36 Mill Plain Road, Suite #204 DANBURY, CT 06811

Town of New Fairfield and Board of Education

203/743-3424

E-MAIL: ben@dotocivil.com

PHONE:

# **BUS LOT LOCATION STUDY**Conceptual Planning and Estimating for Multiple Sites

**January 18, 2025** 

# **Table of Contents**

		<u>Page</u>
1.	Introduction	1
2.	Evaluation Criteria	1
3.	Parcel - A: Narrative	2
4.	Parcel - B: Narrative	3
5.	Parcel - G: Narrative	5
6.	Parcel - H: Narrative	6
7.	Final Recommendations	8
8.	Cost Estimates	Exhibit A
9.	Conceptual Bus Lot Office (floor plan)	Exhibit B
10.	. Bus Template	Exhibit C
11.	Parcel - A: Preliminary Plan (PP01)-R3 Parcel - B: Preliminary Plan (PP02)-R3 Parcel - G: Preliminary Plan (PP03)-R3 Parcel - H: Preliminary Plan (PP04)-R3	Exhibit D

# 1. Introduction

The purpose of the Bus Lot Location Study (Study) was to provide the Town of New Fairfield (Town) with initial engineering review, evaluation, conceptual planning and estimating services to evaluate four (4) separate sites for the possible construction of a new bus storage lot, staff parking, and bus office to support the New Fairfield Public School District. The goal is to use the results of the Study to ultimately determine which of the four sites provides the best opportunity to locate the bus lot and related facilities. A Working Group made of Town Officials, Town Staff, BOE Administrative Staff, and the Board of Education Chairman selected these sites, based on a variety of factors, as the best sites that could accommodate the use and amenities. The selection of a site for this use has proven to be controversial, therefore, the evaluation of these sites was done in a thorough, objective, and well-documented manner with every effort made to build public trust in the process and everyone involved.

The four sites included in this site are as follows:

- Parcel A: Former Consolidated School Site, 302 Ball Pond Road
- Parcel B: High School/Middle School Campus, 54 Gillotti Road
- Parcel G: Cell Tower/New Consolidated School, 302 Ball Pond Road, 24 Gillotti Road
- Parcel H: Town of New Fairfield Drop off Center, 33 Bigelow Road

All four sites are located within the R-88 Zoning District (2-acre residential). A bus lot use is considered a "municipal building and use" according to the Town of New Fairfield's Zoning Regulations. A Special Permit will be required from the Zoning Commission for all four of the sites.

The results of the Study reflect an iterative process of site evaluation, review of draft conceptual plans during development, revisions to plans based on input and requested changes and improvements from the Working Group. Detailed cost estimates (Exhibit A) were prepared utilizing actual quantities based off the conceptual plans, where available, and likely anticipated site-specific costs for items not detailed on the plans due to their conceptual nature.

# 2. Evaluation Criteria:

• Lot should hold 26 full size buses and 9 vans;

- Bus lot fenced with an 8' high chain link fence installed to allow for the storage of snow without damaging the fence;
- The bus lot should have a motorized gate;
- The bus lot office is a 400 s.f. permanent building (not a trailer);
- The bus lot should be lighted and include security cameras;
- Bus parking spaces should be sized based on industry standards and the isle width shall be sized to be able to accommodate anticipated bus traffic in the lot and bus maneuvering for parking and dispatching;
- 40 parking spaces should be provided for staff as close to the lot as possible;
- Staff parking should be located outside of the bus lot fenced area to minimize the secured lot area;
- Conceptual plans shall be at minimum 2' contours to determine extent of cuts, fills and required grading;
- Evaluate sight lines at driveway and roadway intersection;
- Determine likely connections for electricity and communications;
- Evaluate water service connection (new well vs. existing connection);
- Evaluate septic system connection (new septic vs. existing connection);
- Evaluate likely stormwater connection or discharge points and locations of potential detention systems;
- Determine permitting requirements;
- Prepare a cut and fill analysis and use to estimate earthwork costs;
- Estimate length of construction;
- Consider minimum landscaping requirements for use in cost estimating;
- Evaluation and resolution of on-site traffic and pedestrian circulation conflicts with bus traffic, best methods to separate and safeguard;
- Evaluate the benefit of relocating existing site amenities to be able to effectively and efficiently develop a bus lot; and
- Address site specific design issues as identified during development of plans.

