



51' Tall Retaining Wall on Grading Plan (No retaining wall shown, or minimally shown)  
38' Tall Building



**CAR SHOWROOM AND MAINTENANCE BUILDING**  
CANTON  
10.16.2020  
RENDERING 2

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT



*Figure 3 - Applicant provided view from Route 44*

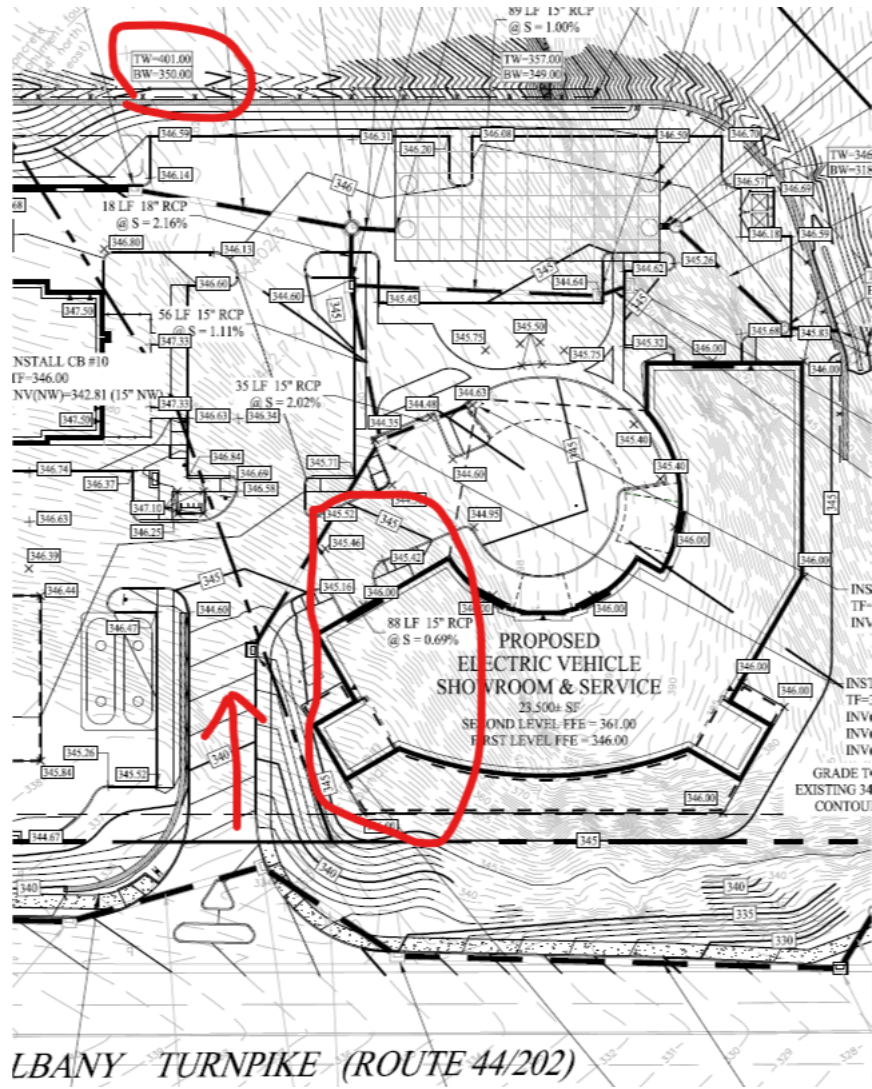


Figure 4 - View of Figure 3 on Grading Plan

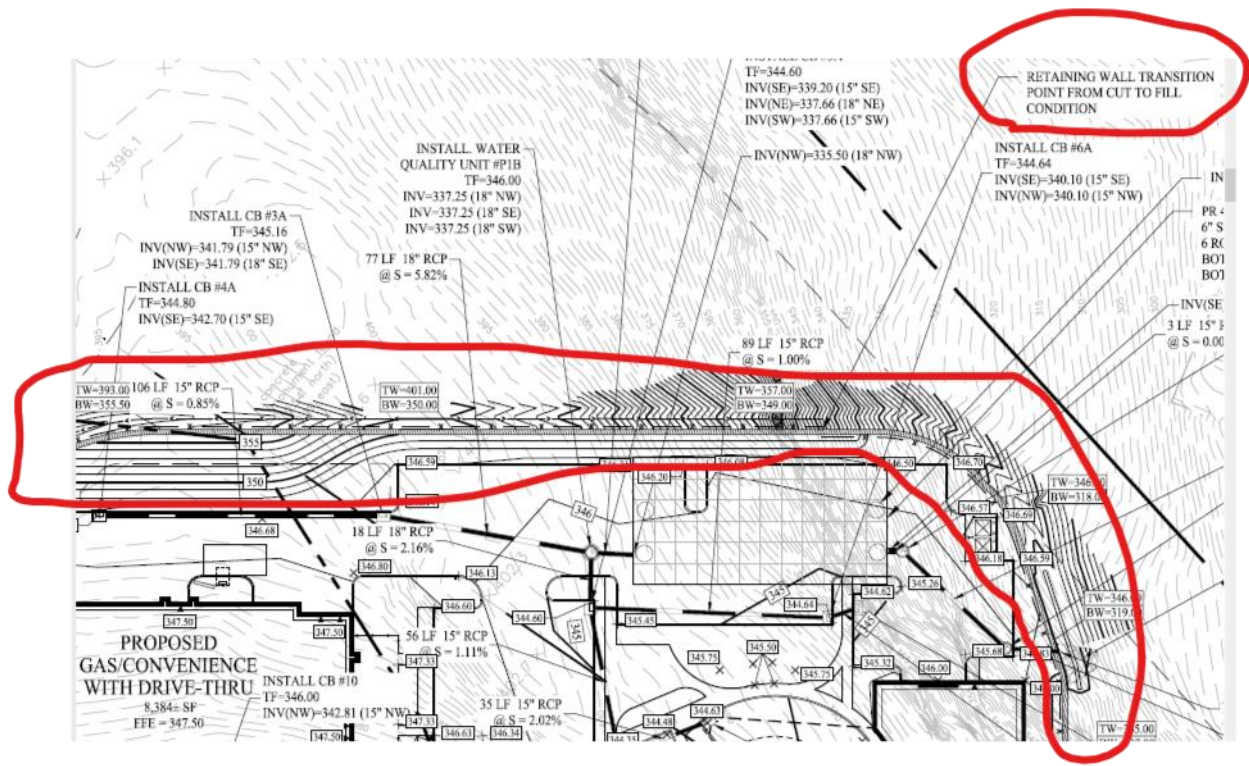
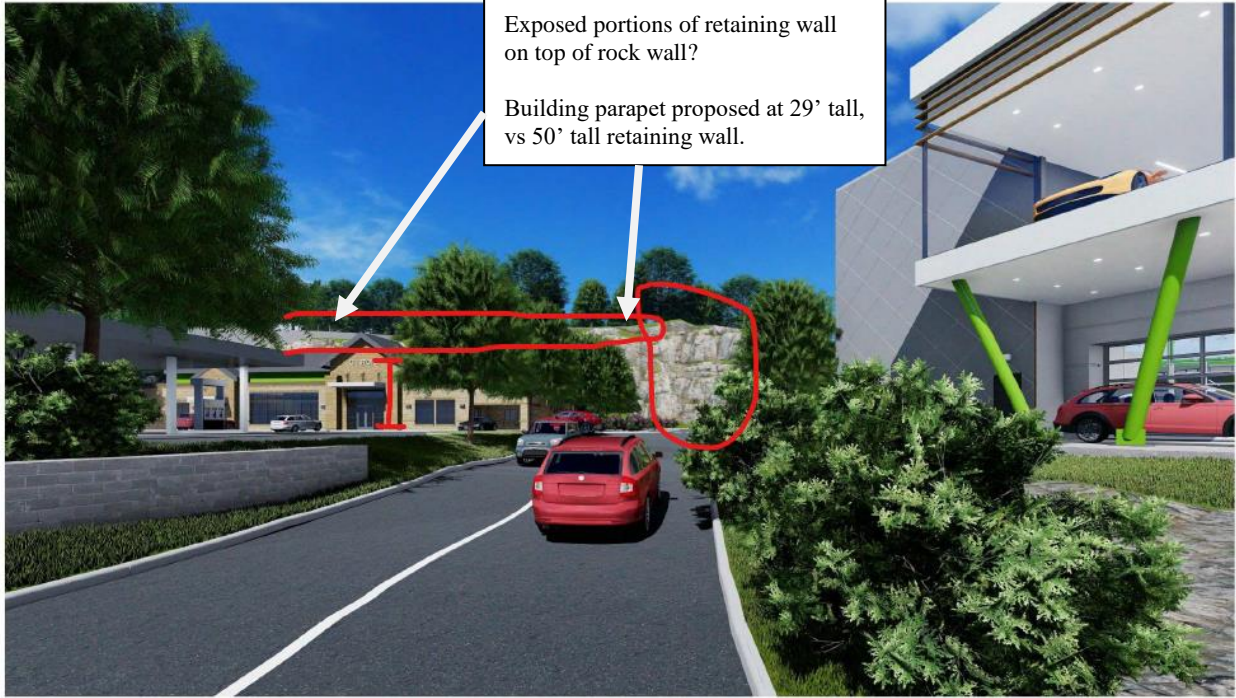


Figure 5 - Indicates retaining wall runs where shown, retaining wall not shown in renderings through this area



**CAR SHOWROOM AND MAINTENANCE BUILDING**  
CANTON  
10.16.2020  
RENDERING 7

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT



*Figure 6 - Limits of retaining wall shown on top horizontal band over building. 29' to top of building parapet, 50' high wall*



**CAR SHOWROOM AND MAINTENANCE BUILDING**  
 CANTON  
 10.16.2020  
 RENDERING 10

9-15 ALBANY TURNPIKE  
 SIMSBURY & CANTON, CT



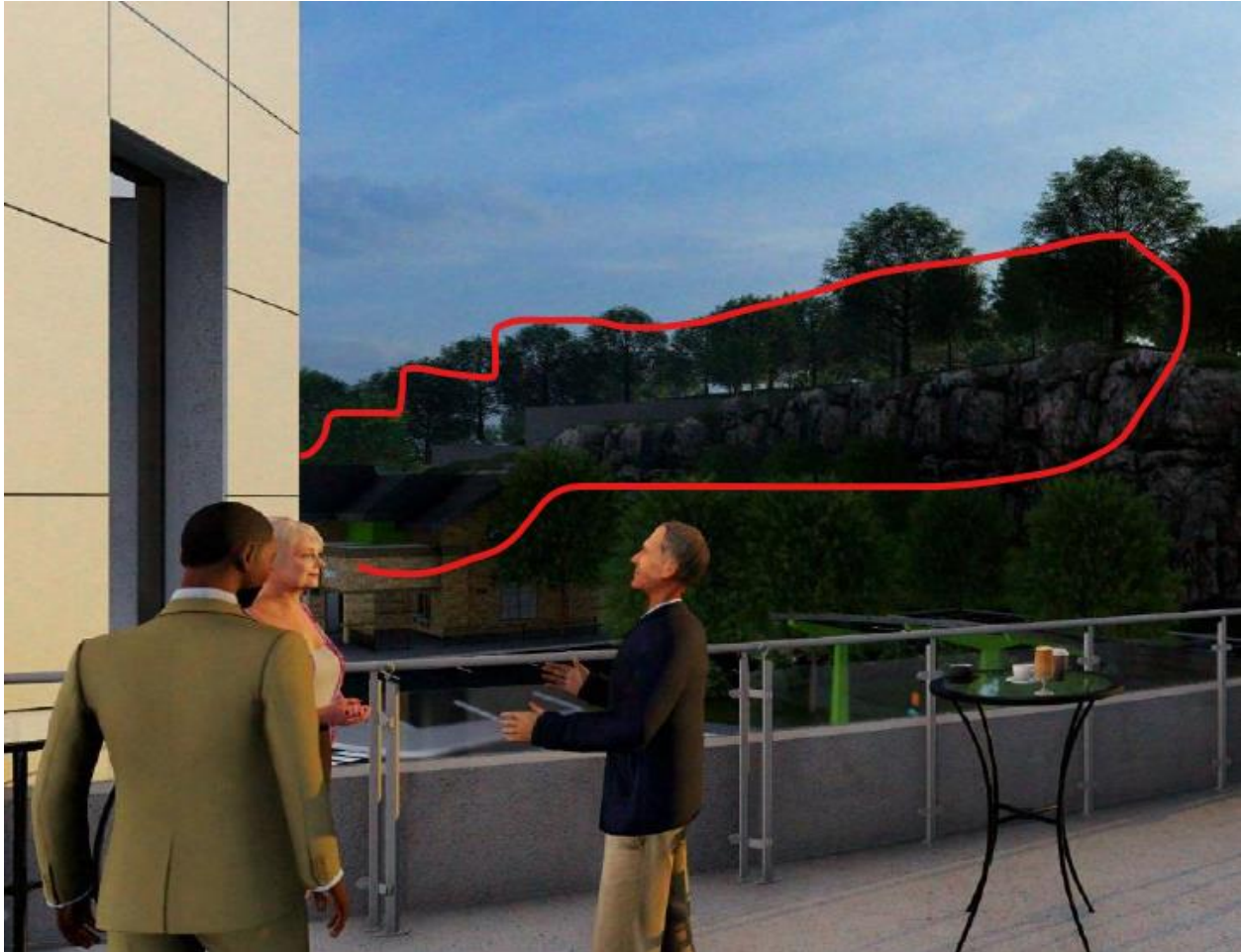
*Figure 7*

**Appropriate cross sections through the site should be provided to have a better understanding of what the proposed constructed condition would be.**

**Limits of where the site will and will not have retaining wall vs. rock wall need to be verified.**

**Imagery shows retaining walls on top of rock walls. Retaining wall appears to be stepped on top of rock wall. See also stepping presented in Figure 8.**

**It is not clear what the retaining walls will actually look like, what the vertical and horizontal limits will be, and their anticipated magnitude or presence within the site. The Commission should not grant a special permit for walls without a clear understanding of what is proposed.**



*Figure 8 – Stepped Wall in background. (Note – confirm location of access drive to the rear of the property. It would seem to run through this area generally where trees are prominently shown and may be removed, or view will be different, if not proposed or required as part of an approved landscaping plan.)*

17. Page A-20 Item #25.35, Section 7.9 Bicycle, Pedestrian, and Emergency

Accommodations - Pedestrian and bicycle pedestrian improvements - substantially improved and addressed. Commission raised question about pedestrian crossing across Route 44 at last meeting. Some additional discussion regarding signal coordination and future trail crossing should occur. See Figure 9 below.



Figure 9 - Red "X" marks location of proposed, approved and or desired traffic signals

18. Item 27, Computer Simulation – Due to the extensive manipulation of the site that is required to create the development pad, and the visual effect it will have in addition to the site and building designs, a computer simulation is recommended per this Item and Section 9.1.A.5.
- **The Commission should look at the computer simulations provided in the field. Images from Google street view are skewed. Any landscaping implied off site may not be there in the future. Height of the existing ridge in the field vs. in the street view images are not the same. Stretching of vehicles, etc. What this area will look like is important. The Commission must be comfortable with their understanding of the proposed built condition.**





*Figure 10 - Provided by applicant (Billboard not shown in this perspective)*



*Figure 11 - Current view*



*Figure 12 - Current view*



*Figure 13 - Comparison*



**CAR SHOWROOM AND MAINTENANCE BUILDING**  
CANTON  
10.16.2020  
RENDERING 11

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT



*Figure 14 - Substantial vegetative screening not in project, not controlled by Commission (Billboard?)*

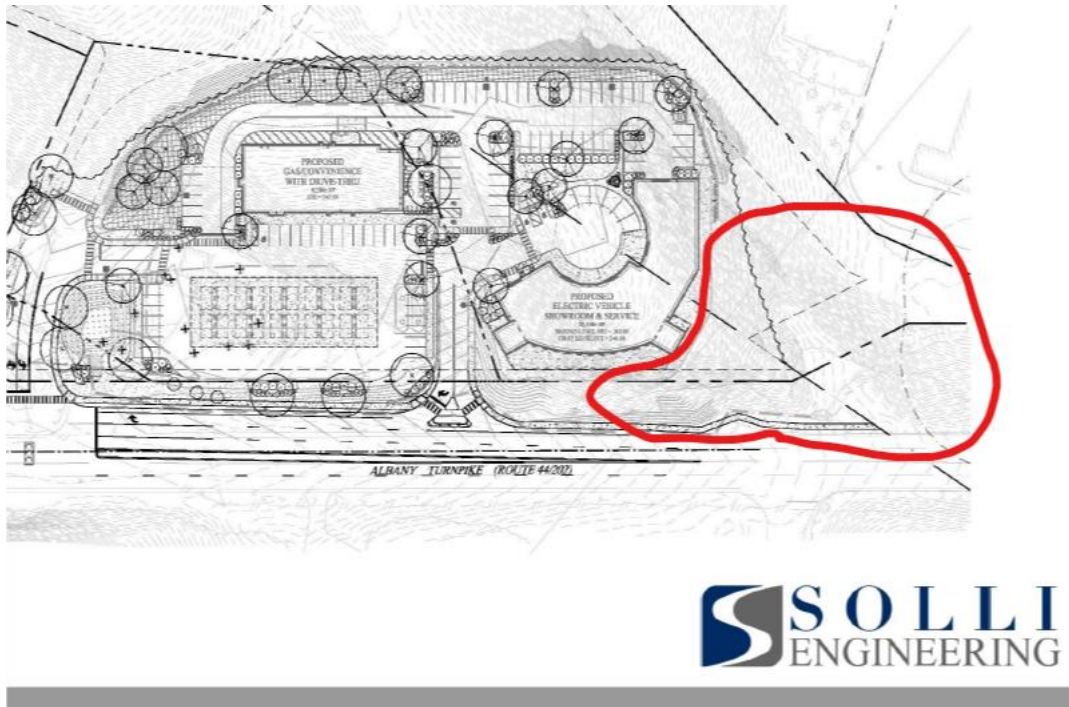


Figure 15 - Area with no proposed landscaping or landscaping requirements (Canton required plantings in front yard not provided) (Billboard?)

Special Permit Checklist:

1. Page A-27, Item #15 – Traffic Comments from the State are pending.
2. Page A-27, Item #16 – Comments from Fire Marshal are pending.
3. Page A-28, Item #18 – Topo/ Drainage – The Commission may require the submission of additional data in cases with unusual topographic. The existing conditions of this property are ‘topographically challenged’ and additional information may be necessary. – The Commission has requested a cross section through the site.

Additional Requirement's for Earth Excavation in Connection with a Special Permit:

1. Checklist not submitted. –Submitted but additional information is necessary.

**Special Permits Review**

Please review Appendix B of the September 29, 2020 report as it pertains to the special permit uses to be conducted including:

Business Uses:

- Retail greater than 2,500 sf
- Outdoor Dining
- Drive-thru
- New Car Dealership
- Gasoline Filling Station

Site Uses:

- Signs that require special permit
- Walls that require special permit
- Outdoor storage and display by special permit
- Earthwork and grading over 2,000 cy

**Completeness**

At the time of this memorandum, the application remains incomplete where noted.

**Archived:** Tuesday, November 10, 2020 3:56:55 PM  
**From:** Cusano, Glenn  
**Sent:** Thu, 29 Oct 2020 08:44:41  
**To:** Deltenre, Renee  
**Cc:** Pade, Neil  
**Subject:** RE: 9-15 Albany Turnpike - Cost Estimate Review  
**Importance:** Normal

---

Hi,

I took a look- price estimates seem pretty good to me, for the most part.

The only things that I questioned were-

Only 20 LF of silt fence?

Earthwork prices seem on the high side, but blasting is very expensive.

Catch-basin prices seem on the high side. Not a big deal really, varies from job to job.

Water valves seem a bit high.

Retaining walls seem high, but those are some very tall walls in any case.

Overall it's pretty good, estimating a little high on certain things is pretty common. I'm comfortable with these numbers.

-G

*Glenn F. Cusano*

Project Administrator

Town of Canton

Canton CT 06022

860-693-7863 ext. 2406

[Gcusano@townofcantonct.org](mailto:Gcusano@townofcantonct.org)



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**From:** Deltenre, Renee

**Sent:** Wednesday, October 28, 2020 4:36 PM

**To:** Cusano, Glenn

**Cc:** Pade, Neil

**Subject:** 9-15 Albany Turnpike - Cost Estimate Review

Hi Glenn,



**Archived:** Tuesday, November 10, 2020 4:02:15 PM  
**From:** Pade, Neil  
**Sent:** Mon, 26 Oct 2020 09:24:47  
**To:** Deltenre, Renee  
**Cc:** Kyle, Emily  
**Subject:** FW: Impact of blasting on wells  
**Importance:** Normal

---

Please add to the file record, thanks

Neil

---

**From:** Theresa Barger [mailto:tsullivanbarger@gmail.com]  
**Sent:** Sunday, October 25, 2020 10:27 PM  
**To:** Pade, Neil  
**Subject:** Impact of blasting on wells

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Hi, Neil,

Regarding the application requesting a special permit to blast rock and build a two-story structure on Albany Turnpike near the Simsbury border, I have additional concerns beyond those raised in my earlier letter. Below, please find links to some preliminary research I've done to learn the potential risks to nearby well water.

I hope you and your staff can do more research. For the record, I do not oppose commercial development on Rte. 44 near the Simsbury town line. My concern is what impact blasting will have on the aquifer and the water quality in the wells in the region. There is a car dealership along Rte. 44 that sits atop a contaminated site from the former Swift Chemical Company. I would urge someone with knowledge of such matters evaluate the risk as to whether blasting will release toxins in the soil into the aquifer.

