



MANCHESTER-BY-THE-SEA

BOARD OF SELECTMEN • TOWN HALL
Manchester-by-the-Sea, Massachusetts 01944-1399
Telephone (978) 526-2000 FAX (978) 526-2001

June 22, 2021

Michael Busby, Relationship Manager
MassHousing Finance Agency
One Beacon Street
Boston, MA 02108

RE: Proposed 40B – The Sanctuary at Manchester-by-the-Sea, MH ID No. 1116

Dear Mr. Busby,

On behalf of the Board of Selectmen of Manchester-by-the-Sea, I write to convey our grave concerns about the appropriateness and feasibility of the Sanctuary at Manchester-by-the-Sea project seeking project eligibility approval from MassHousing. Earlier this year and for several months in 2020, during the pandemic, the Board expended considerable hours and taxpayer dollars meeting with the same applicant for virtually the same project pursuant to the applicant's request for Local Initiative Project support from the Board. The negotiations ended without reaching an agreement because the Board was unable to reach a position mitigating many significant concerns, which we outline here. The site and proposed project are simply incompatible. The project does not warrant a positive Project Eligibility Letter from MassHousing.

The key aspects which make this project inappropriate are that the project:

- 1) Fails to meet the MassHousing Sustainability Development Principles per the applicant's own application.
- 2) Overturns local zoning. The proposal is in a section of town zoned for limited commercial development. This is not just a request for greater housing density but a request to put housing where no housing is allowed by local zoning.
- 3) Ignores and damages our Local Housing Production Plan. We are actively working on appropriately scaled projects properly integrated within our central village area.
- 4) Defies financial reality. The applicant's financial analysis shows, in addition to a needed loan, a \$36 million private equity stake being required that will take 60 years to pay back with no interest. No sound businessperson would ever make such an investment.

- 5) Degrades the environment. From massive blasting the top 40 feet of a granite hilltop to water quality concerns due to runoff, to an undefined on-site wastewater disposal system, to vernal pools on site and nearby, the environmental impacts of the project are unacceptable. Some 20+ waivers from our local wetland regulations are being requested.
- 6) Raises major safety concerns. With just a single access for 136 units, a steep (6-8% grade), long and winding driveway and no internal sidewalks or bike lanes, the project raises significant public safety concerns.

1. **MassHousing Sustainability Development Principles are not met.** Not a single criterion under Method 1 of the self-assessment as filled out by the applicant is met. Under Method 2, the applicant claims compliance with less than 30% of the criteria. The project fails to meet these principles in the following ways:

Claiming credit under Concentrated Development and Mixed Uses is a stretch at best. This is an undeveloped site in an area comprised mostly of conservation lands. There is no existing neighborhood as that term is normally used. Any development would qualify as a higher density use given the area is undeveloped.

Despite claims by the applicant, the project does not Advance Equity nor is it reflective of Making Efficient Decisions. The many public meetings that the Board of Selectmen held on the project attempted to make the project a better fit. We were unable to reach agreement on how to do this. This project does not represent an inclusive community planning effort that ensures social, economic, and environmental justice. The proposed large apartment complex is situated at the very outskirts of town, isolated from the center of the community. The environmental and safety issues are inconsistent with ensuring “future generations are not compromised by today’s decisions” as there is a strong potential for environmental degradation and risking the safety of the new residents. Yes, the Town needs more diverse and affordable housing but not in this location and as proposed.

The project absolutely does not Protect Land and Ecosystems. The environmental impacts of this project present some of our gravest reservations. The only claim the applicant is making here is reference to an informal commitment to placing a conservation restriction on the lands not used in the development of the project. The bulk of this remaining land is wetland and undevelopable. More environmental concerns are found below.

Use Natural Resources Wisely. Given that the project requires blasting away 40 feet of hilltop ledge to create a buildable site, it is hard to understand how the project proponents can claim to be using natural resources wisely. The very steep, granite hill upon which the project is proposed is simply unsuited for this intense a use.

Expands Housing Opportunities. Yes, the project adds to the community’s rental housing stock and a few units will be available to disabled people, but again, it is the wrong location. This site

is away from transit, does not provide housing near jobs and available services, and is completely out of character with our town. No other building in Manchester comes close to the size and scale of the proposed apartment complex. The project is incompatible with our recently updated Housing Production Plan and is counter to what our local zoning calls for in this section of town. Proposing a multi-story apartment complex in a zone that is designated only for limited commercial uses is inconsistent with our local planning efforts.

The project does not Provide Transportation Choice. Due to its isolated location and being perched on a steep hilltop, personal transportation is the only option. Proximity to Route 128 does not mean the project is meeting this criterion. This project does not prioritize “rail, bus, boat, rapid transit, shared ride services, bicycling and walking.” In fact, the developer resisted even modest measures to promote bicycling and walking. The Town, under its existing Complete Streets Policy, will extend the sidewalk further up School Street should development occur in this part of town. Thus, at a minimum, the applicant should be required to build a sidewalk along the project access drive.

Increase Job and Business Opportunities. Here again we see only a modicum of benefit – the few jobs related to the running of the apartment complex are the only increase in permanent jobs we will see from this project. It does nothing to attract new businesses and jobs to locations “near housing, infrastructure and transportation options”. Nor does it advance the State’s goals of expanding “access to education, training, and entrepreneurial opportunities and supporting growth of local businesses, including sustainable natural resources-based businesses . . .”

While the project will meet energy star standards, it is missing opportunities to advance the State’s goals of Supporting Distributed Generation Technologies (solar arrays would be a natural for the large roof space proposed) and other measures to reduce or Eliminate the Consumption of Fossil Fuels.

The applicant claims Consistency to the Regional Plan without providing any explanation. The project is inconsistent with large portions of the regional plan given its isolated location and natural resource constraints on and around the site. The regional plan advocates for new development to take place within existing community centers, not on the fringes in high natural resource areas. The regional plan calls for the protection of our water resources. This project poses threats to 50% of Town’s drinking water. The applicant has no qualifications to opine on regional planning, and in particular no experience or history with Manchester’s planning. MassHousing should disregard the entirety of the applicant’s representation in this regard.

We are not asking for anything more than the objective application of MassHousing’s own Sustainability Development Principles which, due to the extreme constraints of this proposed site, cannot be met. Thus, it would be inconsistent with these principles to grant a Project Eligibility Letter.

2. **Inconsistent with Local Zoning Regulations and Housing Production Plan.** The proposal not only seeks a much higher level of density than anything allowed under our zoning, but also proposes housing in an area zoned only for limited commercial uses, hence the name - Limited Commercial District (LCD). There are no residential units in this part of town. In fact, a large majority of the LCD consists of parcels permanently conserved as natural areas. The Town zoned this area for limited uses due to the abundance of natural resources in the area, particularly its water resources as it serves as a major water recharge area serving the Town's principal drinking water well. The area includes numerous State mapped vernal pools, rare and endangered species, and other significant natural resources. The project site includes vernal pools and large wetlands. Thus, to grant high-density residential use goes completely against the local planning efforts that have been underway for decades.

The Town has recently started exploring options for allowing mixed uses within the LCD on lands that are suited for more intense development, not including this 40B parcel. For example, one landowner is working with the Town on plans for a continuing care complex that would include independent to assisted care living arrangements for seniors as well as workforce housing. This type of collaborative development is something the Town is much more interested in pursuing. The proposed 40B project is counter to these efforts.

3. **The Town recognizes the need to diversify its housing stock and is working to do so.** Our recently adopted Master Plan calls for continued efforts to create more diverse and affordable housing. Voters approved the creation of the Manchester Affordable Housing Trust in 2016 and have been providing substantial funding to the Trust since its inception. Manchester also recently updated its Housing Production Plan that provides a clear and logical path forward to achieving our housing goals. This plan includes partnering with our local housing authority on a major upgrade and expansion of units that will, in conjunction with a few other integrated, appropriately scaled projects, get the Town above a 10% subsidized affordable housing stock threshold. The Trust has just completed the preliminary feasibility study that sets the stage for this important project to move forward. (Note the Planning Board letter attached for more details on the extensive affordable housing efforts underway by the Town.)

One of these projects was finalized just a few weeks ago. With an impressive local fundraising effort of over \$1.4 million, and partnering with the North Shore CDC, a 29-unit complex in the center of town will be 100% deed restricted to affordable housing. The Citizen's Initiative for Manchester Affordable Housing spearheaded this successful project. (Note the Manchester Affordable Housing Trust letter attached.)

The Town affirmed its commitment to completing its Housing Production goals at its 2021 Annual Town Meeting held June 21, 2021. By a near-unanimous vote it requested the Board of Selectmen and the Manchester Affordable Housing Trust to pursue in-town projects that are consistent with our village character and are consistent with Sustainable Development Principles. Additionally, voters expressed their opposition to the proposed 40B project. Earlier this year over 700 residents signed a petition in opposition to the project. (Note the attached petition from CIMAH, the citizen's group promoting

affordable housing in Manchester. Also note the attached letter from the Manchester Planning Board regarding affordable housing and zoning efforts.)

4. **The very high cost and unrealistic financial viability of the project should prevent MassHousing from issuing a Project Eligibility Letter.** Based on the applicant's pro-forma application, the per unit cost is more than \$550,000, even when using a very low cost per square foot estimate. Per the applicant's submittal, in addition to a large loan, an additional \$36 million in cash equity is needed for the project. The applicant shows the project generating an annual profit of approximately \$600,000. That's a 60-year payback on the required cash investment, with no profit on the original investment – a financially unsustainable proposition. Thus, there can be no finding that the project is financially viable. This is in large part due to the very high site improvement costs necessary, further demonstrating that this is the wrong location for such a project. (Note the attached Planning Board letter which goes into greater detail on the finances of the project.)

5. **Environmental Degradation.** As noted under the zoning discussion, the project lies within an extremely sensitive natural resource area. The site shares boundary lines with conservation lands owned by the Town, by the Manchester Essex Conservation Trust and by the Trustees of Reservations. The site and the adjacent parcels contain significant wetlands. Cedar Swamp, which lies adjacent to the site, is an essential part of the Town's well that supplies 50% of our drinking water for residents. The area also contains mapped and unmapped vernal pools. The applicant's own wetland consultant reported "three wetland areas within the site contained the necessary biological and physical criteria for certification as vernal pools." The area is home to an array of rare and endangered species. There is concern that unnaturally warm runoff from paved and constructed surfaces could impact endangered fish species. (Note the attached letter from MECT detailing the many natural resources including the work of their Water Resources Consultant.)

The site is a granite hill that rises steeply from the public road. To develop the site a massive amount of blasting must be done. The hill rises to an elevation of over 150 feet. But to build the apartment complex the developer plans to blast away the top 40 feet of the hilltop encompassing over three acres. This is a huge amount of blasting, and the impacts are likely to alter water flow. The Board remains concerned about the possible collateral damage of such extensive blasting to nearby structures.

Controlling water runoff from the disrupted granite hilltop will be very difficult. With critical water resources surrounding the site it is imperative that no net gain in sediment laden runoff be created. In addition, the applicant proposes a large on-site wastewater disposal system. Again, the feasibility of building such a system that operates to the highest environmental standards is questionable and at best is extremely expensive to build and operate. Nutrient and chemical runoff into Cedar Swamp and into our drinking water system is a major concern. Consider the most recent State-mandated regulation regarding certain "forever" chemicals – PFAS. The new threshold is 20 parts per trillion – it will take very little to contaminate drinking water given the new, extremely low threshold here. Adding to our concerns is the fact that the applicant seeks waivers from over 20 local wetland regulations. These

regulations were adopted locally to protect our water resources. To summarily disregard them raises major red flags for us.

Protecting our drinking water is of paramount importance to us. We cannot take chances here. If our aquifer becomes contaminated/compromised by the construction of this project, it will be too late to do anything about it under a timeframe that will allow us to continue to supply potable water to our community.

6. **Public Safety Threats.** The project only has one point of access/egress along a very long, steep, and winding road. According to the developer, no other access is possible given the site constraints. The grade of the road is as much as 8%. Our local regulations call for at least two access points for projects with over 20 units; this project proposes one access point along a very steep driveway for 136 units. Our local regulations, typical of most, also call for cul-de-sacs to be a maximum length of 500 feet, not the nearly 1900 feet proposed in this ill-sited project.

The steep site with one poor access route at best gives us serious pause. Emergency access up the steep driveway could easily be blocked in a storm by fallen trees, ice or deep snow. The Town hired a well-respected and highly experienced traffic engineer to conduct a review of the proposal as initially presented to the Board for Local Initiative Project approval. His analysis highlighted the concern over just one access road and the steep, curving nature of the driveway. His strong admonition was to insist on a second means of access/egress from the proposed apartment complex. Fleeing residents would be in direct conflict with arriving public safety apparatus. A crash on the access road would block all access to or from the apartment complex. In a public meeting, the developer acknowledged that the proposed single access road made the project less safe.

Our traffic consultant also strongly recommended that accommodations be made for walkers and bikers. The Town has a Complete Streets policy and will be extending sidewalks past the proposed site as future development is approved in the area if and when utilities are extended across Route 128. The isolated site needs all the help it can get to integrate into the community. At a minimum, the project needs sidewalks along the internal access road. Such a sidewalk should meet accessibility requirements as promulgated by the Massachusetts Architectural Access Board. Given the steepness of the site, a handicapped accessible sidewalk connecting to the Town's sidewalk system will be challenging and expensive, exacerbating the financial viability of the project.

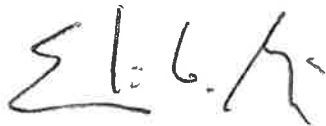
Both aspects of public safety, the ability to respond to emergencies at the site and safe access to and from the complex, once again bring into serious doubt the suitability of this proposed site. No one benefits from a housing project that is isolated, poses real risks to the residents of the complex, and jeopardizes the safety of emergency personal responding to incidents. (Note the Town's Traffic Consultant's Report provided in the attached CIMAH letter.)

It is worth noting earlier 40B projects that ultimately were denied a permit by the MA Housing Appeals Commission. In Lexington Woods vs. Waltham, the MA Housing Appeals Commissions upheld the denial

by the Waltham Zoning Board of Appeals. The project proposed 36 units (100 less than this project) and a single access road of nearly half the length and of similar grades. In the Lexington case, it was determined the single access road was too great a safety risk and out of compliance with local roadway standards – an analogous situation to what we are dealing with in this application. A similar case in Norwell had the same outcome.

In conclusion, the proposed Sanctuary at Manchester-by-the-Sea would endanger its own residents and emergency personnel, put the Town's water supply at risk, fail to provide the integrated, diverse, affordable housing that our community has embraced, disrupt long-standing land-use planning, and fail to meet any of the goals of MassHousing Sustainability Development Principles. The project even fails to make a profit for its investors. We are convinced that ultimately the project will not be permitted. Please save all involved the time and expense of protracted proceedings by refusing to grant a Project Eligibility Letter.

Sincerely,



Eli Boling, Chairman
Manchester-by-the-Sea Board of Selectmen

CC: Senator Bruce Tarr
Representative Brad Hill
William Joyce, Executive Director, MAAB

Enclosures -- Supplemental Letters from:
The Manchester Planning Board
The Manchester Conservation Commission
The Manchester Affordable Housing Trust
The Manchester Essex Conservation Trust
The Citizens Initiative for Manchester's Affordable Housing



MANCHESTER-BY-THE-SEA

PLANNING BOARD

10 Central Street
Manchester-by-the-Sea, Massachusetts 01944
Ron Mastrogiacomo, Chairman

June 14, 2021

Massachusetts Housing Finance Agency

Via the Manchester Board of Selectmen,

Re: SLV 40B Development, Manchester by the Sea

Dear MFHA Members,

Thank you for the opportunity to provide comments on the proposed SLV development in the Town's Limited Commercial District. This letter provides comments from the Manchester Planning Board based on materials in the Application for Site Approval submitted to the MHFA on April 16, 2021 and material submitted to the Manchester BOS previously. The topics covered in this letter are:

- Site suitability
- Design
- Economic viability
- Affordable housing

Unfortunately, there is a lack of detailed information on many aspects of the project, which make it difficult to evaluate and which limits the detail of our comments. In particular, there is insufficient information about items that are particularly relevant to determining site suitability, including:

- Soil suitability for Title 5 on-site septic system
- Abbreviated Notice of Resource Area Delineation (ANRAD)
- Stormwater management proposal, including "alternatives analysis" to stormwater within 50 feet of riverfront
- Cross section analysis showing profiles of the site and areas to be removed

Project Context

The site of the proposed SLV development site has dramatic ledges, thin soils and heavy vegetation and is in an area of sensitive environmental resources that serve to protect our drinking water (Zone 3, draining into Zone 2). The site will require considerable removal of ledge and the development of large detention basins to mitigate the impacts of stormwater runoff. The proposed onsite septic treatment systems will require considerable site work including the removal of large numbers of trees to create a

leach field area. This site abuts Manchester’s largest preservation area which is well used for passive recreation.

For these reasons the Board asks the MHFA to consider the potential impacts a project of this size and with on-site sewage treatment may have during the immediate construction phase and long term on these valuable resources.

Site Suitability

- 1) Isolated site: The site for the proposed development is over a mile from the downtown and is separated by the Route 128 highway. The site is isolated and the applicant correctly indicates that the site is not walkable to transit, schools, or other amenities (page 22 of Sustainability Development Principles). The isolated location near the highway entrance ramps is oriented towards “commuter” residents while the town is endeavoring to make plans and modify its zoning to encourage more “community” residents.
- 2) Challenging topography: The project is perched on a hill with steep topography that presents challenges for public safety, walkability and accessibility. The building will sit at the crest of the hill, 100 feet above School Street. The project site is partially bordered by an existing cliff face and is inherently dangerous on its eastern edge. The proposed access way will include a steep grade, without a sidewalk, and is therefore not compliant with ADA requirements. In order to allow for ADA compliant sidewalk for site access, a large zig-zag sidewalk and ramp system would have to be constructed which would increase site costs and degrade an even larger portion of the site than is currently planned for the road.

Accommodating these site conditions requires the removal of at least 40 vertical feet of ledge from the hilltop (from elevation 152 to a 112). ([See Cross Section Exhibit 5/20/20](#) prepared by Bohler Engineering and presented to the town and excerpted below. This plan shows an earlier design but with the topography. No cross section was included in the April 21 application.)





The 1900-foot-long access road is more than three times longer than a cul-de-sac allowed in the town's subdivision control bylaw (section 8.3.7) and is further challenged by the steep slopes. While the Fire Chief has indicted sufficient access, there are other safety concerns with steep access of this length. There is no proposed second means of access.

- 3) Lack of outdoor recreation space: While the project abuts a conservation area, the building is bounded on the west by 42" high vinyl safety fencing and, on the east, by 42" fencing atop a retaining wall (see Civil Engineering plan). On all sides, the site slopes quickly away from the building and there is limited outdoor recreation space within the project itself, largely due to the topography.
- 4) Location within Zone 3 of a town water supply: Zone 3 is defined as the surface watershed area that contributes recharge to the aquifer through overland runoff. For the Lincoln Street well, this surface runoff is contributed in two ways: 1) overland runoff from the sides of the valley which recharges directly into the outcropping sand and gravel aquifer material; and 2) runoff into the streams, a portion of which enters the aquifer via induced infiltration. Surface runoff provides a significant proportion of the water reaching Sawmill Brook and its feeder streams which provide water to the Lincoln Street well. This is reflected in the "flashy" response of streams to heavy rainfall events. Without proper mitigation, the addition of considerable impervious surfaces, on-site sewage treatment, and the paved access way could have a direct impact on drinking water quality and downstream flooding.

Design Considerations

We appreciate the developer's effort to reduce the height of the proposed building by one story from the original plan.

Preliminary Architectural Plans show a building design and landscape plan with a building mass and exterior design that is not consistent with the character of the town. The size and scale of this project make it larger than any other building in town by a factor of almost 2. It is larger than the Regional High School and the local elementary school combined. It will include the largest parking area in town, and will be the single largest consumer of water and have the largest on-site septic system.

The use of scale and building massing techniques as well as the careful choice of materials are essential to produce a finished product that compliments and belongs to our historic New England town. The

proposed design lacks in refinement at this point of the design process. We note that maintaining town character is a key element of the recent Master Plan.

