BEALS · ASSOCIATES INC.
2 Park 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 overlayed 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.
- Hydrogeologicaly, 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.

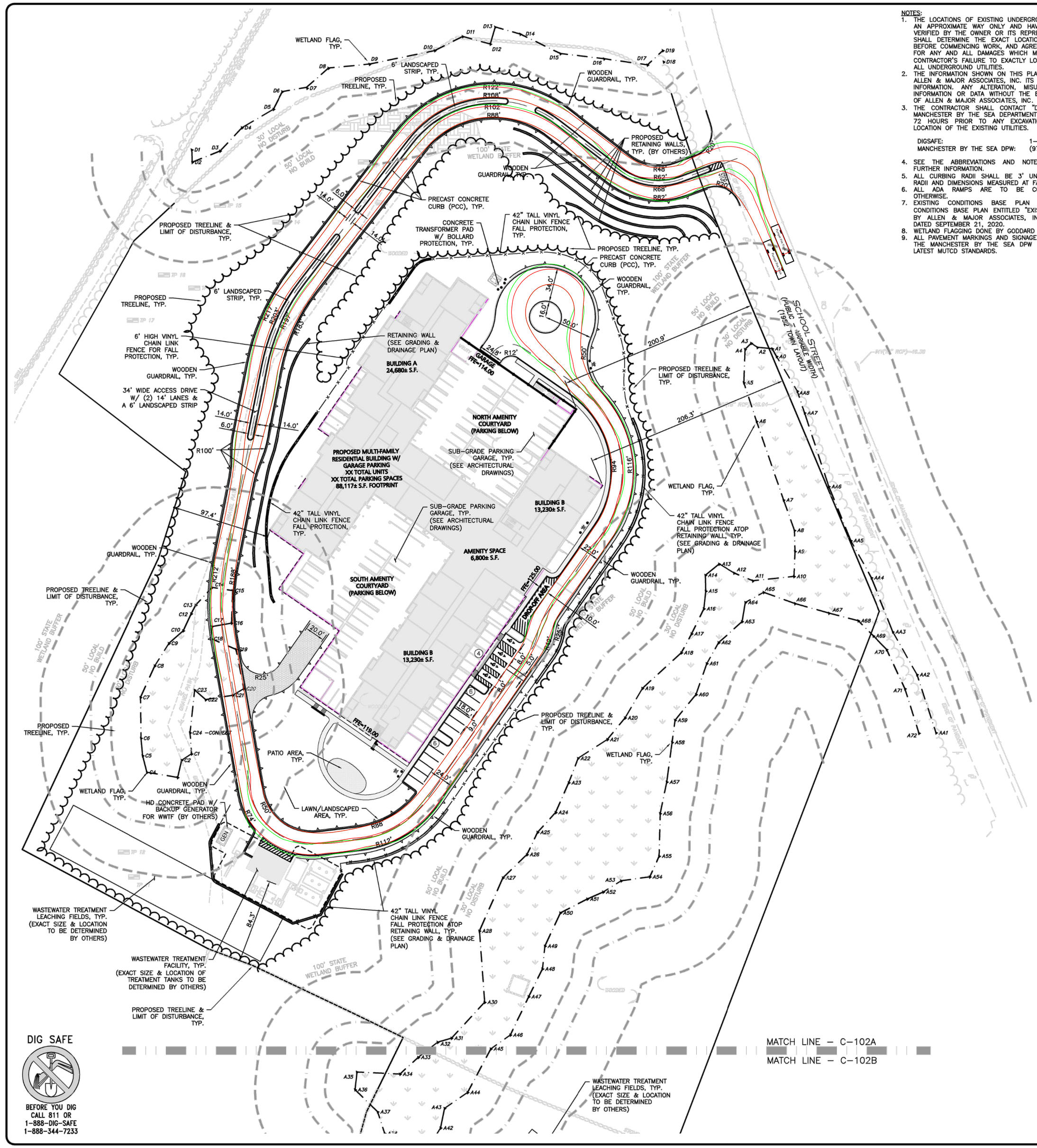
In summary, the proposed project is inadequately designed and does not provide sufficient protection of public health and safety. We question the advisability of placing 157 units on top of a hill, surrounded by steep slopes, with only one point of access via a challenging access drive and no alternative 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



DIG SAFE

BEFORE YOU DIG CALL 811 OR 1-888-DIG-SAFE 1-888-344-7233

NOTES:

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.
3. THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND THE TOWN OF MANCHESTER BY THE SEA DEPARTMENT OF PUBLIC WORKS AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES.