[Here's an Oct. 2, 2020 letter to a Somers resident written by a hydrologist who worked for the state DEEP for 36 years before retiring a year ago:](#)

<https://bit.ly/34qBMaI>

CT DEEP advice to towns regarding blasting:

[https://portal.ct.gov/-/media/DEEP/site\\_clean\\_up/potable\\_water/Blasting-Guidance-Dec2019.pdf](https://portal.ct.gov/-/media/DEEP/site_clean_up/potable_water/Blasting-Guidance-Dec2019.pdf)

Info from New Hampshire:

<https://bit.ly/3kv551r>

Also New Hampshire:

<https://bit.ly/35wQpsq>

**Archived:** Tuesday, November 10, 2020 4:04:00 PM  
**From:** [Pade, Neil](#)  
**Sent:** Thu, 22 Oct 2020 09:28:54  
**To:** [Deltenre, Renee](#)  
**Cc:** [Kyle, Emily](#)  
**Subject:** FW: Canton P&Z Public Hearing 10/21/20  
**Importance:** Normal

---

Please add to record. Thanks,

Neil

---

**From:** Theresa Barger [<mailto:tsullivanbarger@gmail.com>]  
**Sent:** Wednesday, October 21, 2020 8:08 PM  
**To:** Pade, Neil  
**Subject:** Canton P&Z Public Hearing 10/21/20

**CAUTION:** This email came from outside the organization. Do not click links or open attachments if you are unsure the message is safe.

Dear Neil,

I'm writing to comment on File 475; Apln 2000, the application for a special permit.

I understand this proposal is a permitted use in a commercial zone, but have two major concerns. First, the applicant proposes removing a great deal of trap rock ridge. The rock at the gateway to the town is a visual feature that makes Canton unique. I urge the commission to ensure that only the rock necessary for the development of this parcel be removed and no more. If blasting causes pollution or harms residents' wells in any way, please ensure that the applicant puts up a bond to cover the cost to the town to extend public water to this part of Canton and to residents who would need to connect to public water. I share the Conservation Commission's concern about the removal of the trap rock ridge.

Second, the design of the building does not look anything like what one would expect in a small New England town. I urge the commission to work with the applicant to modify its design to make the building more in keeping with the character and charm of the town. It looks like something you'd see in a large suburb in Westchester County, right outside New York City. The town's Plan of Conservation & Development encourages commercial development in this area but also recommends that development be in keeping with the charm and character of the town.

Third, the plan calls for a great deal of parking. I encourage the commission to consider reducing the number of parking spaces on impervious surfaces, and make use of engineering that allows for overflow parking in an area that allows for the absorption of rainwater. Since this is proposed as a showroom for electric vehicles, I urge the commission to encourage that the project be environmentally friendly in every respect. I applaud the plans for a green roof, solar panels and dark-sky compliant lighting. Please encourage energy-efficient buildings and a pledge to not be lit up when the business is closed.

Fourth, nobody wants more traffic lights on Route 44. If you decide one is necessary, please work with the state to ensure that the lights along the eastern end of Rte. 44 are timed to ease traffic flow and limit air pollution from idling cars.

Fifth, to continue the theme of consideration of the environment, please encourage the applicant to select native trees, shrubs and other plantings that serve as food and habitat to native pollinators and birds; please encourage the applicant to avoid plants on the CT invasive plant list, such as *Berberis thunbergii* (Japanese barberry) and *Euonymus alatus* (burning bush).

Thank you,

Theresa Barger  
8 Pond Road  
Canton, CT 06019



CANTON  
CONNECTICUT



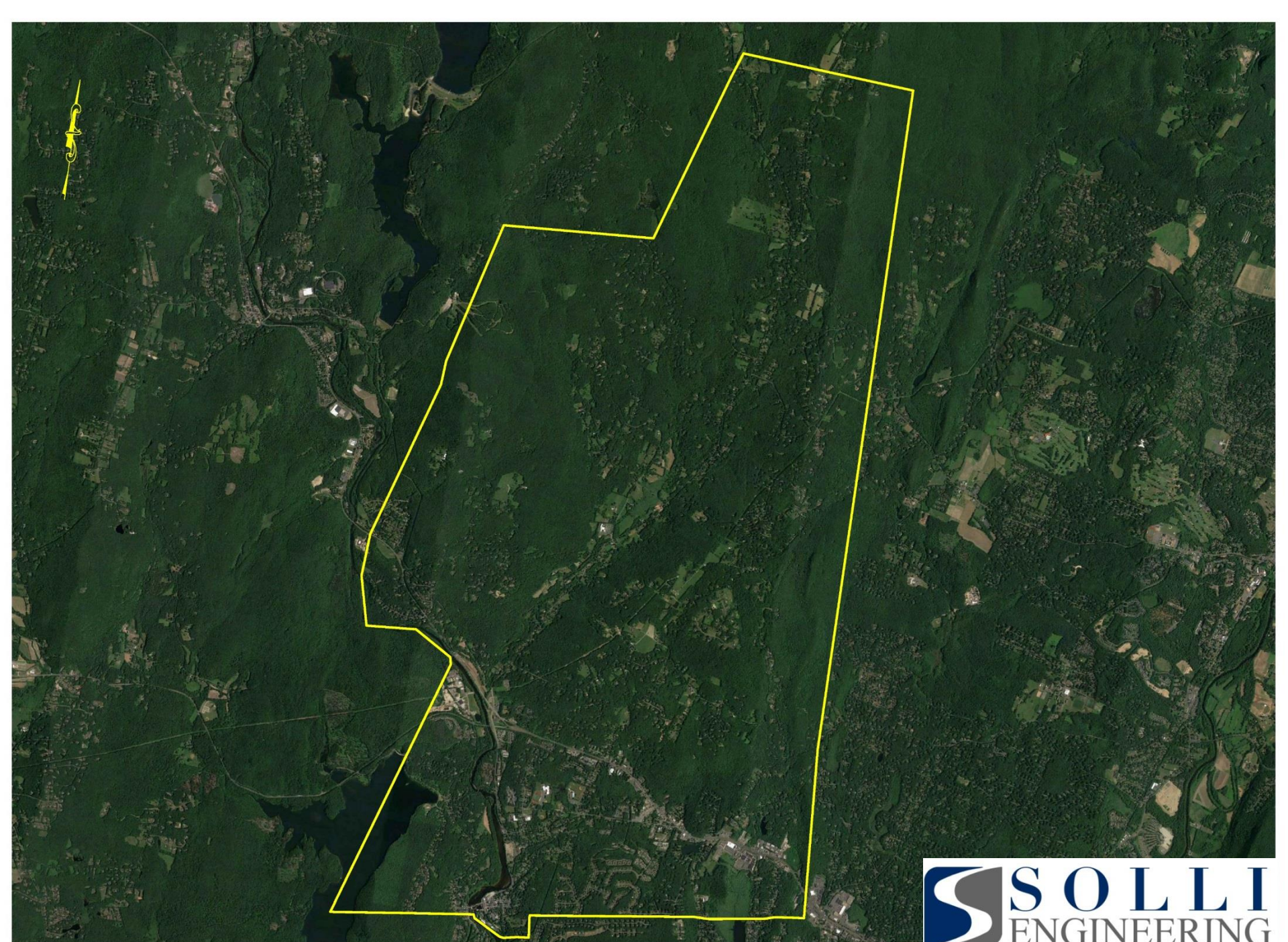
# Planning & Zoning Commission

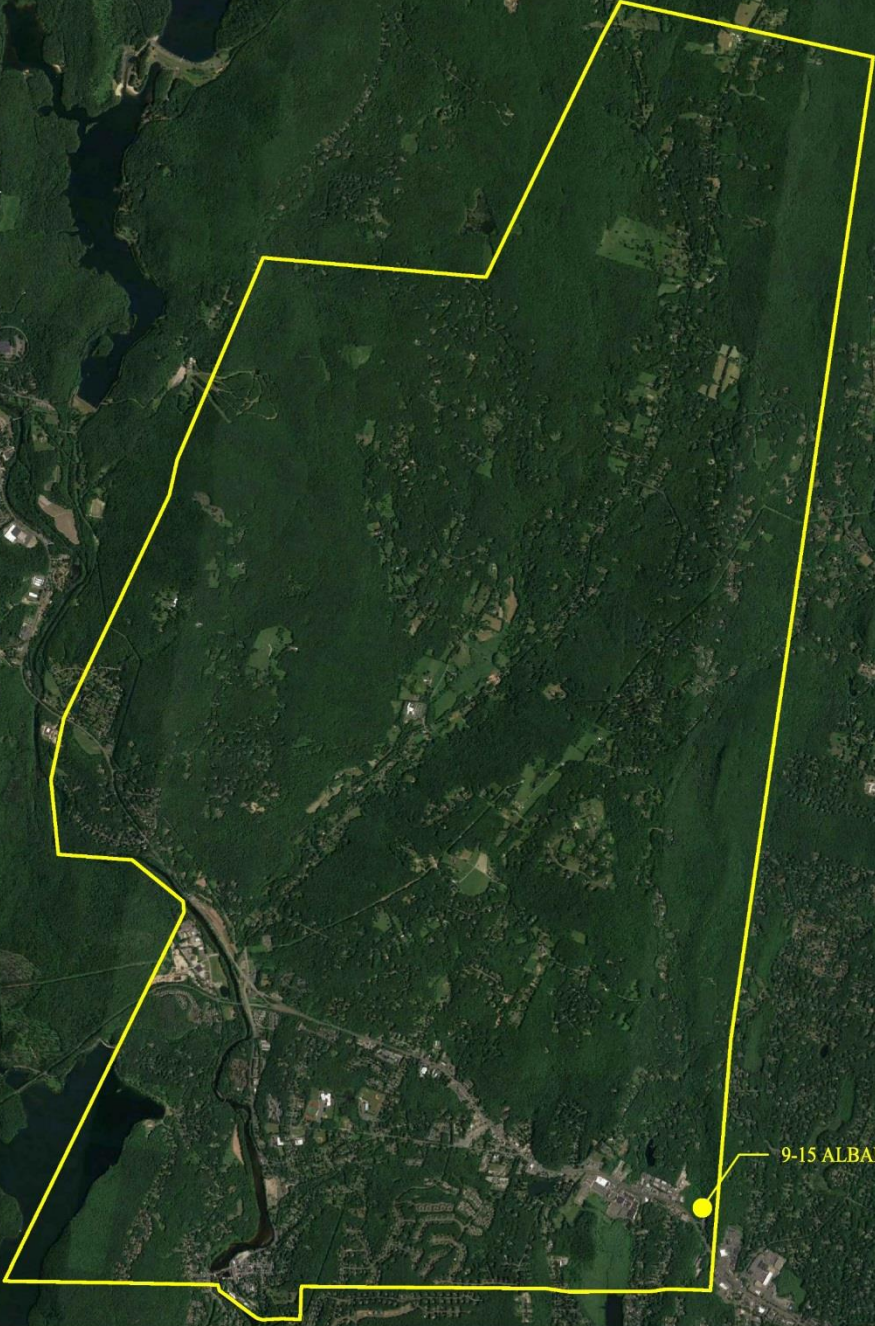
9-15 Albany Turnpike

File 475; Application 2000

October 21<sup>st</sup>, 2020

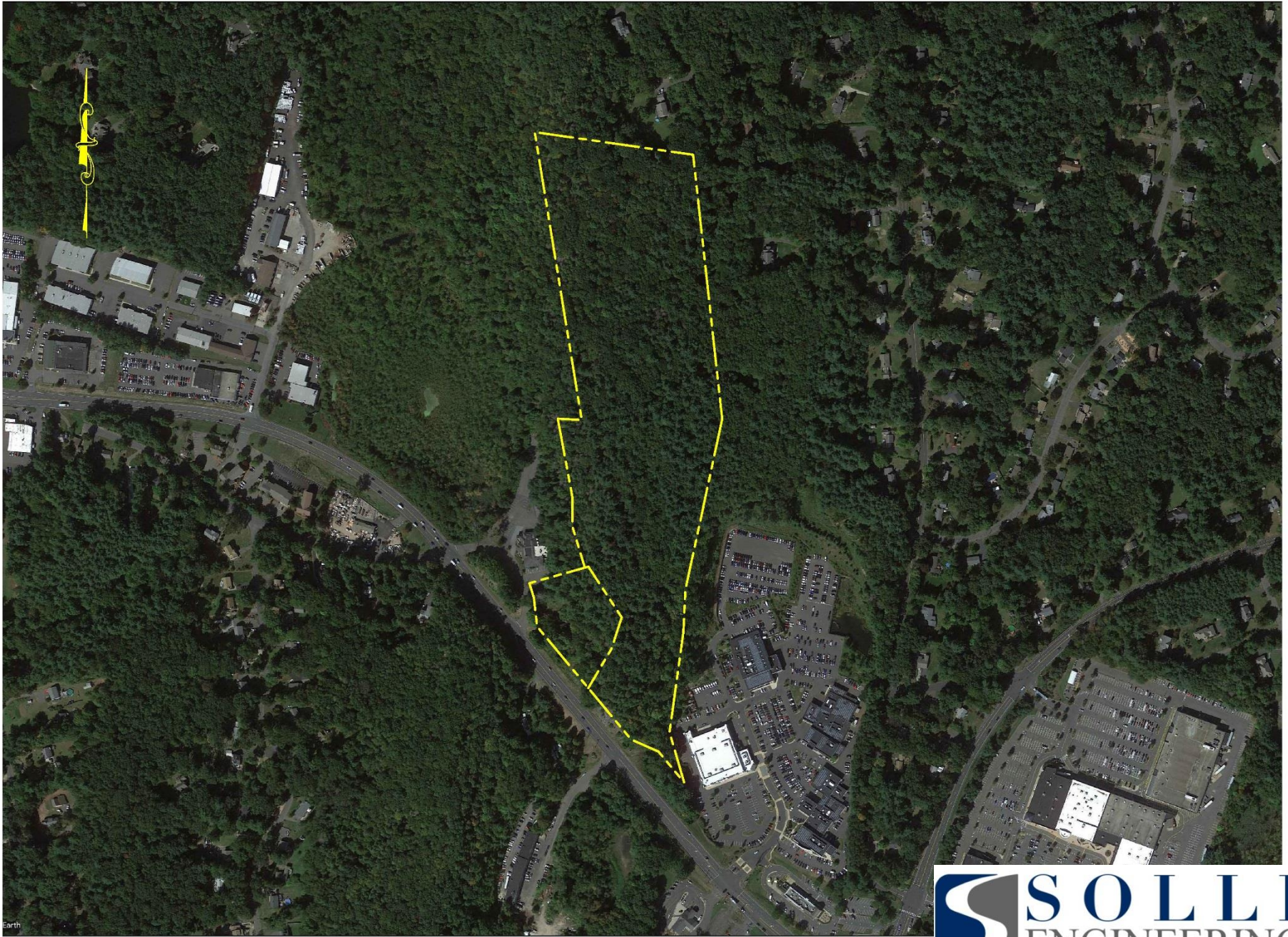






9-15 ALBANY TURNPIKE

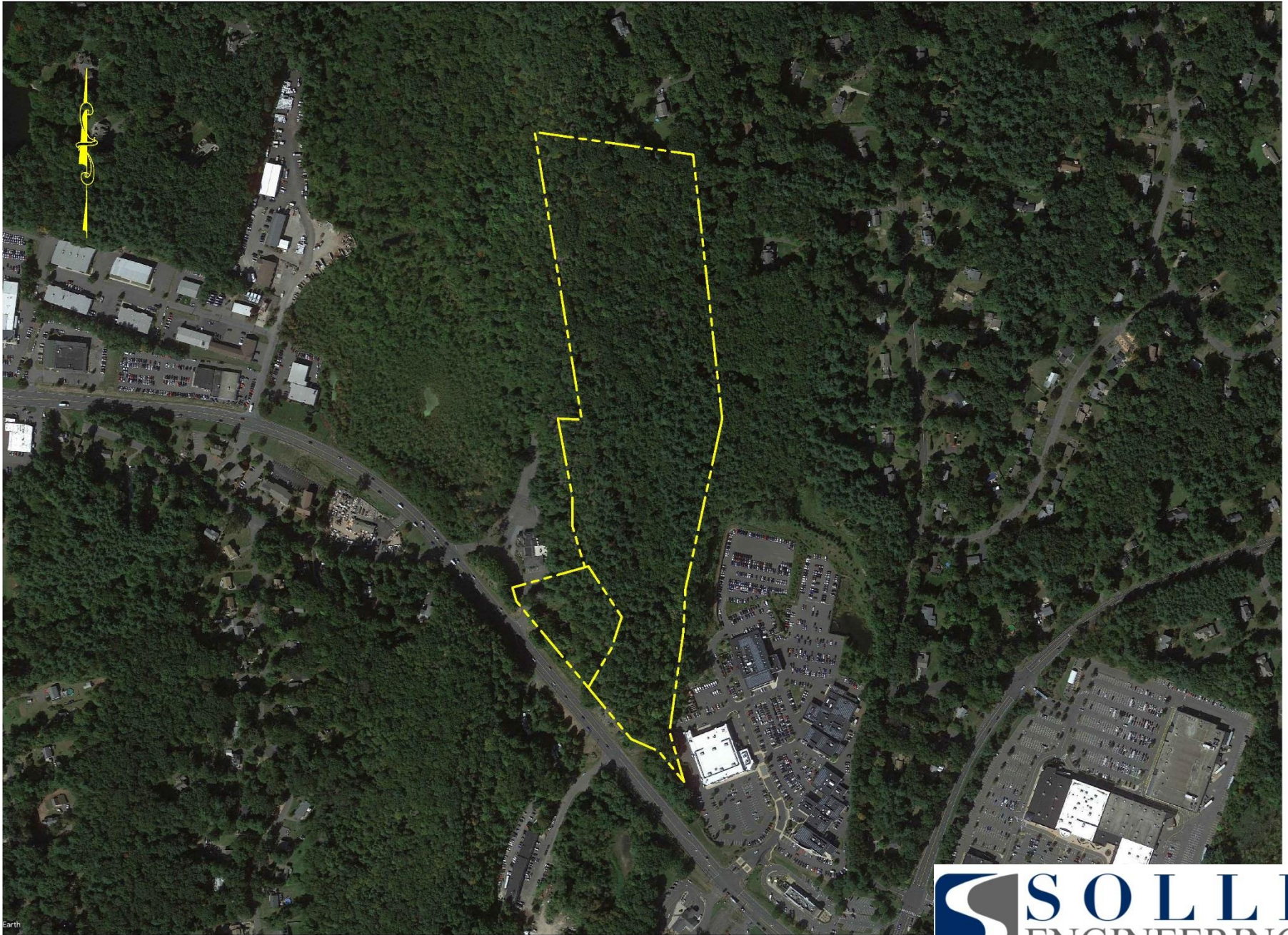


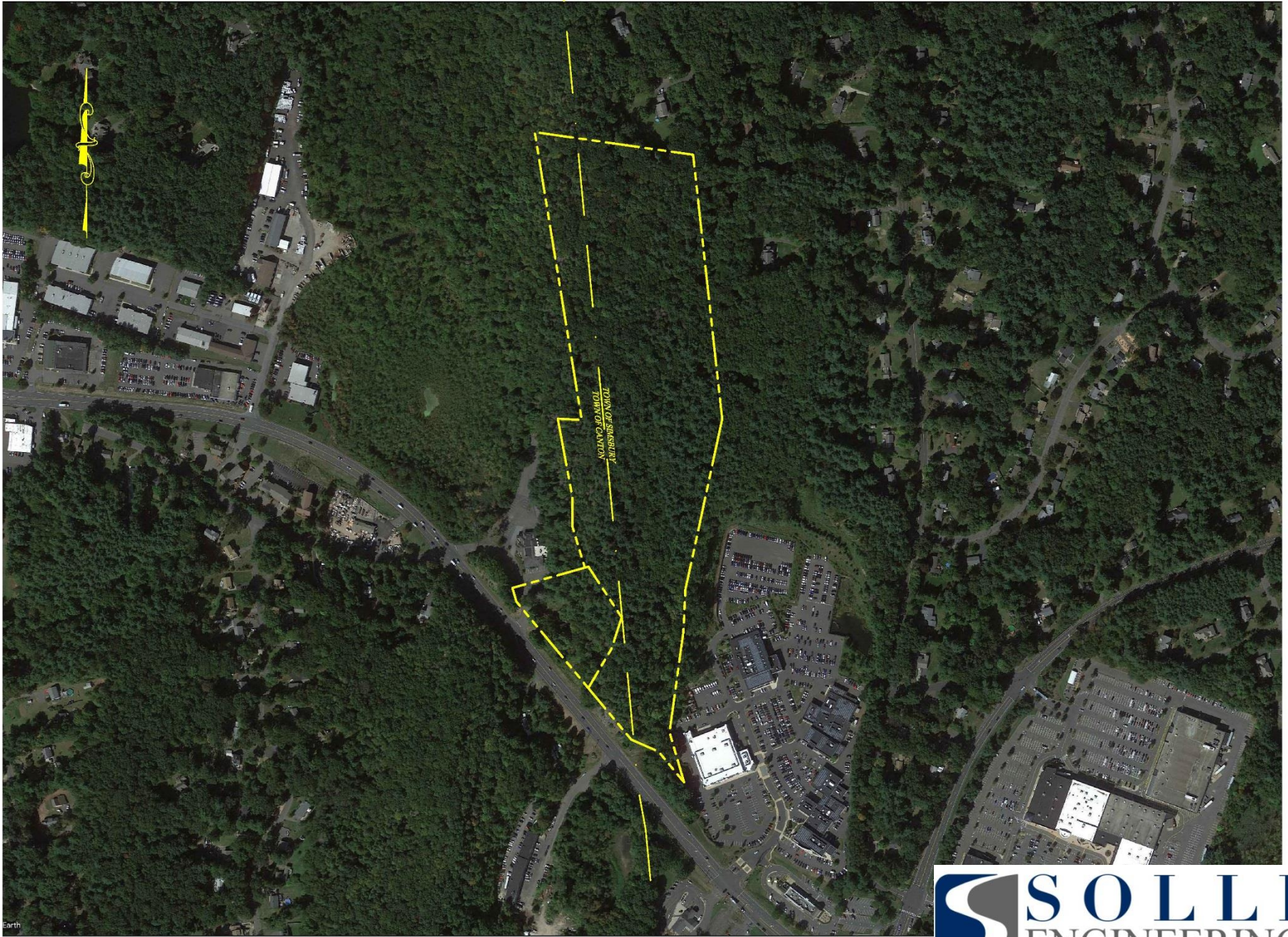












# Potential Opportunity Locations

Concept Areas (not property line specific)