With 136 units, it will be by far the largest housing complex in Manchester, and one of the largest on the North Shore. It will represent over 5% of the town's total stock of housing. The scale and mass of the building require an elegant and creative design that will help it fit appropriately within the context of the town's diverse and historic character.

Economic Viability of the Project

We are all aware that in the past year construction materials and labor costs have skyrocketed. We believe that the fiscal analysis of this project should be revised and resubmitted based on 2021 cost projections.

As it stands, the total development cost presented by the sponsor is \$75 Million, or \$551,000 per unit. As a rental complex it is not clear that the project approaches economic viability. This is a serious issue with this specific project and the Town stands to suffer the risk of a project failing mid-stream, as many large-scale projects nationwide have done, leaving the Town to care for a partially disturbed site with compulsory site management costs to mitigate impacts to surrounding lands as well as being forced into a situation requiring revised zoning to attract some other entity to make use of the potentially abandoned project and for some other unforeseen use.

It is easy to imagine that the size and cost of the project is the result of extensive site development, which includes earth removal to create a suitable building site and to allow for an accessible driveway for vehicles. However, the budgeted allowances for site work (\$500,000) and road work (\$400,000 or \$210/linear foot) are far less than one would expect for a steep rocky site of this type. Another largely unknown cost will be attributed to providing utilities, including an extension of the public water main across Route 128 and the construction of a suitable sewage treatment facility near environmentally sensitive wetlands. We suggest that these costs be examined closely and included in the *pro forma*.

Perhaps a consequence of the high site development cost is a serious constraint on the building construction budget. SLV's proposed construction budget is \$49,000,000 or \$175 per square foot for the 280,000 SF building. This figure apparently includes the contractor's overhead and profit as well as contingency. This seems to be a very low estimate to construct a three-story building with elevators over a podium with underground parking. (Perhaps the area of the garage is included in the estimated gross footage of the building, which might partially explain the figure.) The lack of design features may be an attempt to keep the cost of construction as low as possible. That said, a construction cost for a simple building of this scale and use would normally be \$250 or more per square foot. This raises questions about the reliability of the cost estimate, the durability of the building systems, the quality of amenities for the residents, and the long-term performance of the property

Detail of development costs from page 13 of the SLV application is shown below:

Subtotal - Acquisition Costs	\$4,080,000
Construction Costs-Building Structural Costs (Hard Costs):	
Building Structure Costs	\$46,373,100
Hard Cost Contingency	\$2,643,655
Subtotal - Building Structural Costs (Hard Costs)	\$49,016,755
Construction Costs-Site Work (Hard Costs):	
Earth Work	\$500,000
Utilities: On-Site	\$1,900,000
Utilities: Off-Site	\$2,000,000
Roads and Walks	\$400,000
Site Improvement	\$1,100,000
Lawns and Plantings	\$400,000
Geotechnical Condition	\$200,000
Environmental Remediation	\$0
Demolition	\$0
Unusual Site Conditions/Other Site Work	\$0
Subtotal - Site Work (Hard Costs)	\$6,600,000
Construction Costs-General Conditions, Builders Overhead and Profit (Hard Costs):	
General Conditions	\$0
Builder's Overhead	\$0
Builder's Profit	\$0
Subtotal - General Conditions, Builder's Overhead & Profit	\$0

Detail from page 12 of the application, summarizing the financial elements of the proposal:

for MassHousing-Financed and New England Fund ("NEF") Rental Projects

Section 5: FINANCIAL INFORMATION

In order to issue Site Approval, MassHousing must find (as required by 760 CMR 56.04 (4)) that an initial pro forma has been reviewed and that the Proposed Project appears financially feasible and consistent with the Chapter 40B Guidelines, and that the Proposed Project is fundable under the applicable program.

Initial Capital Budget

Sources

Description	Source	Budgeted
Private Equity	Owner's Cash Equity	\$32,220,915
Private Equity	Tax Credit Equity	\$0
Private Equity	Developer Fee Contributed or Loaned	\$0
Private Equity	Developer Overhead Contributed or Loaned	\$4,662,279
Other Private Equity		\$0
Public/Soft Debt		\$0
Subordinate Debt		\$0
Permanent Debt		\$38,374,755
Permanent Debt		\$0
Construction Debt	<i>for informational purposes only, not included in Sources T</i>	\$0
Additional Source		\$0
Additional Source		\$0
Total Sources		\$75,257,649

While the sponsor’s development budget is preliminary, the proposed rents and operating expenses indicate that the project as planned can support a permanent mortgage of slightly more than \$38,000,000. This is based on a Net Operating Income (annual revenue minus expenses) figure of about \$3,000,000, as shown below

Initial Rental Operating Pro-Forma (for year one of operations)		
Item	Notes	Amount
Permanent Debt Assumptions		
Loan Amount	Lende Brookline Bank	\$38,374,755
Annual Rate	4.75	0.00%
Term	30	0 Months
Amortization	30	0 Months
Lender Required Debt Service Coverage Ratio	1.25	0.00
Gross Rental Income		
		\$4,615,584
Other Income (utilities, parking)	some surplus parking spaces rented and an average of :	\$142,800
Less Vacancy (Market Units): 5% (vacancy rate)		\$237,919
Less Vacancy (Affordable Units): 5% (vacancy rate)		\$0
Gross Effective Income		
		\$4,520,465
Less Operating Expenses		\$1,160
Net Operating Income		
		\$3,002,713
Less Permanent Loan Debt Service		\$2,402,171
Cash Flow		\$0
Debt Service Coverage		1.25

A detailed operating budget was not included in the application, so it is hard to say if the total of \$11,000 per unit in annual operating expenses is reasonable. But even if it is accurate, the supportable mortgage is well short of the total project cost of \$75,000,000. There is a gap of over \$36,000,000. How is this gap to be filled? SLV cites the contribution of its own overhead representing about \$4,662,000 and its own cash equity of \$32,000,000 to fill this gap. On page 16 of the application, SLV seems to indicate that there is no cash flow from the project. That is clearly a typo, since it is apparent that there will be annual cash flow of about \$600,000 after debt service. But even with depreciation and other tax benefits, \$600,000 per year is not an acceptable return on a private investment of \$36,000,000. Indeed, it would take up to 60 years just to pay back the investment. There may be a credible explanation. Perhaps the figures presented in the application include typos or are based on faulty assumptions. Whatever the explanation may be, there is an obvious need for the sponsor to clarify its development strategy

Housing affordability and diversity

Ironically, while technically “affordable” as outlined in the Application, the project will offer only 29 apartment units with rents limited to 80% of Area Median Income. The rest of the units will be market rate. Yet these “affordable” units will have rents higher than most other apartment rentals currently in town, with one-bedroom units starting at \$1,905 per month and three-bedroom units at \$2,406. The

market rate units are considerably higher, topping out at \$3,720 for a three-bedroom unit. There are condo units in town renting for less.

The project application incorrectly states that Manchester has “very little rental housing of any kind” (page 22 and page 24, Sustainable Development Scorecard). The recently updated Housing Production Plan states that 29.9% of Manchester’s housing stock is occupied by renters and almost 20% of these rental units are in facilities with more than 3 units (Table 1-2 of the Manchester Housing Production Plan). Given the lack of vacancy there is an obvious need for more rental housing as well as greater housing diversity, but Manchester has more than “very little” rental housing, and the Town is actively striving to encourage the development of truly affordable housing units.

In 2015 the Town completed its first Housing Production Plan and created an Affordable Housing Trust in 2016. The Trust has been working diligently to understand and address the Town’s housing needs with a variety of strategies. The Town’s 2019 Master Plan also identified the lack of diversity and affordability of housing as principal challenges and the Planning Board is committed to implementing the Plan’s recommendations to support housing needs.

The Town is taking active and deliberate steps to meet local and state housing goals, and the following list summarizes these initiatives:

- Annual CPA Funding to the Manchester Affordable Housing Trust (MAHT)
- MAHT Notice of Funding Availability of financial assistance for the creation of new affordable housing projects
- Financial support provided by over 800 private citizens for the recent purchase by a non-profit organization of a 29-unit naturally occurring affordable housing complex near the Town’s center that is being converted to deed restricted affordable housing targeting households at or below 60% AMI.
- Feasibility Study funded by the MAHT of a 5-acre Town-owned site for Affordable Housing
- Zoning Update under consideration by the Planning Board to align regulations with the Housing Production Plan and Master Plan goals (underway) including:
 - Proposed change to current zoning bylaw to loosen restrictions on ADU
 - Proposed change to current zoning bylaw to allow a Residential Conservation Cluster
 - Proposed change to current zoning bylaw to allow Senior Housing
 - Overlay District Feasibility Study considering mixed uses including housing.

Other more long-term efforts include:

- A Feasibility Study is underway to redevelop Manchester Housing Authority apartment complexes to substantially increase the number of deeply affordable units from 84 units to over 150 units and identify a sustainable operating and maintenance framework (in coordination with DHCD) with a working timeframe of beginning design and construction by 2025
- A Feasibility Study to assess the potential for moving the Town’s Wastewater Treatment Operations from its downtown waterfront location to allow redevelopment of this site for a mix of uses including housing (underway).

- The Town is prioritizing community affordable housing that is integrated into existing neighborhoods and of a scale that makes them appropriate and welcome. Even an earlier 40R Study in the Town's Limited Commercial District and the current Overlay District Study (including the area of the SLV proposal) had the intent of creating a new walkable and integrated mixed-use neighborhood with a diversity of housing options.

The Board also strongly supports housing that would be restricted to households with incomes at or below 60% of AMI. The majority of existing low-income housing is only available at the local Housing Authority apartment complexes, which are mostly age-restricted. The Board further recommends that preference for affordable units be afforded to residents of the Town.

Conclusion

In conclusion, we certainly recognize that there is considerable local opposition to the proposed development of the 136-unit complex as described in the Application for Site Approval. This is not surprising in a small scenic town, and we admit that Manchester has been negligent in encouraging housing production by creating zoning ordinances that have discouraged the development of diverse and affordable housing. One significant outcome of the 40B process to date has been the growing recognition of the urgent need to come to terms with the principles outlined in the newly adopted Master Plan. These include the idea that the Town has an obligation to do what it can to promote new housing for its own citizenry and that a diversity of housing opportunities serves the Town's own economic and social best interests. Furthermore, as listed above, a number of specific initiatives are in place or are under serious consideration to implement these goals. For the reasons outlined above, it is not clear at this stage that the 40B application as currently presented offers the best alternative to meeting these needs or that the project demonstrates financial feasibility.

Sincerely,

Ron Mastrogiacomo

Ron Mastrogiacomo, Chairman

Voted June 14, 2021



MANCHESTER-BY-THE-SEA

MANCHESTER-BY-THE-SEA AFFORDABLE HOUSING TRUST
TOWN HALL
10 Central Street
Manchester-by-the-Sea, Massachusetts 01944
Technical Assistance provided by Sue Brown, Town Planner
Telephone (978) 525-6436 browns@manchester.ma.us

John Feuerbach, Chair
Margaret Driscoll
Nancy Hammond
Joan McDonald
Christopher Olney

May 27, 2021

Board of Selectmen
Town of Manchester by the Sea

Dear Board members:

We are writing in response to the recent call for comment on the Sanctuary development, the 40B development on upper School Street proposed by SLV. As you consider the SLV proposal, the Manchester Affordable Housing Trust (MAHT) would like you to consider the following community affordable housing initiatives currently pursued by MAHT. We also offer comments to mitigate certain aspects of the SLV development. We hope that in your comments to the state that you will point out that the MAHT and the Manchester Housing Authority (MHA) have just concluded a proof-of-concept development analysis for the rehabilitation and introduction of new units at 3 MHA properties- Newport Park, the Plains and Loading Place- and a town owned site on Pleasant Street. While preliminary in scope, and in the community vetting stage, the MAHT and MHA plan envisions the development of approximately 90 new community affordable housing units on the sites, to at least match the 84 current MHA units. The plan considers the rehabilitation and upgrade of the 84 current MHA units. Once initial community review has been undertaken, the MHA and MAHT will move on a development Request for Proposals to seek a development partner who will further advance the plan, continue community vetting and ultimately apply for required funding. MAHT looks to move on the RFP in fall 2021. It is our expectation that when concluded all new units will qualify for the Commonwealth's Supportive Housing Inventory (SHI)

Furthermore, the MAHT recently participated in the 29 -unit Powder House property acquisition with the North Shore Community Development Corporation (NSCDC). The

acquisition involved the purchase of a naturally occurring affordable housing complex near the downtown. MAHT received significant financial donations from town residents seeking to support the development; the MAHT in turn transferred the funds to NSCDC, enabling it to close on the property transaction. The plan warranted MAHT support because NSCDC will commit to preserving and creating long-term affordable rental units at the site and will take steps to qualify all the units for inclusion in the state's SHI.

In addition, MAHT continues to receive funding support from the town's Community Preservation Committee to promote and create community affordable housing. In turn, we continue to advertise the availability of the funds for the creation of community affordable housing, and have in place a funding Request for Proposals, to attract appropriate development proposals.

With regard to mitigation measures for the SLV proposal, MAHT supports the following measures:

- 1) Promote a unit rental mix that addresses the needs of low-income residents. Based on the town's recent housing study we continue to support the provision of rental units affordable to households earning at or below 60% of the Area Median Income, rather than the 80% of AMI currently proposed.
- 2) Enhanced energy efficiency measures incorporated into the construction. It is our firm belief that enhanced energy efficiency measures, more than just energy star appliances, will lead to improved operating performance and will result in lower utility costs to residents.
- 3) Compliance with and promotion of ADA disability measures should be promoted in the development.

Thank you very much for your consideration of the above.

Sincerely,

John Feuerbach
Chair of, and for members of the Manchester Affordable Housing Trust



MANCHESTER-BY-THE-SEA

CONSERVATION COMMISSION • TOWN HALL
Manchester-by-the-Sea, Massachusetts 01944-1399
www.manchester.ma.us Telephone (978) 526-4397

22 June 2021

Hon. Eli G. Boling
Board of Selectmen
Manchester-by-the-Sea
Town Hall, 10 Central Street
Manchester-by-the-Sea, MA 01944

Subject: Comments on Proposed 40B Shingle Place Hill Development
SLV School Street, LLC
Manchester-by-the-Sea, MA
MH ID No. 1116

To Chair Boling and the Board of Selectmen:

The Manchester Conservation Commission (MCC) appreciates this opportunity to submit these comments to the Manchester Board of Selectmen (BOS) in reference to your forthcoming letter to MassHousing on the proposed 40B Shingle Place Hill Development (“Shingle Place Hill”) by SLV School Street, LLC (SLV).

Summary: In light of the ORAD findings (described below) of extensive jurisdictional wetlands on this site (including Riverfront Area from Sawmill Brook, several Bordering Vegetated Wetlands and Isolated Land Subject to Flooding, plus very likely certifiable Vernal Pools and associated Habitats), the MCC presumes that significant mitigation will be required to protect the interests of these wetlands under either the WPA or local Bylaw. The characteristics of this site will in the MCC’s experience make such mitigation extremely challenging, due to steep slopes, prevalent ledge, thin soil layers, and pervasive wetland resources throughout much of the site. In fact, permanent degradation of these resources and protected interests may be unavoidable in what is unquestionably the most challenging site for major development that the MCC has seen in recent decades.

ANRAD/ORAD Process: On 9/29/20, SLV filed an Abbreviated Notice of Resource Area Delineation (ANRAD), DEP File #39-0834, with the State DEP and MCC under the State Wetlands Protection Act (WPA) and regulations, and the Manchester General Wetland Bylaw (Bylaw) and regulations.

MCC opened the first of many public hearings on 10/13/20. The ANRAD was on the MCC agenda for the following dates: 1/3/20; 11/24/20; 12/15/20; 1/19/21; 2/9/21; 3/2/21; 3/23/21; 4/13/21; 5/4/21; and 5/25/21 at which, there being no further information needed, the public hearing was closed and findings deliberated. The MCC issued an Order of Resource Area

Delineation (ORAD) on 6/7/21 with findings and documents relied upon to confirm the wetland boundaries.

The SLV consultants, Allen & Major Associates, Inc. and Goddard Consulting, LLC presented the ANRAD to the MCC and fielded questions from the MCC and public throughout the hearing process. MCC hired a peer review consultant, DeRosa Environmental Consulting, Inc. for expert wetlands review of the filing. It should be noted that the filing, plans, data collection, field review, and discussions focused on the delineation of the onsite wetland resources per the ANRAD/ORAD process. The 40B Development *per se* was not part of the WPA process of wetland delineation, and does not appear on the Approved Plans, nor was the development reviewed during this process.

SLV agreed to pay the peer review consultant fees for review of the SLV consultant's wetland delineation and agreed to the MCC's request to collect additional data during the breeding season for vernal pool indicator species. Applicant and MCC consultants together collected & reviewed data for vernal pool habitat on site as well as reviewing the wetland delineation flagging and placement on the Approved Plans. An uncertified Vernal Pool was confirmed on site as well as Vernal Pool habitat in various locations on site.

During the hearings, SLV requested the local Bylaw be removed from the filing and only be reviewed under the WPA. On advice from Town Counsel, the MCC agreed to find only under the State WPA. Should future development lie within jurisdictional wetlands and buffers under the WPA and/or Bylaw, the applicant would be required to file a Notice of Intent (NOI) or lesser filing depending on the proposed impact to the wetlands.

ORAD findings:

Findings under the Wetlands Protection Act (WPA) only per request by Applicant

1. As requested by the applicant to review boundaries only under the Wetlands Protection Act, the Manchester Conservation Commission (MCC) approves the boundaries of the following wetland resource areas:

Bordering Vegetated Wetlands (BVW):

- BVW Wetland Flags A0 through A72
- BVW Wetland Flags AA1 through AA8
- BVW Wetland Flags D1 through D19
- BVW Wetland Flags E1 through E11 (offsite)
- BVW Wetland Flags F1 through F10 (offsite)

Isolated Land Subject to Flooding (ILSF):

- ILSF Wetland Flags B1 through B14 connect to B25 through B32

Mean Annual High Water (MAHW) for a Perennial Stream (Sawmill Brook)

- MAHW Wetland Flags R1 through R21 (offsite)
- MAHW Wetland Flags R101 through R121 (offsite)
- MAHW Wetland Flags R-201 through R216 (offsite)
- Riverfront Area Resource

2. The MCC acknowledges that there may be other jurisdictional wetland resource areas present on the site or offsite on abutting properties that the Commission was not asked to verify. For this reason, the Commission reserves the right to review any future proposals for work on site to determine if there is a resource area or

portion thereof not verified in this ORAD that may trigger the Commission's jurisdiction, either under the Wetlands Protection Act or Manchester's General Wetlands Bylaw.

3. The MCC acknowledges an existing mapped potential vernal pool is located in flagged wetland "B" as noted in The Goddard Consulting memo to Allen & Major, Inc. dated 11/27/19; shown in Figure 1, "Potential and Certified Vernal Pools near property" of the Goddard Consulting memo to SLV School Street, LLC dated 8/25/20; and as shown on the approved "Existing Conditions" site plan (V-102), revised date 4/27/21.
4. MCC acknowledges that BioMap 2 Core Habitat and Critical Natural Landscape are located to the northwest, northeast and east of the property (shown on Figures 3 & 4 of the ANRAD Application dated 9/25/20).
5. The MCC acknowledges that the Applicant determined (through the Applicant's wetlands consultant) that, "...three wetland areas within the site contain the necessary "biological" and "physical" criteria for certification as vernal pools..." as described in document Vernal Pool Survey Report, 4/26/21.
6. The MCC acknowledges that in addition to certifiable vernal pools on site, the Applicant's wetland consultant found two "...offsite wetland areas contained the necessary biological criteria for certification (> 5 spotted salamander egg masses) but lacked, in the opinion of the Applicant's wetland consultant, the required physical criteria ("D-series Marsh" and "F-series Marsh") because, in the opinion of the Applicant's wetland consultant, they are directly connected to Sawmill Brook, a perennial stream; however, it is the opinion of the MCC that these areas function as significant vernal pool habitat given the large number of egg masses present and that these areas should be reviewed formally by the NHESP regarding their ability to be certified on or before the filing of a Notice of Intent for any proposed project or work within the jurisdiction of the MCC.
7. Although the Abbreviated Notice of Resource Area Delineation request did not include the verification of vernal pools onsite, the Applicant agreed to additional data collection during appropriate breeding season. It is the MCC's opinion, based on findings by the Applicant's wetland consultant, confirmation by MCC's peer review consultant, as well as NHESP mapping (PH 1799 & PH 1805), and the ANRAD filing, that there are vernal pools both onsite and offsite and that vernal pool habitat is protected under the Manchester General Wetland Bylaw whether or not the vernal pools are certified. For this reason, the MCC shall require that the property be reassessed for vernal pool habitat prior to submitting a Notice of Intent application or a Building Permit application.
8. The MCC acknowledges that the Applicant requested the ANRAD/ORAD be reviewed solely under the State Wetlands Protection Act and not under the Manchester General Wetland Bylaw.

