

**TOWN OF COLUMBIA
PLANNING AND ZONING COMMISSION**

Adella G. Urban Administrative Offices Conference Room
323 Route 87, Columbia, CT
Monday, November 27, 2023 7:00 pm

Regular Meeting – HYBRID

Join Zoom Meeting
<https://us02web.zoom.us/j/85357818893>

Meeting ID: 853 5781 8893

Or join by phone 1-646-558-8656 same ID and passcode

THIS IS A HYBRID PUBLIC MEETING. THE PUBLIC CAN ATTEND IN-PERSON OR ELECTRONICALLY. THE INFORMATION PROVIDED IN THIS AGENDA CONTAINS THE LINK TO ACCESS THE MEETING ELECTRONICALLY.

AGENDA

- 1. CALL TO ORDER**
- 2. ROLL CALL AND SEATING OF ALTERNATES**
- 3. ADDITIONS/CHANGES TO AGENDA**
- 4. APPROVAL OF PZC REGULAR MEETING MINUTES of November 13, 2023**
- 5. COMMUNICATIONS AND REPORTS**
 - 5.1 ZEO Report
- 6. AUDIENCE OF CITIZENS**
- 7. UNFINISHED BUSINESS (Discussion/Possible Action)**
- 8. NEW BUSINESS (Discussion/Possible Action)**
 - 8.1 C.G.S. 8-24 Review - HVAC and Air Quality School Project
 - 8.2 Section 51.7 - Minor Modifications of Approved Special Permits
 - 8.3 Section 31.2 and 31.3 - Site Plan vs. Special Permit Uses in CM Districts
 - 8.4 Section 21.2.1 - Family/Home Day Care
- 9. REGULATION REVISIONS (Discussion)**
 - 9.1 Section 3 revisions
 - 9.2 Section 52.7.19 Planned Neighborhood Housing
- 10. COMMISSION OPEN DISCUSSION**

11. AUDIENCE OF CITIZENS:

12. EXECUTIVE SESSION:

Pending Legal Action per State Statutes Section 1-200(6)(B)

13. ADJOURNMENT

**TOWN OF COLUMBIA
PLANNING AND ZONING COMMISSION**

Adella G. Urban Administrative Offices Conference Room
323 Route 87, Columbia, CT
Monday, November 13, 2023 7:00 pm

**Regular Meeting – HYBRID
MINUTES**

Members Present: Chairman Rick Nassiff, Vice-Chair Vera Englert, Thomas Currier , Robert Powell, Justin Riendeau, Walter Tabor

Members Excused: Richard Napolitano, Ed Madrak (Alternate), L. Preston (Alternate), and Don Schofield (Alternate)

Staff Present: Town Planner John Guskowski (via Zoom), Board Clerk Mary Kay Hyman

Others Present: Rhonda Kincaid of Coalition Equity (via Zoom), Michael Magaldi (via Zoom) and and 2 Others Present

1. **CALL TO ORDER:** R. Nassiff called the meeting to order at **7:00 PM**.

2. **ROLL CALL AND SEATING OF ALTERNATES:** None

3. **ADDITIONS/CHANGES TO AGENDA:** None

4. **APPROVAL OF PZC REGULAR MEETING MINUTES of October 10, 2023**

R. Nassiff **MOVED** to **APPROVE** the Minutes of October 10, 2023 R. Powell **SECONDED**.
MOTION PASSED 6:0:0

5. **AUDIENCE OF CITIZENS:**

Resident M. Magaldi asked if he could ask questions about an item under Regulation Revisions. R. Nassiff explained that the Commission does not usually hear the public during discussions of Regulations, but he is welcome to listen, and he will allow M. Magaldi to ask questions that they can consider during their discussion. M. Magaldi then asked what the definition of a minor modification is and for some examples. R. Nassiff stated this is a good question but may be premature. The Committee may define this in their discussion but will not be able to answer directly, as this is not a Public Hearing. R. Nassiff stated that M. Magaldi is welcome to follow the progress, read the minutes on-line, as well as send a letter of any concern he may have.

6. **UNFINISHED BUSINESS (Discussion/Possible Action):** None

7. **NEW BUSINESS (Discussion/Possible Action)**

7.1 Discuss and Act Upon 2024 PZC Meeting Schedule

R. Nassiff **MOVED** to **APPROVE** the 2024 PZC Meeting Schedule as presented R. Powell **SECONDED**. **MOTION PASSED 6:0:0**

8. **REGULATION REVISIONS (Discussion)**

R. Nassif referred to J. Guskowski who stated the Commission does still have topics to review and needs to discuss how to proceed. He then redirected the discussion to J. Riendeau and the Regulations Subcommittee. J. Riendeau then referred to item 8.2.

8.1 Section 3 Revisions

J. Riendeau explained that the Subcommittee has met regarding changes to Section 3 related to two categories of structures, one that is regulated and the other not. The definition around structure is very broad and there is no limiting structure, making the process confusing. The changes would take some smaller items out of this process and define building or regulated structure. He then identified the changes highlighted in sections 3 of the packet.

R. Nassiff then stated when they met as a Subcommittee, he explained that he has concerns about the proposed new verbiage, which would allow zero side setbacks for structures from lot lines, especially in non-conforming lots and all lots in general. He stated he does not agree with this as it could potentially cause several problems, such as an unlimited number of structures placed down a property line and an increase in impervious surfaces. He suggested there could be exceptions made to larger lots that do not have a structure within 500-1000 feet of a lot line. He then stated he does feel the limitation of 100 sq. ft. in the lake overlay zone could be expanded, especially if there is compensatory storage for the structure. He also stated the changes do not address the need to increase the allowable shed size ordinance in the town, as the current 120 sq. ft. is not the standard anymore and is closer to 200 sq. ft., as most other towns use. He stated he would also like to exempt sheds, even in the lake water if they can provide compensatory storage under the shed with no negative impact on the lot, making it easier for people to place a smaller structure. He also stated a limitation to the number of allowable sheds, or the number allowed to have a smaller set back, could be added.

J. Riendeau disagreed and referred the conversation to W. Tabor.

W. Tabor agrees that the Regulations need to head in this direction, but he thinks the zero setback invites trespass and that without the surveying of the permit process it would not be identified. He then referred to R. Nassif's comment about increasing the allowable shed size and mentioned that maybe C. Kisluk the Zoning Enforcement Officer, could maybe inform us of the dominant shed size, based on her experience.

R. Nassiff responded that maybe this could be accomplished scientifically in a way that is acceptable from a lake health standpoint in the overlay zones then it becomes a matter of aesthetics to allow for half the current setback for smaller structures.

T. Currier then asked J. Riendeau why a zero setback.

J. Riendeau replied it negates any reasonable change and it would eliminate the need for permitting, allowing structures to be closer to the property lines.

W. Tabor gave an example of a resident not taking out permits for structures and them ultimately being placed on a neighbor's property.

The Commission then discussed how the Regulations are currently written and possible contradictions.

R. Nassiff stated he would agree to expanding the definition for sheds that allow for reduced setbacks grown to 200 sq. ft. as a reasonable improvement. He would agree to half the current set back in the side and the rear but not in the front of properties.

J. Guskowski stated that part of the original reason for the Regulation changes, aside from the shed change, was due to the number of minor improvements people make to their structures, such as, small propane tanks, bay window etc. that could become a straight building permit vs a zoning permit. The changes were not meant to address setback and property line issues.

R. Nassiff agreed to simplifying these Regulations on minor improvements of a structure, but again, does not agree with the zero setbacks and unlimited sheds.

J. Riendeau stated that the current Regulations are confusing, and people do not understand the process.

The Commission discussed different scenarios and impacts of changes, such as placing structures on a septic system.

R. Nassiff again restated his position on the minor home improvement expansions and reduced back and side setbacks, but not in the front.

J. Guskowski stated that current regulations already exist for non-conforming lots to have relaxed setbacks, and this could be expounded upon to apply throughout town.

R. Nassiff suggested allowing changes to small structures, up to 200 sq. ft, would not require a Zoning permit but the property owner would still be responsible for adhering to all Regulations.

J. Guskowski commented that exempt activity would still need to be verified by the Town.

The Commission then discussed the process of bringing the changes to the Public.

R. Nassiff restated the points of minor improvements within 10 feet of the home and the shed setback. He then expressed concern of a homeowner placing multiple small structures on a property and the need for some control.

The Commission continued to discuss the impact of the proposed changes.

J. Riendeau stated he feels the property owner should have full use of their property from property line to property line.

R. Nassiff stated that having the Zoning Regulations of reasonable spacing is to maintain a peaceful setting between neighbors and protect the harmony of the town. He stated relaxing the Regulations is the most prudent way to approach the situation.

R. Nassiff suggested a "How To" pamphlet in the Building Department to inform the Public of the process without needing a formal Zoning permit.

R. Nassiff asked J. Guskowski to formalize the specific details of the modifications to the Regulations.

The Subcommittee will meet to review these changes.

8.2 Section 51.7 Minor Modifications of Approved Special Permits

J. Riendeau stated that the Commission had discussed this modification in detail at the last meeting, he and J. Guskowski met and discussed the changes, and further discussion is not needed at this time. The Commission agrees to move the discussion back to item 8.1.

J. Guskowski will make a formal draft of the proposed Regulation changes to be presented at the next meeting.

8.3 Site Plan vs. Special Permit Uses in CM Districts

The Commission did not feel further discussion from the last meeting was needed.

J. Guskowski will make a formal draft of the proposed Regulation changes to be presented at the next meeting.

8.4 Family/Home Day Care

The Commission did not feel further discussion from the last meeting was needed.

J. Guskowski will make a formal draft of the proposed Regulation changes to be presented at the next meeting.

8.5 Section 52.7.19 Planned Neighborhood Housing

R. Nassiff stated that 52.7.19.1 should be flexible in the ability to expand affordable housing. He agrees with eliminating age restrictions.

R. Nassiff stated that 52.7.19.3 should be clear that it is not limited to condos.

The Commission discussed with J. Guskowski clarification of the types of dwellings allowed for Neighborhood Housing and the Regulation on design features of these structures.

The Commission stated they are ultimately looking to modify the Regulations to encourage development.

R. Nassiff asked in 52.7.19.5 where did 4 acres come from. J. Guskowski stated it is a starting point for multi-unit developments.

R. Nassiff expressed concern with how people will feel about a multi-unit structure going up in the neighborhood and this needs to be investigated. He stated maybe this type of housing should only be allowed in certain areas.

The Commission continued discussion of the specific size, density, and structure of the future development. R. Nassiff wants to make sure percentages reflected in the Regulations are consistent. R. Nassiff suggested other interested parties be involved in the process. J. Guskowski will share the draft with the Town Manager who can then forward the information to other stakeholders. R. Nassiff suggested making a downloadable version for the Public.

The Commission feels this is a good starting point and will need more review.

9. COMMUNICATIONS AND REPORTS

9.1 Zoning Officer Report

R. Nassiff thanked the Zoning Enforcement Officer C. Kisluk for the updated report.

R. Powell thanked C. Kisluk for adding the dates. He asked why items #13 and #14 are on hold due to Regulation changes. R. Nassiff stated he spoke with C. Kisluk regarding these types of items and C. Kisluk stated items like these are on hold when related Regulation changes are being reviewed.

R. Powell asked for closed items to be reflected in the next ZEO report.

R. Nassiff will ask C. Kisluk to attend the next meeting. He asked that discussion of the Zoning Officer Report be placed early on the Agenda.

9.2 Town of Andover Correspondence

Informational only

9.3 Town of Hebron Correspondence

Informational only

10. COMMISSION OPEN DISCUSSION: None

11. AUDIENCE OF CITIZENS:

M. Magaldi asked why item number 8.2 was not discussed in more detail this evening. R. Nassiff stated they decided it had been discussed enough in the previous meeting. M. Magaldi asked what constitutes a minor modification. M. Magaldi referred to the number of events allowed as an example. R. Nassiff asked if this is in relation to the wedding venue. R. Nassiff indicated statutory requirements prevail, but they would take this under advisement. J. Guskowski referred to the related written regulations.

R. Kincaid thanked the Commission for the work they are doing to make affordable housing more possible. She stated the DEI will also investigate some of the items discussed this evening.

12. EXECUTIVE SESSION:

Pending Legal Action per State Statutes Section 1-200(6)(B)

13. ADJOURNMENT:

R. Nassiff **MOVED** to **ADJOURN** J. Riendeau **SECONDED. MOTION CARRIED UNANIMOUSLY**

The meeting was adjourned at **8:48 PM**.