Canton, CT



## **Opportunity Locations**

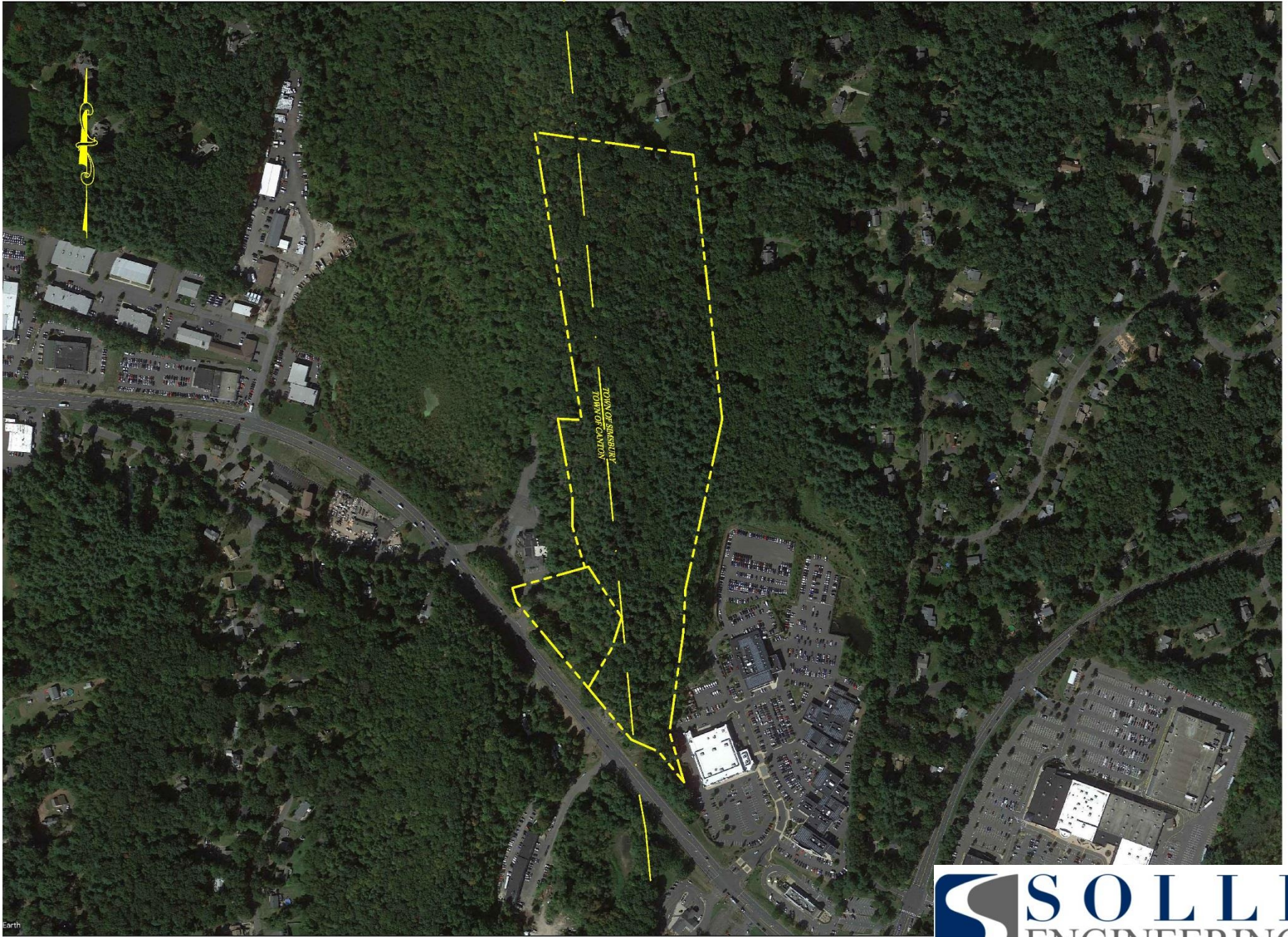
Within the POCD, the term “opportunity locations” is used to identify:

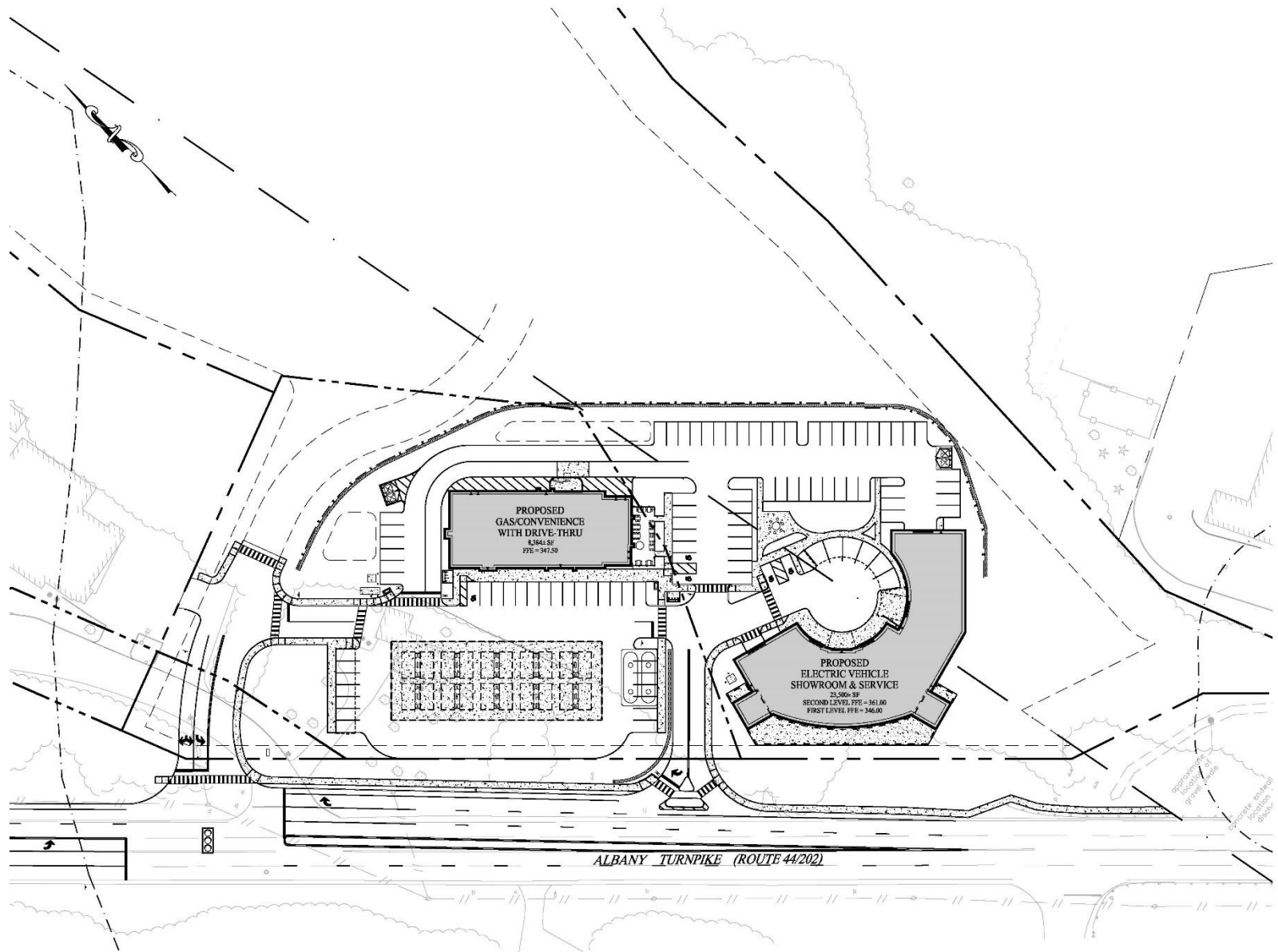
- Sites of significant economic potential; or,
- Sites where there is an expectation of a meaningful/tax positive contribution to the tax base.
- Sites where there are known development interests.

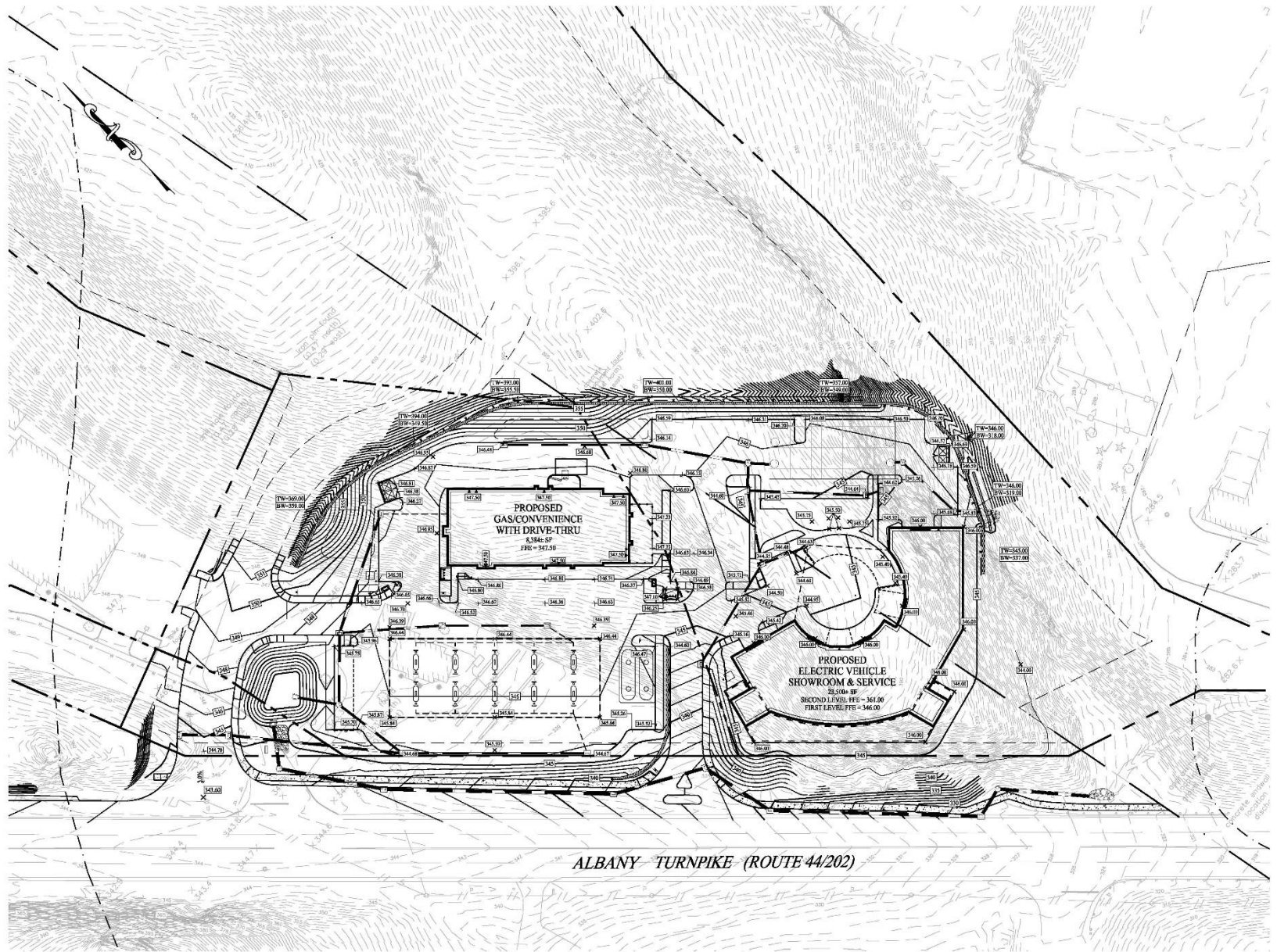
These sites may or may not be zoned for business use today or in the future.

These sites may or may not be developed today. If developed today, these sites may or may not be developed to their full potential.

The map on the facing page identifies some possible opportunity locations in Canton.