Approved Plans & Documents:

- "Abbreviated Notice of Resource Area Delineation (ANRAD) Application"; prepared for SLV School Street, LLC by Allen & Major Associates, Inc; dated 9/25/21, inclusive of sections 1.0, 2.0, 3.0, 4.0, excluding section 5.0 (stamped plans have been revised).
- "Review of Abbreviated Notice of Resource Area Delineation (ANRAD), 0 School Street"; prepared for the Town of Manchester-by-the-Sea Conservation Commission [MCC] by DeRosa Environmental Consulting, Inc, Michael DeRosa, Principal; dated 1/12/2021, inclusive.
- Memo to Chris Bertoni & MCC re: Supplemental Information | ANRAD Review | DEP File # 039-0834 0 School Street; from Michael DeRosa dated 2/16/21.
- Letter to Manchester Conservation Commission re: Response to Peer Review Reports for ANRAD...DEP File #39-0834; from Daniel Wells, Goddard Consulting, LLC; dated 2/19/21.
- Letter to Chris Bertoni, Conservation Administrator re: MassDEP File # 39-0834 ANRAD Request for WPA Review Only, from Carlton Quin, Allen & Major Associates, Inc; dated 2/22/21.
- Letter to MCC re: Supplemental Response to Peer Review Reports for ANRAD, School Street, DEP File #39-0834 from Daniel Wells, Goddard Consulting, LLC; dated 4/26/21.
- "Vernal Pool Survey Report, 0 School Street, Manchester MA DEP file #39-0834" submitted to MCC; prepared for Geoff Engler, SLV School Street, LLC; by Daniel Wells, Goddard Consulting, LLC; dated 4/26/21, inclusive.

- Letter to Chris Bertoni & MCC re: Review of Abbreviated Notice of Resource Area Delineation (ANRAD) Submittal: Summary of Findings & Vernal Pool Assessment; from Michael DeRosa, DeRosa Environmental Consulting, Inc, dated 5/14/2021
- “Existing Conditions Plan”; prepared for SLV School Street, LLC by Allen & Major Associates, Inc.; last revised date 5/27/21; signed and stamped by Norman L. Lipsitz, PLS on 5/27/21; scale 1” = 50’; 2 sheets – V-101, V-102.

It is our hope that MassHousing will consider these potentially critical negative impacts to the community wetlands and water supply from the proposed development of a project of locally-unprecedented enormous scale on such an environmentally sensitive site.

Respectfully submitted,

MANCHESTER CONSERVATION

COMMISSION

A handwritten signature in black ink that reads "Stephen Gang". The signature is written in a cursive, flowing style.

Stephen Gang, Chair

Enclosure: Letter dated 5/14/21 to MCC from Michael DeRosa, Principal, DeRosa Environmental Consulting, Inc, re: Review of Abbreviated Notice of Resource Area Delineation (ANRAD) Submittal: Summary of Findings & Vernal Pool Assessment, 0 School Street, Manchester-by-the-Sea, MA, MassDEP File No. 39-0834.

Cc: Sue Brown, Town Planner, Manchester-by-the-Sea
Greg Federspiel, Town Administrator, Manchester-by-the-Sea

May 14, 2021

BY ELECTRONIC MAIL & HAND DELIVERY

Chris Bertoni, Conservation Administrator
Conservation Commission
Town of Manchester-by-the-Sea
10 Central Street
Manchester, MA 01944
978-526-4397

bertonic@manchester.ma.us

**RE: Review of Abbreviated Notice of Resource Area
Delineation (ANRAD) Submittal : Summary of
Findings & Vernal Pool Assessment**

0 School Street | Manchester-by-the-Sea MA

MassDEP File No.: 039-0834

Dear Ms. Bertoni & Members of the Commission:

This is our third review document regarding the ANRAD and Vernal Pool investigation at 0 School Street, associated with the SLV School Street LLC (the Applicant).

1. Our first report, Review of Abbreviated Notice of Resource Area Delineation was dated, January 12, 2021, and discussed the review of the ANRAD filing and review of wetland delineation in the field.
2. Our second memo, Supplemental Information to the commission was dated, February 16, 2021 and focused on vernal pool issues.
3. This is our final report to the commission, dated May 14, 2021, which discusses the results of the vernal pool egg counts and "ravine area" determination.

The following report summarizes the details and compiles the evidence used to support our findings and recommendations.

SUPPLEMENTAL SCOPE OF WORK

Our efforts were framed by the Scope of Work prepared by the Manchester-by-the-Sea Conservation Commission (the Commission) in its Request for Peer Review of the Abbreviated Notice of Resource Area Delineation (ANRAD), distributed by Chris Bertoni, the Conservation

Administrator. The second phase of work focused on determining the presence of vernal pool breeding habitat within and adjacent to the subject property.

The following report intends to fulfill the intent of this second scope of work. We have summarized our findings in the following narrative and figures.

REVIEW OF DOCUMENTATION

We have received the following documents for review and comment:

1. Vernal Pool Survey Report, 0 School Street, Manchester MA, by Goddard Consulting LLC, dated April 26, 2021.
2. Supplemental Response to Peer Review Reports for ANRAD, School Street – Manchester MA, by Goddard Consulting, LLC, dated April 26, 2021.
3. Existing Conditions Plan, Sheet V-1 and Sheet V-2, Revised April 27, 2021, Showing wetland location revisions.

GENERAL SITE CONDITIONS

The property is covered by a full canopy including white pine as well as red oak, American beech, and shagbark hickory. These species combine to form a nearly complete canopy over the parcels. The topography of the property is dramatic and replete with boulders and exposed ledge. The Sawmill Brook flows by the site to the north and wetland areas are found in the middle of the property as well as on the south side of property flowing off in the southerly direction. Route 128 borders the site to the south; School Street to the east and undeveloped areas to the west and north.

WETLAND RESOURCE AREA BOUNDARIES

Bordering Vegetated Wetland (310 CMR 10.55)

The following areas meet the definition of bordering vegetated wetland as defined at 310 CMR 10.55(2):

- **Wetland Area A:** Delineated in the field and depicted on the site plans as Wetland Flags A0 through A72; connecting to Wetland Flags AA1 through AA8 and connecting back to Wetland Flag A0.

- **Wetland Area D:** Delineated in the field and depicted on the site plans as Wetland Flags D1 through D19.
- **Wetland Area E:** Delineated in the field and depicted on the site plans as Wetland Flags E1 through E11 and located off the site locus.
- **Wetland Area F:** Delineated in the field and depicted on the site plans as Wetland Flags F1 through F10 and located off the site locus.

Ravine Area

On Friday, May 14, 2021, I met with Dan Wells and walked the area known as “the ravine area” in detail, specifically to assess the vegetation associated with the gently sloped topography. We traversed the entire ravine area all the way to Summer Street. The plant community consisted of entirely upland species including: American Beech, hemlock, white pine, striped maple, and hay scented fern. According, it was concluded that the ravine area is not a jurisdictional wetland resource area under the Act.

Riverfront Area Determination (310 CMR 10.58)

We concur with Dan Wells of Goddard Consulting, LLC, regarding the boundary of Riverfront Area at the site and his depiction of “bankfull conditions” along Sawmill Brook (See Existing Conditions Plan, Sheet V-101, by Allen & Major, Associates, LLC., attached).

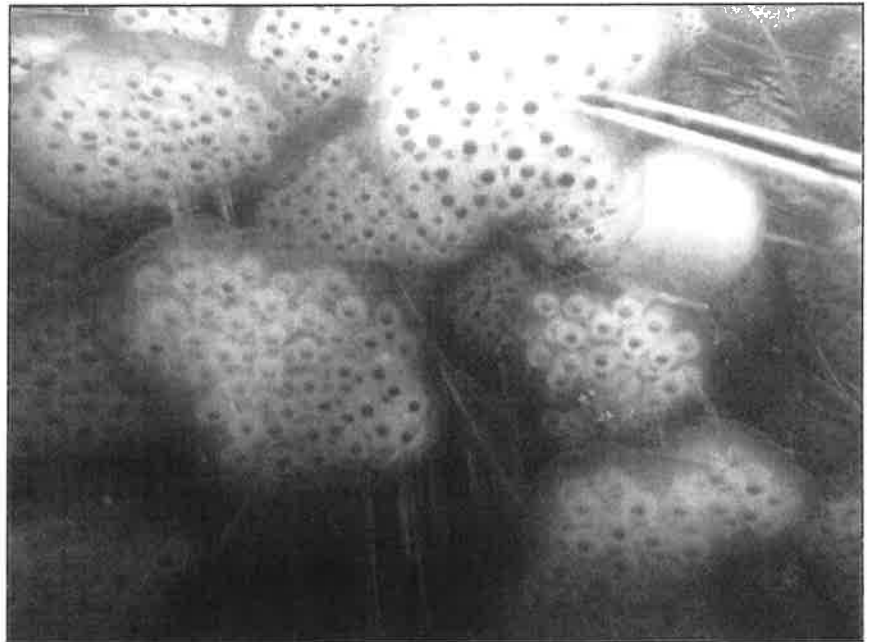


Photo showing density of salamander egg masses within the B-Series wetland.

Isolated Land Subject to Flooding (310 CMR 10.57)

The B-series wetland does not have a functioning outlet based on my site inspection with Dan Wells on April 9, 2021. Dan and I covered the terrain around what would be the outlet from the ponded area and could not make a reasonable conclusion that water found its way out of the basin to a

ditch even in very wet conditions or in flood conditions. Accordingly, I agree with the finding that the B Series wetland is best described as an Isolated Land Subject to Flooding (310 CMR 10.57) and an area that functions as a very robust vernal pool with over 100+ salamander egg masses and an equal number of wood frog egg masses as well as other vernal pool species. The area was marked in the field including Wetland Flags B1 through B32 which connects back to B1.

VERNAL POOL HABITAT (310 CMR 10.60)

In our opinion, the most important value of this site is its likely function as vernal pool habitat as well as upland habitat for vernal pool breeding species. Although there are no mapped vernal pools that have been certified through the NHESP process the site is surrounded by both certified and potential vernal pool species. Additionally, we have observed salamander egg masses in previous years within the A-Series wetland at the 0 School Street site. I was present on two (2) comprehensive egg mass surveys on April 4 and April 9 and concur with Mr. Wells findings as he reported them in his "Vernal Pool Report" dated April 26, 2021, with the following exceptions:

1. In my opinion, it is premature to identify individual pools within the A-Series wetland and this designation should be rejected by the Commission. This area has been experiencing severe drought conditions over the past several years. Portions of the Commonwealth are already in a drought condition for 2021. Given the recent rain events in April and early May conditions have improved in 2021.



View of egg mass within D-Series wetland.

2. Accordingly, in our opinion, the wetland areas available for salamander utilization as vernal pool habitat has been reduced over the previous seasons and although some water was available in the A-Series wetland this season and egg masses were located within this wetland area, within more normal wet seasons, the entirety of the A-Series wetland likely functions as vernal pool habitat. We do not recommend accepting the delineation of the isolated vernal pool areas as conclusive in the use of the wetland area by vernal pool

breeding species and suggest that the entire A-series wetland functions as vernal pool breeding habitat over the average of normal seasons.

3. Additionally, although we understand the vernal pool certification criteria established by the NHESP, we find it very interesting that portions of the D-Series wetland and F-Series wetland, both associated with Sawmill Brook, support substantial numbers of salamander egg masses (17 and 18 egg masses, respectively). As Dan Wells points out in his report, these areas are connected to Sawmill Brook which is a perennial stream and support fish populations (e.g., predators for egg masses). However, these areas consist of emergent swamp and well vegetated with tussock sedge and other emergent wetland vegetation all of which provide adequate egg attachment sites for egg laying salamanders. These emergent aquatic species are used to define the bank full conditions of the river. It seems an argument could be made that these vegetated areas may not actually provide adequate habitat for fisheries but may provide adequate hydroperiod to support populations of breeding salamanders. Dan Wells and I counted 17 and 18 egg masses, which represents significant habitat use by these spotted salamanders.

FINDINGS & RECOMMENDATIONS

Wetland Delineation

The areas shown on the revised existing conditions plans (Sheet V-1 and Sheet V-2) revised on April 27, 2021 represent the wetland areas we reviewed and accepted in the field.

- Bordering Vegetated Wetland Areas: A-Series, D-Series, E-Series and F-Series.
- Isolated Land Subject to Flooding : B-Series Wetland
- Riverfront Area : R-Series, Bank Full Conditions

Need for additional vernal pool study

In our professional opinion it is paramount that additional study be conducted to verify the presence/absence of vernal pool breeding habitat at the site as well as the function and value of the upland areas of the site for non-breeding season habitat. Both habitats are required to maintain a population of potentially endangered species. It would be important for the commission to request the applicant and their representatives to prepare a vernal pool study plan as part of any Notice of Intent (NOI) application to determine the use of the site by breeding amphibians as both breeding areas (e.g., vernal pool habitat) as well as upland areas (non-breeding season habitat). The study should include but not be limited to drift fence and pit traps to determine direction to and from the pools and approximate population density to determine how important this habitat is for resident

amphibian species. Personnel with appropriate background and experience working with rare and endangered species should be retained to do this work.

Further review of the D-Series Wetland and F-Series Wetland as vernal pool habitat subject to NHESP review and comment. Although these emergent aquatic areas are directly associated with Sawmill Brook, the numbers of egg masses located in these areas suggest sustained use of these areas by spotted salamanders in the potential presence of fish predators. The extent of predation by fish in these areas has not been assessed.

Should you have any questions or comments, please call anytime at 978-265-9298.

Respectfully submitted,

DeRosa Environmental Consulting, Inc.



Michael J. DeRosa, Principal
Professional Wetland Scientist



MJD/mjd



Citizens' Initiative for Manchester Affordable Housing

P.O. Box 347

Manchester-by-the-Sea

Massachusetts 01944

info@citizensbythesea.com

June 14, 2021

MassHousing

One Beacon Street

Boston, MA 02108-3110

To Representatives of MassHousing:

We are Board members of a recently formed non-profit called Citizens' Initiative for Manchester Affordable Housing (CIMAH) and write to you in that capacity.

CIMAH respectfully urges MassHousing to deny the request by Strategic Land Ventures (SLV) for a Project Eligibility Letter (PEL) for a site at 0 School Street in Manchester, MA because the project as proposed is inconsistent with the Town's needs, presents significant safety issues for its residents, and creates serious and substantial environmental risks.

The 136-unit multifamily project is flawed in many respects to include, but not limited to, the following:

Life Safety & Health

- As proposed, all 136 units are served by a single 1,900-foot driveway which ends in a cul-de-sac that itself provides a marginal turning radius for emergency fire equipment. The roadway is curvilinear with 6% to 8% grades, and is 3-4 x the typically allowable length of dead-end roadways (500-600 feet). A 1,900-foot roadway serving 136 units with no second point of access endangers the safety of both residents and visitors. A peer review analysis of the roadway design conducted by Stantec Consulting (attached as Exhibit I) stated, "Given the long cul-de-sac length, coupled with the proposed site driveway's horizontal and vertical curvature, the Applicant should provide two effective accesses to serve this site in a safe and efficient

Reference: Traffic Impacts Peer Review Initial Findings Letter

- Pertinent information from Manchester Complete Streets – Tier 2 report (August 2017) and follow up implementation plans.
- Appendix G of Manchester's Subdivision Rules and Regulations (traffic impact guidelines).
- Pertinent comments from municipal boards (December 17, 2020 Select Board meeting).
- Manchester Essex Conservation Trust (for nearby public trail locations)
- National Fire Protection Association 1® Guidelines on Fire Access needs applicable to the Commonwealth of Massachusetts.¹

1.2 - Site visit

Due to peer review time constraints, a site visit to the Sanctuary at Manchester by the Sea (MBTS) was conducted on Tuesday, December 29, 2020. While usually we like to observe 'normal' peak traffic conditions, observed post-Christmas traffic demands were lower than normal. Late December is typically a low month for traffic demands as MBTS is a beach community with peak traffic, pedestrian, and bicycle activity occurring during the summer months of July and August. The on-going pandemic continues to reduce traffic volumes, and cold weather significantly diminished observed pedestrian and bicycle movements. The afternoon site visit was nonetheless useful as it included contextual low-side traffic observations, roadway markings, signs, geometric, and topographic features.

In addition to reviewing the TIA Study Area, we also observed the School Street corridor between Old School Street, a Manchester Essex Conservation Trust trailhead located just north of the Study Area, and the MBTS village center. For the same reasons cited above, downtown MBTS Village Center mid-day parking demands observed on December 29, 2020 were much lower than normal, especially those pertaining to the MBTA's downtown Manchester commuter rail station. During the site visit, recently installed variable speed feedback signs were observed on School Street near the Village Center as well as sight distance and 'complete streets' type cross walk intersection enhancements at the intersection of School Street with Central and Union Streets.

There is no specific traffic peer review guidelines criteria that pertain to the assessment of parking impacts at distant off-site locations for this or any other types of development. Nonetheless, we understand the Town is concerned about the future adequacy of its downtown parking supply to accommodate projected future increases in parking demands pertaining to the Sanctuary at MBTS within the MBTS Village Center and the Manchester MBTA Commuter Rail Station. We understand that MBTS has programed a separate village parking study in the near future. That upcoming study will assess peak Village Center parking demands and utilization characteristics and recommend any necessary changes to the Village Center parking supply or transit access services to address existing and future parking shortages.

¹ Based on 1/7/21 discussions with Manchester Fire Chief Jason Cleary.

manner...". In a public forum, the author of the Stantec report, Gary Hebert went further, calling the single access roadway "not safe". Per NFPA code 7.1.5.2.4 Multiple Access Roads, access by a single road could be impaired by vehicle congestion, condition of terrain, climatic conditions, or other factors. Emergency response times accessing the isolated hilltop would be increased for Emergency Medical Technicians responding to time-sensitive medical emergencies.

- The proposed project includes no sidewalks, let alone ADA-compliant sidewalks. The lack of sidewalk along the 1,900-foot roadway appears to violate Fair Housing Standards. Given the average 8% grade and length of the roadway, pedestrian access without sidewalks is difficult and dangerous. Schoolchildren need a safe route to access their school bus stop and ride their bikes or walk to school. The grade is unsafe for a manual wheelchair, or a novice cyclist and for parents with strollers. An extensive ramp system is required – but not included in the design – to address access and safety challenges under ADA. Manchester has adopted the Safe and Accessible Streets Policy and plans to extend its sidewalks to the proposed development were it to be constructed. William Joyce, of the Massachusetts Architectural Access Board (MAAB), has indicated that MAAB would require that the project include sidewalks to link into the sidewalk infrastructure outlined in the Town's plans adjacent to the site.
- The subject site is surrounded on all sides by rivers or wetlands. Storm water runoff is a major concern. During construction, site plans submitted to the Town indicate that the height of the site will be reduced by 40 feet, which can only be accomplished by blasting into the largely granite hill. After construction has been completed, much of the vegetation surrounding the buildings will have been removed. To date, no Storm Water Management Plan has been submitted to the Town for its review. The two catch basins located at the intersection of the access road and School Street, within the riverfront boundary of the Sawmill Brook, are likely insufficient to prevent runoff on to School Street and critical water resources. Please see the attached Satellite image with project overlay attached as Exhibit II.
- Any storm water runoff entering Sawmill Brook will potentially impact the Lincoln Street well from which the Town draws roughly 50% of its drinking water. In addition, there are two public wells within 400' of the project that have been used in the past to augment the public water supply for the City of Gloucester. Manchester views these wellheads and the associated Cedar Swamp Aquifer as an emergency public water supply.