Respectfully submitted by Mary Kay Hyman, Board Clerk.

Please see the minutes of subsequent meetings for approval of these minutes and any corrections hereto.

Horace Porter School HVAC Indoor Air Quality Improvement Project

Explanatory Text prepared pursuant to CGS Sec. 9-369b.

Question: "Shall the Town appropriate \$6,175,000 for the HVAC system and indoor air quality improvements at the Horace W. Porter School.

YES _____ NO _____"

On December 12, 2023 the above question will be on the ballot of an adjourned 11/30/23 Town Meeting for consideration. The proposed project focuses on upgrading the HVAC systems at the Horace W. Porter School for the following proposed scope of work.

The Columbia Board of Education has identified the need to improve the Indoor Air Quality (i.e., temperature and humidity control, adequate ventilation, and mitigation of potential exposure to microbiological airborne particles, including, but not limited to, fungi, mold, and bacteria).

Proposed Project Includes:

- New HVAC system for the Horace W. Porter school
 - Ventilation - to meet indoor air quality state standards which go into effect in 2024.
 - Humidity control - to mitigate the potential for mold growth in classrooms.
 - Maintain consistent temperatures for both heating & cooling.
 - Air filtration - to meet State of Connecticut indoor air quality standards.
- Full building electrical upgrade to allow for the new HVAC system and to bring the entire building up to current electrical codes.

A "yes" vote will mean you are in favor of the town proceeding with the project pending the projected grant award.

A "no" vote will mean you are not in favor of the town proceeding with the project.

The foregoing question will be submitted to the qualified voters of the Town for a vote on Tuesday, December 12, 2023 during the hours between 12:00 P.M. and 8:00 P.M. Electors and voters who are entitled to vote by reason of Section 7-6 of the CT General Statutes, as amended, may vote at Columbia Town Hall, Yeoman's Hall, 323 Route 87 Columbia, CT. Absentee Ballots will be available at the Office of the Town Clerk during business hours.

Connecticut Department of Administrative Services HVAC Grant Program

A 2nd round of State Heating, Ventilation, Air Conditioning (HVAC) grant is available which provides towns with the opportunity for school air improvements.

Total proposed project cost is estimated to be \$6.175 million. Columbia will be submitting an application for a grant (pending) for \$3,219,645 which would cover approximately 52.14% of eligible expenses, leaving Columbia's portion estimated at \$2,955,355.

Appropriation for the Project shall be funded from grants, undesignated fund balance and/or other sources of funds received by the Town for the Project, such as a 20-year bond. Appropriation will occur provided that in no event shall less than forty-five percent (45%) of the entire appropriation approved hereby be funded with grant monies received from the State of Connecticut and/or such other granting entity.

Horace Porter School HVAC Indoor Air Quality Improvement Project Explanatory Text prepared pursuant to CGS Sec. 9-369b.

The Town of Columbia has hired Silver Petrucelli and Associates to perform initial investigations into the concerns over indoor air quality conditions at the Horace Porter School. Through indoor humidity testing performed by our Senior Mechanical Engineer, building pressurization testing performed by RPM Energy Solutions, and discussions with on-site staff, we have established that the building experiences indoor air quality issues including excessive airborne particulate, and poor control of temperature and humidity which can promote to mold growth.

The existing HVAC systems for the classrooms consist of hot water radiation for heat, operable windows with central exhaust fans for ventilation and, in some cases, window air conditioners for cooling. Building pressurization tests have proven that unconditioned, unfiltered outdoor air infiltrates the building regardless of whether windows are opened or closed. This unfiltered air contributes to elevated humidity and the presence of contaminants in the building. Such HVAC systems are no longer considered appropriate for schools due to their inability to maintain reasonable comfort levels and to control humidity and airborne contaminants.

Options for HVAC improvements have been evaluated and the current construction estimate is based on the system deemed most beneficial for the long-term use of the facility. That system consists of a Variable Refrigerant Flow (VRF) system with outdoor Condensing Units and indoor Fan Coil Units (ceiling cassettes or wall mounted units) which will provide cooling and primary heating. Refrigerant piping will be installed from the outdoor Condensing Units to the indoor Fan Coil Units and the refrigerant flow to the Fan Coil Units will be controlled such that heating may be provided to some areas while cooling is provided to others. The existing heating system is serviceable and will supplement the heating provided by the VRF systems during periods of extreme cold weather.

Ventilation for the facility will be provided by multiple Dedicated Outside Air Systems (DOAS). These systems condition the required amount of outside air to a “neutral” temperature, provide dehumidification, and high-level filtration to remove airborne contaminants. A ducted air distribution system will deliver air from the DOAS units to the rooms, supplying the required amount of conditioned outside air to each space. The DOAS systems will provide a slight building pressurization, thus limiting the likelihood of moisture and contaminant infiltration.

The State of Connecticut recently enacted a requirement to evaluate the indoor air quality in all schools. They have also made funds available via grants for construction projects that will help improve indoor air quality. This grant program is now in its second round with a filing due date of December 31, 2023. This grant funding was made possible through Federal funding and there is no guarantee or plan that it will continue indefinitely.

Board Clerk

From: Jennifer C. LaVoie
Sent: Tuesday, November 14, 2023 12:55 PM
To: John Guskowski; Board Clerk; Rick Nassiff
Subject: HVAC/Air Quality School Project
Attachments: Columbia Tri-Board_Presentation_11-8-23_Revised.pdf; Presentation rev7.pdf; Contract Design Work Replacement IAQ Porter School_Signed7.20.23.pdf

Importance: High

Hello, at tonight's BOS meeting they will be making a motion to set a Town Meeting on 11/30/23 regarding the HVAC/Air Quality Project and then adjourning to Referendum on 12/12/23. **Prior to November 30th** bond counsel recommended that the Projects be approved by the Commission prior to enactment of bond resolution. (C.G.S. 8-24).

Attached are the two PowerPoint presentations from the HVAC Building Committee and Silver Petrucelli & Associates regarding the project as well as the contract with Silver Petrucelli.

Let me know if you need any further information.

Thank you,

Jennifer

Jennifer LaVoie
Executive Administrative Assistant
Town of Columbia
Phone: 860.228.0110
Email: jlavoie@columbiact.org
Website: www.columbiact.org
Address: 323 Route 87, Columbia, CT

Horace W. Porter School Indoor Air Quality Improvement Project



**BY: HORACE W. PORTER HVAC
BUILDING COMMITTEE**

11/8/2023

Overview



- HVAC Building Committee - Members
- Purpose of Presentation
- Problem Statement
- Law
- Grant Overview
- Timeline
- Recommendation

HVAC Building Committee - Members

- **Members**

- Chris Lent
- Leah Osborn
- David Geissert
- Guy Wanegar
- Jeff Collins
- Alan Harbec
- Mike Sylvester, Facilities Manager
- Barbara Wilson, Superintendent
- Mark Walter, Town Administrator

Purpose

- Recommendation to the Board of Education, Board of Selectmen, and FIPAC capital improvements to the Indoor Air Quality System (IAQ) at the Horace W. Porter School

Problem Statement

- Typical classrooms rely on central exhaust systems and operable windows for ventilation; negative building pressure is prevalent which causes:
 - infiltration of unfiltered unconditioned air which contributes to high concentrations of dust and allergens, and
 - persistent high humidity in the building potentially supporting mold growth.
- Outside air required for exhaust make-up (when windows closed) is provided by the several Air Handlers and Rooftop Units via the central corridor
 - violation of the Mechanical Code prohibition on using exit corridors as circulating air plenums due to the possibility of spreading smoke through the corridor in the event of a fire.
- Except in those areas where air conditioning has been installed, the existing systems are incapable of maintaining year-round comfort levels conducive to learning.
- When combined with poor Indoor Air Quality, this provides a sub-standard learning environment.

Indoor Air Quality – the Law

- CGS § 10-220(d)

- Requires BOE to provide for a uniform inspection and evaluation program of the indoor air quality (IAQ) within buildings (e.g., EPA's "Tools for Schools")
 - Review, inspection or evaluation of:
 - heating, ventilation, and air conditioning (HVAC) systems;
 - Radon levels in air;
 - Control of Moisture/Mold;
 - Integrated Pest Management;
 - Effective Cleaning and Maintenance;
 - Smart Material Selection; Source Control; and
 - Energy Efficiency
- PA 22-118 increased frequency of required Indoor Air Quality (IAQ) evaluation from every 5 years to every 3 years
- PA 22-118 significantly broadens prior IAQ requirements captured in CGS § 10-220(d) by creating new HVAC assessment criteria
 - HVAC assessment for each school building (every 5 years)
 - ★ Testing for air filter efficiency and verification of appropriate ventilation
 - ★ Must be conducted by specified personnel

HVAC Grant

- Public Act 22-118 (Sec. 367)
 - ✦ Overseen by Dept. Administrative Services (DAS) Office of School Construction Grants and Review (OSCGR)
 - ✦ ~\$244M available (\$169M State Bonds; \$75M Federal CSFRF)
 - ✦ \$56M awarded in April 2023 (1st round)
 - ✦ See ct.gov/hvacgrants
 - ✦ DAS.hvacgrants@ct.gov
- Grant Matches ~48% of cost (Town covers ~52% balance, per 10/18/22 BOS Meeting)
 - ✦ See also presentation which discusses Ranking (1 to 169)
 - ✦ Adjusted per equalized net grand list per capita, CGS 1-261, of Town's 2, 3, and 4 years prior to FY application made (see also page 490 of PA 22-118)

Timeline



- 11/15/22 – Town Meeting approved HVAC Grant initial Application Submittal
- 12/1/22 – BOE submitted initial grant
- 12/20/22 – BOS appointed members to HVAC Committee
- 1/9/23 – HWP HVAC Building Committee initial meeting
- 1/17/23 – BOS approval of the “Charge” to HWP HVAC Building Committee
- 4/5/23 – State announces recipients 1st round of grants
- 4/13/23 – Responses to Request for Qualifications due
- 4/26/23 – 4 firms invited to an interview

Timeline (cont.)

- 5/1/23 – HVAC Committee votes to invite 3 firms to bid
- 6/26/23 – HVAC Building Committee votes to down-select a firm
- 7/20/23 – Contract awarded to Silver Petrucci & Associates
- 9/7/23 – Opening date for 2nd round of grants
- 11/14/23 – Board of Selectmen to vote on recommending Special Town Meeting appropriation and bond authorization. Set date for Referendum
- 11/30/23 (tent.) – Special Town Meeting
- 12/12/23 (tent.) – Referendum 12:00 pm to 8:00 pm
- 12/31/23 – Closing date for 2nd round of grants

Recommendation

- HVAC system

- Variable Refrigerant Flow (VRF) with Dedicated Outside Air System (DOAS) for ventilation.
 - Classrooms
- Packaged Rooftop Air Conditioning Units
 - Gym, Cafetorium, Library, Main Offices
- Maintain existing boiler system in conjunction with the new HVAC equipment

- Electrical Upgrade

- 1600-amp 480-volt 3-phase service, new 480-volt panel: serving HVAC equipment, new transformer, main service switch,

Compliance to State and Industry Standards



- New HVAC systems will consist of systems capable of maintaining space temperatures of 70 to 75 degrees F and humidity levels of 40 to 60 percent relative humidity per ANSI/ASHRAE Standard 55.
- The new systems will be capable of supplying filtered conditioned outside air to each space at a rate in accordance with ASHRAE Standard 62.1 and the State Building Code.
- New systems will meet or exceed the minimum efficiencies as required by the applicable requirements of the State Energy Conservation Code, ASHRAE Standard 90.1, and the Connecticut High Performance Building Standards.

Benefits



- Improved Indoor Air Quality
 - Maintain <60% Relative Humidity
 - Maintain temperatures between 70-75 degrees F
 - More energy efficient heating and cooling system
 - Filter conditioned air
- Energy Savings
- Utilize a larger portion of the school building in support of the summer program

Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements

Town of Columbia and Columbia Board of Education



TOWN OF COLUMBIA

323 Jonathan Trumbull Highway, Columbia, CT 06237
(860) 228-0110 Fax: (860) 228-1952

Contract for
Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements
by and between
THE TOWN OF COLUMBIA
And
SILVER PETRUCELLI & ASSOCIATES

This Contract is by and between THE TOWN OF COLUMBIA, a municipal corporation having its territorial limits within the County of Tolland, and State of Connecticut, hereinafter referred to as the **Town**, and Silver Petrucelli & Associates whose address is 3190 Whitney Avenue, Hamden, CT 06518 hereinafter referred to as the **Contractor**.