# 3. Parcel – A: Narrative (Former Consolidated School Site)

This site is located within the footprint of the former Consolidated School Site at 302 Ball Pond Road. The school building has recently been demolished under a separate project. Baseline grades used for this study are the proposed final demolition grades provided by the demolition contractor.

The location of the proposed bus lot is similar to the one previously developed by the original design team. Changes include shifting the lot as far from Ball Pond and Gillotti Roads as possible and making the lot rectangular in shape (previously square) to further buffer the lot from the existing ball field and Ball Pond Road. The proposed bus lot driveway was relocated to

Gillotti Road. This driveway provides a gentler grade than the previous Ball Pond driveway and includes a reconstructed shared driveway apron with the existing Gillotti Road parking lot. Adequate site lines are provided as well as adequate turning radii at the road intersection. 31 of the 40 proposed employee spaces will be repurposed and shared with the existing Gillotti Road ball field parking lot to remain. No negative impacts to the existing ball fields or playground result.

The bus office will require a connection to existing domestic on-site water and a new septic system.

Land use approvals from the Conservation Inland Wetlands Commission (CIWC) and Zoning Commission (Special Permit) will be required due to on-site wetlands within 100' of proposed activities and the proposed use in a residential zone. Once all permits are obtained, including building permits, the anticipated construction schedule is approximately 9-12 months.

<u>Positive features</u> of this site include a historical school and bus use/access, existing infrastructure (water, storm drainage, parking lots), central location, proximity to fueling location, limited earthwork, minimal site and tree clearing, and no disruptions to existing municipal or educational activities.

The negative features of this site include the high potential for neighborhood opposition based on the history of the previous design and application process. Multiple applications were made to the Zoning Commission for approval. These applications were negatively received by the public and by members of the Zoning Commission and withdrawn prior to likely denial. The bus lot would also limit the potential for future on-site recreational expansions. With the former Consolidated School now demolished, this site is not suited for a bus lot from an aesthetic standpoint.

# 4. Parcel - B: Narrative (High School/Middle School Campus)

This site is located on the existing High School/Middle School Campus at 54 Gillotti Road. The proposed bus lot location is east and south of the existing High School soccer field in the

location of an existing playground, parking lot, two basketball courts, bocce courts and a dog park.

This location is well suited for a square shaped bus lot immediately east of the soccer field. The existing parking lot in this area will be reconfigured and expanded to provide adequate bus and passenger vehicle traffic patterns, additional parking spaces for bus employees, and to recover high school spaces lost due to the reconfiguration. A redesign of an internal driveway intersection is also proposed to provide proper bus turning paths. The existing driveway apron at Gillotti Road will remain unchanged as it was designed for bus traffic and has both right and left-turn egress (exit) lanes and adequate sight lines.

The bus office will require a connection to existing domestic on-site water at the soccer field restroom building, and a new septic system.

The need to remove the playground, basketball courts, bocce courts, and dog park necessitated the review of a potential replacement location(s). The former Consolidated School site was identified as a suitable location due to its proximity, recreational nature, and existing parking lots. The preliminary plan includes an inset detail showing how these relocated features can all fit at the former Consolidated School.

Zoning Commission (Special Permit) approval will be required for the bus lot since the proposed use is in a residential zone.

The recreational relocations to the former Consolidated School site will require both Zoning Commission (Special Permit) and CIWC approvals due on-site wetlands within 100' of proposed activities and being in a residential zone.

Once all permits are obtained, including building permits, the anticipated construction schedule is approximately 9-12 months for the bus lot. The recreational relocations do not necessarily need to coincide with the bus lot construction.

<u>Positive features</u> of this site include being an existing school that buses will continue to serve daily, excellent existing driveway apron, existing infrastructure (water, storm drainage, parking lot, power), central location, proximity to fueling location, limited tree clearing, moderate earthwork, and limited disruption to the existing school. The high school will gain 45 parking spaces adjacent to the bus lot (7 during school bus lot hours and 45 after bus/school hours). Another positive benefit (safety) of this site is the permanent removal of non-school recreational activities (basketball courts, bocce courts, playground and dog park) from the campus.

<u>Negative features</u> of this site are the costs to remove and/or relocate the non-school recreational uses. The potential for public opposition in removing and relocating these items also exists.