Environmental Risk

- Sawmill Brook is a Coldwater Fisheries Resource (CFR), housing unique sea run brook trout native to the North Shore, as confirmed by DNA testing. These trout can be used for reintroduction into North Shore streams. If preserved, water quality testing indicates that Sawmill Brook will continue to support this fragile resource. According to the Massachusetts State Wildlife Action Plan, "Brook Trout are susceptible to degradations in water quality and have been impacted in many streams statewide;" "In small streams, small perturbations can have acute local impacts. One poorly designed parking lot can release enough hot water from a summer thunderstorm to eliminate a coldwater fishery." According to the Massachusetts Water

Management Act Permit Guidance, “There has been a significant loss in CFR habitat over time, partially because these temperature-dependent habitats are strongly influenced by groundwater and particularly vulnerable to impacts from groundwater withdrawals.” SLV’s proposed development threatens this sensitive resource and its associated Atlantic White Cedar Swamp.

- The proponent has proposed an on-site wastewater treatment plant which incorporates two leaching fields that appear to be on granite outcroppings with poor percolation characteristics. The leaching fields are connected to the treatment plant by a pipe which runs through an existing wetland.

Inappropriate Project Design for Proposed Location

- According to The Trustees of Reservations, “The site [is] particularly un-suitable for a development of this scale: the surrounding land owned by the Manchester-Essex Conservation Trust and by The Trustees is held in trust for all of us. It is everyone’s back yard. As such, it should be viewed as especially valuable, rather than targeted for a development which will likely have significant impacts on the conservation values of the area.” Please refer to the comment letter prepared by the Manchester Essex Conservation Trust for other environmental risks. The risks are substantial and numerous.
- Even after blowing 40 feet off the top of the site, the project as proposed will be the tallest structure in the Town of Manchester. The project would appear 107 feet tall - similar to an eleven-story building - higher than the top of the Congregational Church spire in the center of Town and grossly inconsistent with the town’s existing structures. The net result will alter irrevocably the character of an old New England seaside town.

Isolates Affordable Housing from the Community In Contrast to an Integrated Alternative

- The site is almost two miles from the center of Town and public transit, is realistically accessible only by vehicles, and is isolated from the rest of Manchester. Pedestrian and bicycle access to and from the site is difficult at best. In contrast, the 29-unit affordable housing project North Shore Community Development Coalition (NSCDC) has recently purchased is highly accessible, in the center of Manchester on Powder House Lane. NSCDC’s project serves people at 50-60% of AMI, compared to SLV’s “affordable” units at 80% of AMI. SLV’s proposed “affordable” units are 33-56% *higher* than NSCDC’s affordable units. The purchase of the Powder House Lane units was made possible through \$1.5 million of equity capital contributed by 250+ citizens of Manchester in demonstration of their commitment to affordable housing. Were MassHousing to grant a PEL to the SLV proposal, it would discourage local community development of affordable housing throughout the Commonwealth and allow an isolated, vehicle-dependent, luxury housing project with a less affordable component and significant safety and environmental risks to proceed to the next step in the process. Compared to an in-town, pedestrian-friendly, citizen-funded, safe and truly affordable housing alternative, we request that MassHousing not issue the PEL to the Applicant.

Additional Concerns

- Additional issues pertaining to Parking, Water, Access, Grading, Wetlands, Sewage Disposal, Wetlands Replication are contained in a report dated February 10, 2021 prepared for the Citizens' Initiative for Affordable Housing by Beals Associates, a copy of which is attached as Exhibit III.

563 Manchester households, or more than 26% of the Town's households, have echoed those concerns in a petition asking MassHousing to deny SLV's request for a Project Eligibility Letter (attached as Exhibit IV). Manchester has taken concrete action recently to close its affordable housing gap through better, smaller-scale local solutions. The SLV project would encourage Manchester to meet its 10% affordable housing goal not through truly affordable housing but primarily through unaffordable luxury housing. MassHousing would harm the interests of those it exists to serve if it issued a PEL for this proposal.

Instead, we hope that MassHousing will encourage truly affordable housing of the kind that Manchester has already fostered through North Shore CDC, at lower AMI rates, fully integrated into its community. We hope you will allow the people of Manchester to finish our affordable housing work.

Thank you for your careful attention to this matter and for ensuring that Manchester families and children have access to safe, sustainable affordable housing.

Regards,

Jay Bothwick

Michael Carvalho

Catherine Creighton

Bill Cross

Victoria Esser

Michael Even

Denison Hall

Thomas Kehoe

Ashley Ochs

Susan Thorne

As The Board of the Citizens' Initiative for Manchester Affordable Housing (CIMA)

EXHIBIT I



Stantec Consulting Services, Inc.
85 Network Drive 2nd Floor
Burlington, MA 01803-2767

January 11, 2021

Attention: Gregory T. Federspiel, Town Administrator

Manchester by the Sea Town Hall
10 Central Street
Manchester by the Sea, MA 01944

**Subject: Traffic Impacts Peer Review Initial Findings Letter
Sanctuary at Manchester by the Sea, MA 40B Development**

Dear Mr Federspiel:

In accordance with our Agreement of December 18, 2020, Stantec Consulting, Inc. is pleased to submit this initial letter pertaining to ***Task 1 – Conduct a peer review of the Traffic Impact Assessment (TIA) prepared for a Proposed Multi-family Residential Development on School Street at Manchester by the Sea.***

The referenced TIA is dated September 2020 and was prepared by Vanasse & Associates Inc. (VAI) of Andover, Massachusetts on behalf of the Project Proponent, SLV School Street, LLC.

The Applicant proposes to construct the proposed multi-family development on a wooded undeveloped 27.72-acre site on the west side of School Street. Located adjacent to Route 128, the site has excellent regional access. Specifically, the Applicant proposes to construct 157 multi-family units in two connected 4-story buildings with site recreational amenities. Of the 157 units, 80 would be one-bedroom, 61 two-bedrooms, and 16 three-bedrooms. A total of 247 on-site ancillary parking spaces are proposed—most within a below grade parking deck. This provides a parking ratio of 1.57 spaces per unit including 7 accessible spaces, of which 3 would be van-accessible. On-site outdoor and indoor recreational amenities will be provided in the attached connector between the two residential buildings.

Access to the site is proposed via a single two-way driveway approximately 1/3 mile in length.

1.1 - Review traffic/circulation study materials

In addition to the TIA, we obtained and reviewed traffic-related access and parking elements of the site plan set prepared by Allen & Major Associates dated September 24, 2020.

Supplemental to these core review materials, we examined:

- 2019 and 2020 MassDOT counts on Route 128 exits.
- Pertinent information from the Final Draft Manchester Master Plan (November 2019).

Reference: Traffic Impacts Peer Review Initial Findings Letter

1.3 - Review study methodology, trip generation, and trip distribution assumptions

The TIA acceptably conforms to analysis procedures identified in MassDOT's Traffic Impact and Access Study guidelines (3/13/2014). The TIA used the latest ITE Trip Generation report, and the latest available US Census Journey to Work data to estimate trip generation and trip distribution for the development site. The TIA estimates the Sanctuary at MBTS will generate 854 vehicle trips per day – 427 in and 427 out. Of the typical weekday trips generated, the TIA projects 53 trips (39 out/14 in) will occur during the morning peak hour and 68 (27 out/ 41 in) during the afternoon peak hour. These estimates are reasonable.

Our review of the TIA trip distribution pattern assumed for the Sanctuary at MBTS occupants indicates it is also acceptable and reasonable. The TIA indicates that 60% of future site-generated AM and PM peak hour traffic will be oriented toward to and from Route 128 SB via Exit 15. Approximately 30% of site-generated peak hour traffic is expected to continue to and from the south on School Street. Relatively small 3-4% components of site-generated traffic will be oriented to and from the north on School Street, and east on Route 128 NB via Exit 15, respectively. The TIA trip distribution estimates are reasonable.

To summarize, the methods used to calculate trip generation and trip distribution reported in the TIA are reasonable and acceptable, and are based on typical traffic engineering methodologies.

1.4 – Review Study Area and existing volumes

From the site visit and our review of historical traffic volumes in Manchester, we conclude that the TIA Study Area identified and the number of intersections it includes is reasonable and acceptable from a traffic analysis perspective.²

² We understand the Town is concerned about how the site will affect traffic operations at the intersections of School/Pleasant Streets and School/Union/Central Streets. These intersections are 1-2 miles south of the site driveway intersection with School Street. We are aware that the Town recently implemented Complete Streets sight line and crosswalk enhancements at the School/Central/Union Streets intersection. The TIA projects that the Sanctuary at MBTS will add approximately 16-21 new vehicle trips total in both directions to School Street south of the Route 128 ramps during the AM and PM peak hours, respectively. The TIA also estimates that, by 2027, School Street south of the Route 128 ramps will be carrying a total of 823 and 1,096 vehicles in both directions during the AM and PM peak hours, respectively. The relatively small 2% changes in peak hour volumes due to the Sanctuary at MBTS will be far less than normal day-to-day traffic variations. We therefore do not recommend adding the two intersections of concern to the Study Area, as both will operate similarly with or without the Sanctuary at MBTS development and will not trigger the need for improvements specifically related to this development.

Reference: Traffic Impacts Peer Review Initial Findings Letter

In accordance with MassDOT guidelines, the TIA authors increased actual Study Area traffic volumes counted during July 2020 by 30% to evaluate 'existing' traffic volumes. This was done to account for known pandemic traffic decreases. Also, MBTS, a beach community, has July traffic volumes that are normally 14% higher than average annual conditions. We therefore conclude the 'existing' traffic volumes reported in the TIA are conservative, being up to 44% higher than the likely 'average annual' volumes.

1.5 - Review accident analysis

Crash analysis information as reported in the TIA is acceptable. Consistent with MassDOT guidelines, the TIA evaluated a 5-year period for crash analyses between 2013 and 2017, the most recent available period for crash analysis. None of the Study Area intersections had historic crash rates exceeding average crash rates at similar unsignalized intersections either statewide or within MassDOT District 4, which includes Manchester by the Sea.

1.6 - Review background traffic growth

According to the TIA, background traffic growth to account for unspecific traffic growth sources was increased by 1% per year between the pandemic-adjusted 'existing' 2020 traffic volumes and the year 2027 for the No-Build and Build analyses. The TIA indicates that historical traffic growth rate was approximately 0.63%. Therefore the 1% used is conservative. The future traffic volumes analyzed were set to an aggregate growth rate of 7.2% for *adjusted* background traffic between 2020 and 2027 corrected for pandemic-related traffic reductions. As indicated in the TIA, Manchester's Town Planner confirms that no known developments are projected within the project impact area.³ This is a reasonable assumption for background traffic growth.

1.7 - Review and evaluate level of service (LOS) analyses

Our review of existing (2020), No-Build (2027) and Build (2027) indicates the LOS analysis sheets for all time periods were done acceptably.

VAI used Synchro® Version 10 for analyzing AM and PM peak hour traffic operations. The Synchro® traffic operations analysis software packages is accepted by MassDOT for the evaluation of unsignalized intersections such as those included in the TIA.

³ During the December 29, 2020 site visit, a sign was observed indicating that a Cornerstone Church is proposed for construction on the east side of School Street just south of the Route 128 northbound ramps. Sue Brown, the Manchester Town Planner, in a phone conversation on January 5, 2020, indicated that plans to develop this area have not yet been prepared. When they do become available, the Church will need to incorporate the Sanctuary at MBTS traffic in its background traffic, not vice versa.

Reference: Traffic Impacts Peer Review Initial Findings Letter

The TIA addresses three unsignalized intersections where levels of service (LOS) were evaluated for 2020 'existing' and 2027 No-Build AM and PM peak hour conditions. From north to south, these intersections include:

- School at Atwater Streets,
- Route 128 SB Exit 15 at School Street; and
- Route 128 NB Exit 15 at School and Mill Streets.

The future site driveway intersection with School Street was also analyzed in the TIA for the year 2027 Build AM and PM peak hour conditions only, as it does not exist in 2020, and would not exist under the No-Build condition.

The TIA analysis of 'existing' year 2020 conditions found that all traffic movements through two of the three evaluated intersections are operating acceptably during AM and PM peak hours. With existing volumes increased to reflect non-pandemic conditions, the TIA projects that only the eastbound left and through movement of the Route 128 NB off-ramp to School Street operates with congestion (LOS F) during the afternoon peak hour only. It finds that all the remaining traffic movements at the three intersections in the Study Area will operate at acceptable LOS A-D operations during 'existing' pandemic-corrected AM and PM peak hours. These findings are reasonable.

However, the TIA estimates that by the year 2027, left and through ramp traffic approaching School Street at both Route 128 Exit 15 NB and SB ramp terminals will experience congestion LOS E or F during the AM and PM peak hours. By adding approximately 25 vehicles to the Route 128 NB off-ramp's left turn demand, traffic from the Sanctuary at MBTS will degrade one of the 2027 No-Build traffic movements from LOS E to LOS F. The TIA also finds that peak hour traffic operations will be similar *with or without* traffic generated by the Sanctuary at MBTS. These findings are reasonable and acceptable.

The analysis shows that motor vehicle traffic at the future site driveway with School Street and School Street at Atwater Street should operate at acceptable levels of service A-D during the site-Build AM and PM peak hours. These findings are reasonable and acceptable.

1.8 - Assess the adequacy of proposed traffic mitigation measures

The TIA recommends the following traffic mitigation measures:

Off-site

The TIA proposes preparing a study such that it will suffice for the Town to apply for MassDOT funding for the future construction of operational and safety improvements at the Route 128 Exit 15 interchange, with conceptual design features. This is an acceptable mitigation measure. In

Reference: Traffic Impacts Peer Review Initial Findings Letter

In addition to signalization of the ramps, we recommend that VAI's recommended study of Exit 15 not only consider signalization, but the potential for roundabout configurations at both ramp termini. If future congestion and crashes indicate countermeasures are needed, two roundabouts may overall, be less expensive than signalization. They may also produce better operational and safety results based on the projected volumes as presented in the TIA. Roundabouts especially benefit left turning movements from the ramps because they are made as circular right turns. Also, if MBTS at some point constructs a sidewalk on the east side or both sides of School Street to the north of the interchange, roundabouts provide good opportunities for incorporating sidewalks and low-speed yielding conflicts without the need to signalize the crossings.

Comment: While the TIA did not address this issue specifically, we checked whether future volumes of left turns into the site would warrant the installation of a left turn lane on School Street with full site development. We conclude that minimum left lane warrants on the northbound approach to the future site driveway intersection are not met. Nonetheless, it may be beneficial, if feasible, to consider a minor shoulder widening in the northbound direction of School Street to create an opportunity for a right lane bypass without encroaching on the unpaved shoulder. If done, it should conform to MassDOT design guidance. With School Street design speeds of 40+ mph at the site driveway, a bypass lane could represent a future safety benefit by reducing the potential for rear-end collisions in when the site generated vehicles are waiting to turn left. This is optional consideration, as we recognize that even a modest shoulder widening potentially has adverse environmental drawbacks that must be considered along with its potential safety benefits.

Even if it is not possible to construct an ADA-compliant sidewalk on one side of the site driveway, observations indicate there is an unpaved, non-ADA compliant, shoulder on both sides of School Street that could be used by pedestrians. MBTS does not have existing plans to construct a sidewalk on one or both sides of School Street north of Exit 15. While not the Applicant's responsibility, at some time in the future, provision of a sidewalk on one or both sides School Street to Exit 15 would be advantageous for existing and site generated pedestrian and bicycle connectivity and for accommodating future transit shuttle stops on School Street, whether year-round or seasonal.

Project Access (TIA recommendations in parentheses)

- *The boulevard section of the Project site driveway should provide two (2) 14-foot wide (minimum) travel lanes separated by a 6-foot wide (minimum) raised median with openings or traversable areas provided along the median every 200-feet to allow for emergency vehicles to cross the median when necessary. The non-boulevard section of the driveway should be a minimum of 22-feet in width and designed to accommodate the turning and maneuvering requirements of the largest anticipated responding emergency vehicle.*

Reference: Traffic Impacts Peer Review Initial Findings Letter

Comments: MBTS has the following safety requirements in its Subdivision Rules and Regulations as they pertain to site access:

- Maximum cul-de-sac length of 500 feet “unless a greater length is deemed desirable by the topography or other local conditions”;
- Two means of access for any road serving more than 10 dwelling units;
- For roads serving more than 120 units, a paved width of 34 feet and maximum grade of 6% is required;
- Minimum sight distance of at least 100 feet from the centerline;
- Minimum centerline radii of 150 feet; and
- A sidewalk is required.

The Sanctuary at MBTS site plan, as proposed, has several features not in conformance with all of the above safety guidelines. These features should be addressed to the maximum extent possible.

We recognize that the 40B legislation does not require the Applicant to conform to Manchester’s cul-de-sac guidelines. However, the vast majority of communities within the Commonwealth of Massachusetts cite maximum lengths at 500-600 feet. Given the long cul-de-sac length, coupled with the proposed site driveway’s horizontal and vertical curvature, the Applicant should provide two effective accesses to serve this site in a safe and efficient manner, even if one of those accesses, while maintained during all seasons, is gated and used only during emergency conditions.

An AutoTurn® or similar truck turning envelope analysis should be presented along the entire driveway system using the largest emergency or other moving/delivery vehicles expected to service the site. The requested AutoTurn® or similar analysis will be used to determine whether the proposed driveway may require widening on curved sections to accommodate simultaneous turning vehicles without encroachment on the opposing vehicle travel lane. The design speed of the driveway appears to be 10-15 MPH, given its horizontal and vertical curvature. Is a speed limit proposed to address the horizontal and vertical curvature of the site driveway? A required speed limit for both directions and speed feedback sign are appropriate along with edge speed reduction markings in the downhill direction.

We question whether there is a need to install a raised median for more than the first hundred feet of roadway. An undivided 34’ roadway, such as required by Manchester’s Subdivision access guidelines is less likely to become blocked than a median-divided 34’ edge-to-edge roadway.

- *Where perpendicular parking is proposed, the drive aisle behind the parking should be a minimum of 23-feet in order to facilitate parking maneuvers.*

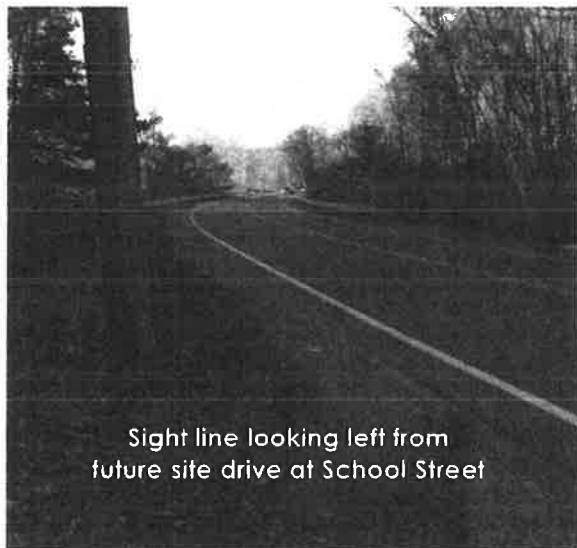
Reference: Traffic Impacts Peer Review Initial Findings Letter

Comment: This statement is acceptable. However, several of the parking spaces within the proposed parking garage have backing, side clearance, and circulation continuity issues. Refer to the site plan parking layout circulation features discussion further on in this letter.