WHEREAS, the Town is seeking qualified firms (including individuals) interested in providing COMPLETE DESIGN WORK FOR THE REPLACEMENT OF THE EXISTING INDOOR AIR QUALITY SYSTEM AT THE HORACE W. PORTER SCHOOL AND RELATED RENOVATIONS AND IMPROVEMENTS PROJECT.

WHEREAS, the Contractor is qualified, ready, willing, and able to perform such services for an agreed upon compensation,

NOW, THEREFORE,

The Town and Contractor do mutually covenant and agree as follows:

1. SCOPE OF SERVICES

1.1 General

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

The Contractor agrees to provide, THE TOWN OF COLUMBIA and The Columbia Board of Education provide complete design, architectural/engineering services, permitting, bidding, and construction oversight for the replacement of the school indoor air quality system at Horace W. Porter School (3 Schoolhouse Road) and related improvements.

2. SCOPE OF WORK

The selected respondent (hereinafter referred to as Consultant or Firm) will provide comprehensive Architectural/Engineering services (including civil and environmental) for the preparation of complete drawings, specifications, estimates, State submittals, contract documents, construction oversight and related services.

The selected Consultant will provide the Town of Columbia with expertise in performing other functions, such as the preparation of all paperwork required by the State Department of Education for project approval and reimbursement.

The selected Consultant must have sufficient staff to assure prompt delivery of services and completion of assigned tasks. The selected Consultant must assign a Professional Architect/Engineer licensed by the State of Connecticut to be responsible for the management and design.

The plans will be developed in conformance with State of Connecticut, Department of Education requirements for school construction grants. The Consultant shall be responsible for the following scope of work:

The successful bidder shall comply with all applicable Federal, State, and local laws and regulations and all Town of Columbia requirements.

Phase 1 — Site Investigation/Recommendations

A. Evaluation

- Confirm the findings contained in the Report of BVH Integrated Services;
- Investigate other options for ventilation and climate control;
- Investigate options for Electrical service upgrades;
- Identify necessary masonry, drainage and related improvements which should be included in the project.

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

B. Permits

- Identify the requirement for all local, State, and Federal permits.
- Identify all steps required to maximize State reimbursement and assure timely payments.

C. Site Investigation Report

- Based on all data collected, applicable laws and regulations, design criteria and good architectural/engineering practices, prepare a report that will form the basis of the design for the reconstruction. Alternatives shall be proposed and analyzed, considering costs of construction, permitting requirements, and other factors. A recommended approach to climate control of each classroom shall be included, with supporting data, cross sections and schematic plans showing the alternatives. Evaluation of the existing HVAC roof-top units shall be made and recommendations, if needed, for replacement shall be made.

Phase 2 — Preparation of Design

A. Preliminary Design

- Prepare a study, analysis and report of existing conditions and problems for the entire Horace W. Porter School building within the project limits:
 - summary of available utility contacts (if required);
 - discussion of construction sequencing (determined by available times when school is not in session, generally during the summer months);
 - discussion of design criteria;
 - summary and status of all permits and applications;
 - preparation of preliminary cost estimates with alternatives, broken down by school wings;
 - preparation of preliminary plan and typical sections for the proposed air quality control system.

B. Final Design

- Complete all preliminary reports into final form;
- Incorporate all Town of Columbia building committee comments;
- Prepare all necessary submittals to the State Department of Education; and,
- Prepare contract plans, specifications, and documents ready for public bidding.

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

C. Meetings

- Attend progress meetings with the Town of Columbia, School HVAC Building Committee; meet as required with local, State, and Federal authorities to complete permit requirements; complete permit applications; meet with utilities officials, to coordinate any improvements.

D. Public Hearings

- Attend public hearings to present plans to boards and commissions, etc. Schedule, coordinate, and host public information meetings with local residents; provide visual aids, attend, and present plans to boards and commissions and provide visual aids.

Phase 3 — Bidding Assistance

A. Bid Review

- Tabulate bid results and prepare quantity comparisons; and,
- Conduct reference checks on low bidders.

Phase 4 — Construction Assistance

A. Construction Oversight

- Attend job meetings/Building Committee meetings;
- Review submittals;
- Respond to Contractor inquiries;
- Review reports of independent Clerk of the Work;
- Review payment requests for appropriateness;
- Assist with submissions to State Department of Education; and,
- Oversee compliance with Prevailing Wage requirements.

B. Project Close-out

- Assist with project close-out and final audit.

3. ADDENDUM 1

APPENDIX A - 6/22/23 CLARIFICATION OF FEE AND SCOPE RESPONSE FROM SILVER PETRUCELLI & ASSOCIATES.

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

4. PROJECT DETAILS

An HVAC Evaluation and Replacement Recommendation (Report) of the Horace W. Porter School was produced in 2021 by BVH Integrated Services. The Report includes an evaluation of the existing condition of the existing ventilation system, creation of a replacement schedule, cost estimation of ventilation replacement options, and issuance of professional advice/guidance with respect to possible state grant opportunities.

It is anticipated that construction for the project would start on or about June 15, 2024.

All work performed under the contract between the Town of Columbia and the selected architectural/ engineering firms or individuals shall be under the direction of professional architects/engineers licensed by the State of Connecticut.

5. CONTRACT TERMS, STANDARDS AND COMPENSATION

5.1 Technical Standards

The Contractor shall perform all work in accordance with all applicable local, state and federal industry standards.

5.2 Term of Contract

The term of this Contract shall be determined by the annual contract service, inclusive.

5.3 Compensation

PHASE	FEE
Site Investigation/Recommendations	\$ 14,200
Design Development	\$ 141,500
Construction Documents	\$ 103,100
Bidding Assistance	\$ 4,600
Construction Administration & Close-Out	\$ 141,000
Acoustical Consultant	\$ 10,000
Review of Building and Ground Exterior	
For Any Water Migration in the School	<u>\$ 13,750</u>
TOTAL	\$ 428,150

Customary reimbursable expenses included in our fees include in-state travel, CAD services, photography, progress and report printing. Any additional services that you may require during the project can be compensated on an hourly cost-plus basis, in accordance with the

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

Hourly Rates below. If the scope is well defined, a mutually agreeable fixed fee can be negotiated.

Excluded Services

As we believe the Town should not pay for services unless they are actually required, we have listed below the optional services that are not customarily required by projects such as yours. We can submit proposals for many of these services, most of which we can complete with in-house forces. The following reimbursable expenses or services are not included in our fee proposal.

1. LEED certification coordination
2. Commissioning, but we will coordinate with the Town's Commissioning Agent
3. BIM-3D Modeling is excluded unless existing Revit models are available from the Town
4. Permit and Agency Approval Plan set printing
5. Travel beyond the State of Connecticut in connection with the project
6. Interior renovations or alterations
7. Modifying casework
8. Production of as-built drawings (we will review the GCs as-builts)

Hourly Rates

Personnel	Hourly Rate
Principal/Project Manager	\$206
Principal/Project Architect	\$191
Architect	\$153
Architectural Designer	\$128
Architectural Draftsperson	\$103
Principal M/E Engineer	\$206
Sr. Project Engineer/Manager	\$179
Project Engineer	\$137
Engineering Designer	\$123
Interior Designer	\$118
Construction Administrator/Building Official	\$133
Specification Writer	\$128
Administration	\$89

5.3.1 Negotiated Fee

The fee proposal shall include the lump sum cost to the Town of providing the proposed services, unless another cost basis is approved by the Town (e.g., unit cost). If applicable, the costs shall be listed for each task or phase. If requested by the Town, additional

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

information such as the estimated number of man-hours of each position classification per task or phase shall be submitted. The fee proposal shall include an allowance for estimated reimbursable expenses for normal reimbursable out-of-pocket costs such as outside printing costs and approved subcontractor and subcontractor fees. All anticipated reimbursable expenses for each specific project shall be itemized in the fee proposal, with unit and estimated total costs listed for each expense.

Reimbursement shall be for actual out-of-pocket costs including the services of subcontractors and shall not include a mark-up and shall not be made for normal overhead expenses such as office supplies, telephone charges, mileage, and inside copying and printing.

Once the scope of services, schedule, proposed staffing plan, and the proposed compensation have been accepted by the Town, the Town will authorize the Contractor to proceed with the work, which shall be performed in accordance with the accepted proposal and the terms and conditions of this Contract.

The Contractor shall prepare and submit invoices accompanied by such documentation as may be required by the Town. Payments will be made to the Contractor within 30 days of Town approval of each invoice. Payments are conditioned upon the satisfactory performance of all work. In the event that the Town determines the Contractor to be in nonconformance with the terms of this Contract or if in the Town's judgment the Contractor's work is not satisfactory, the Town may take corrective action, including, but not limited to, the following:

- 1) Delay of payment
- 2) Adjustment of payment
- 3) Suspension or termination of this Contract

The Contractor agrees to meet with representatives of the Town, at no cost to the Town, to discuss billing issues as the Town deems necessary. Payments to the Contractor will be made on a periodic basis in accordance with the percentage of work actually completed. Payments for each phase of the work within the project will be prorated based upon the amount of work actually completed within that phase. Except in the case of work, which is performed on an hourly rate basis, the amount of the payment for a fixed fee task will not be based simply on the amount of hours expended by the Contractor on the task.

5.4 Management and Administration of the Contract

The Town's designated Managing Authority for this Contract will be the Town Administrator,

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

or his authorized designee, who will have complete authority to act for and on behalf of the Town and control, supervise, and direct the Contractor's activities hereunder. The Managing Authority will make all arrangements for services by the Contractor. All proposals for work to be done under this Contract and any resulting expenditures must be approved by said Managing Authority before any work is initiated or any expenditure made. Services are to be provided by the Contractor, except where the use of specific subcontractors or subcontractors has been approved in writing by the Town for a particular project.

The Contractor's primary contact person will be **Bob Banning, P.E.** who will communicate and report directly to the Town's Managing Authority, be responsible for directing and coordinating the activities of the firm's personnel and approved subcontractors and subcontractors, provide information for projects assigned under this Contract as may be required from time to time by the Town and shall be authorized to prepare and execute proposals, including scopes of services, fee proposals, proposed staffing plans, and schedules as requested by the Town under this Contract.

The Contractor and the Town shall work closely together in all aspects of this program, and each shall follow the reasonable suggestions of the other to improve the operation of the program.

5.5 Relationship Between the Parties

It is mutually agreed that the Contractor, including its employees, is an independent contractor and not an officer, employee, or agent of the Town, and that this Contract is a contract for services and not a contract of employment, and that, as such, the Contractor and its employees shall not be entitled to any employment benefits from the Town such as, but not limited to: vacation, sick leave, insurance, workers' compensation, pension and retirement benefits. All personnel matters affecting Contractor's staff will be the sole responsibility of the Contractor.

In no event shall anything in this Contract be deemed to confer upon any person or entity agency status or third-party beneficiary rights against the Town.

5.6 Indemnification and Hold Harmless Contract

To the fullest extent permitted by law the Contractor shall at all times defend, indemnify and save harmless the Town and its officers, agents, and employees from and against any and all claims, damages, losses, workers' compensation payments, judgments, litigation expenses, and legal counsel fees arising out of and alleged to arise out of the performance of this agreement, injuries to persons (including death) or damage to property alleged to have been caused in whole or in part by the willful, wanton, or negligent acts or omissions of the

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

Contractor, his employees, subcontractors, subcontractors, or materialmen. The existence of insurance shall in no way limit the scope of this indemnification. The Contractor shall reimburse the Town for damage to property of the Town caused by the Contractor, or his employees, subcontractors, subcontractors, or materialmen. This provision shall survive the termination of this Agreement.

5.7 Insurance

The selected Contractor shall furnish a Certificate of Insurance evidencing the following insurance coverage in effect on or before the date of execution of this Contract. Insurance coverage shall remain in full force for the duration of the Contract term, including any extensions. Renewal certificates shall be furnished at least thirty (30) days prior to policy expiration. Failure to maintain insurance coverage as required and to name the Town as an Additional Insured will be grounds for termination of the Contract. The interest of the Town shall be included in all insurance policies required herein, except Workers' Compensation and Professional Liability, as Additional Insured on a primary and non-contributory basis as its interest may appear, which shall be noted on the Certificate of Insurance, and shall include, but not be limited to, investigation, defense, indemnification and payment of settlement or judgment. Such insurance must be written by companies of recognized standing, qualified and licensed to engage in the insurance business in the State of Connecticut. All deductibles are the sole responsibility of the Contractor to pay and/or indemnify. Waiver of subrogation will apply in favor of Town on all insurance policies, including workers' compensation.