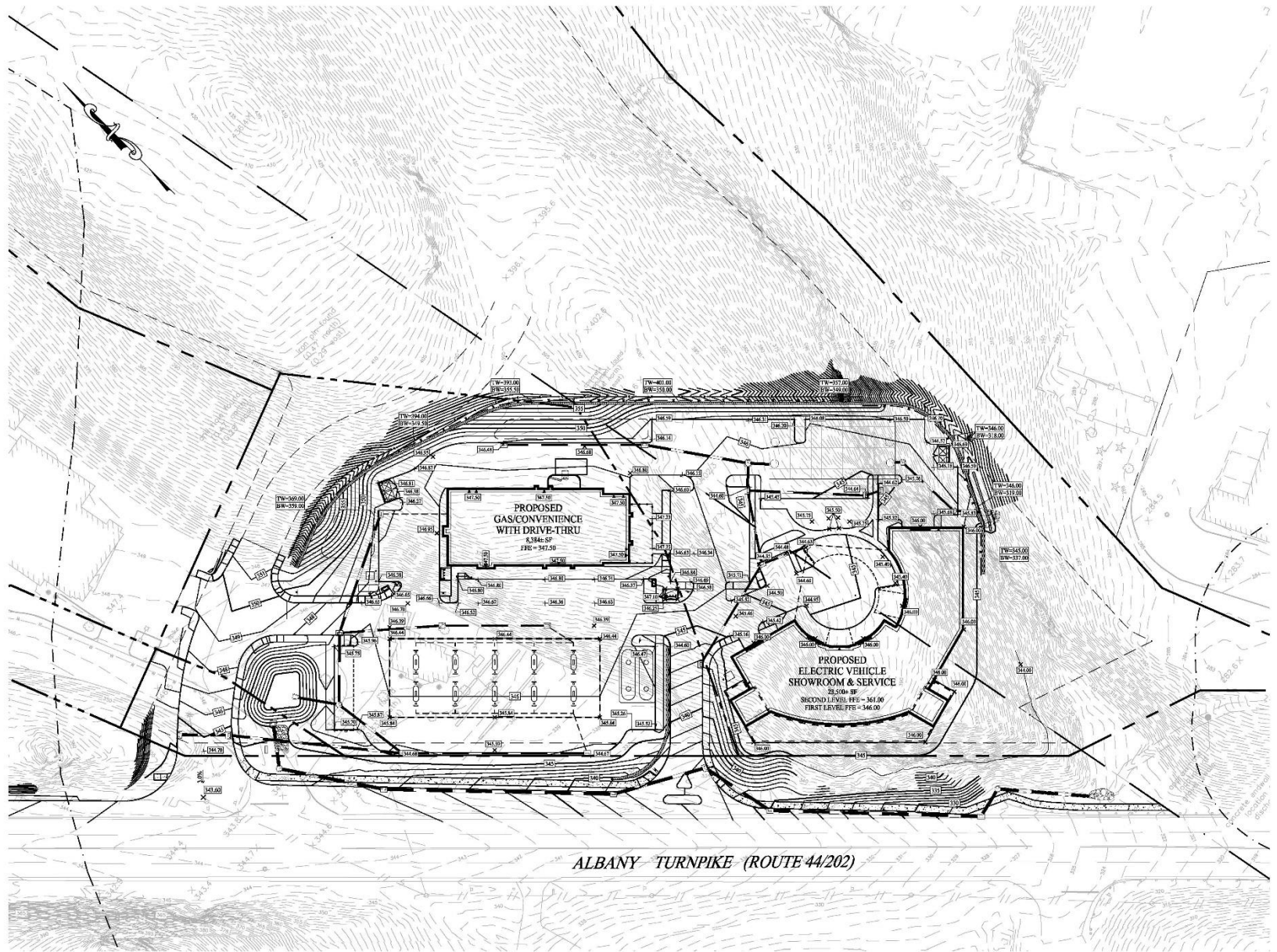




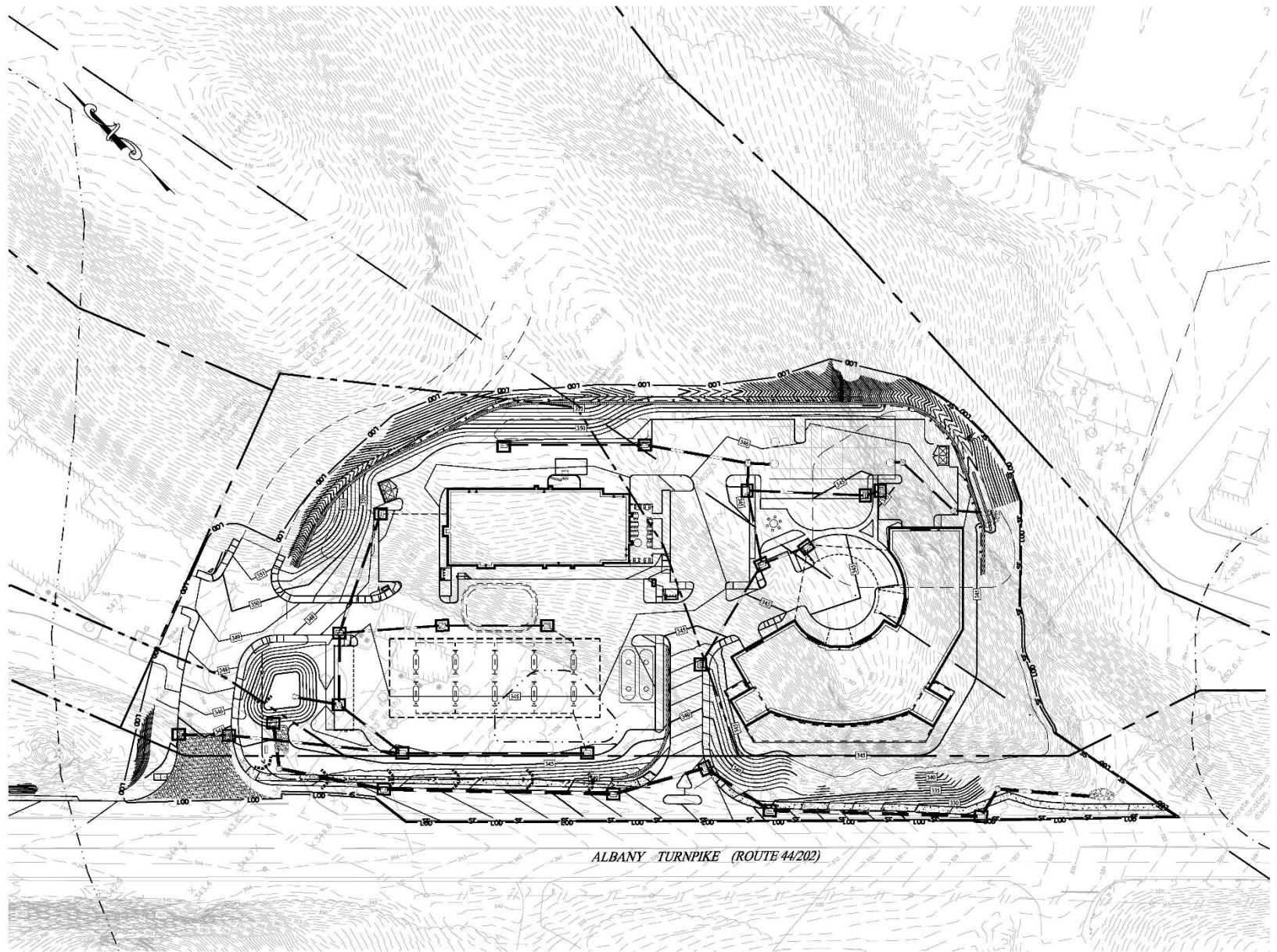




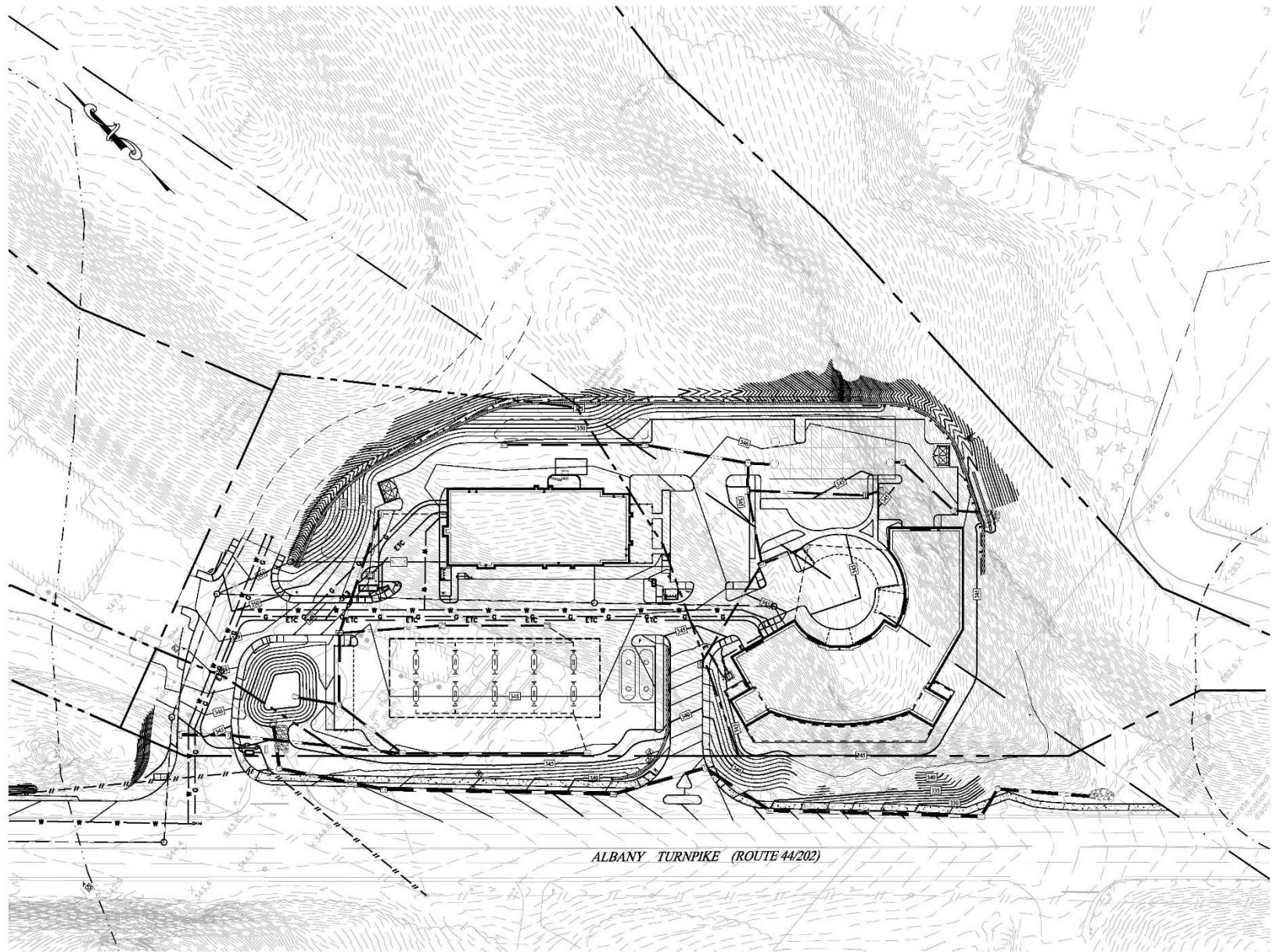


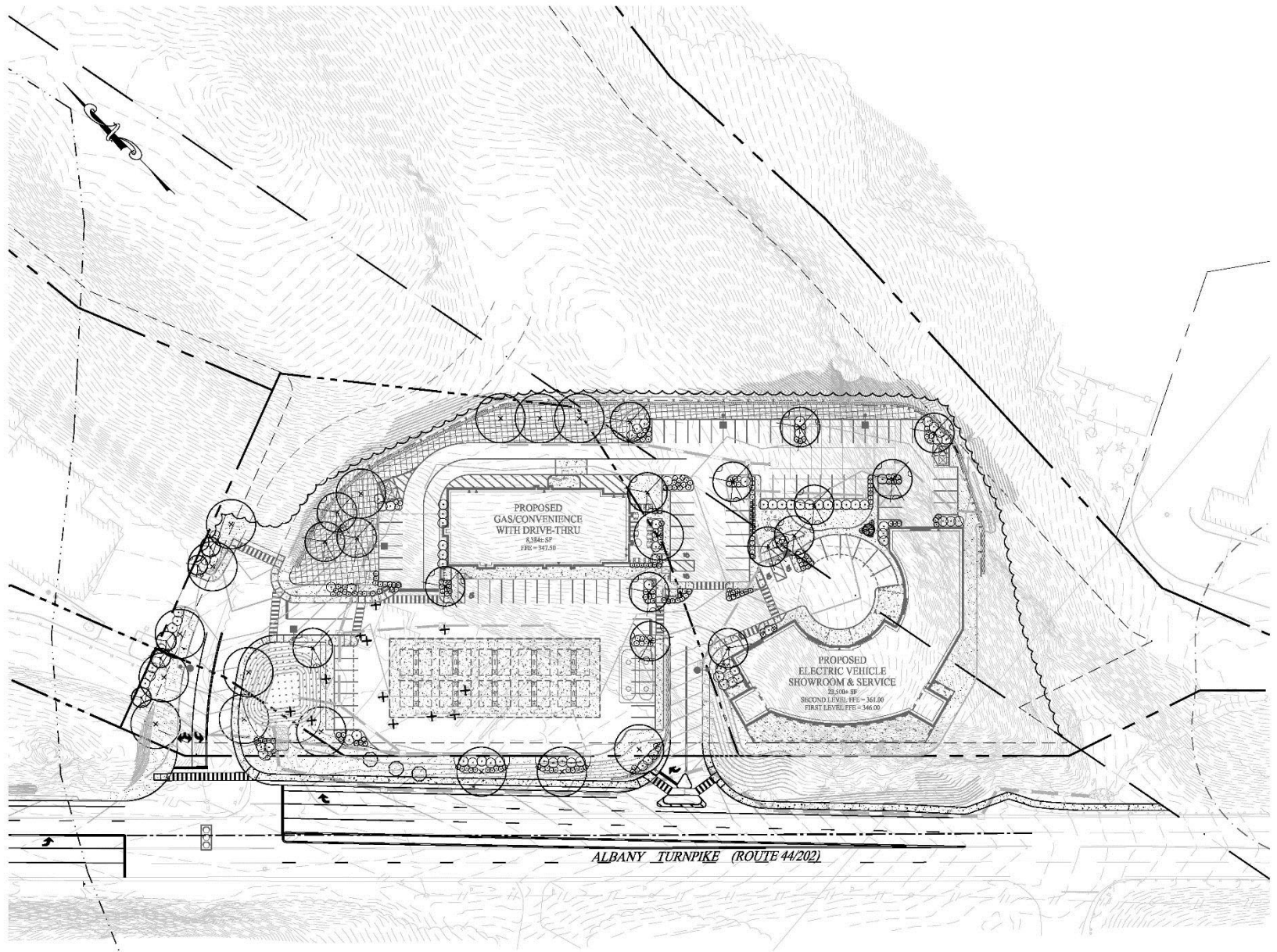


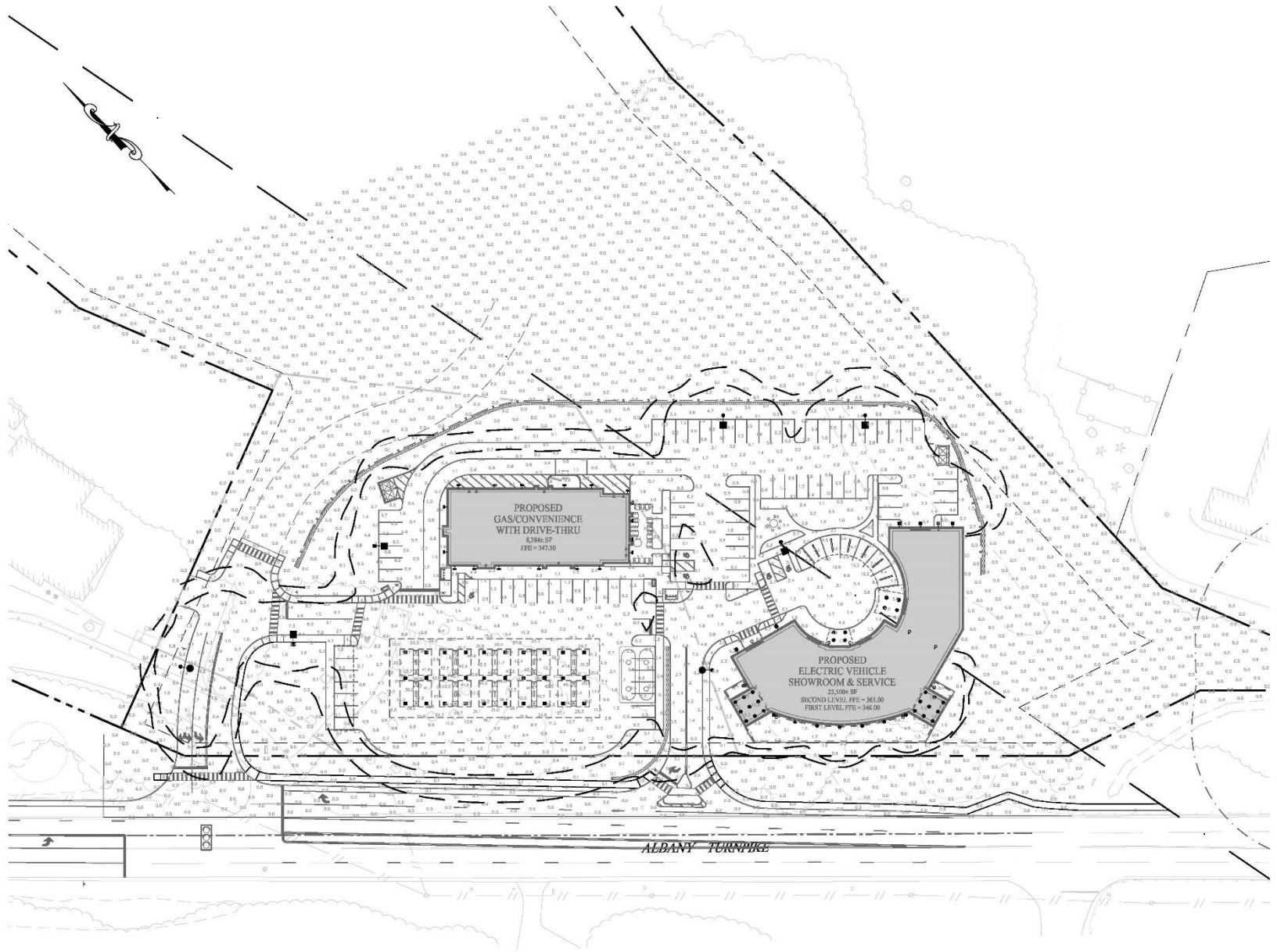
ALBANY TURNPIKE (ROUTE 44/202)



ALBANY TURNPIKE (ROUTE 44/202)









TOWN OF SIMSBURY  
TOWN OF CANTON

TOWN OF CANTON  
TOWN OF AVON

TOWN OF SIMSBURY  
TOWN OF AVON





TRAILSSEND DRIVE  
LOVELLY STREET (ROUTE 177)

LAWTON ROAD

GVS

SHOPS AT FARMINGTON VALLEY

SECRET LAKE ROAD

ALBANY TURNPIKE (ROUTE 44202)

TOWN OF SIMSBURY  
TOWN OF CANTON

HOFFMAN AUTO PARK

WEST MOUNTAIN ROAD

BRUSSEY HILL ROAD (ROUTE 167)

SIMSBURY COMMONS

TOWN OF CANTON  
TOWN OF AVON

WEST AVON ROAD (ROUTE 167)

DALE ROAD

ALBANY TURNPIKE

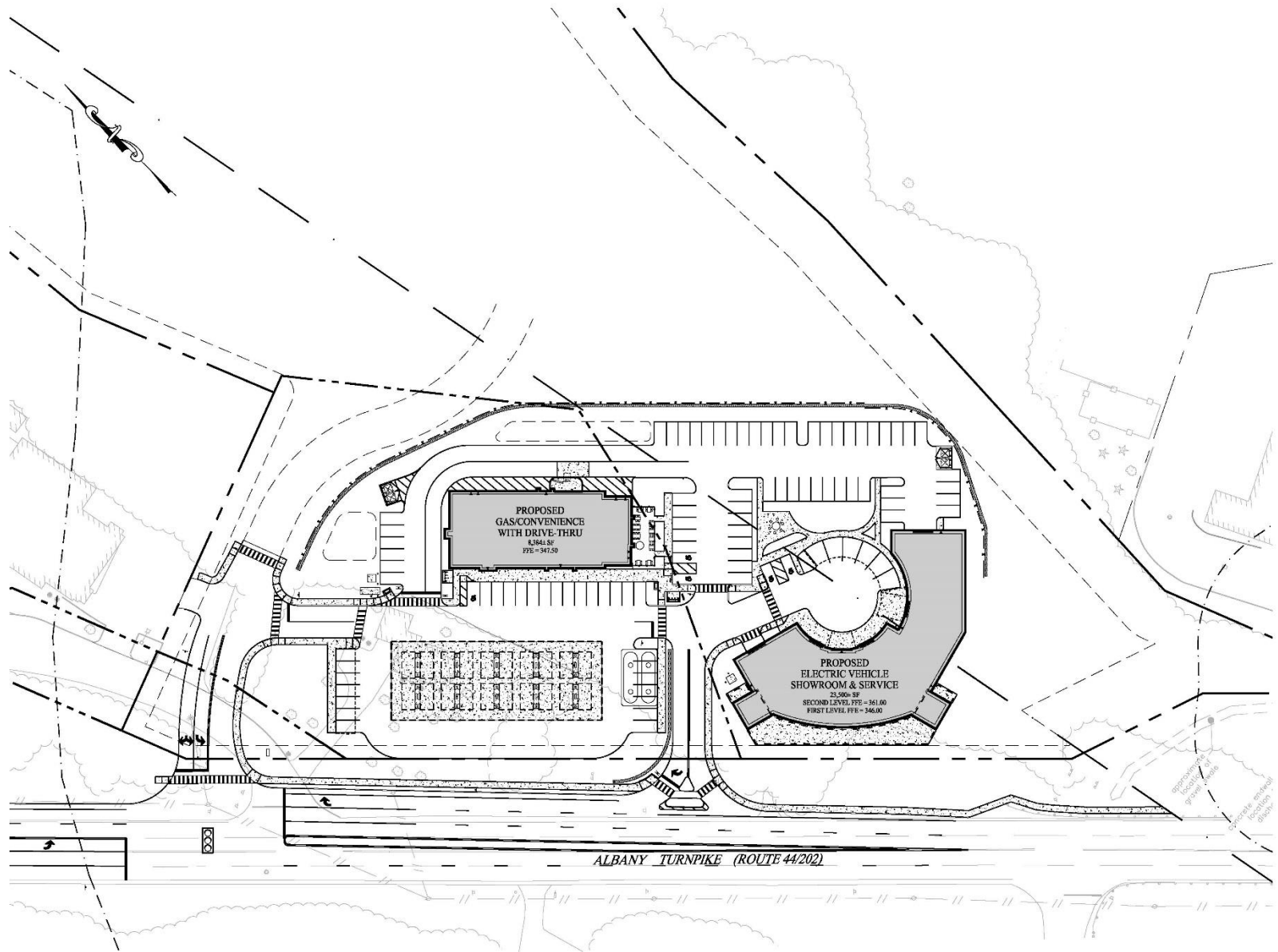
TOWN OF SIMSBURY  
TOWN OF AVON

FOX HOLLOW

(ROUTE 44202)









PROJECT NO: SOL-1433

SCALE:



DATE:

CONSULTANT:

**SOLLI ENGINEERING**  
501 MAIN STREET  
MONROE, CT  
06468

CLIENT:

KEY PLAN:

PROJECT LOCATION:

9-15 ALBANY TPKE  
SIMSBURY &  
CANTON, CT

ORIGINAL ISSUE DATE

ZONING SUBMISSION 06.11.21

REVISIONS & SUBMISSIONS DATE

1. TOWN COMMENTS 10.26.20

2. CLIENT COMMENTS 11.16.20

3.

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9.

10.

DRAWING NAME:

EXTERIOR ELEVATIONS -

COLORED

DRAWING NO.:

CP1.3

DATE:

06/11/21

06/11/21

06/11/21

06/11/21

06/11/21

06/11/21

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06/11/21



FRONT ELEVATION - ALBANY TPKE 1/8"=1'-0" 1



LEFT ELEVATION 1/8"=1'-0" 2

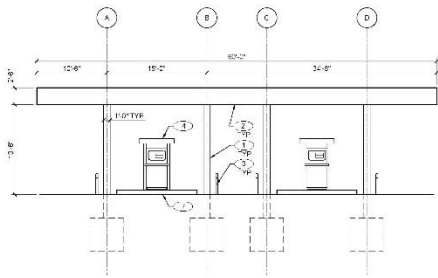


RIGHT ELEVATION 1/8"=1'-0" 3



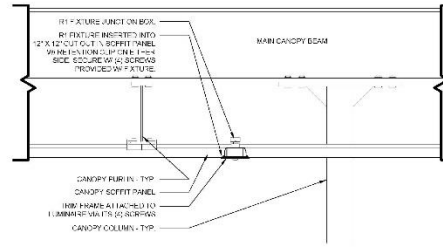
REAR ELEVATION 1/8"=1'-0" 4

1	
2	
3	
4	
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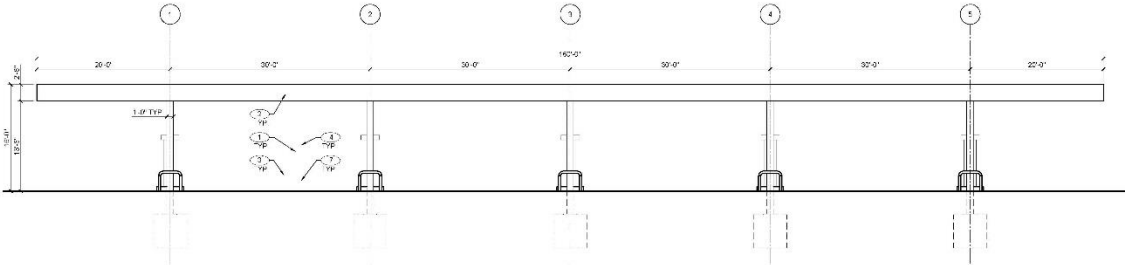


NOTE: BOTH SIDE ELEVATIONS OF CANOPY ARE IDENTICAL.

**SIDE CANOPY ELEVATION** 1/8" = 1'-0" **1**

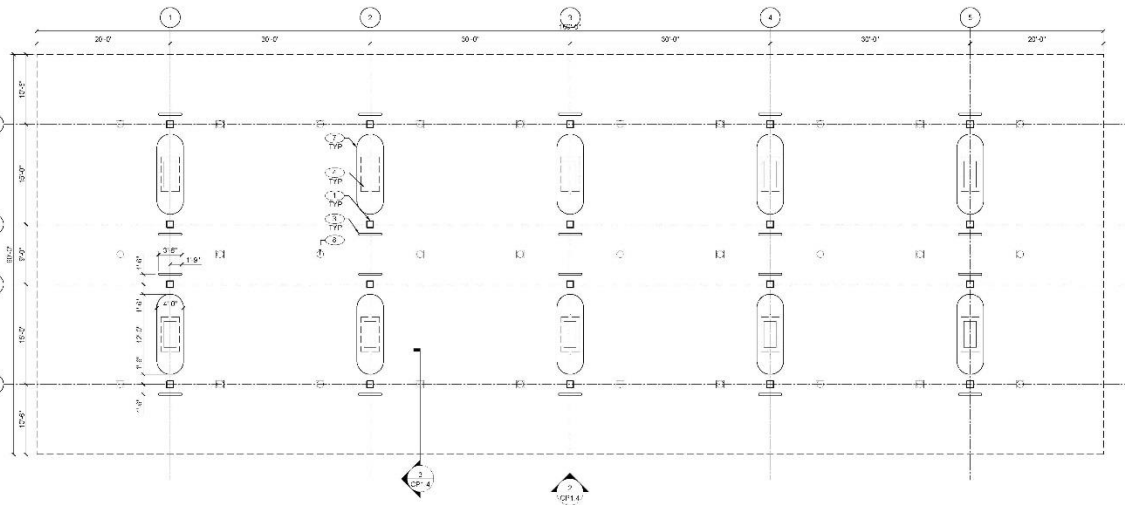


**R1 - RECESSED CANOPY FIXTURE DETAIL** 3/16" = 1'-0" **3**



NOTE: FRONT AND BACK ELEVATIONS OF CANOPY ARE IDENTICAL.

**FRONT CANOPY ELEVATION** 1/8" = 1'-0" **2**



**CANOPY PLAN** 1/8" = 1'-0" **A**

NOTE:  
THE CANOPY DESIGN CONTAINED HEREIN IS A SCHEMATIC AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION WITHOUT THE CONSULTANT'S REVIEW AND APPROVAL. THE CANOPY SHALL BE A FREE STANDING, TYPICALLY 1.5" RECESSED STEEL STRUCTURE (FRONT AND REAR) FABRICATED BY THE CANOPY CANOPY VENDOR AND INSTALLED ON FOOTINGS PROVIDED BY THE OWNER. THE FOUNDATION HAS BEEN IDENTIFIED SPECIFICALLY FOR THE CANOPY SIZE AND OCCUPANCY AS INDICATED. ANY DEVIATION IN CANOPY SIZE AND FOUNDATION SHALL BE IDENTIFIED BY A SEPARATE DRAWING NUMBER TO BE COMPATIBLE WITH THE DESIGN CAPACITY, FOOTING AND ANCHOR BOLTS DESIGN PROVIDED HERETO.

FOOTINGS SHALL BE INSTALLED PRIOR TO CANOPY VENDOR BEING SELECTED. CONSULTANT SHALL NOT BE RESPONSIBLE FOR VERIFICATION AND COORDINATION TO ADJUST THE CANOPY COLUMN AND BASE PLATE DESIGN TO COORDINATE WITH THE FOOTING ANCHOR BOLTS AND SPACING PROVIDED.

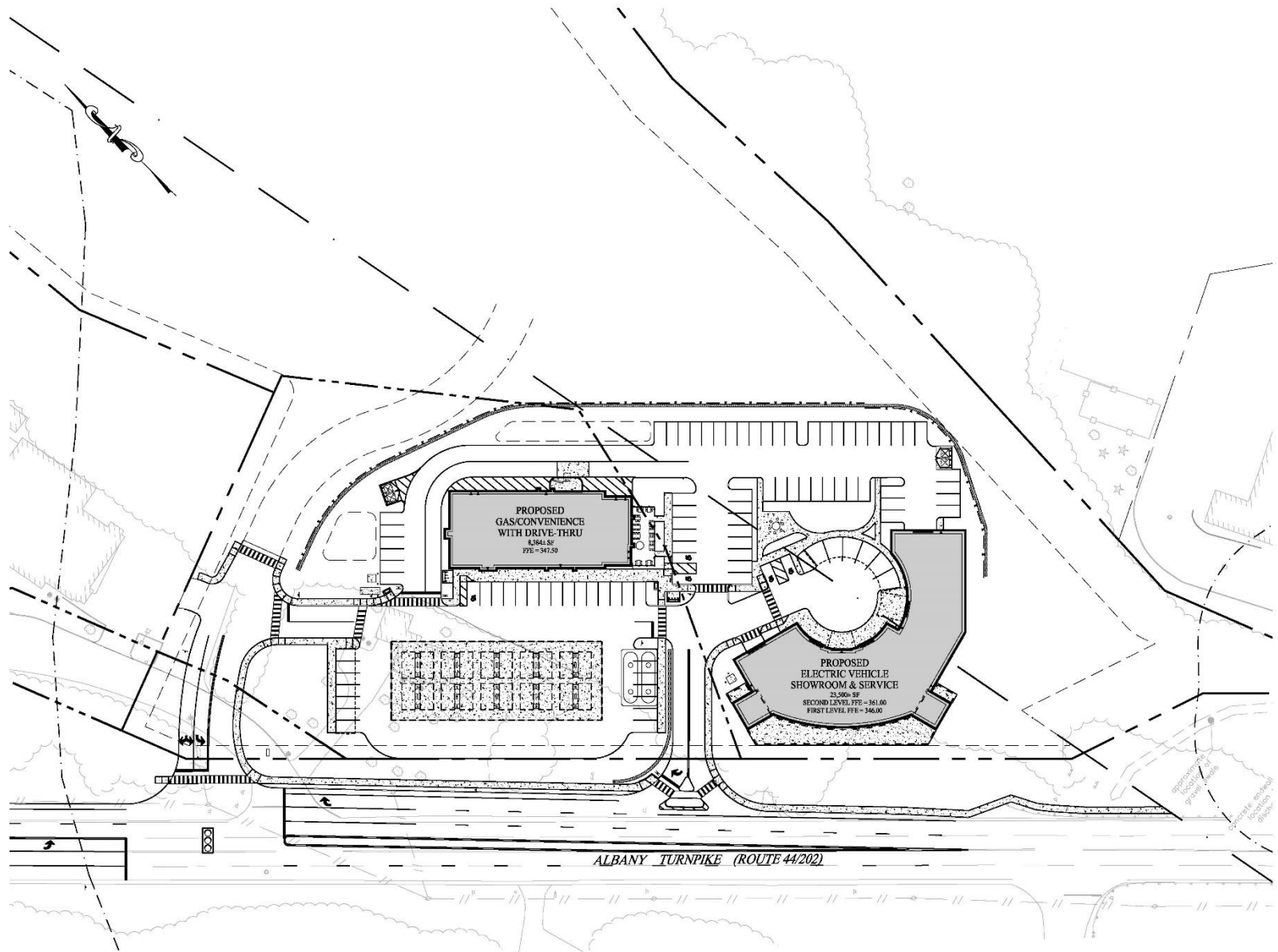
STRUCTURALLY ENGINEERED CANOPY DRAWINGS SHALL BE SUBMITTED BY THE CANOPY VENDOR DESIGNER TO THE OWNER FOR APPROVAL PRIOR TO FABRICATION.