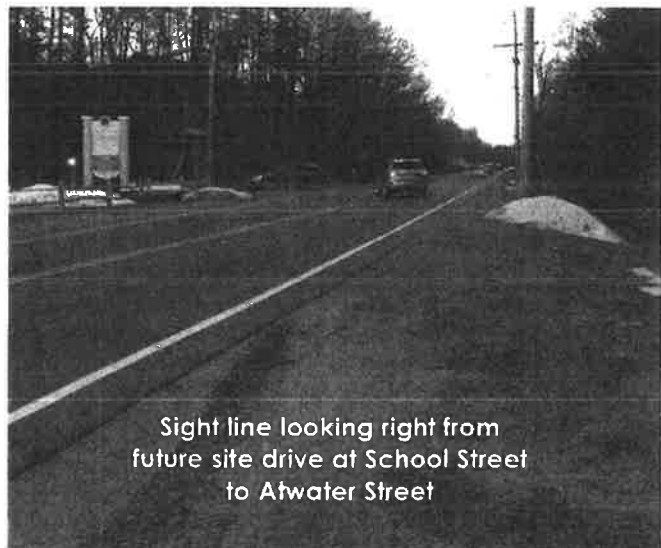
We concur with the following TIA recommendations:

- *Vehicles exiting the Project site should be placed under STOP-sign control with a marked STOP-line provided.*
- *All signs and pavement markings to be installed within the Project site should conform to the applicable standards of the Manual on Uniform Traffic Control Devices (MUTCD).*
- *Americans with Disabilities Act (ADA) compliant wheelchair ramps should be provided at all pedestrian crossings that are to be constructed or modified as a part of the Project.*
- *Signs and landscaping to be installed as a part of the Project within the sight triangle areas of the Project site driveway should be designed and maintained so as not to restrict lines of sight.*
- *Snow windrows within sight triangle areas of the Project site driveway should be promptly removed where such accumulations would impede sight lines.*
- *Consideration should be given to providing accommodations for electric vehicle charging for residents of the Project.*

Site Driveway at School Street – Sight Distance



Sight line looking left from
future site drive at School Street



Sight line looking right from
future site drive at School Street
to Atwater Street

Reference: Traffic Impacts Peer Review Initial Findings Letter

The TIA found acceptable sight lines at the future intersection of the Sanctuary at MBTS driveway with School Street. Our on-site observations confirmed the acceptability of the sight line information as presented in the TIA.

TIA estimates of the required minimum stopping and intersection sight distances between 360 and 500 feet are acceptable and are exceeded in both directions of School Street for greater than a 45 mile per hour speed of approaching traffic.

Transportation Demand Management

The TIA cites that the MBTA provides commuter rail service to MBTS and that the service is a 7-minute drive from the site. It is unclear how the potential shuttle transit stop shown on the site plan adjacent to the end of the cul-de-sac will work to help alleviate site demands on the downtown parking supply or access to the MBTA commuter rail station.

The TIA recommends:

- *Information regarding public transportation services, maps, schedules and fare information will be posted in a central location and/or otherwise made available to residents;*
- *A "welcome packet" will be provided to new residents detailing available public transportation services, bicycle and walking alternatives, and commuter options available;*
- *Pedestrian accommodations will be incorporated into the Project and consist of sidewalks and ADA compliant wheelchair ramps at all pedestrian crossings that are to be constructed or modified as a part of the Project;*
- *Work-at-home workspaces will be provided to support telecommuting by residents of the Project;*
- *An internal mail room will be provided within the building; and*
- *Bicycle parking will be provided consisting of both an exterior bicycle rack located proximate to the building entrance and weather protected bicycle parking within the proposed parking garage.*

Without the appropriate supporting infrastructure, reasonable off-site bicycle or pedestrian access between the Town Center and the site will be problematic. Bicycle and pedestrian flow will be unfriendly due to the curved and relatively steep driveway access coupled with the absence of paved walking or biking infrastructure off-site on the relatively high-speed segment of School Street in front of the site.

Access to an Old School Street Manchester Essex Conservation Trust (MECT) trail just west of the site is not discussed in the TIA. MECT has nearby trails emanating from the Old School Street layout that should be discussed for possible site connectivity. Maps of MECT trails indicate that existing informal trails may actually exist on the development site. The post-development status

Reference: Traffic Impacts Peer Review Initial Findings Letter

of these connections should be addressed to enhance pedestrian and bike access to the Town's trail system and to determine how the site development affects them.

1.9 - Check the adequacy of the site plan circulation features

Impact of the proposed unit count and cul-de-sac driveway on fire emergency access safety: With regard to the proposed development quantity of 157 units, the Town guidelines would require a second access. The Commonwealth of Massachusetts fire protection guidance does not specify a maximum number of units that can be served by a single access road.⁵

There is no discussion in the TIA about the length of the proposed cul-de-sac, which we find to be excessive. At $\pm 1,700$ feet in length, the proposed cul-de-sac driveway far exceeds the maximum cul-de-sac length of 500 feet under Manchester's Zoning Bylaw. Manchester's cul-de-sac bylaw is not unusual, in that the average maximum cul-de-sac length in the vast majority of Massachusetts' communities rarely exceeds 600 feet.⁶ Minimizing cul-de-sac lengths is good design practice⁷ for emergency safety, water service, and transportation mode connectivity reasons.

Wetlands and topography make the provision of a secondary access at this site very challenging. Ideally, an emergency loop road configuration should be provided for the Sanctuary at MBTS.

Impact of proposed access driveway steep grades on access safety: Approximately ± 750 linear feet of the proposed site driveway exceeds 6%, including grades up to 7.5%. Such steep grades will require diligent maintenance procedures to keep the driveway operational during winter snow/icing events, particularly given the driveway's horizontal curvilinear alignment.

Given the steep access driveway grade and absence of walking or biking infrastructure, few bicyclists and pedestrians are likely to use it to access School Street. While not impassable, the proposed access driveway will not be pedestrian or bicycle friendly, as it will not be ADA-compliant and will have a long stretch with 5%-7.5% running grades. Motor vehicles – whether cars or shuttles -- will be the primary mode for site residents and visitors to access this site.

Site parking adequacy: The Applicant proposes a parking supply of 247 spaces including 7 accessible spaces of which 3 will be van-accessible. This averages 1.57 spaces per unit, which exceeds the Town's zoning requirement of 1.5 spaces per unit. Additionally, based on the latest

⁵ While not applicable in this case, we are aware that there is ITE guidance recommending two accesses if more than 20 dwelling units are proposed.

⁶ Dead Ends, Maximum Lengths, Pioneer Institute for Public Policy Research – (2004).

⁷ Sustainable Neighborhood Road Design – A Guidebook for Massachusetts Cities and Towns, Massachusetts Chapter or APA – (May 2011).

Reference: Traffic Impacts Peer Review Initial Findings Letter

ITE Parking Generation report (5th Edition, 2020), site peak parking demands for 250 bedrooms within the proposed 157 units should range from 185-188 occupied parking spaces. We find that the proposed parking supply should be more than adequate to accommodate typical site parking demand peaks that are likely to occur during the overnight hours.

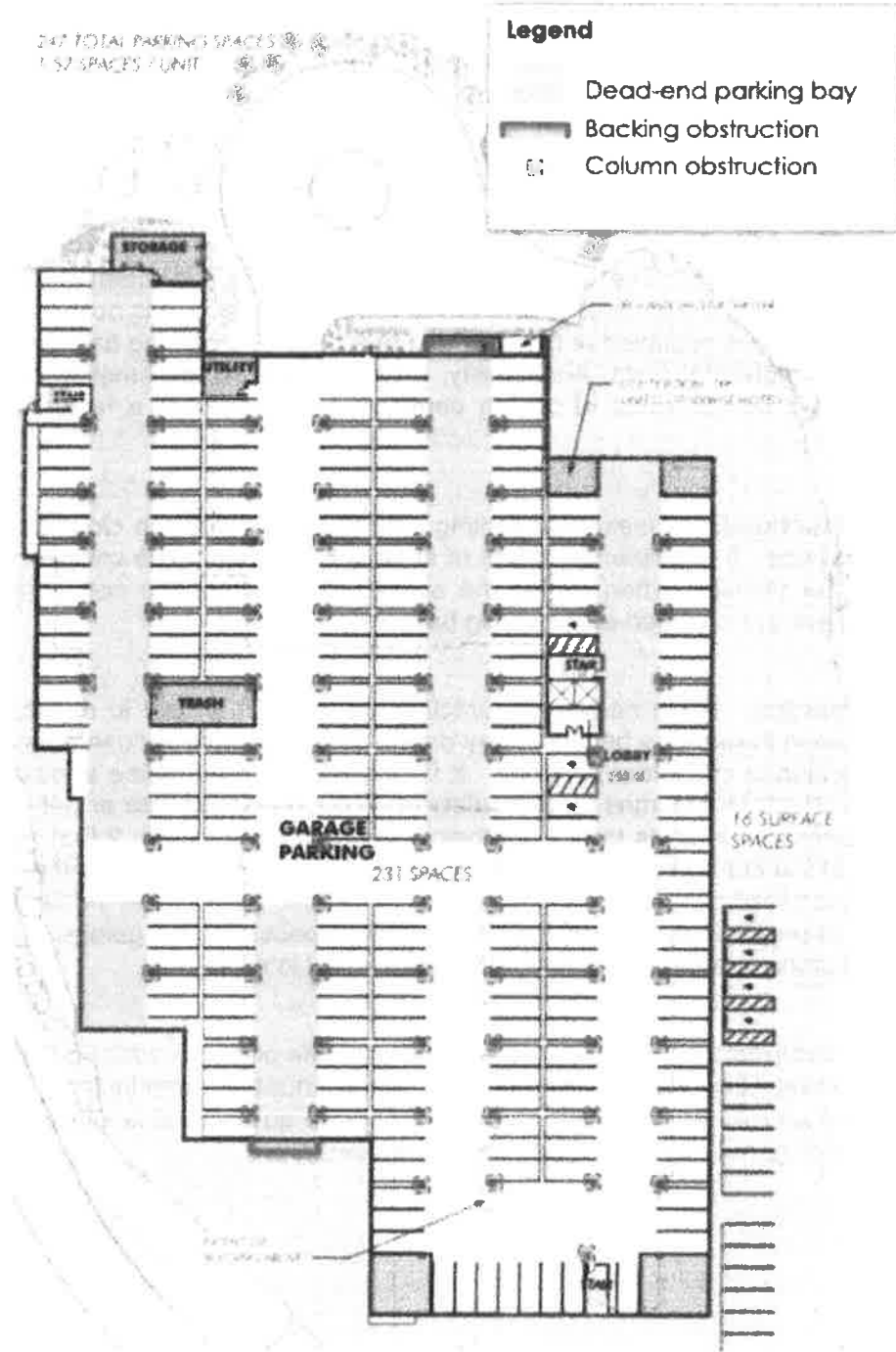
Augmented by an illustration on the next page, comments below pertain to circulation issues that warrant some discussion with the Applicant for safe garage operations, in order of importance:

- **Dead-end parking bays.** The site plan proposes a total of five 'dead-end' parking bays. Such dead-end bays are problematic and are not recommended. It is not always possible to see whether a space is occupied at the entrance to a dead end parking bay, even if all spaces are assigned to individual units. Additionally, if for any reason, an emergency vehicle must enter the garage, the absence of driving continuity could present a hazardous circulation condition.
- **Backing obstructions.** At least four parking spaces are located too close to walls for safe backing maneuvers. If possible, an indent of at least 6 feet should be considered to create a backing area for vehicles when exiting the spaces in question. We note that this issue is eliminated if there are no 'dead-end' parking bays.
- **Structural columns.** While not always practical to do so, it is best to minimize the use of structural columns in garages because they create safety hazards for users adjacent to them and a high incidence of 'fender-benders'. It is necessary to add some additional clearance areas around structural columns for the safety of motorists driving into or out of their spaces and walking between vehicles to or from their parking spaces, usually 2 feet additional width on each side of the column or, essentially a total envelope of 5 feet around the columns. The garage plan submitted calls for the installation of more than 80 columns that will directly affect the users of approximately 160 of the 231 parking spaces in the garage. The envelope around the columns seems to be 2 feet rather than 5 feet in width.

ADA and MAAB compliance: The TIA recommends the site plans be compliant with the federal Americans with Disabilities Act (ADA) and the Massachusetts Architectural Access Board (MAAB). As noted above, the Applicant proposes to create an accessible sidewalk system only adjacent to the building, not along the steep access driveway.

Reference: Traffic Impacts Peer Review Initial Findings Letter

Site Parking Layout Issues of Concern



PARKING LEVEL PLAN

Design with community in mind

Reference: Traffic Impacts Peer Review Initial Findings Letter

Without an ADA compliant sidewalk, the site driveway will not be attractive for bicycle or pedestrian circulation, as more than 700 linear feet of the driveway averages a 7% grade.

Transit/Shuttle stop: A transit/shuttle stop is identified on the site plan at the end of the site driveway cul-de-sac adjacent to the northeast corner of the building. If available, the transit/shuttle stop will be the only reasonable way for residents to access MBTS Town Center services without driving. This stop, as illustrated on the architectural parking plan, seems to comply with ADA/MAAB accessibility requirements.

The potential shuttle service requires a relatively steep uphill/downhill vehicle trip via a 2/3-mile total route diversion from School Street (1/3-mile up; 1/3 mile down) to provide site service as a part of a public route service. The type, service level, and viability of such a proposed shuttle/transit service needs to be clarified.

The availability of funding through the Massachusetts Bay Transportation Authority (MBTA), which serves MBTS today, or the nearby Cape Ann Transit Authority (CATA), which could serve the site at the Town's discretion, is unclear. If either transit service entity is unable to obtain funding for the service, the Applicant should consider the possibility of a residential subscription van/shuttle service connecting downtown Manchester and the MBTA commuter rail station to the site. Permission for any new or shared service stops on School Street and in the Town Center must be obtained from the Town or the MBTA with appropriate transit/shuttle stop infrastructure provided.

Site Loading and moving van access: The Applicant should provide an AutoTurn® or equivalent truck turning analysis showing how site loading and turnaround at the end of the cul-de-sac will occur assuming the largest vehicles expected to access the site. The analysis should confirm whether geometric features of the site driveway and turnaround will be adequate to accommodate occupied envelopes of the largest vehicles approaching the site buildings to and from School Street.

Conclusions

We find that the TIA was well done and generally complies with acceptable methodologies and procedures identified by MassDOT as they pertain to traffic generation, trip distribution and evaluation of existing and future traffic operations and off-site safety with and without the development. Off-site traffic operations and safety characteristics for the site's projected motor vehicle traffic impacts are reasonable and acceptable.

On-site, however, adverse site access features are driven by constraining steep topography and wetlands. The proposed approximately 1/3 mile length cul-de-sac site driveway creates several potential access safety issues.

Reference: Traffic Impacts Peer Review Initial Findings Letter

The proposed access road has steep grades and sharp horizontal curves that do not comply with the requirements of MBTS's Subdivision Rules and Regulations. Most state and national guidelines that we are aware of recommend a secondary means of access should be created to serve the proposed 157 apartment units, preferably in a loop road configuration.

As currently designed, the access driveway's grading and horizontal curvature will discourage pedestrians and bicyclists from traveling to and from the site. The approach to maintaining good site access at all times, including winter icing conditions and unforeseen road blockages, should be provided.

Proposed site plans should show how or whether the site will accommodate and access existing nearby off-site Manchester Essex Conservation Trust (MECT) trails.

The site's proposed 247-space parking supply should serve site related parking demands acceptably. We have identified concerns about the layout of the proposed garage and internal parking operations that should be addressed.

A shuttle/transit stop is proposed on the site. Operations of such a service should be clearly identified, as it may be the best way to enhance pedestrian and bike access via School Street and the Town Center.

We appreciate the opportunity to assist the Town with these services and look forward to working with the Applicant to the successful resolution of issues raised in this peer review letter.

Regards,

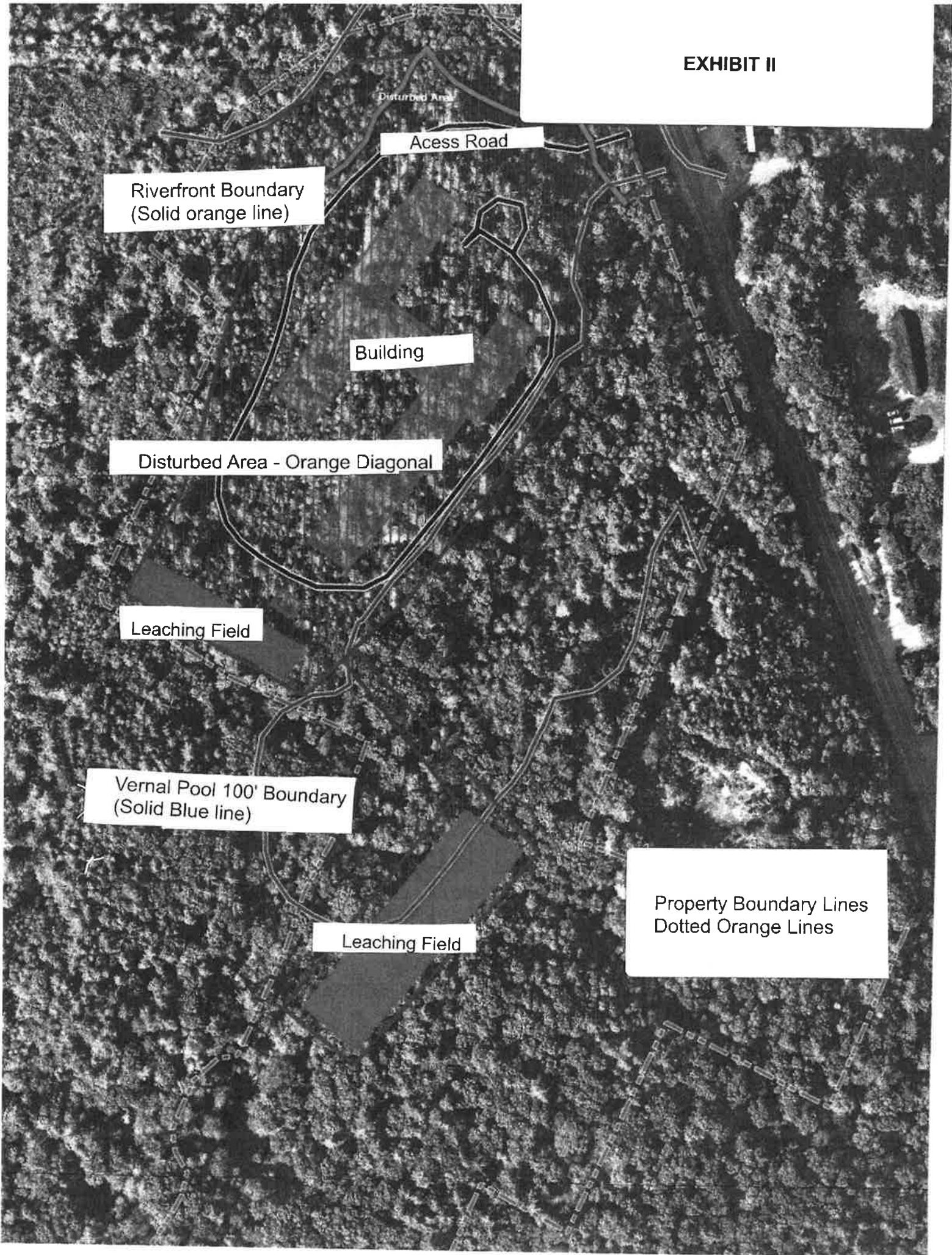
Stantec Consulting Services, Inc.



Gary L. Hebert, PE
Consultant/Peer Reviewer
Phone: 781-249-0419
Email: Gary.Hebert@stantec.com

Reference: 179411000

EXHIBIT II



Riverfront Boundary
(Solid orange line)

Access Road

Building

Disturbed Area - Orange Diagonal

Leaching Field

Vernal Pool 100' Boundary
(Solid Blue line)

Leaching Field

Property Boundary Lines
Dotted Orange Lines

EXHIBIT III

BEALS ASSOCIATES, INC.

2 Pages Plaza, Suite 200, Boston, MA 02116
Phone: 617-242-1120

Citizens' Initiative for Affordable Housing
c/o Dennison M. Hall
Hall Investment Holdings
40 Beach Street, Suite 203
Manchester, MA 01944

Reference: **The Sanctuary at Manchester-By-The-Sea Concerns and Questions**

In response to your request, Beals Associates, Inc. has performed an initial review of the proposed project entitled The Sanctuary at Manchester-By-The-Sea. Our initial review focuses primarily on a seven-sheet plan set entitled: ***Site Development Plans For The Sanctuary at Manchester By The Sea 0 School Street Manchester-By-The-Sea, MA*** which was issued for review on September 24, 2020. The following is a list of concerns and questions about the proposed development off of School Street in the northern portion of Manchester-By-The-Sea. As proposed, the development presents inadequate parking with no other transportation alternatives, no stormwater management plans, insufficient protection of environmental resources, and precarious access through the site considering topography and proposed grades. In sum, the proposed project raises substantial public safety and public health concerns and therefore must be reconsidered for the betterment of current and future residents of Manchester-By-The-Sea.