The Contractor awarded this proposal must provide a current Certificate of Insurance to the Town Administrator PRIOR to commencement of work, with the following requirements:

Insured Limits and Coverage:

- A. To the extent applicable, the amounts and types of insurance will conform to the minimum terms and conditions and coverages of the national Insurance Services Office (ISO) policies, forms, and endorsements.
- B. If the contractor/insured has self-insured retention' s or deductibles under any of the following minimum required coverage's, the contractor/insured must identify on the certificate of insurance the nature and amount of such self-insured retentions or deductibles and provide satisfactory evidence of financial responsibility for such obligations. All self-insured retentions or deductibles will be the contractor/insured's sole responsibility.
- C. Commercial General Liability: The contractor/insured will maintain commercial general liability insurance covering all operations by or on behalf of the

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

contractor/insured on an occurrence basis against all claims for personal injury (including bodily injury or death) and property damage (including loss of use).

Such insurance will have these minimum limits:

- \$ 1,000,000 each occurrence.
- \$ 1,000,000 each occurrence if blasting is required.
- \$ 2,000,000 general aggregate with dedicated limits per project site.
- \$ 2,000,000 products and completed operations aggregate.
- \$ 1,000,000 personal and advertising injury.

D. Automobile Liability: The contractor/insured will maintain business auto liability coverage for liability arising out of any auto, including owned, hired, and non-owned autos in minimum amount of 1 million dollars.

E. Workers' Compensation: The contractor/insured will maintain workers' compensation and employer's liability insurance in the following minimum limits:

- Workers' Compensation: statutory limits.
- Employer's Liability: \$1,000,000 bodily injury for each accident.
- Employer's Liability: \$1,000,000 bodily injury by disease each employee.
- Employer's Liability: \$1,000,000 bodily injury disease aggregate.

F. Professional Liability: \$1,000,000

G. Governing Law: This agreement shall be governed by the laws of the State of Connecticut.

H. These are minimum insurance limit requirements only. Additional insurance coverages and amounts may be required by the Town of Columbia on a per project basis.

5.8 Ethics and Conflict of Interest

In order to avoid perceived or actual conflicts of interest, the Contractor shall disclose to the Town any known special personal or financial interests, beyond those applicable to the general public, of the Contractor, its employees, subcontractors, or subcontractors, regarding any matter that they are working on under this Contract. The Town will determine if a significant conflict of interest exists, and if necessary, will assign the work to others to avoid the conflict of interest.

5.9 Events of Default and Remedies

5.9.1 Events of Default

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

Any of the following occurrences or acts shall constitute an Event of Default under this Contract:

- 5.9.1.1 If in the opinion of the Town, default shall have been made by the Contractor, its successors or assigns, in the performance or observance of any of the covenants, conditions or Contracts on the part of the Contractor set forth in this Contract; or
- 5.9.1.2 If in the opinion of the Town, the Contractor fails to deliver services by the dates agreed upon for any specific project and the Contractor has not received written approval from the Town for an extension to the agreed upon schedule; or
- 5.9.1.3 If any determination shall have been made by a competent authority such as, but not limited to, any authorized federal, state or local government official, or a certified public accountant, that the Contractor's management or any accounting for its funding, from whatever source, is improper, inadequate or illegal, as such management or accounting may relate to the Contractor's performance of this Contract; or
- 5.9.1.4 If a decree or order by a court having jurisdiction in the matter shall have been entered adjudging the Contractor as bankrupt or insolvent or approving as properly filed a petition seeking reorganization, readjustment, arrangement, composition or similar relief for the Contractor under the federal bankruptcy laws, or any other similar applicable federal or state law.

5.10 Election of Remedies

If any Event of Default hereunder shall have occurred and be continuing, the Town may elect to pursue any one or more of the following remedies, in any combination or sequence:

- 5.10.1 Take such action as it deems necessary, including, without limitation, reduction of payment or temporary withholding of payment;
- 5.10.2 Require the Contractor to pay Liquidated Damages in the amount of five hundred dollars (\$500), or one percent of the total compensation for the project on which it has contracted to work, whichever is less, per calendar day to the Town until the work is complete;

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

5.10.3 Suspend work under the Contract; Require the Contractor to correct or cure such default to the satisfaction of the Town; and Board of Education.

5.10.4 Terminate this Contract for cause in accordance with Section 11 hereof.

The selection of any remedy shall not prevent or stop the Town from pursuing any other remedy and shall not constitute a waiver by the Town of any other right or remedy.

5.11 Termination of Contract

5.11.1 Termination

"Termination", for purposes of this Contract, shall mean the cessation, upon the effective date of termination, of the following obligations only: The Contractor's obligation to perform the services described in Section 1, Scope of Services, of this Contract, and the Town's obligation, as described in Section 4, Compensation, of this Contract, to pay for such services.

5.11.2 Termination for Cause

Upon the occurrence of any Event of Default, as set forth in Section 10.1 hereof, the Town may terminate this Contract by giving five (5) days' written notice thereof to the Contractor.

5.11.3 Termination for Program Change

In the event the on-call engineering program shall be terminated or significantly changed, the Town may terminate this Contract by giving ten (10) days' written notice thereof to the Contractor.

5.11.4 Termination for Non-availability of Funds

In the event the Town shall not have funds available for this program, the Town may terminate this Contract by giving ten (10) days' written notice thereof to the Contractor.

5.11.5 Termination for Convenience

The Town may terminate this Contract for convenience at any time, and for any reason, or for no reason, by giving ten (10) days' prior written notice thereof to the Contractor.

5.11.6 Payment upon Termination

In the event this Contract is terminated as herein provided, the Town shall make full payment to the Contractor for all authorized services performed up to and including the date of termination.

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

5.12 Amendments

This Contract may be amended by written instrument executed by the parties hereto, acting therein by their duly authorized representatives. The Contractor's duly authorized representative shall be Bob Banning, P.E. and the Town's duly authorize representative shall be the Managing Authority.

5.13 Establishment and Maintenance of Records

The Contractor agrees to establish and maintain fiscal control and accounting procedures that assure proper accounting for all funds paid by the Town to the Contractor under this Contract. The Contractor agrees that all records with respect to all matters covered by this Contract shall be maintained during the term of this Contract, including any renewal or extension, and for one full year following termination or expiration.

5.14 Audits

At any time during normal business hours, and as often as may be deemed necessary, the Contractor shall make available to the Town, for examination, all records with respect to all matters covered by this Contract.

5.15 Reports and Information

The Contractor shall furnish the Town with such information and reports concerning the progress and management of this project as may be required from time to time. The form of said reports shall be determined by the Town.

5.16 Non-Assignability

The Contractor shall not assign or transfer any interest in this Contract without prior written consent of the Town.

5.17 Severability

If any provision of this Contract is held invalid, the remainder of this Contract shall continue in full force and effect.

5.18 Cumulative Remedies

All rights and remedies of the Town hereunder shall be cumulative and the exercise or beginning of the exercise by the Town of any of its rights or remedies hereunder shall not preclude the Town from exercising any other right or remedy granted hereunder or permitted by law.

5.19 Governing Law

This Contract shall be governed by, and construed in accordance with, the laws of the State of Connecticut.

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

5.20 Subcontractors and Subcontractors

Portions of this work may be subcontracted, provided that:

- 5.20.1 The Town shall give prior approval to such subcontract in writing.
- 5.20.2 All of the terms, covenants, conditions and provisions of this Contract shall have been incorporated in such subcontract(s) and the subcontractor(s) and subcontractor(s) shall have agreed in writing to assume, perform and be bound by this Contract and all the terms, covenants, conditions and provisions hereof.
- 5.20.3 The Town shall not be liable for payment of any wages, materials, or other expenses of any subcontractors.

5.21 Gender/Number/Title

Words of any gender used in this Contract shall be held and construed to include any other gender, and words in the singular shall be held and construed to include the plural, unless the Contract requires otherwise. In the event of any discrepancy or conflict between the name and title of any person referred to in this Contract, the title shall prevail.

5.22 Notices

All notices, approvals, demands, requests, or other documents required or permitted under this Contract, other than routine communications necessary for the day-to-day operation of this contract, shall be deemed properly given if hand delivered or sent by United States mail, first class postage, to the following addresses:

As to the Town:

(The Managing Authority designated
in Section 5 of this Contract)
323 Route 87
Columbia, CT 06237

As to the Contractor:

Silver Petrucelli & Associates
Bob Banning, P.E.
3190 Whitney Avenue
Hamden, CT 06518

5.23 Non-Waiver

Any failure by the Town or the Contractor to insist upon the strict performance by the other of any of the terms and provisions hereof shall not be a waiver, and each party hereto, notwithstanding any such failure, shall have the right thereafter to insist upon the strict performance by the other, of any and all of the terms and provisions of the Contract and neither party hereto shall be relieved of such obligation by reason of the failure of the other to comply with or otherwise enforce any of the provisions of this Contract.

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

5.24 Delinquency in Obligations

The Contractor hereby agrees that throughout the period of the Contract, all taxes, debts, contractual obligations, and audit responsibilities owed to the Town shall be and shall remain current.

5.25 Ownership of Work Product

All work produced under this Contract shall be the property of the Town. The Contractor shall turn over to the Town all original documents and other work products upon completion or demand.

5.26 Entire Contract

This Contract, and its exhibits attached hereto and referenced herein, contain the entire understanding between the parties hereto and supersedes any and all prior understandings, negotiations, and Contracts, whether written or oral, between them respecting the written subject matter.

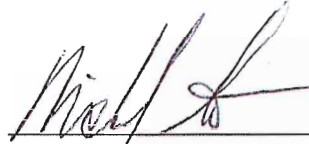
**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

IN WITNESS THEREOF, the TOWN OF COLUMBIA and the CONTRACTOR have executed this Contract on this 20TH day of July 2023.

TOWN OF COLUMBIA

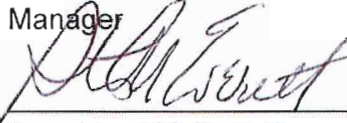
Reviewed:



By: Mike Sylvester

Title: Horace Porter School Facilities
Manager

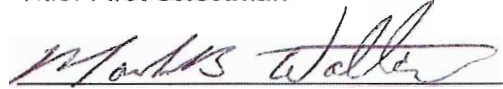
Approved:



By: Steven M. Everett

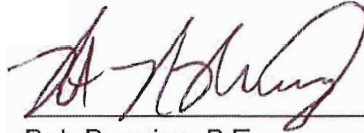
Title: First Selectman

Witness:



CONTRACTOR


Approved:



Bob Banning, P.E.

Title: Principal of Engineering

Witness:



Signature

Title: CHIEF MECH ENGINEER

**Complete Design Work for the Replacement of the
Existing Indoor Air Quality System at The Horace W. Porter School
and Related Renovations and Improvements**

Town of Columbia and Columbia Board of Education

APPENDIX A

**6/22/23 CLARIFICATION OF FEE AND SCOPE RESPONSE FROM SILVER PETRUCELLI
& ASSOCIATES**

Jennifer C. LaVoie

From: Ken Eldridge <keldridge@silverpetrucelli.com>
Sent: Wednesday, July 5, 2023 2:01 PM
To: Jennifer C. LaVoie
Cc: Mark Walter; Christopher Lent; Michael Sylvester; Denise LaRosa
Subject: RE: Horace Porter HVAC - Follow-Up Questions

Jennifer, et al:

Thanks for reaching out and sorry for the Holiday-related delay in response to the HPBC's clarifications. The responses can be found below **in bold red**.

Respectfully,



Kenneth J. Eldridge
Senior Project Manager
203 230 9007 x 260

From: Jennifer C. LaVoie <jlavoie@columbiact.org>
Sent: Thursday, June 29, 2023 2:29 PM
To: Ken Eldridge <keldridge@silverpetrucelli.com>
Cc: Mark Walter <townadministrator@columbiact.org>; Christopher Lent <clent929@gmail.com>; Michael Sylvester <MSylvester@hwporter.org>
Subject: Horace Porter HVAC - Follow-Up Questions

WARNING: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Afternoon Ken,

The Horace Porter Building Committee had two follow-up questions that they would like you to provide a response too. Please see those questions below.