OWNER SHALL BE RESPONSIBLE FOR ANY AND ALL SPECIAL AND THIRD PARTY INSPECTIONS RELATED TO THE FOOTINGS, CANOPY ANCHOR BOLTS AND BRACKET SYSTEMS.

**GENERAL CANOPY NOTES**

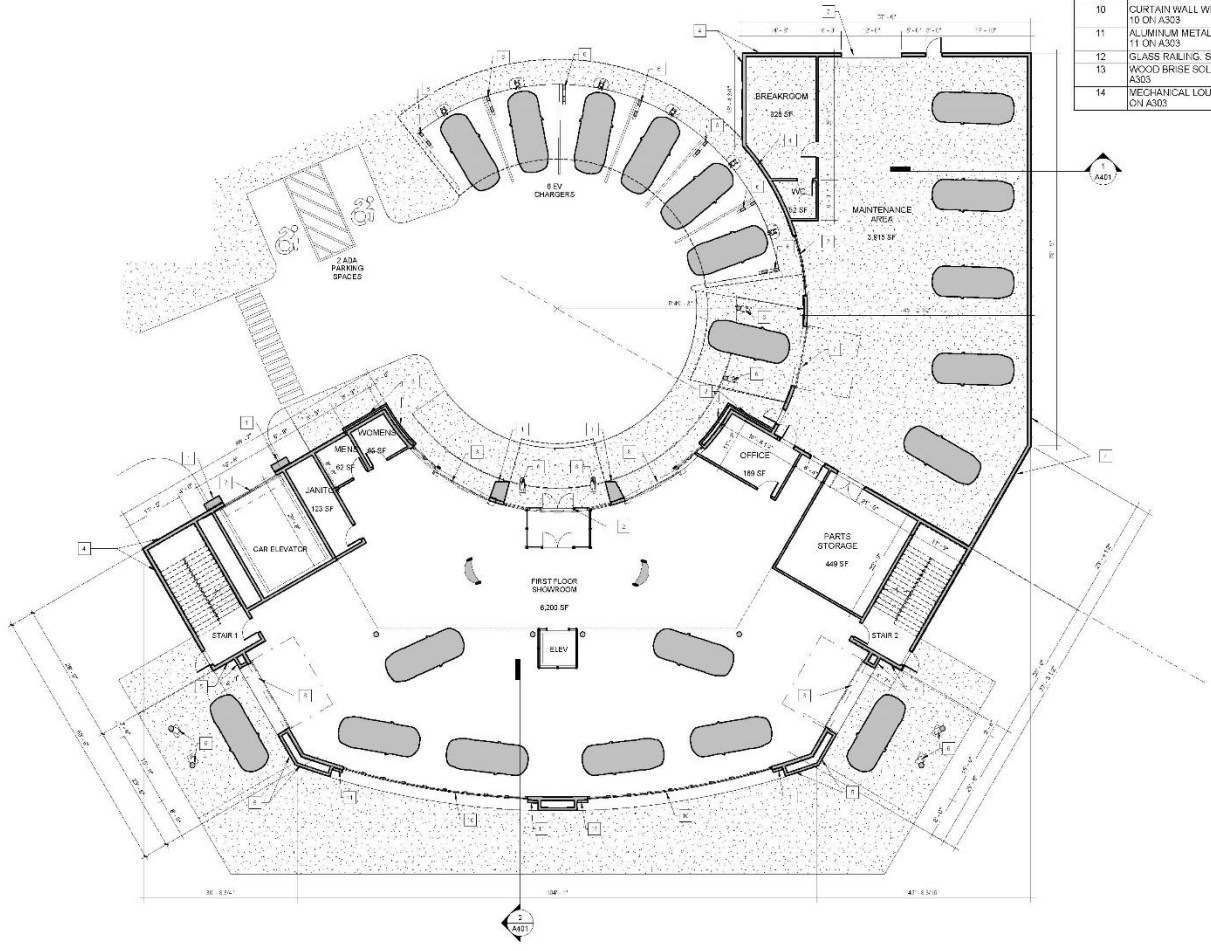
1. 1.5" RECESSED STEEL CANOPY COLUMN WITH INTERNAL BRACKETING BOLTED TO EXISTING WATER MAIN/CURB CUT SYSTEM. PAINTED WHITE, SEMI-GLOSS FINISH.
2. 1.5" HIGH ALUMINUM CLIP-ON ROOF ENVELOPE (RATED: FRAMED CANOPY, PAINTED WHITE).
3. 30" HIGH X 4" DIA. PIPERAIL LAMP/NON-FLUORESCENT YELLOW.
4. FUEL DISPENSERS: 7.5" DIA. TYPE 302 AND 304/316 T.D.C.
5. STEEL PANEL CANOPY CEILING SYSTEM: GALVALUME/ETC.
6. RECESSED LED CANOPY HETEROGENEOUS LIGHT COLOR AND FOOTING BASE COLOR (TYPICALLY 30% IN COMPLIANCE WITH APPLICABLE ZONING/LIGHTING REGULATIONS).
7. HIGH CLEARANCE: 8'-0" MIN. CLEARANCE SHALL.
8. RECESSED CANOPY 150 WATT INDOOR TRAFFIC SYSTEM ABOVE.

**KEY NOTES**

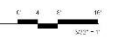


SEE CIVIL ENGINEERING DRAWINGS FOR FULL SITE PARKING LAYOUT

FINISHES CODED NOTES	
#	DESCRIPTION
1	BAMBOO VENEER. SEE IMAGE 1 ON A303
2	ALUMINUM STOREFRONT. SEE IMAGE 2 ON A303
3	LIGHT METAL CLADDING. SEE IMAGE 3 ON A303
4	DARK METAL CLADDING. SEE IMAGE 4 ON A303
5	CONCRETE PANELS. SEE IMAGE 5 ON A303
6	PAINTED STEEL COLUMNS. SEE IMAGE 6 ON A303
7	OVER-HEAD DOOR. SEE IMAGE 7 ON A303
8	GLASS OVER-HEAD DOOR. SEE IMAGE 8 ON A303
9	NANAWALL SYSTEM. SEE IMAGE 9 ON A303
10	CURTAIN WALL WITH SPIDER CLIPS. SEE IMAGE 10 ON A303
11	ALUMINUM METAL PANEL BANDING. SEE IMAGE 11 ON A303
12	GLASS RAILING. SEE IMAGE 12 ON A303
13	WOOD BRISE SOLEIL ABOVE. SEE IMAGE 13 ON A303
14	MECHANICAL LOUVER SCREEN. SEE IMAGE 14 ON A303



1 PROPOSED FIRST FLOOR PLAN  
3/32" = 1'-0"



**CAR SHOWROOM AND MAINTENANCE BUILDING**  
CANTON  
9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

NO.	DATE	DESCRIPTION

PROGRESS DRAWING  
10/19/2020 2:33:58 PM  
NOT FOR CONSTRUCTION

ISSUED FOR REVIEW  
ISSUED DATE: 10/16/2020  
DRAWN BY JB  
CHECKED BY CM  
PROJECT NUMBER: 1122247  
PROJECT: MAINTENANCE BUILDING

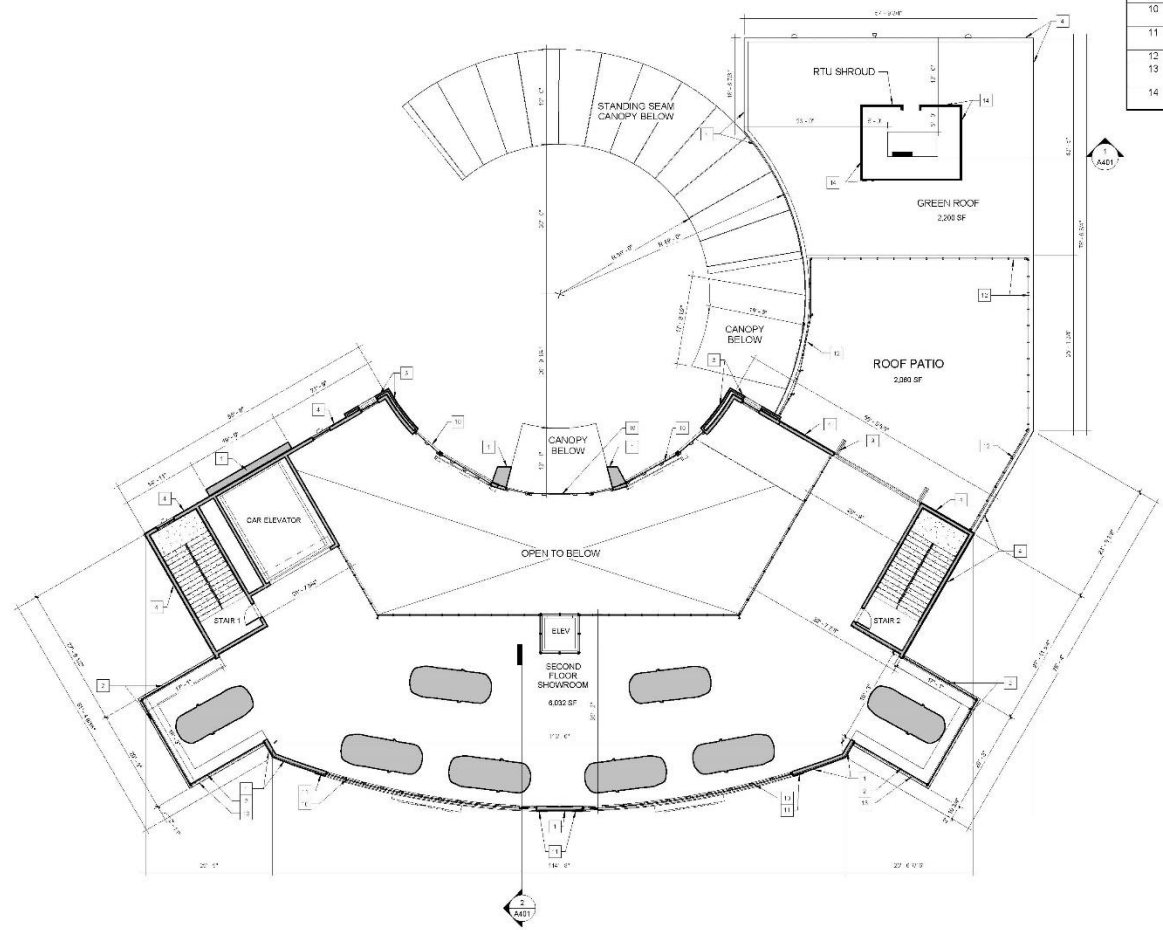
PROPOSED FIRST FLOOR PLAN

DATE: 10/19/2020  
A101

REV DATE: 10/19/2020 2:33:58 PM DWG NUMBER: C:\Users\jcm\OneDrive\Documents\Phase 0 - EV Building\1122247\_P1.dwg

File Path: \\101102020\25402.PW - DWG\PHASE 0\LEVEL\LEVELWORK\CONSTRUCTION\Phase - EV Building\PHASE 0\_L1.dwg

FINISHES CODED NOTES	
#	DESCRIPTION
1	BAMBOO VENEER. SEE IMAGE 1 ON A303
2	ALUMINUM STOREFRONT. SEE IMAGE 2 ON A303
3	LIGHT METAL CLADDING. SEE IMAGE 3 ON A303
4	DARK METAL CLADDING. SEE IMAGE 4 ON A303
5	CONCRETE PANELS. SEE IMAGE 5 ON A303
6	PAINTED STEEL COLUMNS. SEE IMAGE 6 ON A303
7	OVERHEAD DOOR. SEE IMAGE 7 ON A303
8	GLASS OVERHEAD DOOR. SEE IMAGE 8 ON A303
9	WALL SYSTEM. SEE IMAGE 9 ON A303
10	CURTAIN WALL WITH SPIDER CLIPS. SEE IMAGE 10 ON A303
11	ALUMINUM METAL PANEL BANDING. SEE IMAGE 11 ON A303
12	GLASS RAILING. SEE IMAGE 12 ON A303
13	WOOD BRISE SOLEIL ABOVE. SEE IMAGE 13 ON A303
14	MECHANICAL LOUVER SCREEN. SEE IMAGE 14 ON A303



**1** PROPOSED SECOND FLOOR PLAN  
 3/32" = 1'-0"



ADDRESS: PHASE ZERO DESIGN  
 151 WOOD STREET  
 SUITE 200  
 9-15 ALBANY TURNPIKE  
 SIMSBURY, CT 06068

**CAR SHOWROOM AND MAINTENANCE BUILDING**  
 CANTON  
 9-15 ALBANY TURNPIKE  
 SIMSBURY & CANTON, CT

NO.	DATE	DESCRIPTION

**PROGRESS DRAWING**  
 10/19/2020 2:34:02 PM  
 NOT FOR CONSTRUCTION

ISSUED FOR REVIEW  
 ISSUED DATE: 10/16/2020  
 DRAWN BY: JB  
 CHECKED BY: GM  
 PROJECT NUMBER: 1122247  
PHASE ZERO DESIGN ARCHITECTS

**PROPOSED SECOND FLOOR PLAN**

DRAWING NO: **A102**

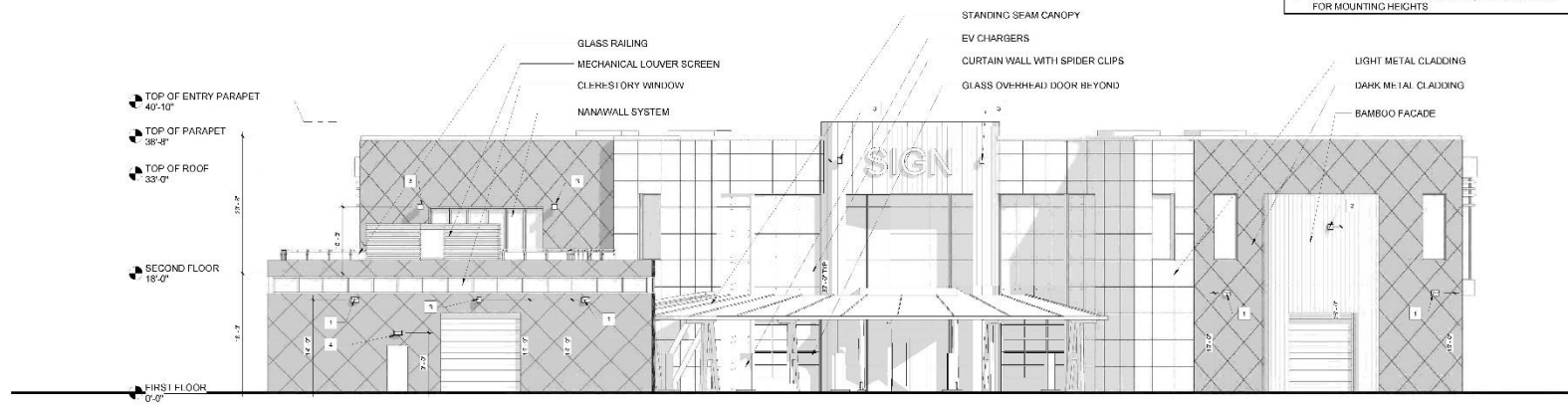


SEE A303 FOR FINISHES LIST, REFERENCE IMAGE AND DESCRIPTION

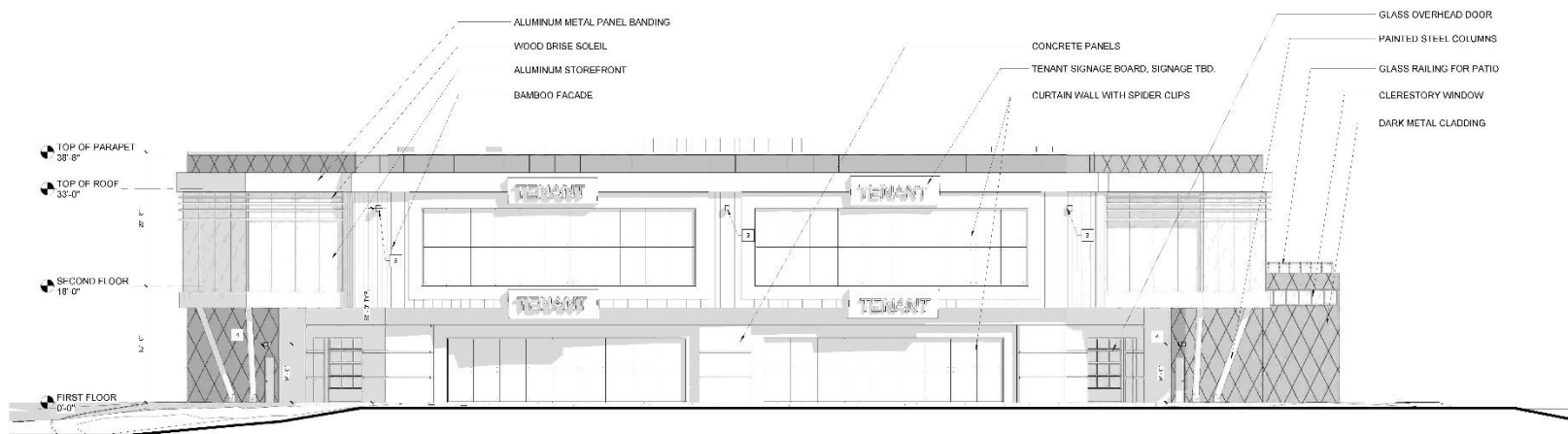
#	DESCRIPTION
1	BUILDING MOUNTED SITE LIGHTING, SEE ELEVATIONS FOR MOUNTING HEIGHTS
2	CAN FIXTURE MOUNTED IN SOFFIT
3	WALL WASH FIXTURE, SEE ELEVATIONS FOR MOUNTING HEIGHTS
4	EGRESS DOOR LIGHT AT 10'-0" A.F.F., SEE ELEVATIONS FOR MOUNTING HEIGHTS
5	LINEAR PARKING CANOPY FIXTURE, SEE ELEVATIONS FOR MOUNTING HEIGHTS

PHASE ZERO DESIGN  
 6 PLYMOUTH STREET  
 SUITE 200  
 WESTPORT, CT 06894  
 TEL: 860.296.2611  
 FAX: 860.296.2612  
 WWW.P0DESIGN.COM

**CAR SHOWROOM AND MAINTENANCE BUILDING**  
 CANTON  
 9-15 ALBANY TURNPIKE  
 SIMSBURY & CANTON, CT



② EXTERIOR ELEVATION 2  
 1/8" = 1'-0"



① EXTERIOR ELEVATION 1  
 1/8" = 1'-0"



**PROGRESS DRAWING**  
 10/19/2020 2:32:04 PM  
 NOT FOR CONSTRUCTION

ISSUED FOR REVIEW  
 ISSUED DATE: 10/16/2020  
 DRAWN BY: JB  
 CHECKED BY: GM  
 PROJECT NUMBER: 110224-1

**EXTERIOR ELEVATION I**

**A301**

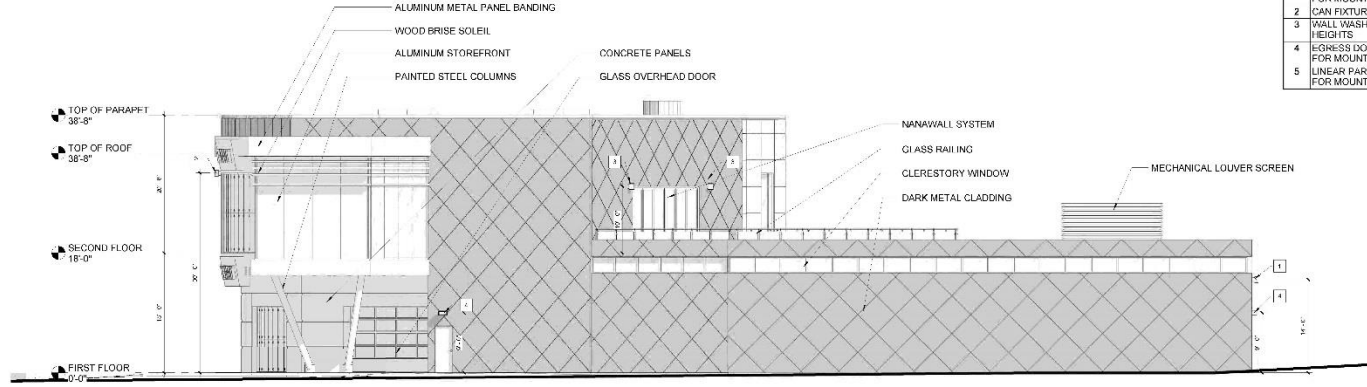
P:\0100 - 0100200-232-21 ED - Day Services\0100200-232-21\Drawings\0100200-232-21\Exterior\0100200-232-21-01.dwg