Even though the 40B process waives all local regulatory requirements, it is important to consider that many of the local regulations are based on good engineering practice and are also intended to protect public health and safety. Throughout this analysis, we cite the local regulations not to ensure compliance with the local regulations that are waived but instead to ensure that the proposed project respects good engineering practice while also ensuring the protection of public health and safety for the future residents of the proposed development and the current residents of Manchester-by-the-Sea.

The most significant concerns are outlined below and grouped in categories for clarity:

Parking

1. 423 parking spaces are required by the Zoning By-laws but only 247 spaces are provided and therefore, there is a deficit of 176 spaces based on the standards in the Town's regulations. In essence, only 58% of the required parking is being provided in the proposed design.
2. In addition to inadequate resident parking, there is no mention of visitor parking in terms of number of spaces provided or location of those spaces.
3. There is no description or clarification of what the amenity space will entail and no parking has been dedicated to that use.
4. The proposed average parking ratio of 1.5 spaces/unit, below every parking requirement metric in the zoning.
5. 3-bedroom units are required to provide five parking spaces, but 1.5 is proposed.
6. 2-bedroom units are required to provide three parking spaces, but 1.5 is proposed.

7. Parking spaces are required to be 9 feet by 20 feet by zoning, but the surface parking spaces are 9 feet by 18 feet. Garage spaces are not dimensioned.
8. Residents will be reliant on driving since the nearest public transit (Commuter Rail station) is 1.7 miles from site, requiring a 7-minute drive, 10-minute bike ride, or 35-minute walk.
9. There is no bicycle infrastructure, such as bike lanes, existing or proposed on the access drive or on School Street.
10. There is no bicycle parking shown on any plan, but the Vanasse Traffic Impact Analysis states there is and should be located near the main entrance.
11. Vehicular speeds on School Street make biking on the "shared travel-way" uncomfortable at best and unsafe at worst, meaning most residents will not bike due to the safety risk
12. There is no sidewalk on School Street between the site and the Route 128 Southbound ramp making walking from the site uncomfortable/unsafe.
13. The conclusion of all of the above information is that additional parking, averaging at a minimum 2.0 spaces/unit, needs to be provided for this many units (and visitors) in this location in town.

Water

1. Section 6.11.1 of the Zoning states, "The Water and Sewer Department has provided evidence that the municipal sewer system can accommodate no more than 200 additional dwelling units and the public water supply is at or near capacity. The rate of residential and commercial development in Manchester-by-the-Sea is determined by and should not exceed the ability of the town to provide adequate public services to safeguard the health, welfare and safety of current and future residents." A water system analysis should be performed to determine if there is adequate water supply for 157 residential units coming online at once. This analysis should be done for volume, pressure, and fire flow.
2. It should be determined if there is adequate pressure and supply for fire protection considering the access drive length and elevation. No booster pump is indicated on the plans.
3. Fire hydrants are currently only proposed along the east side of the building. Is there an adequate number of hydrants and are they in the proper locations for a building of this size? The applicant should review the plans with the Fire Chief to determine if the Chief believes that the proposed design is sufficient for his fire protection needs.
4. Taken in aggregate, the number of hydrants does not fulfill the requirement of one hydrant every 500 feet, per Section 7.14 of the Subdivision Rules & Regulations. Although this is a local requirement, it is also good engineering practice and necessary to protect public safety.
5. There is no Stormwater Management Plan, which is crucial for a site with this much topography, bedrock, and wetland areas. The only indication of stormwater management is the drainage swale along the interior side of the access drive to the west of the building and two catch basins at the intersection of the drive and School Street. Absent any calculations to the contrary, two catch basins for such a large drainage area are inadequate and will likely result in water discharging into School Street. Adequate stormwater management is important to protect wetlands, the town's drinking water sources, prevent erosion, and limit runoff from the access drive onto School Street.
6. Section 5.10.1.3 of the zoning states, "All runoff from impervious surfaces shall be recharged on the site, diverted towards areas covered with vegetation for surface infiltration to the extent possible. Dry wells shall be used only where other methods are not feasible..." There is no information provided to determine if the current design achieves this requirement nor is there

sufficient subsurface information to determine if infiltration is possible. Recharge is necessary to maintain the water balance in the area in order to protect wetland resource areas and water resources.

Access Drive

1. The proposed driveway is approximately 1,900 feet long, exceeding the standard maximum dead-end length of 500 feet (Section 7.09.D.3. Subdivision Rules & Regulations). We are aware that the access through the site is a private driveway. However, it is intended to function as a roadway providing access to a large development and therefore in this case, there is no difference between a driveway and a roadway in terms of functionality. While 40B may waive local design standards, the reason for creating a maximum length of a dead-end roadway is to protect public safety in an emergency. It is commonly accepted that with a single point of access, public safety can be protected to a distance of 500 feet as reflected in the regulations. To ensure the protection of public safety for roadways or driveways in excess of 500 feet, a secondary means of access and egress must be provided. A 1,900' +/- driveway serving 157 residential units with no second point of access does not adequately protect public safety.
2. We have analyzed the accessibility of the site with a 40' pumper fire truck measuring the ability of a truck to negotiate the driveway. The tolerances are very tight and while a truck can negotiate the driveway, the turn-around at the building, and egress within the driveway, the tracks of the wheels are frequently on the very edge of the pavement and at times, the wheels are on the centerline of the driveway. On the east side of the building in the vicinity of the drop-off area, the pavement is reduced to a width of 22' which is relatively narrow, particularly considering that the area is bounded by a guard rail on the east side of the driveway. Attached at the end of this letter is a copy of the submitted Layout & Materials Plan on which we have overlaid a turning analysis showing the path of a 40' pumper fire truck as it navigates through the development. The red lines indicate the path of the tires on the ground surface and the green lines show the overhang of the truck. As indicated by this analysis, the truck must navigate through the site with very tight tolerances in order to travel to the turn around and to return.
3. Section 7.09.C.2. of the Subdivision Rules & Regulations states that subdivisions of over 25 lots shall require two means of access. Typically, one can assume an equivalency of one lot = one housing unit, but in this case one lot can equal six housing units and still exceed this metric. Two means of access is critical for public safety.
4. In Manchester-by-the-Sea, a road that provides access to more than 120 housing units is considered an Arterial Road, illustrating the importance of clear access through wider dimensions, lower gradients, and larger curve radii to accommodate the larger traffic volume. Although not technically a street, the proposed access drive functions as such for the 157 units on top of the hill but it does not comply with the standards deemed to be necessary for this scale of development.
5. No sidewalks are shown along the access drive. How do pedestrians walk safely between the building on top of the hill and School Street on a winding road with a large volume of vehicles traversing the drive daily?
6. Can pedestrians access the abutting trail network from the proposed building? If they access it from School Street, sidewalks along the access drive become more important.

7. Typically, arterial (and collector) roads that serve at least 120 residential units require sidewalks on both sides. Given the existing topography one sidewalk may be adequate, but zero are currently proposed and not acceptable
8. Will the access drive be lit? No information is provided and lighting is critical for the safety of pedestrians who may be walking in the driveway at night.

Grading

1. The driveway to the project is steep, narrow, curvilinear and abuts very steep slopes in different locations.
2. The retaining wall on the east side of the building for the access drive, as shown in the section on the last page of the October 2020 presentation, will be 30 feet tall so assurances need to be made that the design can be constructed as shown safely, especially since this is the only point of access to the parking garage entrance/exit.
3. The entrance of the site is 37 feet below the top of the highest retaining wall and 61 feet below the turn-around at the end of the drive on top of the hill. Assurances need to be made that the design can be constructed as shown and safely. The applicant should provide plans showing the construction details along with a construction sequencing plan describing the steps necessary to construct the substantial walls.
4. The rendering on sheet A17 of the developer presentation from October 2020 is deceiving and fades the proposed building to minimize its visual impact from the roadway. In reality, it will loom large above the trees and the surrounding area.
5. Similarly, sheet A19 from the same presentation does not accurately represent the steep climb of the access drive and the height of the series of retaining walls at the foot of the hill.

Wetlands

- The existing isolated wetland on the western side of the site is to be filled and replicated elsewhere at a ratio of 2:1. No replication area is shown on any plan. The selected location is essential for successful replication since most attempts are unsuccessful from an ecological perspective. The replication area should be shown before approval is granted to fill in the existing wetland as part of the access drive. In addition, the isolated wetland should be checked in the spring to determine if it contains any vernal pools, which sometimes occur within isolated wetlands.
- The 30-foot-tall retaining wall supporting the access drive on the eastern side of the building encroaches into the 100-foot buffer zone of a wetland to the east. What assurances are provided that snowplows will not simply direct snow off the roadway into the buffer and potentially contaminate the sensitive resource area? Because the massive wall is so close to the wetlands, the project proponent should produce plans and a sequence of construction documenting how the wall can be constructed without impacting the adjacent wetlands.
- The leaching field shown on sheet 102B can only be accessed by filling in the wetland directly to the northwest and should therefore be relocated. In addition, a sewer line would have to pass through this wetland area connecting the sewage treatment plan to the leach field and a permanent means of access must be created to ensure long term maintenance of the leach field.

The method of access should be designed to ensure that if constructed in combination with the other wetland filling, that the 5,000-sf wetland fill limit is not exceeded.

- Similarly, sheet C-102A states the exact size and location of wastewater treatment tanks are still to be determined, but their location and size are crucial to understand the potential impacts of the proposed design before approval.

Sewage Disposal

- Insufficient information is provided to properly assess the adequacy of the proposed sewage treatment plant and the leach fields necessary for the disposal of the development's sewage effluent. The plans indicate that a limited number of test pits are located in areas of the proposed leaching fields but the test pit logs are not shown on the plans. In an environmentally sensitive area such as this site, extensive subsurface explorations should be performed to evaluate the soil profile including soil characteristics, permeability, depth to the seasonal high groundwater elevation, depth to bedrock and any other subsurface conditions that may affect the performance and adequacy of the proposed leaching areas.
- Hydrogeologically, the proposed development area appears to be a bedrock hill surrounded by wetlands and/or rivers on four sides. To the west of the site, there is an extensive area of wetland resources known as Cedar Swamp which includes bordering vegetated wetlands and a river flowing in the center of Cedar Swamp. To the north of the site is a large wetland known as Beaverdam Swamp which includes Sawmill Brook. Where Sawmill Brook changes direction from an easterly flow to a southerly flow, the brook flows in close proximity to a non-community groundwater well presumably serving the adjacent medical building. Sawmill Brook continues flowing in a southerly direction to a confluence with Cat Brook. Cat Brook continues to flow in a southerly direction where it flows in close proximity to a public groundwater well and due to its close proximity, the brook flows through both the zone 1 and zone 2 protected areas around this public water supply well. Finally, there is a large wetland area located to the south of the site known as Millets Swamp.
- As evidenced by the information above, it appears that any effluent disposed of in the vicinity of the proposed development, will be transported through both a surface water system and a ground water system that moves towards and through the protected areas of at least two known water supply wells. As a consequence, it is critically important that the performance of the sewage disposal system be assessed in detail to determine its impact on the groundwater supplies and whether the system is capable of protecting the health of those dependent on the two known wells and any other private wells that may exist in this area. With regard to the sewage disposal system design, the only information on the current plan set is notes stating: "***Wastewater Treatment Leaching Fields, Typ. (Exact size & Location to be Determined by Others)***" and "***Wastewater Treatment Facility, Typ. (Exact Size & Location of Treatment Tanks to be Determined by Others)***" The project is not viable without an adequate means of sewage disposal and with the downstream water supply systems, the adequacy of the sewage treatment plant and leach fields must be thoroughly vetted to ensure the protection of public health.

Site Plan Review Criteria

Although the proposed project is exempt from zoning requirements as a 40B project, the underlying criteria for approving projects should not be ignored. Section 6.5 of the Zoning outlines the criteria the Zoning Board of Appeal must consider in approving a site plan and the proposed design does not meet the following:

(a) Protection of adjacent areas against detrimental or offensive uses on the site by provisions of adequate surface water drainage, buffers against lighting, sight, sound, dust, vibration, and allowance of sun, light, and air:

No Stormwater Management Plan is available to determine the adequacy of surface water drainage and given the topography, grades, presence of ledge, and proximity to sensitive environmental resources such information is even more crucial than usual.

(b) Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent areas:

The 1900-foot-long access drive exceeds the standard length of a dead-end road in town, provides only one point of access off School Street, features average grades between 6-8%, increases in elevation over 60 feet, and includes a 30-foot-tall retaining wall on the east side, all of which reduce the ease of access and therefore safety. Furthermore, no sidewalks are provided along the access drive to facilitate safe pedestrian movement between the building at the top of the hill and School Street and nearby trails 60 feet below.

(c) Adequacy of facilities of handling and disposal of refuse and other production by-products

The plan set does not contain sufficient information to properly assess the adequacy of facilities for handling and disposal of refuse and other production by-products

(d) Protection of environmental features on the site and in adjacent areas:

Without adequate stormwater management, which is unknown as this time, abutting wetlands will be subjected to runoff from the roadway. The isolated wetland that will be filled is to be replicated but no location is given, and since most replications are unsuccessful ecologically this detail is important. Additionally, the development will lead to deforestation, blasting, and site work that will irrevocably change this natural area in close proximity to conservation land. This work is governed by the state Massachusetts Wetlands Protection Act and therefore it is not waived by 40B.

(e) Promotion of appropriate arrangement of structures within the site and in relation to existing structures within the district and neighborhood:

The proposed structure is located at the top of a hill, over 60 feet above School Street, and with only one point of access. Combined with the necessity of blasting and excavation to create the pad for the building, and the filling of a wetland for the access road, it is clear this site is not suitable for the scale of the proposed project.

(f) Coordination with and improvement of systems of vehicular and pedestrian access, drainage, water supply, sewage disposal, lighting, landscaping, wetlands, water courses, buildings and other features that support the neighborhood:

At this time, there is no indication of off-site improvements but there is no safe pedestrian or bicycle access along School Street or from School Street to the proposed building, no drainage details provided, no indication of water source, only vague outlines of potential sewage disposal locations (one of which would necessitate filling another wetland to access it), no information about lighting, and admitted damage to abutting wetlands.

(g) Compliance with all applicable sections of the Zoning By-Laws.

Subdivision Design Objectives

Furthermore, the local Subdivision Rules & Regulations outline several Design Objectives (Section 7.02) that we believe are appropriate to a project of this size. The following should be reduced to the greatest extent possible:

1. *Volume of cut and fill:*

No detailed analysis is provided but given the proposed project is located on top of a hill, it is reasonable to assume significant cutting will be required. The highpoint on the site is at elevation 152. The plans indicated that the first-floor elevation of the proposed building is 119 with a garage under the first floor. To achieve the finished grades, the existing site will have to be lowered in overall elevation by approximately 40 feet. This will result in the removal of a significant amount of soil and rock. The applicant should be required to provide a cut and fill analysis of the proposed site plan to evaluate how much material will have to be removed from the site.

2. *Area over which existing vegetation will be disturbed, especially if within 200 feet of a river, wetland or waterbody or in areas having a slope of more than 15%:*

The proposed project will result in deforestation within 200 feet of multiple wetlands (including filling one in) and in areas of steep slopes.

3. *Number of trees removed having a diameter over 12" at breast height:*

No detailed analysis is given, but for a mature forest such as the one located on-site, it is reasonable to expect an abundance of trees with a diameter over 12" and that many will be removed during the construction process. More details should be provided to account for this destruction.

4. *Extent of waterways altered or relocated:*

Although no defined waterways will be impacted, one wetland will be filled for the access road and a second may be filled to access the sewage disposal area southeast of the building. Furthermore, the lack of stormwater management currently proposed puts all abutting wetlands at risk for alteration of their ecological conditions.

5. *Dimensions of paved areas except as necessary for safety and convenience, especially in aquifer recharge areas*

6. *Buildings located within 500 feet of existing Town roads:*

The proposed building is over 800 feet from the closest Town road (School Street), and there is only one point of access. The building is over 60 feet higher than the intersection with that road, average proposed grades are 6-8%, and there is a 30-foot-tall retaining wall to support the access drive, all of which raises serious concerns about vehicular and emergency access.

In summary, the proposed project is inadequately designed and does not provide sufficient protection of public health and safety. We question the advisability of placing 157 units on top of a hill, surrounded by steep slopes, with only one point of access via a challenging access drive and no alternative access or means of transportation. We provide this initial review for your consideration and with the intent of highlighting the improvements necessary to make this a viable project.

Sincerely,

Beals Associates, Inc.



Lawrence M. Beals



Patrick Connolly

EXHIBIT IV

Open Letter to MassHousing

June 12, 2021

MassHousing
One Beacon Street
Boston, MA 02108-3110

To the Representatives of MassHousing:

We, the undersigned citizens of Manchester, respectfully request that for three reasons MassHousing deny Strategic Land Ventures (SLV)'s request for a Project Eligibility Letter (PEL):

The Town of Manchester has made real progress towards its Affordable Housing Goals. North Shore Community Development Coalition (NSCDC) recently purchased 1-3 Powder House Lane, with 29 existing rental units located in the heart of Manchester. NSCDC, a mission-driven non-profit, will preserve these 29 affordable units in perpetuity. More than 260 local families demonstrated their support for integrated, affordable housing by donating more than \$1.5 million to NSCDC. No tax dollars were needed. NSCDC's project serves people at 50-60% of AMI, compared to SLV's "affordable" units at 80% of AMI. The Manchester Affordable Housing Trust (MAHT), established in 2016 to increase the diversity of housing options for Manchester's low- and moderate-income households, endorsed the project, which is compatible with the town's Housing Production Plan.

SLV's proposal poses risks to the life, health and safety of residents.

- **Dangerous road.** With a single, steep cul-de-sac access road 1900 feet long and no secondary access road, even SLV agrees with the Town's independent Traffic Impact Consultant, who characterized the project as "less safe." Emergency vehicles might block families seeking to leave the property. Worse still, vehicles double parked or broken down could block emergency vehicles seeking access to the site.
- **No sidewalk.** The proposed project appears to violate Fair Housing standards by placing at risk any resident who seeks to exit the property on foot or wheelchair. An extensive ramp system is required – but not included in the design – to address access and safety challenges under ADA.
- **Threatens drinking water supply.** Sawmill Brook, which wraps around three sides of Shingle Hill, links downstream via induced infiltration to the Lincoln Street well – the source of roughly half of Manchester's drinking water. The project would generate

significant stormwater runoff on this water supply, and on the related aquifer recharge area and reserve public water supply.

- **Harmful blasting.** Repeated exposures to air overpressure and ground vibration from the removal of 40 feet of rock on Shingle Hill poses risks to the public water supply and the outstanding wildlife habitat within adjacent Town-owned conservation areas.
- **On-site wastewater treatment a major environmental risk.** It deploys two large leaching fields in granite outcroppings connected by a pipe running through a highly sensitive wetland.
- **Menaces Conservation Land.** The site abuts or overlooks 1600 acres of conservation land conserved by, among others, Manchester-Essex Conservation Trust and The Trustees of Reservations - each of which has expressed its strong opposition to SLV's proposal.

SLV's proposal is inappropriate for the site and inconsistent with local needs.

After blasting 40 feet of rock off the top and north section of Shingle Hill, SLV's large structure will tower over a 90-degree sloped ledge. SLV's plan entails monumental engineering for 136 units (only 34 of which would be designated affordable) and 226 cars, with rampart-like retaining walls that will strip vegetation from the hillside and loom 65 feet over School Street. Because of the severe drop-offs, the project is in many cases surrounded by a chain link fence "for fall protection". The project from the roof to the bottom of the retaining wall would reach approximately 75 feet, the equivalent of a seven-story high building. Considering the elevation from the entrance of the property, the project would appear 107 feet tall - similar to an eleven-story building and grossly inconsistent with the town's existing structures. It threatens the natural environment, it is vastly out of scope in relation to its surroundings and municipal planning, and it is a devastating blow to generations of care for open space.

The 34 units of affordable housing would be priced for people earning 80 percent of area median income or more, isolated from the rest of the town, and nearly two miles away from public transportation. Manchester needs affordable housing priced at lower AMI rates and fully integrated into our community. Manchester has taken concrete action to close the affordable housing gap in our town with local solutions to our town's housing needs. We hope that you will deny a PEL for this inferior project which poses concerns to the health and/or safety of the occupants and the residents of Manchester and allow us to finish our work.

Thank you for considering our request.