1. Assuming a need by date of 10/1/23, would your firm be able to commit to having a cost estimate to support the Grant application process? Also, would your firm have the construction documents completed by 10/1/23? If not complete with construction documents, approximately what percentage completed would be anticipated? **We would be able to commit to 10/1/23 Estimate date, and we feel as though a substantial amount of design work would be completed by that date as well. However, it would be negligent to say that the entire design would be completed by the 10/1 date...We would propose that our work could be completed by the end of 2023...and sooner than that if possible. Of course, that would be contingent upon relatively smooth and timely review and approval processes as well.**

2. Your firms' proposal did not include reviewing and evaluating the exterior building and grounds for any water migration/drainage issues and recommendations to mitigate. Would your firm commit to a "Not to exceed" price to include this in the scope of work? The Committee estimates 50 hours should be sufficient. **We could estimate a \$13,750 allowance for exterior water mitigation issues on a not to exceed basis as a placeholder commensurate with**

the 50 hours of sub-consultant time in the field and for the design. This should be investigated as soon as possible to understand the scope, extent, history, determine scheduling needs, etc., in order to determine the right partner to bring on from our stable of trusted partners. That includes our typical 10% markup for the administration of their contract as well.

Best Regards,

Jennifer

Jennifer LaVoie
Executive Administrative Assistant
Town of Columbia
Phone: 860.228.0110
Email: jlavoie@columbiact.org
Website: www.columbiact.org
Address: 323 Route 87, Columbia, CT

Caution: This is an external email and may be malicious. Please take care when clicking links or opening attachments.



June 22, 2023

Mr. Mark Walter
Town Administrator
Town of Columbia
323 Route 87
Columbia, CT 06237

Via email to: townadministrator@columbiact.org; jlavoie@columbiact.org; msylvester@hwpore.org;
clent929@gmail.com

RE: Horace Porter School IAQ Improvements – Additional Questions
SP+A #: 23.093

Dear Mr. Walter:

SP+A appreciates the opportunity to clarify our fee and scope by responding to the Committee's questions. Those responses are attached.

If you have any additional questions, please feel free to contact me at 203-230-9007 ext. 260 or keldridge@silverpetrucelli.com. Thank you.

Sincerely,

A handwritten signature in blue ink, which appears to read 'Kenneth Eldridge', is positioned above the typed name.

Kenneth Eldridge, PE
Chief Mechanical Engineer

1. *Did your proposal include the use of an Acoustical consultant? If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

No, it did not. The additional cost would be \$10,000.

2. *Did your proposal include a review of building and ground exterior for any water migration into the school? If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

No this was not included as this was not requested in the RFP or during the walkthrough. We cannot affix a price for this without knowing the size/scope, however, in many projects, we have been able to remedy this issue with our in-house staff.

3. *Did your proposal include Structural Engineering review and design, as required, for any new equipment? If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

Yes, this was included in our fee.

4. *Did your proposal include working with the owner contracted commissioning agent and include requirements in plan and specification? If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

Yes, our proposal includes working with your Commissioning Agent

5. *Please elaborate on the extent of your firm's assistance with the State Grant process, and your success rate?*

Our OSCGR involvement ranges from assisting with the preparation of School Construction Grants (SCG) forms and outlining our clients' project requirements to attending the prep, Design Development Review (DDR) and pre-bid conformance meetings. This cooperation helps our clients obtain the maximum grant reimbursement available for eligible items. And we help identify ineligible items and propose possible alternatives.

State Project-related Activities We Coordinate

- Full Grant Reporting and Reimbursement
- Timely submission of Payment Applications
- Timely Submission of Approved Change Orders
- Submission of State Required Plans and Specifications
- Assistance with project closeout and audit process.

SCG Forms We Prepare

- Project Grant Initiation
- Site Review and Approval
- Project Reviews (Prep, DDR, etc.)
- Ineligible Cost Worksheets
- Cost Estimate in Uniformat
- State Change Orders

Our team attends OSCGR meetings prepared with the required checklists, letters, drawings, and specifications and walk the State review through the project explaining details and providing answers to their questions. As meetings moved to a remote format, we created a streamlined system on our end that includes aligning checklist items with uploaded files, putting our drawings in folders (i.e., code plan, roof plans, floor plans) and hyperlinking documents for quick access. Following the review, we quickly provide additional information as needed to expedite the final review and approvals.

We provide follow-on services to respond to comments or requests made by the client and/or OSCGR during the Certificate of Approval review process and/or PCR process. We also meet with the OSCGR to review the addenda that are issued during bidding, which is a requirement that continues to evolve.

6. *Did your proposal include a review of existing HVAC equipment, and if necessary, did it include cost for design to replace existing HVAC equipment? If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

Yes, this was included in our fee.



7. *Did your proposal include any interior architectural changes to accommodate new mechanical and electrical systems to be installed? If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

Yes, this was included.

8. *Did your proposal include up to two (2) reviews of contractor submitted materials? If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

Yes, we included this.

9. *Did your proposal include providing a professional cost estimate during the design phase, to be used as a basis for the Town of Columbia and Board of Education's grant application? If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

Yes, this was included.

10. *In regards to Project Schedule, please confirm whether the timeline included in your proposal remains current? Assuming a contract start date of 7/1/23, would your work-load support the development of construction documents to support the submission of the State Grant application in the fall of 2023? Please provide cost and fee impact, if any, and include any assumptions and clarifications.*

Yes, we will be able to accommodate this schedule.

11. *Your proposal did not include sufficient details/ description of what's included in each phase. Please provide this additional information to support a review of the proposed scope of work.*

Our approach to the project was included in the first part of our submission, repasted here:

We will begin the project with a kick-off meeting with the Town and BOE to confirm project scope and goals.

Preliminary Engineering and Design: We will meet with the Fire Marshal, Building Official and Health Department to confirm any current violations or concerns that they may have with the building and seek out their requirements and develop the plan of action incorporating their requirements.

We will conduct a meeting with Town and school staff to review known/suspected HVAC issues within the school including:

- Documented existing issues
- Comfort Complaint and Maintenance Issue Logs
- Routine Maintenance Records
- Equipment Inventory (Age, Location, Areas Served, Condition, Size, Make, Model, etc.)
- Facility standards for temperature, humidity, filtration, ventilation, etc. if applicable

We will identify design and as-built documentation available for:

- Verification in field
- Code compliance under current standards
- Best practices currently in use

We will tabulate the data above to present current status and deficiencies based on levels of concern related to issues of IAQ. These include:

- Mandatory for Code
- Repair to original design compliance
- Upgrade for maintenance, age, operational issues, etc.



- Recommendations for upgrade to existing operation
- Replacement required or recommended

Schematic Design: Multiple design schemes for the school will be considered. Installation cost, energy efficiency, ease of use by occupants, acoustical characteristics, maintenance cost/complexity, size/weight implications, ventilation characteristics, availability (i.e. lead time), and others will factor into our evaluation process. We will consider systems that are inspired by Connecticut's High Performance Construction Standards (i.e., chilled beams, VAV). We will also explore potential sources of funding that might offset construction costs as well as available incentives from the utility. We will develop a preliminary estimate of construction cost for each proposed option.

Design Development: Once a preferred system approach is determined we will detail the design of the HVAC replacement systems to meet OSCGR requirements. We will also document any electrical, structural and architectural requirements as well as any demolition requirements for the new systems including electrical modifications and interior renovations (i.e., lighting or ceiling modifications).

The cost estimate will be updated and plans will be submitted to the Board of Education and regulatory boards for approval. After the review is complete, we will meet with the Board of Education to reconcile any review comments and we will meet with local officials as required to complete the design documents.

The Design submission will include the following:

- Schematic layouts of utility services to the proposed project.
- Architectural reflected ceiling plans and interior elevations.
- Preliminary structural, mechanical and electrical engineering concepts and layouts.
- Schematic Design narrative, including agency/Town approval submission requirements, and preliminary approval schedule.
- Demolition Plans
- Energy efficient engineering systems will be designed incorporating rebates and incentives for lighting and mechanical installations

The project estimate will be reconciled, and plans will be submitted to the Town and regulatory boards for approval.

Supplemental field investigation work will be completed to verify details and specifications developed as a part of this phase of the work.

If necessary, reasonable code modification requests will be prepared for approval by the local fire marshal or building inspector and subsequently the State Fire Marshal's office. We will prepare the modifications based on our experience with customarily acceptable relief requests, as well as preparing modifications that will provide reasonable life safety while reducing the financial burden of the project.

Construction Documents: Our in-house specifications writers will complete a comprehensive set of construction documents for each school with finalized cost estimates and construction schedules. During the preparation of the construction documents, we will meet with the team regularly to review the system selections, plans and other design features, confirming that all program requirements and goals are included in the plans. Specifications for Divisions 1-16 will also be prepared. After our in-house quality review, we will issue final review sets of documents to the Town for review and comment. With the Town's approval, we will edit the final plans and issue the final documents, including specifications, for the Town's printing and distribution to potential bidders. We will coordinate our bid preparation efforts with the Town's Purchasing Department.

A comprehensive set of construction documents with finalized cost estimates and construction schedules broken into phases including:

- Cover sheet and general information

- Code sheets and code information, including existing and new code information
- Remediation plans and floor plans if any, equipment plans, reflected ceiling and roof plans
- Elevations, sections, details, miscellaneous details, enlarged floor plans
- Structural plans, details, sections and special notes.
- HVAC plans, sections, and details including equipment schedules.
- Plumbing plans, sections, details and equipment schedules.
- Fire Protection plans, sections, details and equipment schedules.
- Electrical lighting and power plans, sections, details and equipment schedules.

Bidding: Our bid phase support includes attendance at the pre-bid conference and bid opening. All bidder questions will be reviewed and, when necessary, referred to the relevant discipline for response. Addenda will be prepared as required to clarify the scope of the work and specifications of material, products and the execution of the work. Addenda and Requests for Information (RFIs) will be distributed to all registered bidders. After the bids are received, we will develop a spreadsheet comparing all bids and our estimate. We will review for the reasonableness of the unit bid prices and look for any indication of a possibly unbalanced bid. We will also check the contractor's references and work experience, as well as verifying the completeness of the bid submissions. Based on this review, we will make a written award recommendation.

Construction Administration: Because SP+A has a full-time construction administration department, we designate a dedicated Construction Administrator during project design to act as the point person for all correspondence and documents as well as a liaison between the Owner and the contractor. Having one dedicated individual handling all correspondence allows for ease of communication, as all involved parties know whom to go to for answers. Our typical CA services include:

- Shop drawing review and approval
- Design modifications and sketch preparation
- Requisition review and approval
- Job coordination and progress meetings
- Contract interpretation and response to inquiries
- Periodic site visits to assure quality standards are being met and general conformity to the construction documents
- Change order preparation and review
- Punch list and contract closeout

Close Out/Commissioning/Warranty: We respond to inquiries regarding the warranties and corrective work required by the contractor during the warranty period. We conduct a post construction evaluation of the project, determining the financial and schedule performance of the team, the responsiveness of the designs to the program and other related issues. We will coordinate with the Town's Commissioning Agent.

12. *In your Fee proposal section, you stipulate that additional services may be compensated on an hourly cost-plus basis. Please clarify the subsequent sentence "If the scope is well defined, a mutually agreeable fixed fee can be negotiated?" Is this statement relative only to out of scope work?*

Yes, that is correct.

13. *For Construction Administration, please confirm that your proposal was based upon the construction phase (HVAC and electrical) encompassing the entire building (i.e., one package with award to one contractor), and not performed in sections (e.g., A-wing completed initially, and other sections of the building scheduled in subsequent years, subject to authorization and funding)?*

Yes, that is correct.

14. *In the event the construction of HVAC upgrades/new equipment are desired to be completed one section at a time (e.g., A-wing only completed), how would that impact your proposal?*

Our Construction Administration fees would need to be adjusted to account for the additional time.

15. *The RFP included the need for the firm to attend town meetings. Please provide any clarifications and assumptions of your proposed scope. If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

We have included live attendance at (2) Town Meetings, or virtually if you prefer as many Towns have gone hybrid.

16. *The Town of Columbia and Board of Education desire the firm to assist with the State Grant process. Please confirm your proposal included this scope. If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

Yes, we understood the scope to include OSCG&R support so that is included.