   DIGSAFE: 1-800-344-7233
   MANCHESTER BY THE SEA DPW: (978) 526-1242

4. SEE THE ABBREVIATIONS AND NOTES PLAN AND DETAILS FOR FURTHER INFORMATION.
5. ALL CURBING RADII SHALL BE 3' UNLESS OTHERWISE NOTED. ALL RADII AND DIMENSIONS MEASURED AT FACE OF CURB.
6. ALL ADA RAMPS ARE TO BE CONCRETE UNLESS SPECIFIED OTHERWISE.
7. EXISTING CONDITIONS BASE PLAN TAKEN FROM AN EXISTING CONDITIONS BASE PLAN ENTITLED "EXISTING CONDITIONS", PREPARED BY ALLEN & MAJOR ASSOCIATES, INC., ORIGINAL SCALE 1"=50', DATED SEPTEMBER 21, 2020.
8. WETLAND FLAGGING DONE BY GODDARD CONSULTING.
9. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE COORDINATED WITH THE MANCHESTER BY THE SEA DPW AND SHALL CONFIRM TO THE LATEST MUTCD STANDARDS.

LEGEND:

- PROPERTY LINE
- SIGN
- BOLLARD
- BUILDING
- BUILDING ARCHITECTURE
- CURB
- RETAINING WALL
- PARKING STRIPING
- ROADWAY STRIPING
- TRAFFIC ARROWS
- HEAVY DUTY CONCRETE
- SIDEWALK
- ADA ACCESSIBLE RAMP
- ADA DET. WARNING SURFACE
- SETBACK LINE
- PARKING COUNT (10)
- WOOD GUARDRAIL
- CHAIN LINK FENCE
- WOOD FENCE
- TREE LINE
- TRANSFORMER (T)

PARKING SUMMARY CHART

USE: RESIDENTIAL HOMES:

80 ONE-BEDROOMS PROVIDED	(1 BEDROOM = 2 SPACES)	=	160 SPACES
61 TWO-BEDROOMS PROVIDED	(2 BEDROOMS = 3 SPACES)	=	183 SPACES
16 THREE-BEDROOMS PROVIDED	(3 BEDROOMS = 5 SPACES)	=	80 SPACES
00 FOUR-BEDROOMS PROVIDED	(4 BEDROOMS = 6 SPACES)	=	00 SPACES
	TOTAL SPACES REQUIRED	=	423 SPACES

247 TOTAL PARKING SPACES ARE CURRENTLY PROPOSED, 231 OF WHICH ARE LOCATED WITHIN THE PODIUM/GARAGE PARKING AREAS AND 16 TOTAL SURFACE PARKING STALLS, FOR A PROPOSED PARKING RATIO OF 1.50 SPACES PER 1 DWELLING UNIT.

ADA REQUIRED:
THERE ARE BETWEEN 201 AND 300 TOTAL PARKING SPACES REQUIRING 7 ACCESSIBLE STALLS PER ADA REGULATIONS AND 2 OF THEM TO BE VAN ACCESSIBLE.

ADA PROVIDED:
7 ADA ACCESSIBLE SPACES, 3 OF WHICH SHALL BE VAN ACCESSIBLE

SURFACE PARKING		STRUCTURED PARKING		TOTAL PARKING	
STANDARD SPACES	ACCESSIBLE SPACES	STANDARD SPACES	ACCESSIBLE SPACES	TOTAL PROVIDED	TOTAL REQUIRED
12	4	228	3	247	423

PARKING NOTES:

(1) OFF-STREET PARKING SPACES SHALL BE DESIGNED WITH MINIMUM DIMENSIONS OF 9 FEET BY 18 FEET.

LAND USAGE TABLE - LIMITED COMMERCIAL DISTRICT (LCD) & WATER RESOURCE OVERLAY PROTECTION DISTRICTS - ZONE 3

ITEM	EXISTING	PROPOSED	REQUIRED/ALLOWED
MINIMUM LOT AREA (2)	23.72± ACRES	23.72 ACRES	5.00 ACRES
MINIMUM FRONTAGE (1)	495.2 FEET	495.2 FEET	N/A
MINIMUM LOT WIDTH	291.2 FEET (6)	291.2 FEET	500 FEET
MAXIMUM BUILDING COVERAGE (3)	0%	7.6%	20%
MAXIMUM PARKING COVERAGE (3)	0%	0.29%	25%
MINIMUM LANDSCAPED COVERAGE (3)	100%	87.3%	25%
MAXIMUM IMPERVIOUS COVERAGE (5)	0%	12.7%	15%
MINIMUM FRONT YARD (4)	N/A	200.9 FEET	150 FEET
MINIMUM SIDE YARD (4)	N/A	97.4 FEET	100 FEET
MINIMUM REAR YARD (4)	N/A	84.3 FEET	100 FEET
MAXIMUM BUILDING HEIGHT (7)	N/A	44.4' (3 STORIES) (8)	35' (2.5 STORIES)
MINIMUM PARKING AREA INTERIOR LANDSCAPING	N/A	15.5%	5%

LAND USAGE TABLE NOTES:

(1) SECTION 5.3 – SETBACK: IN THE CASE OF A LOT ABUTTING MORE THAN ONE STREET, THE MINIMUM FRONT SETBACK SHALL BE APPLICABLE TO EACH STREET. THE MINIMUM SETBACK REQUIREMENTS SHALL NOT APPLY TO THE PROJECTIONS OF STEPS, EAVES, CHIMNEYS, AND CORNICES, WINDOW SILLS OR BELT COURSES.