The undersigned residents:

1. Chris Abbott
2. Ellen Abbott
3. John Abbott
4. Katharine Abbott
5. Trina Abbott
6. Robert Agnello
7. RoseMarie Agnello
8. Elizabeth Akerley
9. Michael Alden
10. Lee Allen
11. Diane Allenberg
12. Carrie Almog
13. Anthony Aloï
14. Barrett Alston
15. Jessica Alston
16. Elizabeth Alt
17. Patricia Ambrose
18. Susannah Ames
19. Arthur Anderson
20. Carl Anderson
21. Elizabeth Anderson
22. Lorna Andersson
23. Alison Anholt-White
24. Cook Ann
25. Caroline Armington
26. Stephen Armington
27. Alan Armstrong
28. Rosemary Armstrong
29. Lynn Atkinson
30. Nancy August
31. Eugene Ayott
32. Sarah Ayott
33. Michael Azevedo
34. Peter Baciù
35. Gale Bacon
36. James Bacon
37. Andrea Basso
38. Rem Baviu
39. J. Robert Beatty
40. Leslie Beatty

41. Elaine Beggan
42. Joseph Beggan
43. Connie Behnke
44. James Behnke
45. keith bellucci
46. KAREN BENNETT
47. Carolyn Bergeron
48. Donald Besser
49. Helen D. Bethell
50. John T Bethell
51. Henri Bichet
52. Stephanie Bichet
53. Nancy Bildner
54. Catherine Bilotta
55. Kjetil Birkcland
56. Jeffery Bistrong
57. Isabelle Black
58. Camilla Blackman
59. Jane Blau
60. Kristen Bock
61. William Bonaccorso
62. Lisa Bonneville
63. Jay Bothwick
64. Kathleen Bothwick
65. Florence Bourgeois
66. Eric Bourke
67. Erin Bourke
68. Janet Boynton
69. Reid Boynton
70. Davis Bradford
71. Miriam Bradford
72. Adrienne Bradley
73. Deborah Bradley
74. Timothy Braier
75. Charles Brennan
76. Jill Brennan
77. Adam Briggs
78. Margaret Briggs
79. Kristen Brousseau
80. Catherine Brown

81. Elizabeth Brown
82. Roxanne Brown
83. William Brown
84. Catherine Browne
85. Gail Browne
86. Roseanne Bruno
87. Alida Bryant
88. Christopher Bryant
89. Carol Bundy
90. John F. Burke
91. Neil Burke
92. Tracey Burke
93. Tamera Burns
94. Dolores Burroughs
95. Elyse Campanelli
96. Joseph Campanelli
97. James Campbell
98. Rebecca Campbell
99. Samuel Campbell
100. Jean Capello
101. Leonard Capello
102. Jeff Carovillano
103. Bernadette Carr
104. Gracia Carr
105. James Carr
106. Sheila Carrassi
107. Sherilyn Carroll
108. Francis Caruso
109. Michael Carvalho, Esq.
110. Jon Casey
111. Frances Caudill
112. Thomas Chafe
113. Martha Chapman
114. Aaron Chase
115. Meghan Chase
116. Philip Chase
117. Pamela Ciccone
118. Nora Cifric
119. Andrew Clark
120. Diane Clark

121. Elisabeth Clark
122. Anne Coccoluto
123. Jeff Cochand
124. Betty Lou Colarusso
125. Clay Colarusso
126. Peter Colarusso
127. Elizabeth Colbert
128. Frances Colburn
129. Amy Coleman
130. Linda Coleman
131. Shoshanah Collins
132. Tonya Colpitts
133. T. Philip Comenos
134. Catherine Comiskey
135. Cynthia Conant
136. Stuart Conant
137. William Condon
138. Hannah Conlon
139. Thomas Conlon
140. Kathleen Connolly
141. Elaine Conway
142. Alice Coogan
143. Ann Cook
144. Douglas Cool
145. John Costello
146. Pearce Coues
147. Phoebe Coues
148. Clement Courcy
149. Eilen Courcy
150. Anne Cowman
151. Terry Cowman
152. Beryl Cox
153. Martha Cox-Stavros
154. ROBERT COYNE
155. Bradley Crate
156. Catherine Creighton
157. Peter Creighton
158. Jeff Crispen
159. Andrew Crocker
160. BOB CROCKER

161. Julie Crocker
162. Ruth Crocker
163. Catherine Crockett
164. Gregory Crockett
165. Skylar Crofton
166. Linda Crosby
167. Ellen Cross
168. William Cross
169. Deborah Cummins
170. Jordan Cummins
171. Carisa Cunningham
172. Jill Curatolo
173. Peter Curatolo
174. Richard Curran
175. Gerald Dackert
176. Patricia Dackert
177. Marcus Dahllof
178. Mary Dalton
179. Michael Dalton
180. Tracy David
181. David Davis
182. Ed Davis
183. George Davis
184. Jean Davis
185. Katharine Davis
186. Megan Davis
187. Deborah de Sherbinin
188. Nick de Sherbinin
189. Julie de toledo
190. Craig Deery
191. Laurel Deery
192. Jeffrey Delaney
193. Nancy Delaney
194. Christina Delisio
195. Aaron Dell
196. Sharon Deveney
197. Nicole Lattanzi Dickerson
198. Stephen Dickerson
199. Tanya Dickson
200. Winifred Diedrich

201. Carl Doane
202. Kate Dodge
203. Nina Doggett
204. Anthony Dolan
205. Mark Dolan
206. Marlene Dolan
207. Scott Doneghy
208. Arden Dore
209. William Dore
210. Eleanor Dorr
211. Lawrence Dorr
212. Donna Dowal
213. Katharine Dreier
214. Elise Dudley
215. Jim Dudley
216. Liza Dudley
217. Lori Dumont
218. Brian Duncan
219. Patricia Duncan
220. Peter Durand
221. Susan Durkin
222. James Elder
223. Sharon Els
224. Steve Elterich
225. Faith Emerson
226. Joan Endicott
227. Anne Engelhart
228. Caitlin Eppes
229. Charles Eppes
230. Jan Eschauzier
231. Morgan Evans
232. Joan Even
233. Michael Even
234. Rebecca Even
235. Zack Even
236. Jennifer falconer
237. Alison Falk
238. Ruth Faulkner
239. Caroline Fedorowich
240. Richard Fedorowich

241. Alba Figueroa
242. Dina Flood
243. BOB FOLEY
244. Laurie Franco
245. Brenda Furlong
246. Charles Furlong
247. PHILIP Furse
248. Tobias Gado
249. Judith Gamble
250. Gail Gang
251. Tara Gans
252. LISA GARLITZ
253. Robert Garlitz
254. Michael Gates
255. Timothy G. Gates
256. Mark gauthier
257. Michele Gaythwaite
258. Bart Geer
259. Sue Geer
260. Ann Marie Gentilucci
261. Page Gentleman
262. Helen George
263. Paul George
264. Timothy George
265. John Gillis
266. Patricia Gillis
267. Jeffrey Gilson
268. Pat Glennon
269. Laurie Glimcher
270. Sheila Goddard
271. Christopher Gosline
272. Renée Gosline
273. Asa Gosnell
274. David Gosnell
275. Nina Gosnell
276. Anastasia Goulakos
277. Lauren Grace
278. Erin Graeter
279. Elizabeth Graham
280. Catherine Greenough

281. Erin Greenwood
282. Klara Gregory
283. Martha Gubbins
284. John Gurley
285. Leslie Gurley
286. Ann Guyer
287. David Haley
288. Denison Hall
289. Marion Hall
290. OWEN HALL
291. Stephen Hall
292. Susan Halpern
293. Stephen Hamilton
294. James Hammond
295. Leslie Hammond
296. Maddie hammond
297. Nancy Hammond
298. Whitney Hammond
299. Susan Harrington
300. James Harris
301. Rebecca Harvey
302. David Haskell
303. lisa haskell
304. Olga Hayes
305. Susan Henderson
306. Cook Henry
307. Charles Herlihy
308. Deborah Hersey
309. Jenny Hersey
310. Richard Hersey
311. Mark Heslop
312. Sheila Hill
313. Michela Hirnak
314. Jonathan Hodges
315. Leslie Hoff
316. Arthur Hofmann
317. Charles Hogan
318. James Holley
319. Janis Holley
320. Joan Houghton

321. Charles Hovey
322. Charles Hovey
323. Nancy Hovey
324. Clifford Hughes
325. Mary G Hull
326. John Huss
327. Sally huss
328. Bill Hutchins
329. Anne Hutchinson
330. MichelleHuth
331. Lorraine Iovanni
332. Al Ireton
333. Elaina Jacobs
334. Laurie Jaekle
335. Emily Jay
336. John Jay
337. James Jodice
338. Bruce Journey
339. Cynthia Journey
340. Malia Judge
341. John Julian
342. Diane Kaneb
343. Gary kaneb
344. Tasso Kaper
345. Stephen G Kasnet
346. Alex Kaufman
347. Thomas Kehoe
348. Gillian Kellogg
349. Carolyn Kelly
350. Karen Kenny
351. Pamela Kenworthy
352. Dorota Keverian
353. Kenneth Keverian
354. Anderson Kilgore
355. Diane Kilgore
356. Jeanne Kinch
357. Anne Kneisel
358. Tyler Kneisel
359. William Kneisel
360. John Knowles

361. Anton Kobus
362. Marilyn Kobus
363. Marisa Kobus
364. Philip Kobus
365. Mary Koch-King
366. Dianne Koeplin
367. Lauren Komishane e
368. Pavel Korzine
369. Brianna Koslowski
370. Peter Koslowski
371. PornwadeeKoslowski
372. Elizabeth Kross
373. Andre Kuehnemund
374. Michele Kulick
375. Joan Kulukundis
376. Miles Kulukundis
377. Jacqueline Lamb
378. Lawrence Lamb
379. Natasha Lamb
380. Jessica Lamothe
381. Melissa Landsvik
382. Gloria Landy
383. Andrew Lane
384. Charlie Lane
385. Judy Laspesa
386. Lewis Lattanzi
387. Suzanne Lattanzi
388. James Latham
389. Deborah Ledbetter
390. John Ledbetter
391. Virginia Lehar
392. Carol Lipartito
393. Mimi Locke
394. Bob Lockwood
395. Charles Lodge
396. Susan Lodge
397. Margaret Logue
398. Michael Logue
399. Elizabeth Loomis
400. Susan Love

401. Heather Lovett
402. Mary Lumsden
403. Lucy Lydon
404. Mary lydon
405. Patrick Lydon
406. Susannah Lydon
407. Judith Lyons
408. Michael Lyons
409. James Maccarone
410. Michael Mack
411. Susan MacKinnon
412. Gayle Macklem
413. Richard Macklem
414. Robert MacNeille
415. Stephen MacNeille
416. Jacek Makowski
417. Mary Makowski
418. Thomas Makowski
419. Ursula Makowski
420. Michael Mangini
421. Lisa Mann
422. William Mann
423. Marion MARIOTTI
424. Chrissa markos
425. Carolyn Marletta
426. John Marletta
427. Drayton Martin
428. Sam Martin
429. Jacob Martz
430. Mary Beth Massillon
431. Sean Masterson
432. Veronica Matthews
433. Martha Mayne
434. Roy Mayne
435. Kate Mazzini
436. Donna Mazzone
437. Frank Mazzone
438. Jeffrey McAvoy
439. Gale McCAnn - Bacon
440. Jane McConnell

441. William McConnell
442. ALLEN MCCOY
443. Mr. Laurie McCoy
444. Frederick Mcdonald
445. Mary McDougal
446. Mimi McDougal
447. Scott McDougal
448. Mary Ann McGovern
449. Amanda McGrath
450. Gavin McGrath
451. Kathleen McHugh
452. Virginia McIlvaine
453. Lisa McLaughlin
454. Michael McLaughlin
455. Nurhajati McMahan
456. Françoise Meahl
457. Robert Meahl
458. Kurt Melden
459. Dana Menon
460. Brooke Merluzzi
461. Dave Merrill
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464. Thomas Miller
465. Jeff Milne
466. Scott Milne
467. Charlotte Minasian
468. Patricia Mitchell
469. Su Mittermaier
470. Alison Moerland
471. Daniel Moerland
472. Timothy Molinari
473. Amy Moore
474. Peter Moore
475. Mary Lou Morison
476. Thomas Morison
477. Kris Moroney
478. Fred Morris
479. Garlan Morse
480. Jody Morse

481. Eileen Morsett
482. Cindy Morton
483. Jeff Morton
484. Peter Morton
485. Victoria Morton
486. Paul Murray
487. Elisabeth Nalley
488. PAMELA Nelson
489. Adam Neves
490. Elaine Nichols
491. H. Owen Nichols
492. Meghan Nichols
493. alexander Noble
494. Ann Noble-Kiley
495. Malcolm Noriega
496. Elizabeth Novak
497. Lucy Noyes
498. Marlon Nunez
499. Aileen O'Rourke
500. Augustine O'Keeffe
501. Alli Ocean
502. Ashley Ochs
503. Daniel Ochs
504. Andrew Oldeman
505. Melanie Oldeman
506. Sylvie Oldeman
507. Chris Oliver
508. Christopher Oliver
509. Jane Olson
510. John Olson
511. Dorina Omari
512. Genci Omari
513. Carole Oneil
514. Stephen Osterman
515. Erica Owen
516. Sally paddden
517. Alicia Palmer
518. Collin Palmer
519. Kathleen Palmer
520. Stefan Palmer

521. Eunice Panetta
522. Jeanne Paratore
523. Maria Parisi
524. Betsy Parker
525. BETH PAYSON
526. Leah Peavey
527. Todd Peavey
528. Emma Perryman
529. Gregory Petsko
530. Barrett Petty
531. Lydia Petty
532. Christopher Phillips
533. Jane Phillips
534. Sarah Pierce
535. Erin Pinstein
536. Tyler Pinstein
537. Janet Pletcher
538. Dustin Plomondon
539. Marcia Polese
540. Geoffrey Pope
541. Craig Porter
542. Louisa Porter
543. Marion Powers
544. Lisa Pratt
545. Michael Pratt
546. Kevin Prentice
547. George Putnam
548. Stuart Pyle
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553. Kimberly Ray
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556. Julie Reilly
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570. Kathryn Rosenthal
571. Steve Rosenthal
572. Andrea Rosmarin
573. Cynthia Ross
574. Mark Ross
575. Linda Rossetti
576. Ronald Rossetti
577. Faith Rossi
578. Brian Rothe
579. Rachel Rothe
580. Joseph G. Sabella
581. Judi Sabella
582. C. Denise Samolchuk
583. James Samolchuk
584. David Saunders
585. Jeanne Scalley
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587. LINDSAY SCANLON
588. Anne Schennum
589. Leslie Schoenherr
590. LANDMARK SCHOOL
591. Hendrea Schwartz
592. Ian Schylling
593. Jack Schylling
594. Robert Scott
595. Denise Shane
596. Ellen Shaughnessy
597. Keith Shaughnessy
598. Dana Shell
599. Thomas Sherman
600. Judi Shipman

601. William Shipman
602. Jay Sibulkin
603. Dorothy Sieradzki
604. Manny Sieradzki
605. Teresa Silverman
606. Dick Singleton
607. David Slade
608. Patricia Slade
609. Thompson Smalley
610. george p smith
611. Julie Smith
612. Llewellyn Smith
613. Ralph Smith
614. Richard Smith
615. Joan Snow
616. Emily Snyder
617. Greg snyder
618. Susan Snyder
619. Ruth Sones
620. Bob Spintig
621. Jeanne Stanton
622. James Staudt
623. Ana Stefanovich
624. Ailsa Steinert
625. David Stember
626. Danielle Stern
627. David Stern
628. Sarah Stock
629. Bridget Stone
630. Paul Stone
631. Sarah Stone
632. Eileen Storey
633. Cynthia Stowell
634. Harley Stowell
635. Madeline Stowell
636. Ian Strachan
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638. Paul Stremple
639. Daniel Strimpel
640. Harriet Strimpel

641. Oliver Strimpel
642. Zoe Strimpel
643. Adam Strout
644. Jackson Strout
645. Lucia Strout
646. Samuel Strout
647. William Strout
648. Connie Sullivan
649. Paul Sullivan
650. Peter Surdam
651. Kurt Svetaka
652. Robin swayze
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654. Lynda Taylor
655. Joel thomas
656. Wendy Thomas
657. Robert Thompson
658. Susana Thompson
659. Pamela Thorne
660. Merrill Thorpe
661. Erin tillman
662. Julie Tosi
663. Santana Tosi
664. Ellen Trojan
665. George Trojan
666. David Turnbull
667. Susan Turnbull
668. Maureen Twombly
669. Juni Van Dyke
670. Jane Van faasen
671. Dana Vermilye
672. Leslie Victorine
673. Christine virden
674. Eduardo Vivanco
675. Sarah Vivanco
676. Michele Vivian
677. Ernst von Metzsch
678. Gail von Metzsch
679. Sylvia Vriesendorp
680. Michal Vytopil

681. Susan Wadia-Ells
682. Frederick WALES
683. Martha Wales
684. Leland Wallace
685. Matthew Walsh
686. Ken Warnock
687. Alby Waugh
688. Andrew Waugh
689. David Weaver
690. Kitty Weaver
691. Theresa Weinheimer
692. Sable Weisman
693. Laura West
694. Nadia Wetzler
695. Allison Whccler
696. Kristopher Wheeler
697. Trayne Wheeler
698. Nick White
699. Jennifer Wiese
700. Christine Wight
701. Karen Wilk
702. Bill Williams
703. Lee-ann Willwerth
704. Tom Willwerth
705. Byron Winn
706. Nancy Winslow
707. Joan Wogan
708. Christopher Wolcott
709. Cornelia Wolcott
710. Benjamin Wolsieffer
711. Gary Wolsieffer
712. Martha Wood
713. Veronica Wu
714. Adrienne Young
715. David Young
716. Suzanne Young
717. Christina Yukins
718. Lisa Zanetti
719. Pat Zeller



MANCHESTER ESSEX CONSERVATION TRUST

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MANCHESTER-BY-THE-SEA
BOARD OF SELECTMEN
JUN 15 2021

Hon. Eli G. Boling, Chair
Board of Selectmen
Manchester-by-the-Sea
10 Central Street
Manchester-by-the-Sea, MA 01944-1399

Subject: Comments on Proposed 40B Shingle Place Hill Development
SLV School Street, LLC
Manchester-by-the Sea, MA
MH ID No. 1116

To Chair Boling and the Board of Selectmen:

The Manchester Essex Conservation Trust (MECT) appreciates the opportunity to submit these comments to the Manchester-by-the-Sea Board of Selectmen (BOS), in reference to your forthcoming letter to MassHousing on the proposed 40B Shingle Place Hill Development (“Shingle Place Hill”) by SLV School Street, LLC (SLV).

MECT finds that SLV’s proposed project will cause irreparable harm to the surrounding environment, seriously threaten the Town’s current and future water supply, and create life safety issues for both the Town as a whole and for the project’s prospective tenants. In addition, this project fails to integrate with the “typology”, as defined by MassHousing, that is, the massing and density patterns in the immediately abutting and wider surrounding areas of upper School Street. For these reasons, we urge you to recommend that MassHousing deny the request by SLV for a Project Eligibility Letter (PEL) for 0 School Street.

MECT is a nonprofit organization dedicated to conserving ecologically important land and wildlife habitats in Manchester and Essex, Massachusetts. We’ve been acquiring and protecting ecologically important woodlands and wetlands for nearly 60 years, with a strategic focus on the “Wilderness Conservation Area” (WCA), about 2,000 contiguous acres in the towns of Manchester and Essex, with roughly 25 miles of trails open to public use. The primary point of access to the WCA is on upper School Street, Manchester, directly to the north and closely proximate to Shingle Place Hill. It is important to note that the Town of Manchester by

Trustees: President Michael Dyer, Vice President/Secretary Matthias Plum, Treasurer Bethe Palmer, Asst. Treasurer Jonathan Calder, Lynn Atkinson, Thomas Barrieau, Michael P. Carvalho, Frances R. Caudill, Jeffrey Cochand, Albert M. Creighton III, Gregory A. Crockett, George E. Davis, Garlan Morse, Jr., Julie Scofield; George P. Smith. Staff: Executive Director Patrice Murphy, Development & Finance Director Alida Bryant, GIS & Conservation Data Manager Peter O’Donnell.

the Sea and The Trustees of Reservations also own significant conservation land directly abutting the project site, including both Cedar Swamp and Sawmill Brook, which make up the site's western and northern boundaries. Altogether these conservation lands are the result of a broad community effort dating back to 1879 and the dedication of the Cathedral Pines, which is also among the Town-owned land abutting the project site.