# 5. Parcel - G: Narrative (Cell Tower/New Consolidated School)

This site is located on the upper portion of 302 Ball Pond Road and rear of 24 Gillotti Road. The bus lot location is situated on a hillside between an existing cell tower site and the rear of the New Consolidated School. The existing cell tower access drive that runs from the Fire Station to the cell tower was not able to be reused due to steep grades (15% to 20% in portions) and its poor condition. An approximately 1,500 ft. long access drive running from Gillotti Road, over the footprint of the former Consolidated School, and up the hillside behind the Fire Station was designed to access the bus lot.

Due to steep topography, a rectangular shaped bus lot was best suited for the site. Employee parking is located at the top of the access drive outside the fenced and gated bus lot.

The proposed driveway merges with a redesigned and shared apron that will also serve the existing Gillotti Road parking lot to remain. Adequate site lines are provided as well as adequate turning radii at the road intersection. No negative impacts to the existing ball fields or playground result.

The bus office will be served by connections to existing domestic on-site water and sewage treatment at the rear of the New Consolidated School. Power and communications will also be brought from the New Consolidated School due to its proximity to the bus lot.

The long access driveway and steep site grades require an extensive amount of tree clearing, earthwork, retaining wall construction, large asphalt surfaces, and storm drainage infrastructure.

Land use approvals from the CIWC and Zoning Commission (Special Permit) will be required due to on-site wetlands within 100' of proposed activities and the proposed use in a residential zone. Once all permits are obtained, including building permits, the anticipated construction schedule is 12 to 15 months.

<u>Positive features</u> of this site include its concealed and private setting, access to water and sewer, central location, proximity to fueling location, and requires no disruptions existing school, Town, or recreational operations. The access drive also provides the Town a future ability to potentially eliminate significant portions of the existing cell tower access drive with a simple interconnection.

<u>The negative features</u> of this site are the long access drive, need for retaining walls, and extensive tree clearing, earthwork and storm drainage infrastructure. The potential for neighborhood opposition also exists based on the history of the previous application process as described in the Parcel A narrative.

# 6. Parcel - H: Narrative (Town of New Fairfield Drop off Center)

The bus lot location for this site is located at the Town Drop off Center along the main access driveway, in the approximate location of the current brush/leaf drop off area at 33 Bigelow Road. Employee parking is provided immediately east and west of the bus lot along the existing access drive.

The bus office will be served by a new well and septic system since no facilities currently exist on-site. Power and communications will also be brought from the existing utility lines adjacent to the bus lot.

Bigelow Road is a narrow residential road that will need to be widened in the vicinity of the existing main driveway to accommodate proper school bus ingress and egress and provide proper sight distances.

Land use approvals from the CIWC and Zoning Commission (Special Permit) will be required due to on-site wetlands within 100' of proposed activities and the proposed use in a residential zone. Once all permits are obtained, including building permits, the anticipated construction schedule is 9 to 12 months.

<u>Positive features</u> of this site include its internal and private location and requires no disruption to existing school or recreational operations. The only impacts will be to the existing leaf/brush drop off area.

The negative features of this site are the remote location, and distance to the fueling location. The existing driveway entrance is approximately 1.5 miles from Gillotti Road, with 5/8ths of a mile running on a narrow and winding section of Bigelow Road. All the daily bus and employee vehicle trips will need to travel this extra distance. Approximately 300 feet of road widening will be required along the site entrance on Bigelow Road. Significant earthwork will also be required to achieve the bus lot grades. The potential for neighborhood opposition also exists with this site due to the daily additional bus and employee vehicle trips being added to Bigelow Road and Ball Pond Road.

One additional negative feature is the potential for significant wetland disturbance with this lot. Wetland flagging was not part of the scope of this study, however, based on professional experience, the adjacent wooded areas to be disturbed have the potential to contain wetland soils beyond the limits of what historical mapping shows. Any selection process that includes this site as the first choice should include a consultation and wetland flagging by a licensed State of CT soil scientist.

# 7. Final Recommendations

The objective of this study was to provide a "<u>final recommendation for a site that would be the quickest, and most cost-effective opportunity to accommodate the build for the prospective use and associated amenities"</u>.