17. *Did your proposal include the review of the existing building management system (BMS) direct digital control system, and scope for control integration, upgrades and/or new equipment? If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

Yes, this is included.

18. *The Town of Columbia and Board of Education desire the firm to deliver Construction documents in paper form. Please provide any clarifications and assumptions of your proposed scope.*

Our fee includes three (3) printed copies and a pdf.

19. *The Town of Columbia and Board of Education desire the firm to assist with the coordination of utility rebates. Please confirm your proposal included this scope. If your proposal did not include, please provide additional cost and terms to incorporate in the scope of work.*

Yes, this is a standard task undertaken during the design phases and followed up during CA.

20. *In your proposal you included references from prior projects. If available, please provide any written testimonials or equivalent reviews.*

We do not have written references but encourage you to call the references provided directly.



HVAC UPGRADES

Presentation

November 8, 2023



Silver Petrucci + Associates
3190 Whitney Avenue | Hamden, CT 06518
311 State Street | New London, CT 06320
203 230 9007 silverpetrucci.com

Horace Porter School

Issues related to Indoor Air Quality and High Indoor Humidity

The Horace Porter School Building
Exhibits High Indoor Humidity
due to Excessive Air Infiltration Rates and
Possible Water Vapor Infiltration
due to Poor Site Drainage,
as Evidenced by Relative Humidity
Measurements Recorded by SP+A and
Blower Door Testing Performed by RPM

No Evidence of Water was Observed Inside the Building although, it is Possible that Water Vapor is Migrating into the Building Through the Floor Slabs, Foundation Wall and Earthen Floor of the Pipe Tunnel.

Existing Systems Serving Classrooms
Consist of Centralized Exhaust with
Operable Windows for Ventilation.

These Systems are no longer Considered
Appropriate for Schools due to

Excessive Energy Use,
Poor Temperature Control, and
Sub-Standard Indoor Air Quality.

Additionally, Existing Infiltration is More than
Twice that Required for Ventilation per the
Mechanical Code, Contributing to
Excessive Energy Use,
Poor Temperature Control and
Sub-Standard Indoor Air Quality

The Connecticut Legislature has Adopted EPA's "Tools for Schools" Requiring BOEs to perform Annual Indoor Air Quality Assessments to Identify and Improve IAQ Problems

Required Space Ventilation Rates (CFMoa) per ASHRAE 62.1 – Ventilation Rate Procedure:

$\text{CFMoa} = \text{CFM/Person} \times \text{No. of Persons} + \text{CFM/Sq Ft} \times \text{Sq Ft}$

500 occupants x 1.8 (for diversity) x 10 CFM/person
+ 100,000 sf x .06 cfm/sf

$\text{CFMoa} = 15,000 \text{ CFM}$ (for the Entire School Building)

Existing Air Infiltration =

Sum of Active Exhaust Fans – Outside Air Supplied Through Air
the Handling Equipment = 39,000 CFM±

Approximately 15,000 CFMoa Required

vs

39,000 CFMoa Actual

The Most Commonly Specified Systems for HVAC Retrofit of School Classrooms and Offices Today are Variable Refrigerant Flow (VRF) systems with Dedicated Outside Air System (DOAS)

DEDICATED OUTSIDE AIR SYSTEM (DOAS) WITH VARIABLE REFRIGERANT FLOW (VRF)



VRF SYSTEM



INDOOR CEILING CASSETTE



OUTDOOR UNIT

DOAS UNIT



VRF with DOAS are Well Suited to Schools

Due to Exceptional Performance and Relative
Ease of Installation in Existing School Buildings
as well as the ability to provide
Excellent Indoor Air Quality

VRF with DOAS is Capable of Meeting all of
the Latest Standards for Indoor Air Quality,
Comfort, and Energy Efficiency

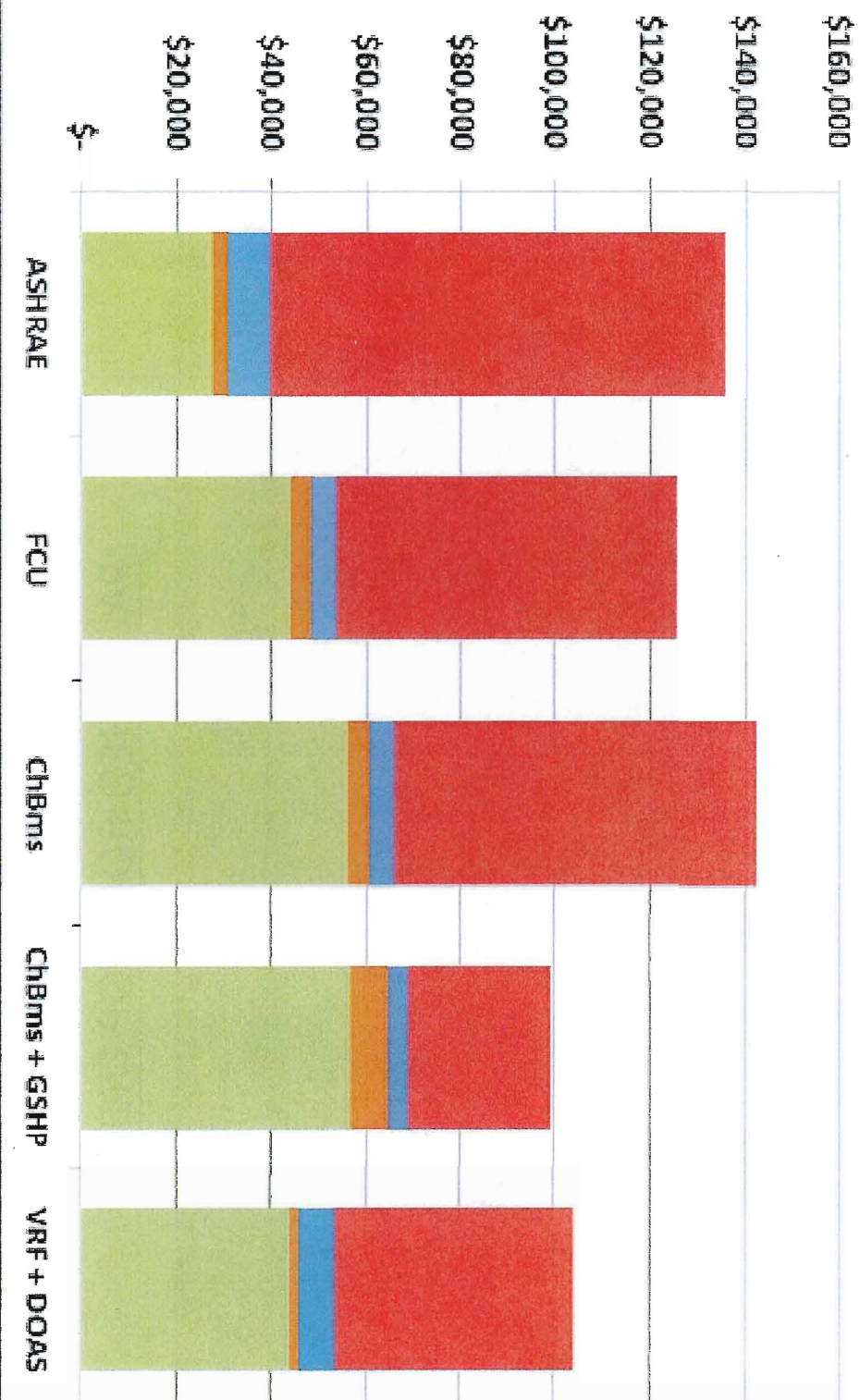
Large Spaces such as Gymnasiums,
Auditoriums and Cafeterias are more suited to
Unitary Type Equipment such as
Packaged Rooftop Heat Pumps
or

Split System Heat Pumps with Air Handling Units

PACKAGED ROOFTOP UNIT



Annual HVAC Energy Cost (\$) Comparison



- Space Heating
- Space Cooling
- Pumps & Misc
- Ventilation Fans

The 2021 Facility Air Conditioning Feasibility Study
Performed by BVH Integrated Services
Recommends Modernization of the HVAC with
Systems Similar to Those Discussed Here.
(VRF with DOAS and Unitary Equipment for Larger Spaces)

There are Currently Substantial Incentives
Available from Eversource for Heat Pumps
and VRF Systems that can Cover a
Large Portion of the Equipment Cost

Summary of Initial Findings:

- Air infiltration into the school due to the operation of the centralized exhaust systems exceeds required ventilation and much of the air is untreated.
- It appears that there may be some moisture infiltration into the building due to grading issues at the A-Wing but it is likely not a major contributor to the humidity issues.
- Maintaining the building at a positive pressure with new HVAC systems will reduce moisture infiltration. DOAS Units will allow control of indoor humidity.
- Existing HVAC systems do not meet Current Standards for Indoor Air Quality and Energy Efficiency.
- Adding Air Conditioning without addressing Ventilation and Energy Efficiency would likely not be eligible for State Grant Funding.

Questions?

~~51.7—Proposed amendments 11/14/23~~

Formatted: Font: Not Bold, Italic

~~51.7 Minor Modification of Approved Site Plan or Special Permit ElementsFeatures:~~

Formatted: Font: Not Bold

Minor changes in an approved Site Plan or Special Permit are acceptable with the written approval of the Planning & Zoning Commission, provided such changes shall in no way affect the overall layout, design, development density, environmental impact, or intended or approved nature of the Site Plan or Special Permit use. Applicants may petition for minor modification approval by the Commission by a written request through the Town Planner or directly to the Commission.

The Commission shall hear the details of the proposed changes or additions and shall determine whether such proposed change is a minor modification of the prior approval. If determined to be minor by a majority vote of the Commission, the Commission shall authorize the Zoning Enforcement Officer and the Chairman of the Planning and Zoning Commission to document the modification with a signed letter for the file. This determination and letter shall serve as the approval for the minor change or modification.

If the Commission determines the proposed changes or additions exceed the scope of a minor modification, the applicant shall submit a Site Plan or Special Permit Modification-Application to the Commission for the proposed modifications.

8.3

ARTICLE III – NON-RESIDENTIAL DISTRICTS

(Entire Section Revised 11/1/19) (Draft revision 11/14/23)

31. Commercial Manufacturing District 1 (CM-1)

The purpose of this district is to permit larger commercial and manufacturing businesses on major thoroughfares and Commerce Drive.

31.1. Permitted Uses. Applications for the following uses to locate in an existing building that does not include any alterations to the exterior of the building or changes to the vehicular or pedestrian areas of the site, are permitted with Staff approval per Section 3.

1. Business and professional offices (for example: realtor, insurance, medical and health services, physical therapy, accounting, financial advisor, legal) occupying less than 3,000 sq. ft.
2. Banking Institution with no drive-thru window
3. Personal services (for example: hair salon, barber, shoe repair, tailor and drop off/pick up laundry and dry cleaning, tattoo shop, nail salon, day spa). Excludes any other uses specifically referenced elsewhere by the name of that use.
4. Retail facilities occupying less than 3,000 sq. ft.
5. Restaurants and restaurant alcohol sales occupying less than 3,000 sq. ft. Drive-thru window, entertainment and patio seating approved per 31.2.3 and 31.3.14
6. Private schools of self-defense, music, dance, and similar uses occupying less than 3,000 sq. ft.
7. Museum, gallery, studio, art lessons
8. Indoor recreation occupying less than 3,000 sq. ft.
9. Veterinary office, occupying less than 3,000 sq. ft.
10. Manufacturing, assembly, processing operations located on Commerce Drive
11. Dwelling unit(s) above a 1st floor business use
12. Existing single-family dwellings; minor home occupation in an existing single-family dwelling
13. Accessory uses customary with and incidental to uses listed in Section 31 provided that (with the exception of single-family dwellings under 31.1.12) there are no changes to the exterior of the building or site.

31.2. Other Permitted Uses with Site Plan Approval by the Commission per Section 51, unless property abuts the Residential-Agriculture District, then by Special Permit per Section 52.