I. Project Description

SLV proposes a 136-unit apartment complex, a very largely scaled, high-density project that presents enormous challenges on an extremely difficult, hilly, rocky site. It will require the clear-cutting of at least 10 acres of pristine forest and introduce 3.85 acres of impervious surfaces. In addition, SLV will conduct "hilltop removal" of approximately 270,000 cubic yards, extensive filling and ground stabilization to support a steep, winding access road, and the removal of hundreds of trees; in short, the near-total destruction of a wooded hilltop overlooking hundreds of acres of protected wetlands and preserved woodlands. In addition, it will require a private wastewater treatment plant (WTP) facility for effluent flows approaching 30,000 gallons per day, serviced by a main sewer from the apartments running over a wetland on-site. The impacts of primary concern are water-related, but there are many other significant ecological and human health and safety issues. Taken in all, they will cause significant irreparable harm, and they render the site completely unsuitable to SLV's purpose. These matters are addressed in detail in the sections following.

However, we are compelled to also point out that SLV's project is contrary to MassHousing's "Adjacent Building Typology" guidelines as we see them. In this case, we construe the absence of adjacent buildings, the presence of vital natural resources, and the site's challenging topography to indicate that the project design is not at all appropriate for the Shingle Place Hill site. The topography is an extremely difficult, rocky hilltop site, which must be drastically altered in order to accommodate the building's "massing".

The "existing development pattern" proximate to Shingle Place Hill is that there is no nearby significant development, only protected woodlands and wetlands. Therefore, the "integration" of this massive apartment building into its surroundings is impossible. SLV chose to ignore this factor, instead contending that "there are no abutters". In fact, the project would have profound and irreversible negative impacts on abutting lands and on the greater mass of conservation land beyond, and on the citizens of Manchester by the Sea and many surrounding towns and cities who enjoy the benefits conferred by this conservation land: fresh air, clean water, recreational opportunities, and enjoyment of its natural values.

In particular, SLV's proposal is for a grossly oversized white and grey monolithic structure towering over the organic, and graceful lines of native trees, flowering plants, flowing brooks, and picturesque rocky outcrops. Parenthetically, this complex is totally out of character with Manchester by the Sea as a whole, being much larger than any other buildings in Town except the public schools. The proposal, as presented, is not for terraced or stepped architecture, designed to blend into the hilltop. It does not include green roofs or softened lines. Its outsized three-story apartment building would top out at 160 feet elevation, which is 111 feet higher than the nearby Wilderness Conservation Area parking lot. The access road would start on School Street and wind its way through all points of the compass around the flanks of the Hill, largely at grades of 5-7.5%. Both the road and the building will require extensive reinforced concrete retention walls, with chain-link safety fences on top. The southern and western portions of this

road would be plainly visible to visitors using the trails into the WCA, and the planned retention ponds would be within Sawmill Brook's riparian buffer zone.

SLV's apartment building would be visible from School Street, which is now a nearly uninterrupted "green corridor" between the Route 128 School Street interchange and the Town of Essex, as well as from the interior public trails on the conservation land. It would have an overbearing presence on the 1,000-foot long boardwalk crossing Cedar Swamp and would be plainly visible from Millstone Hill and Prospect Ledge trails, where thousands of people seek passive recreation and peaceful natural views. The project would dominate the landscape where setbacks and conservation land have resulted in hardly a building structure visible from the road for two miles to the north, and greenery prevailing along the roadway to the south. It is hard to imagine a more typologically inappropriate project.

II. Environmental Impacts

SLV's project raises several serious environmental protection and public health concerns, generally regarding water resources and habitat destruction. For the reasons discussed herein, these concerns are valid, compelling, and documented.

A. Water Resources

Sawmill Brook and Cedar Swamp adjoin SLV's proposed Shingle Place Hill development immediately to the north and west. Sawmill Brook flows through the Swamp on both sides, exits it to the east under School Street, and then flows south, joining Cat Brook and proceeding south toward the Town's municipal water wells and thence to Manchester Harbor. The construction and operational activities of Shingle Place Hill present a material threat of irreparable impacts to Sawmill Brook and Cedar Swamp for several reasons. The proximity of this densely developed site combined with the very steep grades raises the grave concern that both stormwater flow and groundwater discharge could be directed into both Sawmill Brook and Cedar Swamp.

MECT commissioned hydrologist Scott Horsley to study the effects of this project upon water resources. As his report (enclosed) indicates, he is highly qualified in his field and uniquely positioned to analyze hydrology and this complex. Horsley's conclusion: "Sawmill Brook provides a source of water that serves both public drinking water supplies and a cold-water fishery. The quality of both of these ecosystem services is dependent upon the quality of Sawmill Brook. The proposed location of this project is inconsistent with the protection of these resources and poses a significant threat to them." The particulars follow.

- Sawmill Brook is identified as a high-priority resource under the Massachusetts MVP program (Municipal Vulnerability Preparedness) and has received national and state funding for improvements and restoration. Sawmill Brook is also a state-designated cold water fishery (CWF # 9355050) and has demonstrated that it supports anadromous species like sea-run brook trout and rainbow smelt, which are very sensitive to temperature variation. Based upon information and belief, the Massachusetts Wetlands Protection Act does not sufficiently protect the brook from thermal pollution due to storm runoff, increased impervious surfaces, and reduction of tree and shrub cover, if this immense 40B is built. We note that there are other runoff-related concerns such as road salts and hydrocarbons and that SLV has not submitted a detailed stormwater management plan at this time. Any impacts to this fragile resource would undeniably threaten these species, which are known as indicators of the health of the water resource

system. Finally, Sawmill Brook is hydrologically connected to the aquifer that supports the town's water supply at the Lincoln Street well.

- SLV proposes a private wastewater treatment plant (WTP) facility as part of its development. They have not yet submitted its design, or soil logs and other data showing the suitability of this steep, rocky site for absorption of up to 30,000 gallons per day of effluent. The treated wastewater will certainly flow into Sawmill Brook and Cedar Swamp. MECT is concerned that the infiltration of wastewater from the WTP will result in the introduction of Per- and Polyfluoroalkyl Substances called “PFAS”, among other dangerous household pollutants including pharmaceuticals and phosphates. While consumer products and food are the largest sources of exposure to these chemicals, drinking water can be an additional source of exposure causing developmental effects in fetuses during pregnancy and in breastfed infants, and adverse effects on the thyroid, liver, kidneys, hormone levels, and immune system.¹ In fact, PFAS are of such significant concern that in October 2020 MassDEP published an exceedingly restrictive drinking water standard (MMCL) of just 20 nanograms per liter (ng/l) or parts per trillion (ppt).² SLV has failed to provide any details regarding the efficacy of its proposed WTP, especially those related to the removal of PFAS and other constituents from WTP discharge. This is a matter of direct and grave concern to the Town, raising the prospect of future non-compliance with drinking water standards. By way of example and not limitation, on May 20, 2021, the Town of Wayland shut down one of its municipal water supply wells due to exceedances of the recently promulgated PFAS regulations, and are now forced to incur significant remediation costs.
- The proposed development of Shingle Place Hill will require the removal of approximately 270,000 cubic yards of rock through aggressive blasting. MECT has previously raised concerns about the introduction of blasting-related chemicals known as Perchlorate, which are highly soluble and can migrate great distances through groundwater. Perchlorate contamination from blasting activities has been identified in multiple towns throughout the Commonwealth of Massachusetts and is exceedingly difficult to remediate.³ While this issue was previously brought to SLV's attention, there is no indication in its recent submittals to conclude that Perchlorate-based blasting compounds will be prohibited from the Shingle Place Hill development. In addition, it is known that blasting operations, especially at this scale, can cause several other adverse environmental effects: ground vibrations, airblast, flyrock, generation of fine particles, fumes and dust. We cannot characterize these direct effects, especially of noise and ground vibrations, on nearby homes, the animals in the nearby resource areas, and on the subsurface strata and hydrology, but have serious concerns about blasting operations conducted at this scale.

¹ Mass DEP Fact Sheet

<https://www.mass.gov/doc/massdep-fact-sheet-pfas-in-drinking-water-questions-and-answers-for-consumers/download>

²<https://www.mass.gov/doc/massdep-fact-sheet-pfas-in-drinking-water-questions-and-answers-for-consumers/download>

³ <https://www.mass.gov/guides/perchlorate-frequently-asked-questions>

To reiterate, Sawmill Brook and Cedar Swamp are a critically valuable hydrologic system that integrates surface water and groundwater, a suite of mutually dependent resources including public drinking water supplies and a cold-water fishery. This system will face several significant threats from SLV's proposed development, immediately during the highly impactful construction phase and for decades of operation following.

B. Destruction of Habitat

SLV's proposed development would abut, and in a larger sense be proximate to, protected lands that have several important resource designations. Thus, the immediate destruction of woodlands on Shingle Place Hill and the long-term threats posed by its presence takes on much-increased significance. There is likely to be deleterious permanent impact due to blasting and other construction activities over a multi-year period, and from runoff, wastewater, and other effects over decades of operation.

First, this area is Critical Natural Landscape and Core Habitat (designated areas CNL 1362 and CH 2536), that is, large contiguous blocks of undeveloped habitat designated by the state for conservation interest under the MA Division of Fisheries and Wildlife BioMap2 (2016). The riparian areas surrounding Sawmill Brook are designated as CNL 1202 and CH 2480 by the state, based on the species that they support and the unique habitat. Cooperation between several conservation organizations and municipalities, dating back to 1879, has protected almost 2,000 nearly-contiguous acres in the vicinity. This project threatens to fragment the habitat at an important ecological "edge". Of additional significance, Cedar Swamp is designated as a rare Massachusetts habitat, "Atlantic Cedar Swamp", which is targeted in the State Wildlife Action Plan (SWAP) for its support of numerous unique species.

The project area is also designated as Prime Forest of Statewide Importance by the Department of Natural Resources Conservation at the University of Massachusetts. Such areas may contain soils untilled since 1830 or prior, and may contain greater biodiversity than areas that have been tilled; thus, the state has emphasized conservation.

Several large and highly productive vernal pools have been identified in the project area and immediate vicinity. Destruction of the upland habitat, which is allowed by the Wetlands Protection Act, but not the more stringent local wetland by-laws, is a death sentence to the rich amphibious life dependent on these pools. Even the wetlands specialist that conducted the vernal pool studies for the applicant remarked that one of the vernal pools on the Project site was exceptionally productive.

Local conservation groups are coordinating with the state's Natural Heritage and Endangered Species Program to document several species on the Massachusetts Endangered Species Act (MESA) list in the immediate vicinity. Two bird species, the Northern Parula Warbler (threatened) and American Bittern (endangered), and the Hentz's Red-bellied Tiger Beetle (threatened) have been identified locally. The Blue Spotted Salamander (special concern) and Blanding's Turtle (threatened) populations are presently being investigated locally. The small whorled pogonia (endangered worldwide) has been located in the Wilderness Conservation Area adjoining the project area and is being tracked by the state Natural Heritage Endangered Species Program. A State-watch plant, featherfoil, has been found this year in the Cedar Swamp area.

MECT understands that SLV will be seeking waivers from the Town's local wetland bylaws. We oppose this exemption. The Town put these added protections in place especially

for the protection of our natural heritage and for the health and well-being of its citizens. MECT supports a thorough assessment and investigation by qualified environmental scientists to review the application and its impact on wetlands, vernal pools, groundwater, and surface water quality and make recommendations to the Town's ZBA in consultation with the Conservation Commission. To reiterate, the threats to water resources are 1) increased stormwater runoff due to the project's extensive impervious surfaces, resulting in thermal pollution, non-point pollution from herbicides, pesticides, fertilizer, hydrocarbons, pharmaceuticals, PFAS, and road salt, and 2) discharge of high volumes of treated effluent from on-site wastewater system with constituent nitrogen and phosphate loads, as well as a plethora of household wastes including pharmaceuticals, solvents, paints, etc., from as many as 300 residents of the project.

We also have serious concerns about impacts on plant and animal life in the conservation corridor, which includes Cedar Swamp and Cathedral Pines, from light, noise, and air pollution, from both on-site traffic and the facility itself, the visual impact from the building for the thousands of people who visit annually, and the severe impact of blasting and other construction activities over a period of several years. The light that would shine from this building into Cedar Swamp is particularly troubling. Such light pollution is known to have adverse effects on biodiversity through changed night habits, such as reproduction and migration, of insects, amphibians, fish, birds, bats and other animals, and distortion of the day-night cycle of plants⁴. This citation is one of hundreds in the technical literature.

III. Life Safety and Transportation Issues

During the LIP process, Town Residents raised concerns regarding the configuration of the proposed single driveway into Shingle Place Hill. SLV's principal, Geoffery Engler, publicly acknowledged that Shingle Place Hill would be "less safe" having a single means of ingress/egress, rather than two means of access. (Manchester Board of Selectmen, 40B workshop, Thursday, January 14, 2021). Mr. Engler further stated that SLV was unable to include a separate (i.e., safer) second ingress/egress due to the presence of wetlands on-site. He thus presented an extremely difficult design and enforcement tradeoff between protecting water resources and providing the safest road access for the residents of the apartment project. Note that gas and water mains run under the access road. If service on either of these utilities is required, it will further compromise the safety of the roadway. This illustrates in bold strokes the unsuitability of this extremely challenging site for this large-scale development.

IV. Conclusion

Mr. Engler has stated publicly several times that the Shingle Place Hill project "has no abutters" and that, therefore, there is, in the sense of an affected neighborhood, no impact. MECT strongly disagrees with this notion. The abutting landowners include the Town of Manchester and private non-profit land trusts, all holding land protected for conservation purposes in perpetuity, as well as private landowners who have held their woodland lots over many generations. In a larger sense, the abutters are the assemblage of plants and animals that make up the nearby wetlands and woodlands, as well as all the citizens of Manchester and the surrounding communities who value the intrinsic and aesthetic qualities of the Wilderness Conservation Area. The Trustees of Reservations makes the point succinctly in their letter to the

⁴ Hölker, F. ; Wolter, C. ; Perkin, E. K. ; Tockner, K., "Light pollution as a biodiversity threat", *Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Trends in Ecology & Evolution* 2010 Vol.25 No.12.

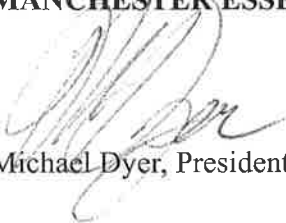
Selectmen: "The site is particularly unsuitable for a development of this scale: the surrounding land owned by the Manchester-Essex Conservation Trust and by The Trustees is held in trust for all of us. It is everyone's backyard. As such, it should be viewed as especially valuable, rather than targeted for a development which will likely have significant impacts on the conservation values of the area."

Consistent with our defining principles, we remain committed to enhancing the quality of life in our communities by ensuring that lands that are vital to public health like Sawmill Brook, Cedar Swamp, and Town Water Supply are properly protected from the impacts of development, and to maintaining a diverse habitat that supports local flora and fauna.

Again, we urge you to recommend that MassHousing deny the request by SLV for a Project Eligibility Letter (PEL) for 0 School Street. On behalf of our Members, Trustees, and Staff, I want to thank the BOS for their consideration in this matter and for all of your hard work on behalf of the citizens of Manchester by the Sea.

Respectfully submitted,

MANCHESTER ESSEX CONSERVATION TRUST

A handwritten signature in black ink, appearing to read "Michael Dyer", is written over a faint, circular stamp or watermark.

Michael Dyer, President

Enclosure: Letter to Board of Selectmen from Scott Horsley, Water Resources Consultant

Cc: MECT Trustees
Sue Brown, Town Planner, Manchester by the Sea
Greg Federspiel, Town Manager, Manchester by the Sea

Scott Horsley
Water Resources Consultant
65 Little River Road • Cotuit, MA 02635 • 508-364-7818

9 June 2021

Mr. Eli G. Boling, Chair
Manchester-by-the-Sea Select Board
10 Central Street
Manchester-by-the-Sea, MA 01944

Re: Proposed 40B project at Shingle Place Hill

Dear Mr. Boling:

I am writing to provide comments regarding the Notice of Application for the Chapter 40B housing project "Sanctuary at Manchester-by-the-Sea" submitted by SLV School Street, LLC, located at 0 School Street in Manchester-by-the-Sea.

Qualifications: I have over 30 years of professional experience in the fields of sustainable land use planning and water resources management. I have served as a consultant to federal, state, and local government agencies, non-governmental organizations (NGOs), and private industry throughout the United States, Central America, the Caribbean, the Pacific Islands, Bulgaria, and China. I have assisted in the development and presentation of a nationwide series of U.S. Environmental Protection Agency (USEPA) workshops on drinking water protection, wetlands management, and watershed management. I served as a consultant to the Commonwealth of Massachusetts in the development of the Smart Growth Toolkit. I have also served on numerous advisory boards to the USEPA, the National Academy of Public Administration, Massachusetts Department of Environmental Protection (DEP), Massachusetts Executive Office of Energy and Environmental Affairs (EEA), and the National Groundwater Association. I have received national (USEPA) and local awards for my work in the water resources management fields. I currently serve as Adjunct Faculty at Harvard University Extension School and Tufts University, where I teach courses in water resources policy, wetlands management, green infrastructure (GI), and low impact development (LID). These courses focus on the critical role of local governments who have the primary responsibility and authority of regulating land uses in critical water resource protection areas.

Comments: The proposed 40B project at 0 School Street is located in the headwaters of the Sawmill Brook and upstream of the town's public water supply. Sawmill Brook is a designated cold-water fishery. It is vulnerable to changes in water quality including temperature and flow. The proposed development will significantly alter the microclimate of the brook's watershed by removing large tracts of trees and replacing those with significant areas of impervious surfaces. This will result in higher water temperatures and altered flow rates – both of which will impair the cold-water fish habitat.

Sawmill Brook is also a tributary to and serves as a source of water for two public drinking water supplies – Cedar Swamp and the Lincoln Street Well. Cedar Swamp is a wetland that borders Sawmill Brook and is underlain by an aquifer that has served as a public water supply for the City of Gloucester in the past and remains a potential reserve supply. The swamp provides recharge to the underlying aquifer and is hydrologically connected to Sawmill Brook.

Further downstream the Lincoln Street well provides public water supply to the residents of Manchester-by-the-Sea and draws a portion of its water from Sawmill Brook as induced infiltration. A hydrogeologic investigation by Horsley Witten Hegemann, Inc. (1990) provides documentation of the contributing areas to the well that includes infiltration from and a direct hydrologic connection to Sawmill Brook. This investigation was provided to MADEP as part of the Zone 2 and Zone 3 delineations for the public drinking water supply well.

Historically, surface water and groundwater supplies have been managed and regulated separately. However, as we now know they are inexorably linked and are more efficiently managed and regulated together. Groundwater provides baseflow to streams, lakes and wetlands. Similarly surface waters can provide sources of water to groundwater supplies (as in the case of the Lincoln Street well). This is particularly true of groundwater public drinking water supplies that draw some water from adjacent streams (such as Cedar Swamp and Lincoln Street well).

The MA Wetlands Protection Regulations recognize this linkage between surface water (wetlands) and groundwater. The Regulations identify "*protection of public and private water supply*" and "*drinking water supplies and groundwater*" as two of the key interests that support the law (310 CMR 10.01 (2)).

Sawmill Brook provides an excellent example of this type of integrated surface water – groundwater hydrologic regime. It clearly illustrates the interdependence between these resources and the need to manage and regulate them holistically together. It also provides a clear example of a resource area that provides both critical ecological habitat (as a cold-water fishery) and a public resource as a drinking water supply source.

In conclusion, Sawmill Brook provides a source of water that serves both public drinking water supplies and a cold-water fishery. The quality of both of these ecosystem services is dependent upon the quality of Sawmill Brook. The proposed location of this project is inconsistent with protection of these resources and poses a significant threat to them.

Thank you for your cooperation and attention to this matter. Please contact me with any questions that you might have.

Sincerely and respectfully,

A handwritten signature in black ink, appearing to be 'SH' or similar initials, written in a cursive style.

Scott Horsley
Water Resources Consultant