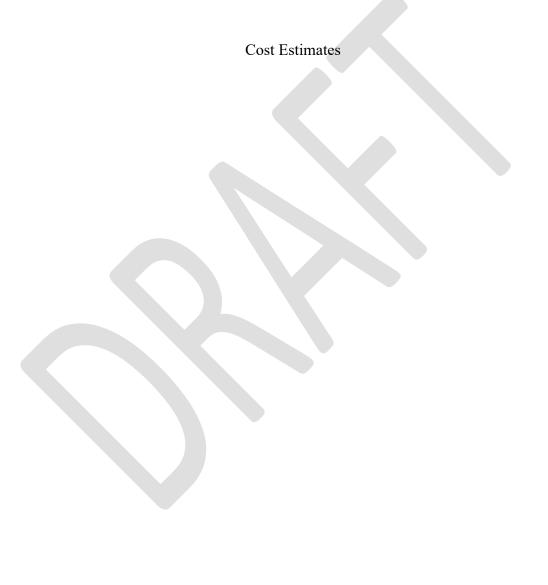
The final recommendations will be made after public input is received from New Fairfield residents, the Public Building Committee, the Board of Finance, the Board of Selectmen, and the Board of Education.

I trust this report provides the information necessary for the proper selection of a bus lot site.

Sincerely

Benjamin V. Doto, III, P.E.