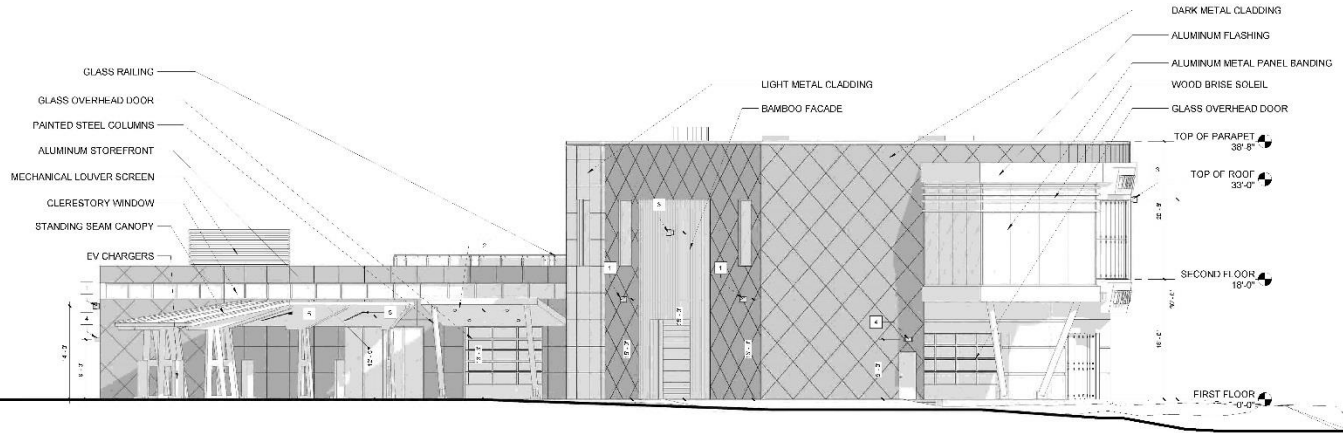


SEE A303 FOR FINISHES LIST, REFERENCE IMAGE AND DESCRIPTION

LIGHTING FIXTURE CODED NOTES	
#	DESCRIPTION
1	BUILDING MOUNTED SITE LIGHTING, SEE ELEVATIONS FOR MOUNTING HEIGHTS
2	CAN FIXTURE MOUNTED IN SOFFIT
3	WALL WASH FIXTURE, SEE ELEVATIONS FOR MOUNTING HEIGHTS
4	EGRESS DOOR LIGHT AT 10'-0" A.F.F., SEE ELEVATIONS FOR MOUNTING HEIGHTS
5	LINEAR PARKING CANOPY FIXTURE, SEE ELEVATIONS FOR MOUNTING HEIGHTS



② EXTERIOR ELEVATION 3  
 1/8" = 1'-0"



① EXTERIOR ELEVATION 4  
 1/8" = 1'-0"

**CAR SHOWROOM AND  
 MAINTENANCE BUILDING**  
 CANTON  
 9-15 ALBANY TURNPIKE  
 SIMSBURY & CANTON, CT

PROGRESS DRAWING  
 10/19/2020 2:32:21 PM  
 NOT FOR CONSTRUCTION

ISSUED FOR REVIEW  
 ISSUED DATE: 10/16/2020  
 DRAWN BY: JB  
 CHECKED BY: GM  
 PROJECT NUMBER: 110324-1  
 PROJECT TITLE: Progress Drawing of Light Fixture

EXTERIOR ELEVATION II

A302

# EXTERIOR FINISHES LIST



**1 - BAMBOO FACADE**  
HDG BUILDING MATERIALS - HDG EXTERIOR BAMBOO  
<https://hdgbuildingmaterials.com/products/cedking-siding/hdg-bamboo/>



**2 - ALUMINUM STOREFRONT**  
KAWNEER STOREFRONT - 1520JT 55G CURTAIN WALL SYSTEM  
[https://www.kawneer.com/kawneernorth\\_america/en/product.asp?cat\\_id=1992&prod\\_id=47018&desc=thema-rsp-curtain-wall-system](https://www.kawneer.com/kawneernorth_america/en/product.asp?cat_id=1992&prod_id=47018&desc=thema-rsp-curtain-wall-system)



**3 - LIGHT METAL CLADDING**  
OMEGA PANEL LAMINATORS - OMEGA-LITE - ASOOT WHITE  
<https://www.laminatorsinc.com/architectural-systems/products/omega-lite>



**4 - DARK METAL CLADDING**  
MAC METAL BLOCK SIDING - DARK GREY  
<https://macmetalarchitectural.com/product/metablock/>



**5 - CONCRETE PANELS**  
NICHHA FIBER CEMENT PANELS - INDUSTRIAL BLOCK - CONCRETE SERIES  
<http://www.nichha.com/product/industrialblock>



**6 - PAINTED STEEL COLUMNS**  




**7 - OVERHEAD DOOR**  
OVERHEAD DOOR - INSULATED SECTIONAL STEEL-BACK DOORS  
<https://www.overheaddoor.com/insulated-sectional-steel-back-doors>



**8 - GLASS OVERHEAD DOOR**  
OVERHEAD DOOR - ALUMINUM GLASS DOORS S21  
<https://www.overheaddoor.com/aluminum-glass-door-s21>



**9 - NANA WALL SYSTEM**  
NANAWALL - FOLDING GLASS WALLS  
<https://www.nanawall.com/folding-glass-walls>



**10 - CURTAIN WALL WITH SPIDER CLIPS**  
GLASSCON - CABLES GLAZED WALLS - SUSPENDED GLAZING  
<https://www.glasscon.com/products/spider-glass-suspended-glass-fin-cable-system/cables-glaze-wall-suspended-glazing>



**11 - ALUMINUM PANEL BANDINGS**  
OMEGA PANEL LAMINATORS - OMEGA-LITE - BRIGHT SILVER (METALIC)  
<https://www.laminatorsinc.com/architecture-systems/products/omega-lite>



**12 - GLASS RAILING**  
ORL-05 7300 STAINLESS STEEL POST RAILING SYSTEMS  
[http://www.cr-arch.com/product\\_page/architectural\\_railings3\\_stainless\\_steel\\_systems.html](http://www.cr-arch.com/product_page/architectural_railings3_stainless_steel_systems.html)



**13 - WOOD BRISE SOLEIL**  
KAWNEER - VERSOLEIL SUN SHADE SINGLE BLACK SYSTEM  
[https://www.kawneer.com/kawneernorth\\_america/en/product.asp?prod\\_id=418&desc=commercial-single-brise-sun-shade-system](https://www.kawneer.com/kawneernorth_america/en/product.asp?prod_id=418&desc=commercial-single-brise-sun-shade-system)



**14 - MECHANICAL SCREEN**  
LOUVERED ROOF EQUIPMENT GREENS  
[https://www.archlouvers.com/Equipment\\_Systems.html?pcid=EAlal0abChMPL7psWSTANVB4JCDSAm2EAYANAAGuMSFD\\_BwE](https://www.archlouvers.com/Equipment_Systems.html?pcid=EAlal0abChMPL7psWSTANVB4JCDSAm2EAYANAAGuMSFD_BwE)

CANTON  
CANTON  
9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

PROGRESS  
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CONSTRUCTION

ISSUED FOR REVIEW  
ISSUED DATE: 10/16/2020

DRAWN BY: JB  
CHECKED BY: CM  
PROJECT NUMBER: 1102047

MATERIALS LIST

A303



## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 13

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT





## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 14

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT





## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 8

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT





## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 10

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

**S** **SOLLI**  
ENGINEERING



**CAR SHOWROOM AND MAINTENANCE BUILDING**  
CANTON  
10.16.2020  
RENDERING 15

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT





## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 16

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT







## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 11

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT



**CAR SHOWROOM AND MAINTENANCE BUILDING**  
CANTON  
10.16.2020  
RENDERING 12

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT





## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 1

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

**SOLLI**  
ENGINEERING



## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 6

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

**S** **SOLLI**  
ENGINEERING



## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 2

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

**S** **SOLLI**  
ENGINEERING



## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 7

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

**S** **SOLLI**  
ENGINEERING



## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 9

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT



## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 3

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

**S** **SOLLI**  
ENGINEERING





## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 4

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

**S** **SOLLI**  
ENGINEERING



**CAR SHOWROOM AND MAINTENANCE BUILDING**  
CANTON  
10.16.2020  
RENDERING 5

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

**SOLLI**  
ENGINEERING



## CAR SHOWROOM AND MAINTENANCE BUILDING

CANTON  
10.16.2020  
RENDERING 6

9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

**S** **SOLLI**  
ENGINEERING

PROJECT NO.: SOL-1433



CONSULTANT:  
**SOLLI ENGINEERING**  
501 MAIN STREET  
MONROE, CT  
06468

CLIENT:

KEY PLAN:

PROJECT LOCATION:  
9-15 ALBANY TPKE  
SIMSBURY &  
CANTON, CT

ORIGINAL ISSUE DATE

10/29/20  
3:29:55 PM 08/11/20

REVISIONS & SUBMISSIONS DATE

1 TOWN COMMENTS 10/28/20

2 CLIENT COMMENTS 12/18/22

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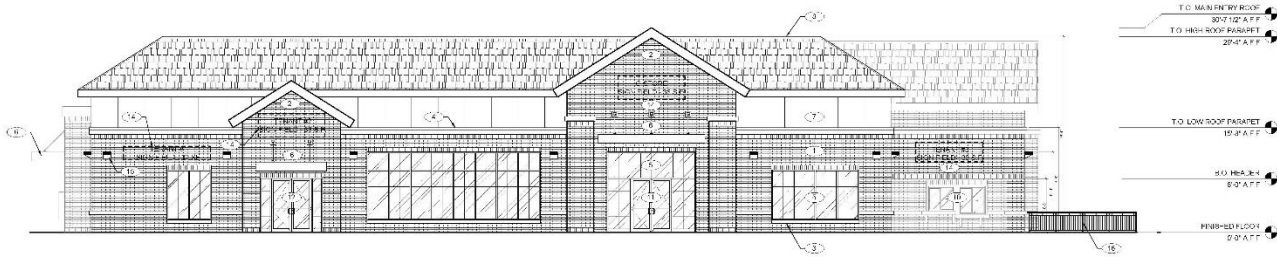
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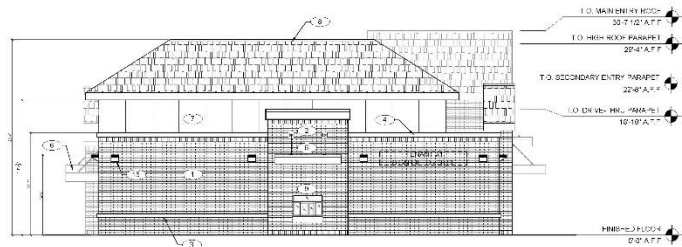
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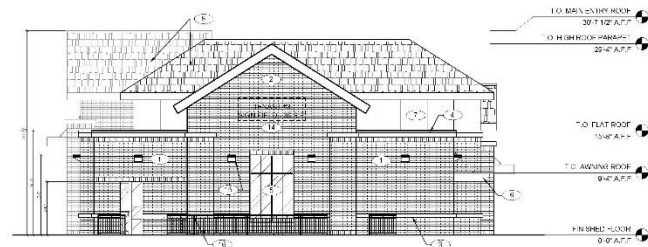
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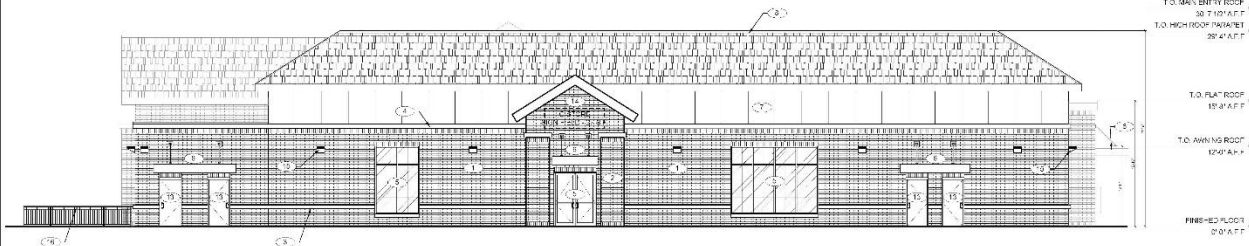
FRONT ELEVATION 1/8"=1'-0" 1



LEFT ELEVATION 1/8"=1'-0" 2



RIGHT ELEVATION 1/8"=1'-0" 3

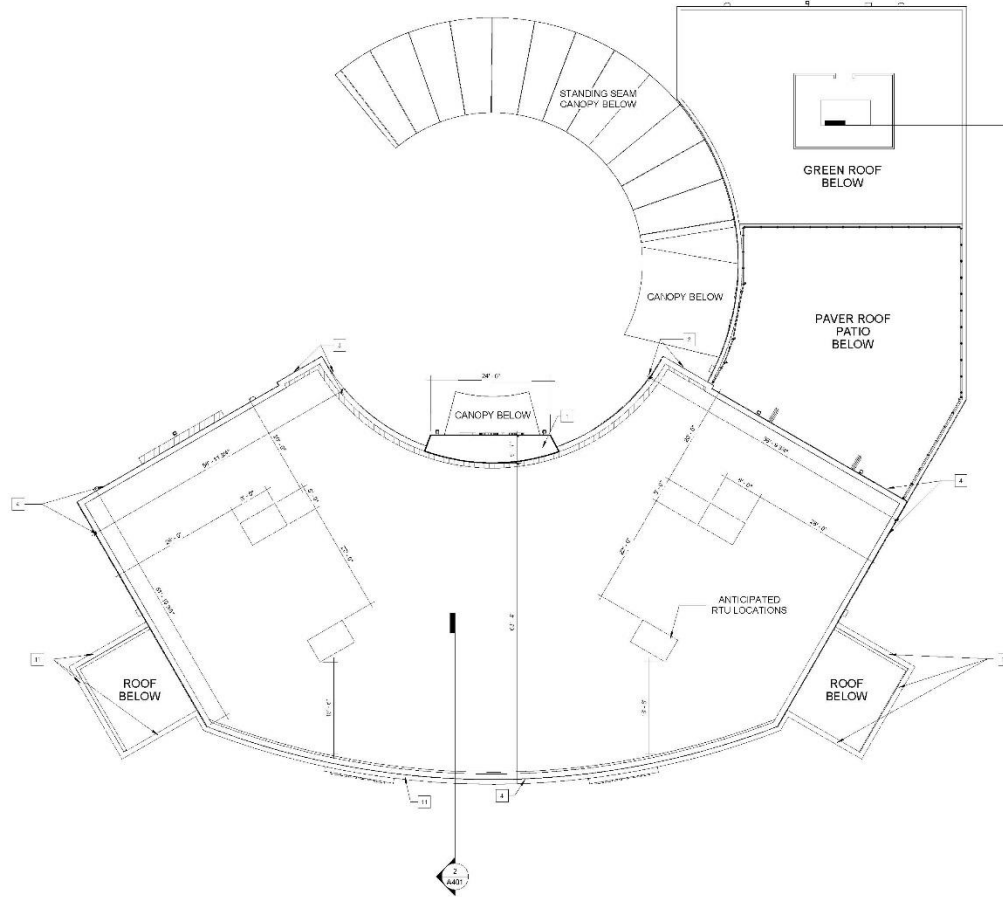


REAR ELEVATION 1/8"=1'-0" 4

- KEY NOTES**
1. BRICK VENEER - STANDARD SIZE, BURNING SAND COLOR, LIGHT TAN, USED ON THE MAIN ENTRY OF THE BUILDING.
  2. BRICK VENEER - STANDARD SIZE, BURNING SAND COLOR, MEDIUM TAN, USED ON THE BUILDING ENTRANCE AND DRIVE THROUGH PROJECTIONS.
  3. PROTECT CONCRETE WATER TABLES - COLOR MEDIUM TAN.
  4. ALUMINUM PARAPET CAP - COLOR, DARK TAN.
  5. ALUMINUM STAIR ROPES SYSTEM WITH CLAMPING GLASS, COLOR, DARK BRONZE.
  6. PREPARED CAST STEEL SUSPENDED AWNING SYSTEM WITH INTERVALL WORK DRAINS AND SECURED WITH X-MON BRACKETS OR DRUMS.
  7. ALUMINUM FRODO SHIELD, COLOR, METALLIC GREEN.
  8. HANGBOARD ROOF WITH MATCHING TYPICAL SHINGLES AND MATCHING GABLE END COLOR FOR HALLWAY AND MECHANICAL LINEN SHELF - FULLY SECURED FROM VIEW BY THE HANGBOARD ROOF.
  9. DRIVE THRU WINDOW, COLOR, DARK BRONZE.
  10. HANGBOARD PANEL WITH AROUND COLOR, DARK BRONZE.
  11. PRIMARY PUBLIC ENTRANCE.
  12. SECONDARY ENTRANCE.
  13. SERVICE DOORS, COLOR, DARK BRONZE.
  14. WALL MOUNTED "EMERGENCY" LIGHTS - INDIVIDUALLY INTERNALLY ILLUMINATED - ALL LETTERS WITH CONCEALED LIGHT SOURCE.
  15. ALL MOUNTED EXTERIOR WALL MOUNTED LIGHTS - STRUCTURAL TYPE, ALL TYPES LIGHT SOURCE SHALL BE DIRECTED UP AND DOWN AND SHIELDED FROM EXTERNAL OBSERVERS - USE LIGHT COLOR BLACK LIGHT COLOR SHALL BE COORDINATE WITH MAIN EXTERIOR COVERS - FINISHES MODELS NO. 301 AND 302 AND UNITS TO THE 2" EDGE OF LIGHT.
  16. 30" HORIZONTAL WINDOW WITH 10" HORIZONTAL SLIT.
  17. MANUFACTURE FOR WINDOW WORKS MODEL 100 R10.


REV DATE: 10/18/2020 2:34:06 PM DWG FILE: C:\Users\luciano\OneDrive\Documents\A103 - EV Building\11182020\_A103.rvt

1 PROPOSED ROOF PLAN  
3/32" = 1'-0"



#	DESCRIPTION
1	BAMBOO VENEER SEE IMAGE 1 ON A303
2	ALUMINUM STOREFRONT SEE IMAGE 2 ON A303
3	LIGHT METAL CLADDING SEE IMAGE 3 ON A303
4	DARK METAL CLADDING SEE IMAGE 4 ON A303
5	CONCRETE PANELS SEE IMAGE 5 ON A303
6	PAINTED STEEL COLUMNNS SEE IMAGE 6 ON A303
7	OVERHEAD DOOR SEE IMAGE 7 ON A303
8	GLASS OVERHEAD DOOR SEE IMAGE 8 ON A303
9	NANAWALL SYSTEM SEE IMAGE 9 ON A303
10	CURTAIN WALL WITH SPIDER CLIPS SEE IMAGE 10 ON A303
11	ALUMINUM METAL PANEL BANDING SEE IMAGE 11 ON A303
12	GLASS RAILING SEE IMAGE 12 ON A303
13	WOOD BRISE SOLEIL ABOVE SEE IMAGE 13 ON A303
14	MECHANICAL LOUVER SCREEN SEE IMAGE 14 ON A303





PHASE ZERO DESIGN  
11400 67 STREET  
SUITE 200  
CANTON, CT 06030

**CAR SHOWROOM AND MAINTENANCE BUILDING**  
CANTON  
9-15 ALBANY TURNPIKE  
SIMSBURY & CANTON, CT

NO.	DATE	DESCRIPTION

**PROGRESS DRAWING**  
10/18/2020 2:34:06 PM  
NOT FOR CONSTRUCTION

ISSUED FOR REVIEW  
ISSUED DATE: 10/16/2020  
DRAWN BY JB  
CHECKED BY GM  
PROJECT NUMBER: 1122247

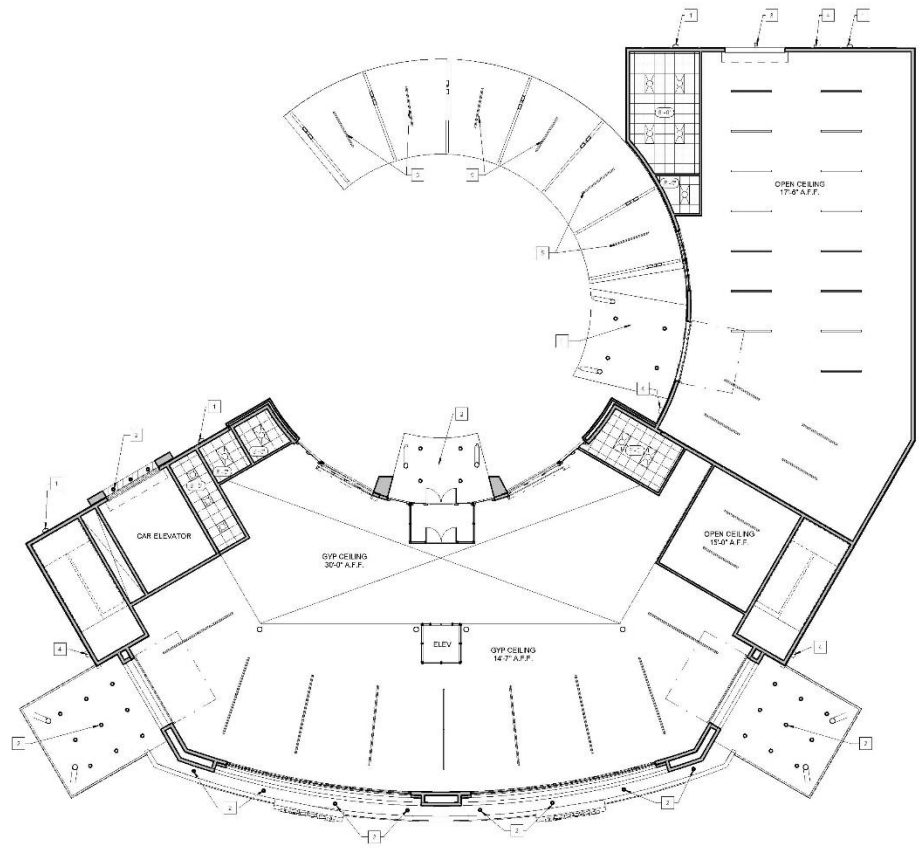
**PROPOSED ROOF PLAN**

**A103**

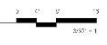


Plot Date: 10/19/2020 2:34:08 PM - Drawn By: J.B. - Drawn Date: 10/16/2020 - Project Number: 1122247 - Drawing Title: PROPOSED FIRST FLOOR LIGHTING PLAN