1. Uses listed in Section 31.1 items 1-9 with changes to exterior of building or site, or a larger footprint
2. Drive-thru window for restaurant, bank or retail use
3. Restaurant including indoor entertainment or patio dining
4. Municipal office buildings and uses
5. Seasonal farmers market per requirements of Section 21.5.3.2 Farmer's Market items a-f, there is no minimum lot size required in CM1 or CM2 District
6. Vehicular sales, services, repair, or rental of new or used cars, trucks, trailers, motorcycles, off-road and other recreational vehicles, marine boats and trailers; gasoline retail sales (See Section 52.7.4)
7. Heavy equipment sales and services

8. Contractor's and construction office and yards, all stored equipment and materials shall be screened from street and abutting properties per Section 65.7 and 66.
9. Indoor self-storage facilities
10. Accessory uses customary with, and incidental to, uses listed in 31.2 and 31.3 with changes to the building or site
11. Public Utility buildings
12. Package Stores (See Section 67)
13. Manufacturing, assembly, processing operations within structures of 20,000 square feet or less, other than permitted under 31.1.10
14. Pet Boarding, Day Care and Grooming
15. Major home occupation in an existing single-family dwelling
16. Restaurant and Clubs including outdoor entertainment, patio dining or micro-brewery (See Section 52.7.7) if not directly abutting an existing residential use.
17. Convalescent home, residential health care facility (See Section 52.7.3) if not directly abutting an existing residential use.
18. Funeral Home
19. Multifamily Dwelling (See Sections 52.7.21) effective 6/1/22

~~10.~~

31.3. Permitted Uses with Special Permit Approval by the Commission per Section 52.

1. Daycare Center for Children or Adults (See Section 52.7.2 and 52.7.13)
- ~~2.1. Public Utility buildings~~
- ~~3. Post Office (See Section 52.7.18)~~
- ~~4. Package Stores (See Section 67)~~
- ~~5.2. Outdoor Recreation facility (See Section 52.7.19)~~
- ~~6.3. Manufacturing, assembly, processing operations within structures of over 20,000 square feet other than permitted under 31.1.10~~
- ~~7.4. Warehousing and distribution; frontage on, and direct access to, a State road is required~~
- ~~8. Pet Boarding, Day Care and Grooming~~
- ~~9.5. Sand and Gravel operations (See Section 63)~~
- ~~10. Buildings, uses and facilities of the State of Connecticut, Federal Government and other governmental agencies~~
- ~~11.6. Wireless Telecommunication Facilities (See Section 52.7.15)~~
- ~~12. Major home occupation in an existing single-family dwelling~~
- ~~13. Clubs (See Section 52.7.7)~~
- ~~14.7. Restaurant and Clubs including outdoor entertainment, patio dining or micro-brewery (See Section 52.7.7) if directly abutting an existing residential use.~~
- ~~15.8. Convalescent home, residential health care facility (See Section 52.7.3) if directly abutting an existing residential use.~~

Formatted: Indent: Left: 0.81", No bullets or numbering

Formatted: Indent: Left: 0.69", No bullets or numbering

~~16. Funeral Home~~

~~17.9.~~ Motel (See Section 52.7.8)

~~18.10.~~ Storage of material which is dangerous due to explosion, extreme fire hazard or radioactivity, beyond that required for personal residential use

~~19.11.~~ Commercial oil, propane or gasoline tanks

~~20.12.~~ Cannabis Establishments (See Section 52.7.22) *effective 6/1/22*

~~21. Multifamily Dwelling (See Sections 52.7.21) *effective 6/1/22*~~

ARTICLE III – NON-RESIDENTIAL DISTRICTS

(Entire Section Revised 11/1/19) (Draft revision 11/14/23)

31. Commercial Manufacturing District 1 (CM-1)

The purpose of this district is to permit larger commercial and manufacturing businesses on major thoroughfares and Commerce Drive.

31.1. Permitted Uses. Applications for the following uses to locate in an existing building that does not include any alterations to the exterior of the building or changes to the vehicular or pedestrian areas of the site, are permitted with Staff approval per Section 3.

1. Business and professional offices (for example: realtor, insurance, medical and health services, physical therapy, accounting, financial advisor, legal) occupying less than 3,000 sq. ft.
2. Banking Institution with no drive-thru window
3. Personal services (for example: hair salon, barber, shoe repair, tailor and drop off/pick up laundry and dry cleaning, tattoo shop, nail salon, day spa). Excludes any other uses specifically referenced elsewhere by the name of that use.
4. Retail facilities occupying less than 3,000 sq. ft.
5. Restaurants and restaurant alcohol sales occupying less than 3,000 sq. ft. Drive-thru window, entertainment and patio seating approved per 31.2.3 and 31.3.14
6. Private schools of self-defense, music, dance, and similar uses occupying less than 3,000 sq. ft.
7. Museum, gallery, studio, art lessons
8. Indoor recreation occupying less than 3,000 sq. ft.
9. Veterinary office, occupying less than 3,000 sq. ft.
10. Manufacturing, assembly, processing operations located on Commerce Drive
11. Dwelling unit(s) above a 1st floor business use
12. Existing single-family dwellings; minor home occupation in an existing single-family dwelling
13. Accessory uses customary with and incidental to uses listed in Section 31 provided that (with the exception of single-family dwellings under 31.1.12) there are no changes to the exterior of the building or site.

31.2. Other Permitted Uses with Site Plan Approval by the Commission per Section 51, unless property abuts the Residential-Agriculture District, then by Special Permit per Section 52.

1. Uses listed in Section 31.1 items 1-9 with changes to exterior of building or site, or a larger footprint
2. Drive-thru window for restaurant, bank or retail use
3. Restaurant including indoor entertainment or patio dining
4. Municipal office buildings and uses
5. Seasonal farmers market per requirements of Section 21.5.3.2 Farmer's Market items a-f, there is no minimum lot size required in CM1 or CM2 District
6. Vehicular sales, services, repair, or rental of new or used cars, trucks, trailers, motorcycles, off-road and other recreational vehicles, marine boats and trailers; gasoline retail sales (See Section 52.7.4)
7. Heavy equipment sales and services

8. Contractor's and construction office and yards, all stored equipment and materials shall be screened from street and abutting properties per Section 65.7 and 66.
9. Indoor self-storage facilities
10. Accessory uses customary with, and incidental to, uses listed in 31.2 and 31.3 with changes to the building or site
11. Public Utility buildings
12. Package Stores (See Section 67)
13. Manufacturing, assembly, processing operations within structures of 20,000 square feet or less, other than permitted under 31.1.10
14. Pet Boarding, Day Care and Grooming
15. Major home occupation in an existing single-family dwelling
16. Restaurant and Clubs including outdoor entertainment, patio dining or micro-brewery (See Section 52.7.7) if not directly abutting an existing residential use.
17. Convalescent home, residential health care facility (See Section 52.7.3) if not directly abutting an existing residential use.
18. Funeral Home
19. Multifamily Dwelling (See Sections 52.7.21) *effective 6/1/22*

31.3. Permitted Uses with Special Permit Approval by the Commission per Section 52.

1. Daycare Center for Children or Adults (See Section 52.7.2 and 52.7.13)
2. Outdoor Recreation facility (See Section 52.7.19)
3. Manufacturing, assembly, processing operations within structures of over 20,000 square feet other than permitted under 31.1.10
4. Warehousing and distribution; frontage on, and direct access to, a State road is required
5. Sand and Gravel operations (See Section 63)
6. Wireless Telecommunication Facilities (See Section 52.7.15)
7. Restaurant and Clubs including outdoor entertainment, patio dining or micro-brewery (See Section 52.7.7) if directly abutting an existing residential use.
8. Convalescent home, residential health care facility (See Section 52.7.3) if directly abutting an existing residential use.
9. Motel (See Section 52.7.8)
10. Storage of material which is dangerous due to explosion, extreme fire hazard or radioactivity, beyond that required for personal residential use
11. Commercial oil, propane or gasoline tanks
12. Cannabis Establishments (See Section 52.7.22) *effective 6/1/22*

SECTION 21 – RESIDENTIAL-AGRICULTURAL DISTRICT

Proposed amendment 11/14/23

Formatted: Plain Text, Centered

21.1 Approvals: The following uses are permitted in all Residential-Agricultural Districts including the Columbia Lake Watershed Protection Overlay Districts subject to the approval process described in this section. For additional procedures and standards, see Section 3 – Certificate of Zoning Compliance, Section 51 – Site Plans, and Section 52 – Special Permits. Site Plans and Special Permits approved by the Zoning Commission are nonetheless subject to the provisions of Section 3- Certificate of Zoning Compliance. Some Special Permit uses are subject to special standards per Section 52.7.

21.2 Uses of land in the Residential-Agricultural District are permitted as follows:

NOTE: Properties within the Columbia Lake Watershed Protection Overlay Zone have additional requirements, see Section 21.4

21.2.1 Permitted Uses with Staff Approval per Section 3

1. One single family dwelling per lot
2. Agriculture and farms, see Section 21.5 for uses and type of approval required
3. Trailers subject to the provisions of Section 64
4. Signs as provided in Section 62

5. Minor Home Occupation, subject to Section 8.5.1

5-6. Family Day Care Home, or Group Child Care Home, as defined in and in compliance with Connecticut General Statutes, Chapter 368a (as may be amended), in an existing single-family residence. A copy of the State License to operate the facility must be submitted to the Zoning Enforcement Officer

SECTION 3 - ZONING PERMITS & CERTIFICATES OF ZONING COMPLIANCE

(Entire Section revised 7/1/14) Proposed revisions June 2023

- 3.1 Zoning Permit.** No building or regulated structure shall be erected, added to, or structurally altered and no use shall be established until a Zoning Permit has been issued by the Zoning Enforcement Officer. All applications for such permits shall be in accordance with the requirements of these Regulations. Unregulated structures that require building permits may be reviewed by the Zoning Enforcement Officer for compliance without requiring a separate zoning permit.
- 3.1.1 Application.** Every application for Zoning Permit shall be accompanied by such information and exhibits as are required by these Regulations or may be reasonably required by the Zoning Enforcement Officer in order that the proposal of the applicant may be adequately interpreted and judged as to its conformity with the provisions set forth in these Regulations. The application shall include a certification that the lot is on record by deed, including the date of recording, or is in a subdivision which has been approved by the Planning & Zoning Commission.
- 3.1.2 Plot Plan.** The application shall be accompanied by two copies of a plot plan based on an A2 survey prepared by a land surveyor registered in the State of Connecticut, drawn to scale showing the actual dimensions of the lot to be built upon, the size of the structure(s) to be erected, the location of the structure(s) upon the lot, the floor area ratio, the dimensions of all open spaces and easements, the setback lines observed by the structure(s), the location of driveways and curb cuts, the area and percentage of impervious cover, both existing and proposed, any approval provisions under Section 51 or 52 of these Regulations and such other information as may be necessary. The Zoning Enforcement Officer may waive any of the plot plan requirements in cases where it is not needed to determine conformity with these Regulations.
- 3.2 Certificate of Zoning Compliance:** No land shall be occupied or used and no regulated structure built or altered shall be occupied or used in whole or in part for any purpose, until a Certificate of Zoning Compliance shall have been issued by the Zoning Enforcement Officer, stating that the premises or regulated structure complies with all the provisions of these Regulations. Such a Certificate is also required for any change, extension, or alteration in a use. Prior to issuance of a Certificate of Zoning Compliance, the applicant shall submit an as-built survey at the A2 level, prepared by a licensed surveyor, showing the exact placement of the regulated structures on the lot. No such Certificate of Zoning Compliance shall be issued by the Zoning Enforcement Officer until all zoning requirements and conditions have been met. The Zoning Enforcement Officer may waive the as-built survey requirements in cases where it is not needed to determine conformity with these Regulations.

Regulated Structure: Anything constructed or erected, the use of which requires location on the ground or attachment to something having location on the ground. As used in these Regulations, structures shall include, but are not limited to buildings, swimming pools, fences or walls greater than six (6) feet in height, permanently placed outdoor storage containers, ~~Above~~ ground storage tanks in excess of 250 gallons, and other significant buildings or building additions in excess of 200 square feet.

Retaining walls and public utility equipment (as defined herein) are not considered structures under these regulations.

In the Columbia Lake Protection Area Overlay Zones, new unroofed terraces, patios, and similar hardscape, semi- impervious and impervious surfaces greater than 100 s.f., or, modifications or additions to unroofed terraces, patios, and similar hardscape, semi- impervious and impervious surfaces after the effective date of these regulations that are equal to or greater than 100 s.f., shall be considered structures and shall require a Zoning Compliance Certificate but shall be exempt from the setback and lot coverage requirements.

Unregulated Structure: Small accessory or appurtenant structures or structural elements that are not for human or animal occupancy with a footprint of less than 200 square feet, and do not require a building permit.

Formatted: Underline

Unregulated Structures shall be exempt from all zoning permitting requirements.