# EXHIBIT A



# **New Fairfield Bus Lot Estimating Worksheet**

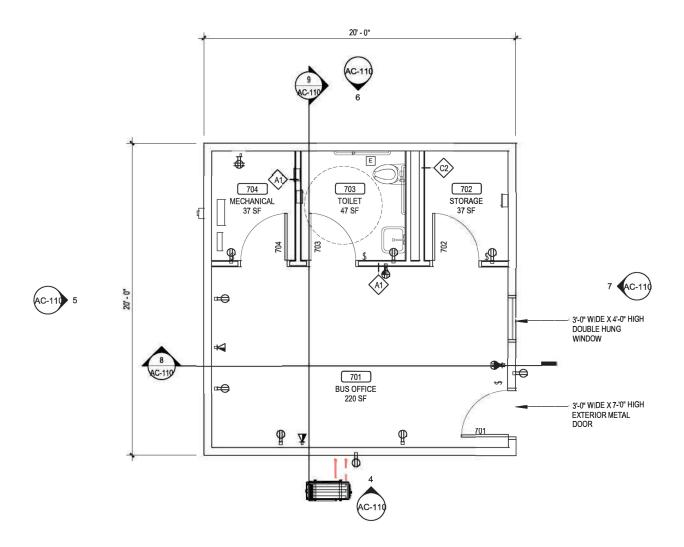
Date: 1/18/2025 with Escalation to

				bvd
	<u>Parcel - A</u>	Parcel - B	<u>Parcel - G</u>	<u>Parcel - H</u>
	Consolidated	HS Site By	Cell Tower	Drop Off
HARD COSTS	Site	Rec. Area	Site	Site
Clearing - Grubbing - Strip Topsoil	\$22,138	\$51,843	\$109,936	\$42,634
Demolition	\$0	\$45,600	\$10 <i>5</i> , <i>5</i> 50 \$0	\$0
Excavation - Cuts to Fills	\$20,340	\$8,292	\$52,404	\$420
Export Fill	\$0	\$76,428	\$0	\$0
Import Fill	\$51,504	\$0	\$161,640	\$152,376
Retaining Walls	\$0	\$0	\$145,800	\$132,370
Sediment and Erosion Control	\$9,532	\$3,702	\$15,126	\$4,224
Pvmt./Base/Curbing/Walks/Striping	\$377,029	\$598,954	\$607,485	\$306,072
Storm Water Management	\$228,367	\$219,287	\$366,106	\$185,766
Fencing and Gates	\$101,304	\$84,288	\$101,712	\$93,950
Lawns and Grasses	\$40,531	\$26,578	\$76,411	\$22,923
Landscaping	\$9,600	\$32,640	\$20,160	\$19,200
Signage	\$10,800	\$10,800	\$10,800	\$10,800
Site Lighting	\$125,928	\$93,720	\$93,192	\$84,612
Security	\$12,000	\$12,000	\$12,000	\$12,000
Power and Distribution	\$27,600	\$30,840	\$23,820	\$22,860
Water Distribution / Well	\$9,600	\$18,720	\$8,880	\$23,400
Septic / Septic Connection	\$21,600	\$19,200	\$20,880	\$20,400
Subtotal Hard Costs	\$1,067,873	\$1,332,892	\$1,826,352	\$1,001,637
SOFT COSTS				
Utility Fees	\$5,000	\$5,000	\$5,000	\$5,000
Permitting	\$20,000	\$20,000	\$20,000	\$20,000
Design Fees	\$70,000	\$70,000	\$82,000	\$70,000
Management Fees	\$60,000	\$70,000	\$70,000	\$70,000
Contingency	\$150,000	\$150,000	\$150,000	\$150,000
Subtotal Soft Costs	\$305,000	\$315,000	\$327,000	\$315,000
NON-ELIGIBLE COSTS				
Bus Offic Bldg.	\$200,000	\$200,000	\$200,000	\$200,000
Relocated Recreational Items	\$0	\$838,607	\$0	\$0
Road Widening	\$0	\$0	\$0	\$100,873
Work in R.O.W. (aprons, etc.)	\$25,000	\$0	\$25,000	\$0
Subtotal Non-Elig. Costs	\$225,000	\$1,038,607	\$225,000	\$300,873
TOTAL	\$1,597,873	\$2,686,499	\$2,378,352	\$1,617,510
ESCALATION - (7% per year)				
Summer of 2026 (1.5 years = 10.5%)	\$167,777	\$282,082	\$249,727	\$169,839
GRAND TOTAL	<u>\$1,765,650</u>	<i>\$2,968,581</i>	<i>\$2,628,079</i>	<u>\$1,787,349</u>

# **EXHIBIT B**



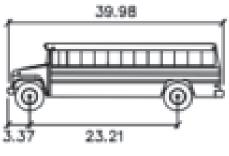
# Exhibit B - Conceptual Bus Office



# EXHIBIT C



# **NEW FAIRFIELD BUS TEMPLATE**



New Fairfield School Bus

feet

Width : 7.83 Track : 7.83 Lock to Lock Time : 6.0 Steering Angle : 41.0

NOTE: DIMENSIONS BASED ON FIELD MEASUREMENTS TAKEN ON 9/1/22 AND INFORMATION PROVIDED BY THOMAS BUILT BUSES

# **EXHIBIT D**

Parcel - A Preliminary Plan (PP01)

Parcel - B Preliminary Plan (PP02)

Parcel - G Preliminary Plan (PP03)

Parcel - H Preliminary Plan (PP04)