LIGHTING FIXTURE CODED NOTES	
#	DESCRIPTION
1	BUILDING MOUNTED SITE LIGHTINGS. SEE ELEVATIONS FOR MOUNTING HEIGHTS
2	CAN FIXTURE MOUNTED IN SOFFIT
3	WALL WASH FIXTURE. SEE ELEVATIONS FOR MOUNTING HEIGHTS
4	EGRESS DOOR LIGHT AT 10'-0" A.F.F. SEE ELEVATIONS FOR MOUNTING HEIGHTS
5	LINEAR PARKING CANOPY FIXTURE. SEE ELEVATIONS FOR MOUNTING HEIGHTS



**1 PROPOSED FIRST FLOOR LIGHTING PLAN**  
 3/32" = 1'-0"



ADDRESS: **PHASE ZERO DESIGN**  
 1500 67 STREET  
 SUITE 200  
 WESTPORT, CT 06890  
 (860) 426-1000  
 WWW.PHASEZERODESIGN.COM

**CAR SHOWROOM AND MAINTENANCE BUILDING**  
 CANTON  
 9-15 ALBANY TURNPIKE  
 SIMSBURY & CANTON, CT

NO.	DATE	REVISION

**PROGRESS DRAWING**  
 10/19/2020 2:34:08 PM  
 NOT FOR CONSTRUCTION

ISSUED FOR REVIEW  
 ISSUED DATE: 10/16/2020  
 DRAWN BY: JB  
 CHECKED BY: CM  
 PROJECT NUMBER: 1122247  
 PROJECT TITLE: CAR SHOWROOM AND MAINTENANCE BUILDING

**PROPOSED FIRST FLOOR LIGHTING PLAN**

DRAWING NO: **A201**











## Certificate of Occupancy

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101 ALBANY TURNPIKE  
D/B/L: 1010101

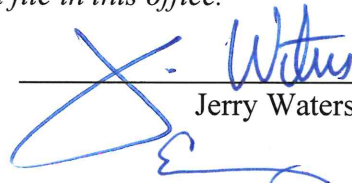
**Owner of Building:** CANTON REALTY, LLC  
2086 STANLEY STREET, SUITE 205  
NEW BRITAIN, CT 06053

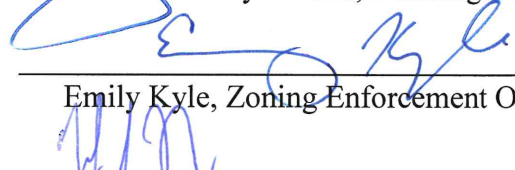
**Permit Number(s):** 19-1068(E); 20-0166(B); 20-0261(E); 20-0389(E); 20-0400(E); 20-0466(P); 20-0501(SS); 20-0519(E); 20-0524(E); and 20-0538(M)

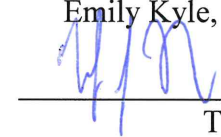
**Type of Permit:** New 19,000 Sq. Ft. Retail Facility

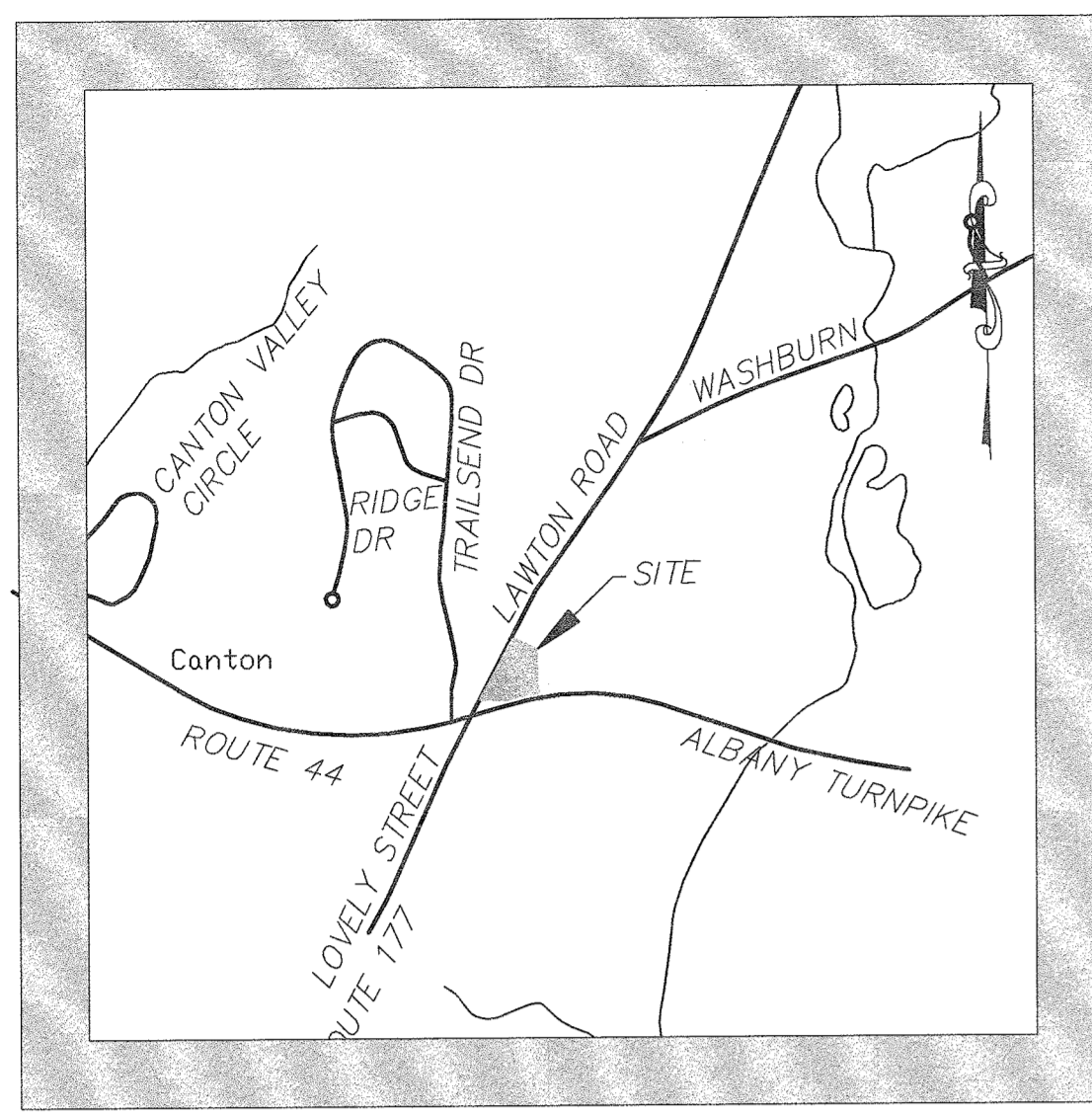
**Date Issued:** October 28, 2020

*This Certificate of Occupancy is issued pursuant to the requirements of the required building code, and is based upon periodic inspections made by this office, with certifications and test reports as required by the Building Official. Those periodic inspections are made by the observation and only to that extent has it determined that the building is in compliance with the approved drawings on file in this office.*

  
\_\_\_\_\_  
Jerry Waters, Building Official

  
\_\_\_\_\_  
Emily Kyle, Zoning Enforcement Officer

  
\_\_\_\_\_  
Timothy Tharau, Fire Marshal



VICINITY MAP  
1"=1000'

SITE DATA TABLE TAKEN FROM MAP REFERENCE #2		ASB 09/25/20	ASB 09/25/20
<b>SITE DATA TABLE:</b>		<b>SITE ZONE: B BUSINESS DISTRICT</b>	
*SITE SIZE: 3.94± ACRES OR 171,650± S.F. (SOURCE-SURVEY BY F.A. HESKETH ASSOCIATES)	3.94 AC.	PROVIDED SETBACKS:	217.5'
LOT 11: 2.34 ACRES		-FRONT:	
LOT 12: 1.60 ACRES		-BUILDING: 108'	
		-PARKING: 33'	
SITE COMPLIES WITH THE MINIMUM LOT SIZE REQUIREMENT OF 30,000 S.F.		-SIDE:	56.8'
		-BUILDING: 32'	
		-PARKING: 10'	
		-REAR:	24.1'
		-BUILDING: 25'	
		-PARKING: 13'	
<b>TAX LOT NUMBER:</b>		<b>PARKING REQUIRED:</b>	
-ASSESSOR'S MAP 32 / 101 LOT 101		-RESTAURANT (BUILDING A): 30±	
-ASSESSOR'S MAP 34 / 107 LOT 107		-RETAIL (BUILDING B): 74±	
		<b>PARKING PROPOSED:</b>	95
		-RESTAURANT (BUILDING A): 20±	
		-RETAIL (BUILDING B): 95±	
<b>PROPOSED USES:</b>	19,183± S.F.	<b>RESTAURANT A - ASSUME RESTAURANT A SEATS 40±</b>	
-RESTAURANT-BUILDING A 2,000± S.F.		<b>PER PARKING USE REQUIREMENTS PARKING AT A RATE OF 10' / 1000 S.F. IS EXCESSIVE AND SHOULD BE PERMANENTLY REDUCED PER 7.2.C.7. (AS APPROVED BY TOWN)</b>	
-RETAIL-BUILDING B 22,000± S.F. (APPROVED BY TOWN)		<b>SYNERGIES OF USE ALLOW FOR OVERLAP.</b>	
19,164± S.F. (PROPOSED PHASE 1 CONSTRUCTION)			
<b>ALLOWED BUILDING COVERAGE:</b>	11.2%	<b>PERCENT GREEN IN PARKING REQUIRED:</b>	N/A
-25% OR 42,912± S.F.		-10% OR 6,732± S.F.	
<b>PROPOSED BUILDING COVERAGE:</b>		<b>PERCENT GREEN IN PARKING PROPOSED:</b>	
-14±% OR 24,000± S.F. (APPROVED BY TOWN)		-15% OR 7,625± S.F.	
-12.3±% OR 21,164± S.F. (PROPOSED BLDG A & BLDG B PHASE 1 CONSTRUCTION)		<b>TREES IN PARKING AREA REQUIRED: 12</b>	>12
<b>ALLOWED BUILDING HEIGHT:</b>	24.9'	<b>TREES IN PARKING AREA SHOWN: 29±</b>	
-35' OR 2.5 STORIES		<b>REQUEST FOR:</b>	
<b>PROPOSED BUILDING HEIGHT:</b>		-SITE PLAN APPROVAL SECTION 9.1	
-BUILDING A: 21±		-SPECIAL EXCEPTIONS REQUESTED PER	
-BUILDING B: 25±		-4.1.C.1.a. RETAIL LESS THAN 25,000 S.F.	
<b>ALLOWED IMPERVIOUS COVERAGE:</b>		-4.1.C.2.a. CLASS III RESTAURANT	
-50% OR 85,825± S.F.		-4.1.C.3.a. DRIVE-THROUGH RESTAURANT	
<b>MAXIMUM PROPOSED IMPERVIOUS COVERAGE:</b>	N/A	-4.1.C.11.a. PARKING BEYOND 4.1.B.7.d	
-45.5±% OR 78,130± S.F.		-7.5.D.3. EARTHWORK	
<b>REQUIRED SETBACKS:</b>		<b>NO ON-SITE OR ADJACENT WETLANDS:</b>	
-FRONT	217.5'	<b>PER TABLE 7.5.D A SPECIAL PERMIT IS REQUIRED FOR EARTHWORK EXCESS OVER 2,000 CY</b>	
-BUILDING: 10'			
-PARKING: 10'		<b>EARTHWORK SUMMARY:</b>	
-SIDE	56.8'	-12,500± CY CUT	
-BUILDING: 15'		-11,000± CY FILL	
-PARKING: 10'		-1,500± CY EXPORT POSSIBLY MORE	
-REAR	24.1'	<b>THE COMMISSION MUST CERTIFY THE EROSION AND SEDIMENT CONTROL PLAN PER SECTION 7.6.</b>	
-BUILDING: 15'			
-PARKING: 10'		<b>SITE: 171,650± S.F.</b>	
		<b>DISTURBED AREA: 95±% OF SITE</b>	

N/A RESTAURANT PORTION OF SITE NOT COMPLETE

N/F  
W/S PEAK CANTON PROPERTIES LLC  
C.L.R. VOL.285 PG. 557

Δ = 07'35.26"  
R = 1472.69'  
T = 97.69'  
L = 195.10'  
C = 194.96'  
CB = S 88°56'44" W

Δ = 01'13.29"  
R = 1472.69'  
T = 15.74'  
L = 31.48'  
C = 31.48'  
CB = N 86°36'11" W

Δ = 00'05.29"  
R = 1502.69'  
T = 1.26"  
L = 2.52'  
C = 2.52'  
CB = N 85°53'19" W

Δ = 19'43.04"  
R = 1400.00'  
T = 243.30'  
L = 481.79'  
C = 479.42'  
CB = N 81°13'39" W

Δ = 09'54.35"  
R = 1472.69'  
T = 127.68'  
L = 254.71'  
C = 254.40'  
CB = N 82°15'38" W

Δ = 08'29'13"  
R = 1502.69'  
T = 111.50'  
L = 222.59'  
C = 222.38'  
CB = S 81°35'49" E

Δ = 08'41'06"  
R = 1472.69'  
T = 111.93'  
L = 223.24'  
C = 223.02'  
CB = N 81°38'54" W

Δ = 09'11'30"  
R = 1400.00'  
T = 112.54'  
L = 224.60'  
C = 224.36'  
CB = N 82°02'45" W

Δ = 06'04'53"  
R = 1400.00'  
T = 74.37'  
L = 148.59'  
C = 148.52'  
CB = S 74°24'34"

Δ = 02'34'22"  
R = 1482.69'  
T = 33.30'  
L = 66.58'  
C = 66.58'  
CB = N 72°43'09" W

Δ = 02'34'22"  
R = 1482.69'  
T = 33.30'  
L = 66.58'  
C = 66.58'  
CB = N 72°43'09" W

N/F  
LAWTON PROPERTIES LLC  
C.L.R. VOL.411 PG.770  
C.L.R. VOL.361 PG.386  
C.L.R. VOL.360 PG.289  
EXCEPTING C.L.R. VOL.392 PG.757  
115 ALBANY AVE.  
PARCEL NO. 32/101/0115  
UNIQUE ID 1010115  
"NO BUILDINGS"

ZONE  
ATG-2

BY SEWER EASEMENT IN FAVOR OF THE TOWN OF CANTON, CONNECTICUT  
C.L.R. VOL.392 PG.525

BY EASEMENT GRANTED TO THE CONNECTICUT WATER COMPANY  
19,726 SQ.F.T.  
C.L.R. VOL.394 PG.1157

PK NAIL N/F  
56.38' SECT. SVC. LLC  
C.L.R. VOL.410 PG.284  
C.L.R. VOL.406 PG.581  
111 ALBANY AVE.  
LOT C  
PARCEL NO. 32/101/0111  
UNIQUE ID 1010111

OVERHANG

HOLE SET IN

CONC. CURB

AREA UNDER CONSTRUCTION

COMBINED LOT AREA 1716± S.F. OR 3.94 ACRES

ELECTRIC DISTRIBUTION EASEMENT IN FAVOR OF THE CONNECTICUT LIGHT AND POWER COMPANY  
C.L.R. VOL.395 PG.408

GRAVEL

STONE TRACK

IRON PIN FOUND HELD

UNDERGROUND STORMWATER INFILTRATION SYSTEM #1  
27 ABS STORMTECH M3-3500 CHAMBERS

Δ = 02'54'21"  
R = 1512.69'  
T = 38.37'  
L = 76.72'  
C = 76.70'  
CB = S 72°38'00" E

Δ = 02'54'21"  
R = 1512.69'  
T = 38.37'  
L = 76.72'  
C = 76.70'  
CB = S 72°38'00" E

CONC. CURB

AREA UNDER CONSTRUCTION

COMBINED LOT AREA 1716± S.F. OR 3.94 ACRES

ELECTRIC DISTRIBUTION EASEMENT IN FAVOR OF THE CONNECTICUT LIGHT AND POWER COMPANY  
C.L.R. VOL.395 PG.408

GRAVEL

STONE TRACK

IRON PIN FOUND HELD

UNDERGROUND STORMWATER INFILTRATION SYSTEM #1  
27 ABS STORMTECH M3-3500 CHAMBERS

Δ = 02'54'21"  
R = 1512.69'  
T = 38.37'  
L = 76.72'  
C = 76.70'  
CB = S 72°38'00" E

Δ = 02'54'21"  
R = 1512.69'  
T = 38.37'  
L = 76.72'  
C = 76.70'  
CB = S 72°38'00" E

EASEMENT IN FAVOR OF THE STATE OF CONNECTICUT FOR HIGHWAY PURPOSES AND DEFINED TRAFFIC EASEMENTS  
C.L.R. VOL.389 PG. 631

C.P. #104  
REBAR WITH CAP  
N 36°09'41.87"  
E 26°31'10.47"  
ELEV. = 323.71

Δ = 08'41'06"  
R = 1472.69'  
T = 111.93'  
L = 223.24'  
C = 223.02'  
CB = N 81°38'54" W

Δ = 09'11'30"  
R = 1400.00'  
T = 112.54'  
L = 224.60'  
C = 224.36'  
CB = N 82°02'45" W

EASEMENT IN FAVOR OF THE STATE OF CONNECTICUT FOR HIGHWAY PURPOSES AND DEFINED TRAFFIC EASEMENTS  
C.L.R. VOL.387 PG.740

EASEMENT IN FAVOR OF THE STATE OF CONNECTICUT FOR HIGHWAY PURPOSES AND DEFINED TRAFFIC EASEMENTS  
C.L.R. VOL.387 PG.740

SANITARY SEWER EASEMENT IN FAVOR OF THE TOWN OF CANTON  
C.L.R. VOL.392 PG.524

WATER EASEMENT IN FAVOR OF THE CONNECTICUT WATER COMPANY  
C.L.R. VOL.394 PG.1128

SANITARY SEWER EASEMENT IN FAVOR OF THE TOWN OF CANTON  
C.L.R. VOL.389 PG.615

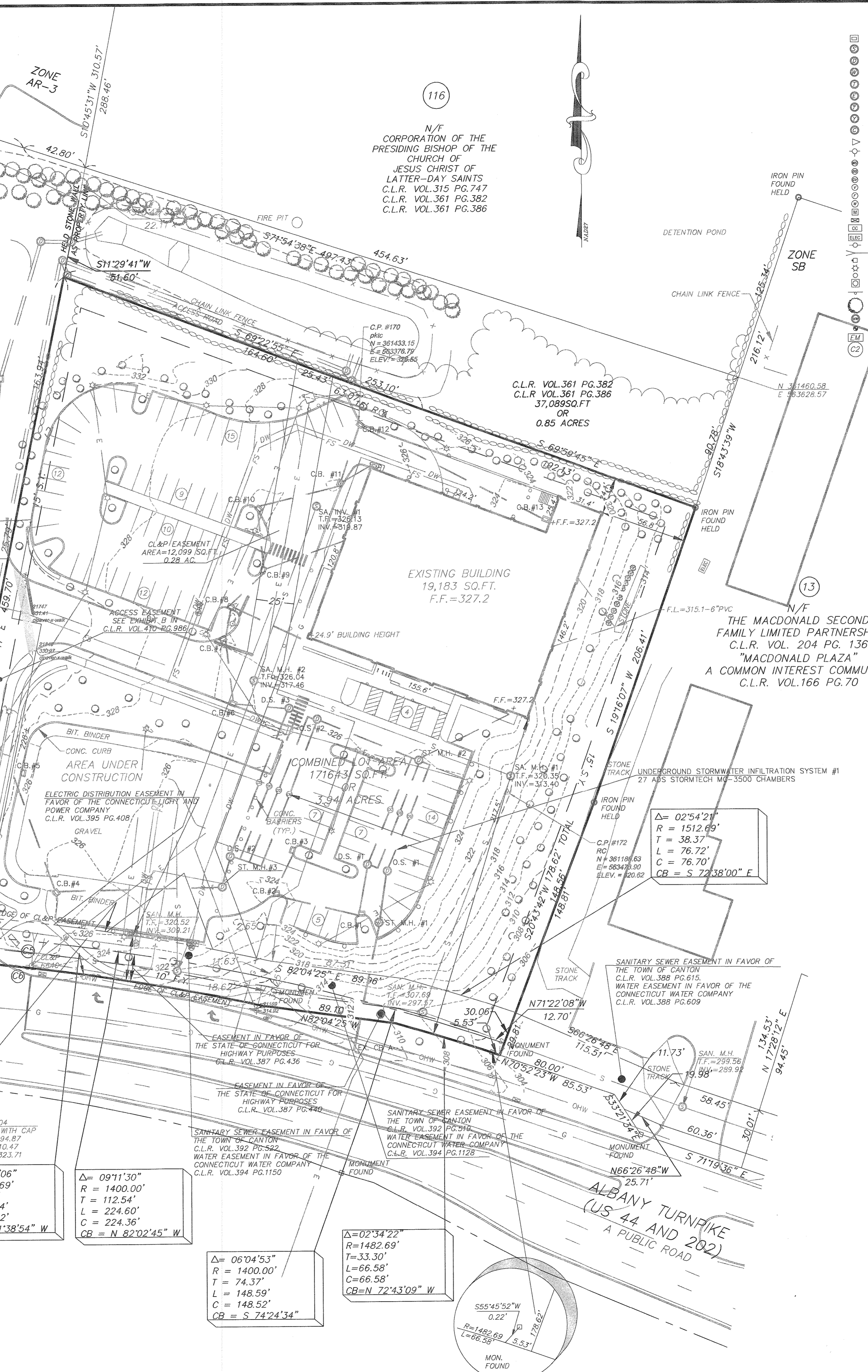
WATER EASEMENT IN FAVOR OF THE CONNECTICUT WATER COMPANY  
C.L.R. VOL.388 PG.609

Δ = 06'04'53"  
R = 1400.00'  
T = 74.37'  
L = 148.59'  
C = 148.52'  
CB = S 74°24'34"

Δ = 02'34'22"  
R = 1482.69'  
T = 33.30'  
L = 66.58'  
C = 66.58'  
CB = N 72°43'09" W

MON. FOUND

R = 1482.69'  
L = 66.58'  
C = 66.58'