Water-related structural improvements such as piers, docks, boat ramps, and lifts are permitted structures exempt from the minimum yard requirements and are subject to the securing of the necessary permits from the Columbia Board of Selectmen and the Columbia Inland Wetlands Commission.

Formatted: Font: Bold, Font color: Red

Formatted: Indent: Left: 0", First line: 0"

Structural Alteration: The term "structural alteration" shall mean any change or addition to the structure or supporting members of a building, such as walls, columns, beams or girders.

Formatted: Indent: Left: 0.13", First line: 0"

DRAFT ZONING REGULATION AMENDMENT – FOR DISCUSSION PURPOSES

The following proposed regulation is based on the current Section 52.7.19, “Neighborhood Retirement Housing” but is revised to remove the current age restrictions and to encourage a broader range of housing options in Columbia, including affordable housing, while retaining some design and neighborhood-context control for the Commission. *Draft 11/14/23*

52.7.19 Planned Neighborhood Housing (Entire Section revised 6/01/15) (Draft 11/14/23)

- 52.7.19.1 Intent: To provide for a broader variety of housing in a development pattern that preserves the neighborhood residential character of the Town of Columbia by permitting an increase in density within the development and allowing alternative housing types with a site design that is in harmony with and preserves natural, scenic and historic site design features; and to provide incentives and opportunities for the creation of affordable housing while also preserving open space lands.
- 52.7.19.2 Required Approvals: A Special Permit shall be required for any proposed Planned Neighborhood Housing. The Special Permit may be issued only by the Columbia Planning and Zoning Commission after a public hearing and shall be issued only in conformity to the provisions of Section 52.7.19 of these Regulations. A pre-application review with the Commission is strongly encouraged.
- 52.7.19.3 Definitions: For purposes of this Section, the following definitions shall apply:
- Planned Neighborhood Housing: A building, or group of buildings located on a single parcel of land or multiple contiguous parcels, sharing common management and ownership, and consisting of detached, semi-detached, or multiple-dwelling units.
- Dwelling Unit: A single unit providing complete, independent living facilities for qualified occupants including permanent provisions for living, sleeping, eating, cooking and sanitation.
- Planned Neighborhood Housing Complex: All buildings, structures and land associated with the development site. Ownership of the Complex shall be by one entity, either a Common Interest Ownership as defined by CT General Statutes or Private Ownership.
- Unbuildable area: The area, expressed in square feet, within the site that is comprised of wetlands soils, watercourses, lakes, ponds, swamps, marshes, flood zone A per FEMA maps, slopes greater than 20%, and easements prohibiting building development.
- Dedicated open space: Land whose future use is legally restricted to conservation, recreation, or agriculture in perpetuity.

52.7.19.4 Application for Planned Neighborhood Housing:

- A. Approvals: A Special Permit is required under the provisions of Section 52.3.
- B. Information Required to be submitted:
 - 1. Application signed by the owner and agent, if any, stating the ownership of the property to be developed and summarizing the development proposal.
 - 2. An approval of the septic system design by the appropriate authorizing agency.
 - 3. An approval of the water supply system from the appropriate authorizing agency.

4. Key map of the neighborhood on a scale of 1" = 400' showing the relation of the proposed development to abutting properties and to existing and proposed streets.
5. Certified A-2 base map, on a scale of 1" = 40', showing the following:
 - a. Location of benchmarks.
 - b. Size of the Complex in total acreage.
 - c. Location of any ponds, brooks, or inland wetland areas, as certified by a soil scientist.
 - d. Two foot contours extending fifty (50) feet beyond site boundaries. Contour information shall be collected by an actual field survey or by means of photogrammetry (aerial topography).
 - e. Location of unbuildable area. Notes should reflect total area (in square feet) of buildable and unbuildable areas on the site.
 - f. Location of subsurface sewage disposal area and site testing locations for the same.
 - g. Location of water supply.
 - h. Location, dimension and basement floor elevation of all buildings; as well as foundation and footing drains.
 - i. Location of internal private roads, individual driveways, parking areas, and parking spaces.
 - j. Location of accessory buildings, structures and facilities.
 - k. Location of proposed dedicated open space.
6. Architectural plans showing accurate elevations, height, bulk, construction materials and other massing, architectural, and design features of the proposed development.
7. Stormwater Plan per Section 6.3 of Columbia Subdivision Regulations.
8. An erosion and sedimentation control plan prepared in accordance with Article VIII of the Zoning Regulations of the Town of Columbia.
9. Landscaping plan (may be incorporated as a part of the Site Plan referenced in Section 51) showing:
 - a. Planting schedules - type, number, minimum size of trees and/or shrubs and other plants.
 - b. Treatment of seeding and sodding.
 - c. Pavement types for vehicular and pedestrian movement.
 - d. Type, height and density of any proposed screening or fencing.
10. Open Space Plan.
 - a. Description of the proposed use of the areas of open space
 - b. Proposed ownership and maintenance responsibility. All conveyances of rights, title, interest and easements shall be in a form approved by the Town Attorney, shall be accompanied by a Certificate of Title and releases or subordinations of liens and encumbrances where appropriate, and shall be executed and recorded on the Columbia Land Records prior to or concurrent with the filing of the final Subdivision Plan, unless an alternative schedule is approved by the Commission.

52.7.19.5 Standards: Any application for a Special Permit under the provisions of Section 52.7.19 shall meet the following requirements:

- A. Complex Size and Location: The minimum size of Planned Neighborhood Housing Complex is four (4) acres, shall be located in a Residential District (RA) and shall have a minimum frontage of fifty (50) feet at the street line of a public street.
- B. Dwelling units per acre: The maximum number of dwelling units in the Planned Neighborhood Housing Complex shall be determined by soil capacity and State Public Health Code but shall not exceed 8 units per acre of market-rate housing units, or 12 units per acre if a minimum of 20% of units are set aside as "affordable" as defined in this subsection, excluding "Unbuildable Area" as defined in Section 52.7.19.3
 - 1. Affordability Percentage. At least twenty percent (20%) of the dwelling units will be rented or conveyed subject to an incentive housing restriction. Such restriction shall require that, for a least thirty (30) years after initial occupancy of the development, the dwelling units will be sold or rented at, or below, prices that will preserve the units as housing for which persons pay thirty percent (30%) or less of their annual income, where the income is less than or equal to eighty percent (80%) or less of the area median income. In determining compliance with this Section, the Commission will use regulations or guidelines published by the Connecticut Office of Policy and Management, the Connecticut Department of Housing, or any other successor agency designated in accordance with Conn. Gen. Stats. §8-13m. to 8-13x.
 - 2. Affordability Plan. Each applicant for multiple housing units within the Planned Neighborhood Housing development will provide an affordability plan that will detail the administration, monitoring, and enforcement of the dwelling units to be sold or rented at below market rates as described above. The plan will include proposed deed restrictions or covenants, lease agreements, common interest ownership documents, bylaws, rules and regulations, sample income calculations, and any other information as the Commission may require, to establish compliance with this Section and Conn. Gen. Stats. §8-13m. to 8-13x.
 - 3. Designation of Administering Agency. The applicant will indicate the name, address, and other contact information for the agency that will administer the sale or rental of the dwelling units that are subject to the below-market sale or rental in accordance with this Section.
 - 4. Affordable dwelling units may be offered for sale or rental in individual, public, cooperative, or condominium ownership. Documentation as to management, organization, and incorporation of applicable ownership associations will be submitted to the Commission at the time of filing the application for a Planned Neighborhood Housing development.
 - 5. Affordable units shall be of a construction quality and design that is comparable to market-rate units within the development and shall be dispersed throughout the development.
- B. No dwelling unit shall contain more than three (3) bedrooms and no more than one-third of the total number of dwelling units in the Complex shall contain three (3) bedrooms.
- C. No building shall contain more than six (6) dwelling units
- D. Community buildings, recreational facilities and open spaces designed for, and used principally by, the residents are permitted as accessory uses.

- E. Building Height: Maximum height of 28 feet if one-story and 35 feet if two-story.
- F. Separating distance for buildings with dwelling units within the Complex: Minimum separating distances shall be not less than twenty (20) feet for one-story buildings, and thirty-five (35) feet for two-story buildings.
- G. Setbacks: All buildings shall be setback 50 feet from property lines of residential properties that abut the perimeter of the Complex parcel(s) and 35 feet from existing town or state right of ways.
- H. Sewage Disposal: Each dwelling unit shall be connected to an approved sewage disposal system.
- I. Water Supply: Water Supply facilities must meet the requirements of the State Health Code.
- J. Parking, driveways, and roads: The following standards shall apply to parking, driveway and roads:
 - 1. All public streets within the Planned Neighborhood Housing Development shall be constructed in accordance with these Regulations, town ordinance and the Town of Columbia Construction and Development Standards.
 - 2. All internal roadways and driveways shall be private roads and shall be maintained by the owner or Homeowners Association.
 - 3. Emergency Vehicle Access
 - a. All streets must provide adequate fire truck and emergency vehicle access.
 - b. Developers are encouraged to design roads and accesses that minimize the expanse of pavement through the employment of "natural" roadside surfaces that accommodate the turning radii and clearances necessary for the maneuvering of emergency vehicles.
 - 4. Driveways shall be constructed in conformance with Section 8.12 of the Zoning Regulations of the Town of Columbia and shall be bituminous concrete.
 - 5. There shall be at least two parking spaces provided for each single-family dwelling unit. One of these parking spaces may be provided within an attached garage.
 - 6. Guest parking shall be provided throughout the complex in small lots or pull-off areas in close proximity to dwelling units and other areas such as near a community building or passive/active recreation areas.
- K. The entire Planned Neighborhood Housing Complex shall be owned by one entity. Driveways, parking areas, utilities, water, sewage, streets, landscaped areas, accessory buildings, structures and facilities, and open spaces designated on the site plan shall be owned and maintained by the owner of the Complex. If the owner is a common interest ownership association pursuant to the Connecticut Common Interest Ownership Act of the Connecticut General Statutes, the Association By-Laws and Association Rules shall be reviewed and approved by the Town Attorney.
- L. All utility transmission and service lines shall be underground, except when waived by the Commission due to site limitations.

- M. Architectural considerations: All buildings shall share a common exterior architectural theme and be compatible with other dwellings in Columbia. Each dwelling unit shall contain a basement or attic for storage.
- N. Home office uses shall be allowed in conformance with Section 8.5.1 of the Zoning Regulations of the Town of Columbia with the exception that no additional commercial vehicle is permitted.
- O. Adequate street lighting for internal roads shall be provided.
- P. Appropriate signage shall identify the entrance to the complex, intersections, directions, and patterns of vehicular movement. The placement, size and height of the signs shall conform to the requirements of Section 62.
- Q. A minimum of 15% of the lot shall be preserved in perpetuity as dedicated open space for conservation, recreational or agricultural use where appropriate. Such open space shall be located so that it is an integral part of the residential area, readily accessible to residents of the parcel and to necessary maintenance equipment except where such accessibility would interfere with a stated conservation purpose or agricultural use.
- R. The Planned Neighborhood Housing Complex may be developed in stages. The initial site plan shall show the full development with the first stage depicted in detail; future stages may be shown in concept. Future stages shall require Special Permit approval by the Commission.

52.7.19.6 Evaluation Criteria: In considering the proposed application, the Planning and Zoning Commission shall be guided by the following:

- A. The existing and future character of the neighborhood in which the use is to be located.
- B. The location of principal and accessory buildings in relation to one another.
- C. The height, bulk, and density of buildings in relation to one another.
- D. Traffic circulation within the site; amount, location, and access to parking; traffic load or possible circulation problems on existing streets; pedestrian safety throughout the site and in the immediate neighborhood.
- E. Availability of water to the site and adequate disposal of sewage and storm water.
- F. Safeguards to prevent detrimental impact to adjacent property and the neighborhood in general.
- G. Provisions for open space, common areas and amenities, including size, configuration, purpose, connectivity to other open space, public and environmental benefit, ownership, maintenance, and control. The proposed purpose, use and management of dedicated open space shall be reviewed based on the criteria listed in the open space section of the Columbia Plan of Conservation and Development.

52.7.19.7 The Commission may provide for bonding of all required common improvements and for soil and erosion control.

52.7.19.8 The owner of the Complex is responsible for the maintenance of all common improvements and for maintaining the provisions of the approved Special Permit and Site Plan and the verification of occupancy qualifications.