### BUS LOT PARCEL (A) PARKING SUMMARY

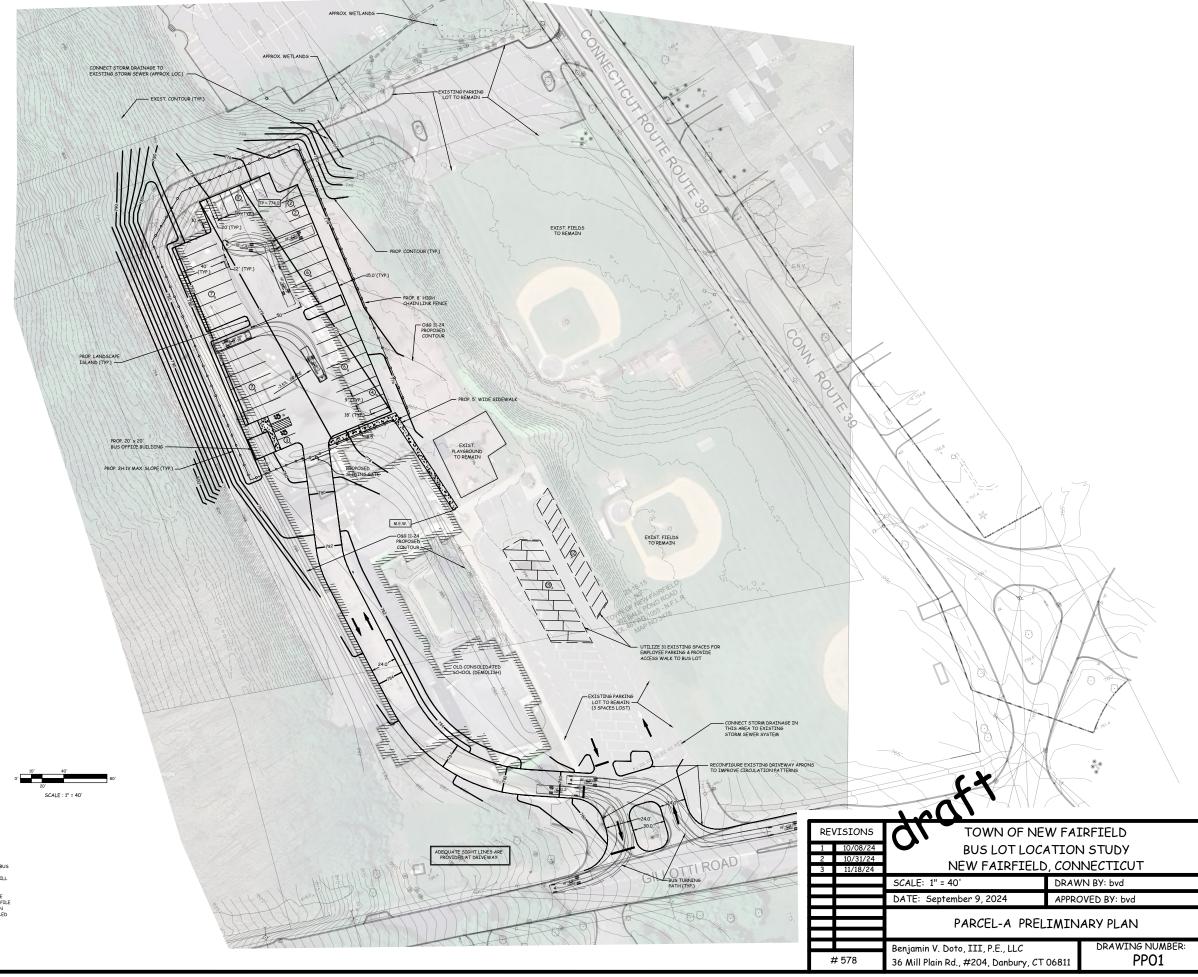
 1)
 BUS SPACES
 26 SPACES

 2)
 VAN SPACES
 9 SPACES

 3)
 AUTO (EMPLOYEE) SPACES
 \*40 SPACES

\* INCLUDES 2 HANDICAPPED ACCESSIBLE INCLUDES 31 SHARED IN OLD SCHOOL LOT

# HANDICAPPED ACCESSIBLE PARKING SPACE PROP. TRAFFIC PATTERN F6 = 382.5 PROP. FINISHED GRADE ELEVATION TP = 382.0 PROP. TOP OF PAVEMENT ELEVATION TW = 791.0 MATCH EXISTING PAVEMENT ELEVATION MATCH EXISTING PAVEMENT ELEVATION O, PROP. BUS PARKING SPACE COUNT PROP. VAN PARKING SPACE COUNT O, PROP. VAN PARKING SPACE COUNT OO, PROP. AUTO/EMPLOYEE PARKING SPACE COUNT



### GENERAL NOTES

- THESE DRAWINGS ARE INTENDED FOR PRELIMINARY SITE PLANNING PURPOSES AS PART OF A BUS
  LOT STUDY FOR CONCEPTUAL PLANNING PURPOSES. PLANS ARE ARE NOT INTENDED FOR
  CONSTRUCTION. ADDITIONAL INFORMATION, DRAWINGS, DETAILS, AND SPECIFICATIONS WILL
  BE REQUIRED FRIOR TO THE START OF CONSTRUCTION.
- TOPOGRAPHIC AND BOUNDARY INFORMATION TAKEN FROM COMPILATION OF ELECTRONIC FILE
  PROVIDED BY SYNDRY A RAPP LAND SURVEYIND, P.C., DATED JULY 26, 2024. THE COMPILATION FILE
  WAS ASSEMBLED FROM ANTIABLE HESTORICAL SURVEYS AND AND STATE OF CT ESTS DATA. AN
  UPDATED A-2, BOUNDARY AND TOPOGRAPHIC SURVEY WILL BE REQUIRED PRIOR TO ANY DETAILED
  SITE DESIGN AND LAND USE AFROYALS.