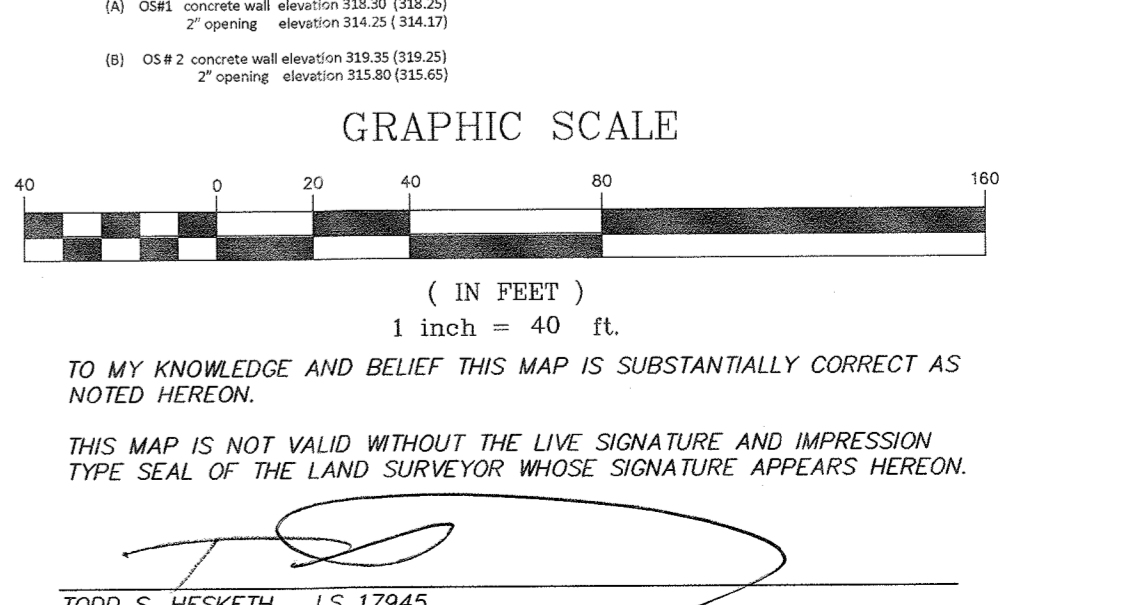


LEGEND  
(SYMBOLS NOT TO SCALE)

○ = CATCH BASIN	○ = GAS METER
○ = SANITARY MANHOLE	○ = WATER METER
○ = DRAINAGE MANHOLE	○ = TELEPHONE
○ = WATER MANHOLE	○ = AC UNIT
○ = TELEPHONE MANHOLE	○ = TREE LINE
○ = ELECTRIC MANHOLE	○ = STONE WALL
○ = UNKNOWN MANHOLE	○ = GUIDE RAIL
○ = YARD DRAIN	○ = DIRECTION OF FLOW
○ = CABLE MANHOLE	○ = IP, PROPERTY CORNER
○ = FLARED END SECTION	○ = MONUMENT
○ = FIRE HYDRANT	○ = DRILL HOLE
○ = WATER GATE VALVE	○ = SURVEY CONTROL POINT
○ = GAS GATE VALVE	○ = FENCE LINE
○ = MISC. GATE VALVE	○ = WATER LINE
○ = VENT PIPE	○ = GAS LINE
○ = FILLCAP	○ = ELECTRIC LINE
○ = WELL	○ = CABLE TELEVISION LINE
○ = MAIL BOX	○ = OVERHEAD WIRES
○ = HAND HOLE	○ = POINT OF BEGINNING
○ = CONTROLLER CABINET	○ = NORTHING
○ = ELECTRIC TRANSFORMER	○ = EASTING
○ = UTILITY POLE	○ = NOW OR FORMERLY
○ = GUY WIRE	○ = CANTON LAND RECORDS
○ = CROSSWALK POLE	○ = DELTA ANGLE
○ = LIGHT POLE	○ = RADIUS
○ = POST	○ = TANGENT
○ = TRAFFIC LIGHT SUPPORT POLE	○ = LENGTH
○ = STREET SIGN	○ = CHORD
○ = TREE (TYP.)	○ = CHORD BEARING
○ = MONITOR WELL	○ = FRONT YARD
○ = BORING	○ = REAR YARD
○ = ELECTRIC METER	○ = CONTROL POINT
○ = CURVE INFORMATION	○ = ROOF LEADER
	○ = FIRE SERVICE
	○ = DOMESTIC SERVICE
	○ = NUMBER OF PARKING SPACES

- NOTES:
- THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
  - IT IS AN IMPROVEMENT LOCATION PLAN-RECORD INTENDED TO AID IN ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
  - THE BOUNDARY DETERMINATION CATEGORY IS THAT OF RESURVEY. IT IS DEPENDENT IN NATURE AND BASED UPON MAP REFERENCE #1.
  - THIS SURVEY CONFORMS TO CLASS A-2/7-2 ACCURACY STANDARDS.
  - SUBJECT PARCEL IS CURRENTLY OWNED BY CANTON REALTY, LLC. C.L.R. VOL.446 PG.552.
  - SUBJECT PARCEL IS CURRENTLY OWNED IN THE TOWN OF CANTON SB ZONE AND B ZONE ACCORDING TO THE TOWN OF CANTON ASSESSORS WEBSITE.
  - BEARINGS AND COORDINATES DEPICTED HEREON REFER TO THE 1927 NORTH AMERICAN DATUM (NAD 27) AND THE 1929 NATIONAL GEODETIC VERTICAL DATUM (NGVD 29). CTGS STATION 5690X N=361141.56, E=560,769.85 AND CTGS STATION 2438X N=360,906.88, E=562,459.92, ELEVATION=333.95.
  - THE SITE CONTAINS 95 STRIPED PARKING SPACES.
  - THE SITE CONTAINS 131 PLANTED TREES AT THE TIME OF THE ASBUILT.
  - UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON (IF ANY) HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING AND RED LINED CONTRACTOR DRAWINGS. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE THE EXISTENCE OF WHICH ARE UNKNOWN BY THIS SURVEYOR. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED PRIOR BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.
- MAP REFERENCES:
- LOT CONSOLIDATION PLAN PROPERTY SURVEY PROPERTIES OF NEW BROADWAY REALTY, LLC AND CANTON REALTY, LLC 101 & 107 ALBANY TURNPIKE, CANTON, CONNECTICUT DATE 06-01-01 SCALE: 1"=40'. REV. 1 03-11-2019 TITLE/TOPO BY F.A. HESKETH & ASSOCIATES, INC.
  - LEGEND & SITE DATA CANTON REALTY LLC COMMERCIAL SITE PLAN 101 / 107 ALBANY TURNPIKE CANTON, CT DATED APRIL 13, 2005 LATEST REVISION 1-16-20 BY LADA, P.C. LAND PLANNERS AND CLARK ENGINEERING

STRUCTURE & TYPE	TOP FRAME ELEVATION (ASBUILT)	TOP FRAME ELEVATION (EXIST.)	INVERT IN ELEVATION (ASBUILT)	INVERT IN ELEVATION (EXIST.)	INVERT OUT ELEVATION (ASBUILT)	INVERT OUT ELEVATION (EXIST.)
ST M H#1	325.00	324.80	314.15	313.68	313.50	313.68
ST M H#2	326.01	325.85	314.15	313.90	314.15 (ALL)	314.00
D.S. #1	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #2	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #3	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #4	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #5	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #6	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #7	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #8	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #9	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #10	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #11	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #12	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #13	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #14	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #15	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #16	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #17	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #18	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #19	326.10	324.40	319.17	318.81	319.17	318.81
D.S. #20	326.10	324.40	319.17	318.81	319.17	318.81



AS-BUILT FOUNDATION

IMPROVEMENT LOCATION PLAN - RECORD

PROPERTIES OF  
**NEW BROADWAY REALTY, LLC**  
AND  
**CANTON REALTY, LLC**  
101 & 107 ALBANY TURNPIKE  
CANTON, CONNECTICUT

Date: 05-28-2020 Drawn by: CAD Job no: 00213  
Scale: 1" = 40' Checked by: TSH Sheet no: 1 OF 1

Revisions:  
No. Date Description  
1 06-02-2020 TOWN COMMENTS  
2 07-30-2020 STORM/SANITARY  
3 09-22-2020 ASBUILT SITE

FAH F.A. Hesketh & Associates, Inc.  
3 Creamery Brook, East Granby, CT 06026  
Phone: (860) 659-9000 Fax: (860) 644-8000  
e-mail: mah@fah.com





STATE OF CONNECTICUT  
OFFICE OF POLICY AND MANAGEMENT

11/9/2020

Town of Canton  
The Honorable Robert Bessel  
P O Box 168  
Collinsville, CT 06022-0168

Dear First Selectman Bessel:

Governor Ned Lamont and I would like to congratulate you and the Town of Canton on your \$128,205.00 grant through the 2020 Small Town Economic Assistance Program (STEAP) for the following project:

PROJECT NAME: New Replacement Softball Field  
PROJECT DESCRIPTION: Relocation of softball field to unused municipal property site  
Qualifies for COVID-Related Project Provision: NO  
Other Comments (if applicable): N/A

**Please confirm your award no later than 12/9/2020, by contacting Acting Undersecretary Martin Heft at the Office of Policy and Management at [Martin.Heft@ct.gov](mailto:Martin.Heft@ct.gov).**

The Department of Energy and Environmental Protection will administer your award. We are providing a copy of this letter to Alison Chase of Department of Energy and Environmental Protection. After confirming your award with Martin Heft, please contact Alison Chase, at [Alison.Chase@ct.gov](mailto:Alison.Chase@ct.gov) as soon as possible to begin the grant contract process.

**You should not proceed with any anticipated STEAP-funded project work until you are fully aware of any contractual terms required by the administering agency. This letter does not constitute a contract.**

Please keep in mind that your receipt of these STEAP funds will be contingent upon your compliance with the rules and regulations of the agency that administers your award, and reimbursement(s) of funds will not occur without a fully executed agreement between the municipality and the state administering agency.

Thank you and best of luck with your project.

Sincerely,

  
Melissa McCaw, Secretary

C: Martin Heft, Acting Undersecretary, OPM  
Alison Chase- Department of Energy and Environmental Protection



# CANTON HIGH SCHOOL BALL DIAMOND MASTERPLAN

MILONE & MACBROOM



## Proposed Softball Field Estimate

Erosion Control:	\$	6,000.00
Clear & Grub:	\$	35,500.00
Cut & Fills:	\$	15,000.00
Grade:	\$	10,500.00
Infield Clay:	\$	30,000.00
Seed – Field:	\$	6,000.00
Remaining Site:	\$	9,000.00
Walks Pave:	\$	38,000.00
Fence – Perimeter:	\$	56,625.00
Backstop:	\$	12,000.00
Bull Pen (2):	\$	5,000.00
Bleacher Pad:	\$	6,500.00
Press Box: Elevated prefab with stairs	\$	50,000.00
Concession Stand: No equipment or utilities	\$	25,000.00
Dug out (2):	\$	9,500.00
General Conditions, Project Safety Mgt and Misc Work:	\$	35,000.00
<b>Total Project:</b>	<b>\$</b>	<b>349,625.00</b>



**DRAFT MINUTES**  
Regular Virtual Meeting  
Canton Planning and Zoning Commission  
Wednesday, October 21, 2020 at 7:00 PM

**CALL TO ORDER:** Mr. Thiesse called the meeting to order at 7:05 PM.

**PRESENT:** Jonathan Thiesse, John Huyghebaert, Michael Vogel, Katie Villa, David Evans, Elizabeth Vinick (seated for Mr. Phil Pane), and Thomas Blatchley (seated for Mr. Lansford Perry)

**ABSENT:** Phil Pane and Lansford Perry

**ALSO PRESENT:** Town Planner Neil Pade and Recording Secretary Paul Dunahoo

**READING OF THE LEGAL NOTICE:** Read by Mr. Pade.

*Mr. Thiesse welcomed Mr. Vogel to the Planning and Zoning Commission.*

**PUBLIC HEARINGS**

1. **File 475; ApIn 2000; 9 and 15 Albany Turnpike; Assessor Map 32 and 36; Parcel 1010009 and 1010015; Zone: B; Special Permits: Section 4.1.C.1.a., retail/service businesses and personal service businesses greater than 2,500 square feet; Section 4.1.C.2.b., outdoor dining when accessory to restaurant classes I, II, or III; Section 4.1.C.3.a., drive-thru uses; Section 4.1.C.10.a., new car dealership, as defined by CGS Section 14-51(1); Section 4.1.C.10.e., gasoline filling stations; Section 7.3.F.8.a., sign approval by special permit; Section 7.5.D.3., earthwork and grading over 2,000 cubic yards; Section 7.7.C.3., retaining wall by special permit; Section 7.10.B.2, outdoor storage and display; and Site Plan Application: Section 4.1.B.3., restaurant classes I & II; Section 9.1.A., request to construct a 8,384 sq. ft. gas station/convenience store with restaurants and drive-thru, and 23,500 sq. ft. electronic vehicle showroom with 117 associated parking spaces; 9-15 Albany Turnpike, LLC, applicant/owner**

Attorney David Markowitz was present to represent 9-15 Albany Turnpike, LLC. The engineer, Mr. Kevin Solli of Solli Engineering, was present. Mr. Mark Greenberg, manager of 9-15 Albany Turnpike, LLC, was also present.

Mr. Markowitz said that the proposed entrance to the site will have a traffic signal. The site has two parts. The first is a gas station, and the second is an electric vehicle (EV) showroom. The gas station will contain a deli, ice cream shop, and a coffee shop with a drive through. Indoor and outdoor seating will be available. The gas station will have charging available to EVs. The EV showroom will not be a dealership. Instead, the vehicles will not be sold from the showroom, and they will instead be available for purchase online. Outside there will be at most two or three vehicles stored in front of the building, not in the parking area. The service area of the showroom building is in Simsbury, and Simsbury has voted to approve the site plan for the portion of the site that is in their town.

Mr. Kevin Solli gave the Commission a more detailed overview of the site. He noted that the site has been identified as a priority development area and opportunity location in the Plan for Conservation and Development. Mr. Solli said that they are considering having a canopy over the parking area with EV charging stations. In addition to the entrance with a stoplight, the proposal includes a right-in right-out entrance and exit. The project will require approval from the Department of Transportation. Pedestrian access has been taken into account, as sidewalks, crosswalks; signage, bike racks, and seating are included in the plan. An elevator is within the showroom building, so visitors can go to the second floor to view the cars. Much of the rock face façade on Route 44 will be maintained. The drainage will run south. All the water collected will be treated, and when released it will match the existing rate of runoff.



According to Mr. Solli, silt fencing will be used during construction. 81,000 cubic yards of earth will be moved, and blasting will be required. Pre-blast surveys will be conducted. While most material processing will be done off-site, what is done on-site will be done in Simsbury. Two waivers are requested. The current landscape requirement in Canton is that a 10 ft. landscape buffer is placed along the front. Since there is a large right of way in front of the site, the applicant is requesting that they be allowed to have the buffer within the right of way. Additionally, the applicant is requesting a waiver in order to have less than the required number of shade trees along the front.

Mr. Richard Correia said that they estimate the tax revenue for Canton could go up to \$109,697, a net increase of \$103,000.

Ms. Vinick asked if the plan presented was the whole site development plan. Mr. Solli said that it was the only development currently planned.

Mr. Pade presented his staff report on the project.

When asked by Mr. Thiesse if they had considered different materials other than bamboo for the front of the showroom building, Mr. Solli said that they had, but that they had gone with the current design because it was a prototype that they could replicate in other areas.

Ms. Teresa Barger from 8 Pond Road said that while she is not opposed to development on the spot, she is concerned by the amount of rock the applicant plans to remove. She urged the commission to ensure that only the necessary amount of rock be removed. She also asked that the applicant put up a bond to cover the cost of any pollution or damage to the town by the project. Additionally, she objected to the design of the building, as she does not believe that it looks like something which belongs in a small New England town.

Mr. John Peck from 264 Barber Town Road said that he likes the way the ridge looks now. He agreed with Ms. Barger that the proposed building design does not look like it belongs in Canton, and he would like the Commission to ensure that the project does not ruin the ridge. Otherwise, he would prefer another location for the building to be found.

Ms. Amy Hogan from 296 East Hill Road asked if the developer would be operating the shops or if they would be run by chains. Mr. Thiesse said that it is not something the Commission can discuss. Mr. Solli replied that they are hoping to have Connecticut-based shops, and that they do not intend to have something at the scale of Subway.

**MOTION:** Mr. Thiesse moved that the commission continue the public hearing for File 475; Apln 2000; 9 and 15 Albany Turnpike to the November 18, 2020 regular meeting. Mr. Evens seconded the motion, which passed unanimously.

#### **PUBLIC HEARING ACTIONS:**

1. **File 475; Apln 2000; 9 and 15 Albany Turnpike; Assessor Map 32 and 36; Parcel 1010009 and 1010015; Zone: B; Special Permits: Section 4.1.C.1.a., retail/service businesses and personal service businesses greater than 2,500 square feet; Section 4.1.C.2.b., outdoor dining when accessory to restaurant classes I, II, or III; Section 4.1.C.3.a., drive-thru uses; Section 4.1.C.10.a., new car dealership, as defined by CGS Section 14-51(1); Section 4.1.C.10.e., gasoline filling stations; Section 7.3.F.8.a., sign approval by special permit; Section 7.5.D.3., earthwork and grading over 2,000 cubic yards; Section 7.7.C.3., retaining wall by special permit; Section 7.10.B.2, outdoor storage and display; and Site Plan Application: Section 4.1.B.3., restaurant classes I & II; Section 9.1.A., request to construct a 8,384 sq. ft. gas station/convenience store with restaurants and drive-thru, and 23,500 sq. ft. electronic vehicle showroom with 117 associated parking spaces; 9-15 Albany Turnpike, LLC, applicant/owner – No action was taken**

**OLD BUSINESS:** None

**OTHER BUSINESS:**

**1. Update Regarding the Communications Facilities Sub-Committee**

**MOTION:** Mr. Thiesse moved that the Commission continue the sub-committee consisting of Elizabeth Vinick, Michael Vogel, and Tom Blatchley, and that it prepare proposed revisions to Section 8.4 of the zoning regulations; the committee is to report back to the commission at each regular meeting with updates and shall present a draft no later than the June 21<sup>st</sup>, 2021 regular meeting of the Commission. Ms. Vinick seconded the motion, which passed unanimously.

**2. Discussion of Zoning Map Amendments Pertaining to Potential Opportunity Locations**

**3. Discussion on Potential Edits to the Form-Based Code**

**4. Update regarding violation at 31 Powder Mill Road** – The Commission agreed that no additional action was required.

**5. Discussion on POCD Implementation**

**6. Discussion of Form Based Code Concept of Site/Pad/Maximum Density Partial Approvals**

**7. Discussion of Public Improvement Standards**

**8. Review of Minutes from September 16, 2020** – The minutes were approved as amended.

**9. 2021 Meeting Schedule**

**10. Staff Reports:**

- a. **Town Planner's Report**
- b. **ZEO Report**

**ADJOURNMENT:**

**MOTION:** Mr. Evans moved to adjourn the meeting at 10:20 p.m. Ms. Vinick seconded the motion, which passed unanimously.



2021 MEETING SCHEDULE  
CANTON PLANNING & ZONING COMMISSION

REGULAR MEETINGS HELD THE THIRD WEDNESDAY

Tuesday, January 19, 2021\*  
Wednesday, February 17, 2021  
Wednesday, March 17, 2021  
Wednesday, April 21, 2021  
Wednesday, May 19, 2021  
Wednesday, June 16, 2021

Wednesday, July 21, 2021  
Wednesday, August 18, 2021  
Wednesday, September 15, 2021  
Wednesday, October 20, 2021  
Wednesday, November 17, 2021  
Wednesday, December 15, 2021

Special meetings to be convened as necessary; the January meeting will be held on the Third Tuesday due to the annual Town Meeting on Wednesday, January 20, 2021.

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Regularly scheduled meetings of the Planning and Zoning Commission are held at 7:00 p.m. at the Community Center at 40 Dyer Avenue, Canton, CT unless otherwise noted. The following are current members of the Planning and Zoning Commission:

Thomas Blatchley (Alternate)  
David Evens (Regular)  
John Huyghebaert (Regular)  
Philip Pane (Regular)  
Lansford W. Perry (Regular)  
Jonathan Thiesse (Regular)  
Katie Villa (Regular)  
Michael Vogel (Regular)  
Elizabeth Vinick (Alternate)





# TOWN OF CANTON LAND USE OFFICE

4 Market Street, Collinsville, Connecticut 06022

ZEO Report, November 18, 2020  
Permits Granted since October 21, 2020

#	Street	Permit	Dated Issued	
115	Albany Turnpike	SIGN	10/22/20	Sign Permit
150	Commerce Drive	SIGN	10/22/20	Sign Permit
15	North Mountain Road	ZONPERM	11/4/20	Zoning permit for in ground pool
5	Cherry Brook Road	MSPM	11/4/20	Minor site plan modification- pool addition & site improvements
5	Cherry Brook Road	CERTCOM	11/4/20	Certificate of zoning compliance
110	Dowd Avenue	ZONPERM	11/5/20	Zoning permit for detached garage
77	Cherry Brook Road	ZONPERM	11/12/20	Zoning permit for attached accessory dwelling unit
238	Albany Turnpike	SIGN	11/16/20	Sign permit
85	High Valley Drive	ZONPERM	11/16/20	Zoning permit for in ground pool

SFH – Single Family Home

ZONPERM – Zoning Permit

FBC1 – Form Based Code Type 1 App

SIGN – Sign

LIQUOR – Liquor

MSPM – Minor Site Plan Modification

SP – Special Permit

CERTCOM – Certificate of Compliance

### Inspections Since October 21, 2020

*\*\* Part of regular inspection route*

10/22/20

- 330 East Hill Road\*\* Ongoing Construction
- 43 Garrett\*\* Ongoing Construction

- 15 & 17 East Street\*\* Ongoing Construction
- 147 Main Street – CO Inspection

10/28/20

- 325 Commerce Drive – E&S Inspection

11/18/20

- 325 Commerce Drive – E&S Inspection
- Commerce Drive – Sidewalk Project
- 238 Albany Turnpike – Zoning Compliance
- 43 Garrett\*\* Ongoing Construction
- 81 W Simsbury Road\*\* – Zoning Enforcement
- 534 Cherry Brook Road – Zoning Enforcement

11/2/20

- 9 – 15 Albany Turnpike – Photos for NP Staff report

11/17/20

### ZEO Action since October 21, 2020

Phone Calls – 19

Counter - 3

Emails – 111

### Building Permits Signed since October 21, 2020