SECTION 5.7 – LIMITED COMMERCIAL DISTRICT: NOT WITHSTANDING THE FOREGOING PROVISIONS OF THIS SECTION 5.0, THE FOLLOWING REQUIREMENTS SHALL BE MET IN THE LIMITED COMMERCIAL DISTRICT:

(2) SECTION 5.7.1 – EACH BUSINESS, DEFINED AS A SINGLE-USE UNDER ONE OWNERSHIP, SHALL BE LOCATED ON A LOT OF NOT LESS THAN FIVE (5) ACRES AND A MINIMUM WIDTH AT ALL POINTS OF NOT LESS THAN FIVE HUNDRED (500) FEET.

(3) SECTION 5.7.2 – THE STRUCTURES ON THE LOT SHALL COVER NOT MORE THAN TWENTY PERCENT (20%) OF THE LOT AREA AND AT LEAST TWENTY FIVE PERCENT (25%) OF THE LOT SHALL BE OF NATURAL OR LANDSCAPED AREA. NOT MORE THAN TWENTY FIVE PERCENT (25%) OF THE LOT SHALL BE USED FOR PARKING.

(4) SECTION 5.7.3 – ALL STRUCTURES SHALL BE SET BACK FROM ANY STREET AT LEAST ONE HUNDRED AND FIFTY (150) FEET, AND ONE HUNDRED (100) FEET FROM ANY OTHER LOT LINE.

(5) SECTION 4.9.5.1(p) – LAND USE (WITHIN THE WATER RESOURCE OVERLAY PROTECTION DISTRICT – ZONE 3) THAT RESULTS IN THE RENDERING OF MORE THAN 15% IMPERVIOUS AREA OR 2,500 SQUARE FEET OF ANY LOT, WHICHEVER IS GREATER, SHALL BE PROHIBITED UNLESS A SYSTEM FOR ARTIFICIAL RECHARGE OF PRECIPITATION IS PROVIDED WHICH IS SATISFACTORY TO THE PLANNING BOARD, THAT WILL NOT RESULT IN THE DEGRADATION OF GROUNDWATER QUALITY.

(6) EXISTING NON-CONFORMING ZONING REQUIREMENT.

(7) SECTION 5.5 – HEIGHT RESTRICTIONS – NO STRUCTURE SHALL BE ERECTED OR ALTERED SO THAT IT EXCEEDS 2-1/2 STORIES OR SO THAT THE VERTICAL DISTANCE MEASURED FROM THE HIGHEST POINT OF THE ROOF TO THE MEAN PRE-CONSTRUCTION GRADE EXCEEDS 35 FEET, WHICHEVER IS LESSER. CHIMNEYS, SPIRES, OR TOWERS NOT USED FOR HUMAN OCCUPANCY MAY EXTEND TEN (10) FEET ABOVE HEIGHT LIMITS.

(8) MEAN PRE-CONSTRUCTION GRADE IS DEFINED AS A REFERENCE PLANE REPRESENTING THE AVERAGE ELEVATION OF PRE-CONSTRUCTION GROUND ADJOINING THE BUILDING AT ALL EXTERIOR WALLS. A HALF STORY IS DEFINED AS A STORY WITH A SLOPING ROOF, THE AREA OF WHICH STORY AT A HEIGHT OF FOUR (4) FEET ABOVE THE FLOOR DOES NOT EXCEED TWO-THIRDS OF THE FLOOR AREA OF THE STORY IMMEDIATELY BELOW IT. SEE SHEET C-109 ENTITLED "MEAN PRE-CONSTRUCTION GRADE PLAN" FOR CALCULATION OF THE MEAN PRE-CONSTRUCTION GRADE.

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

N:\PROJECTS\2725-01\CIVIL\DRAWINGS\CURRENT\C-2725-01_LAYOUT & MATERIALS.DWG

ISSUED FOR REVIEW SEPTEMBER 24, 2020

PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:
SLV SCHOOL STREET, LLC
257 HILLSIDE AVENUE
NEEDHAM, MA 02494

PROJECT:
THE SANCTUARY AT MANCHESTER BY THE SEA
0 SCHOOL STREET
MANCHESTER-BY-THE-SEA, MA

PROJECT NO.	2725-01	DATE:	09-24-2020
SCALE:	1"=40'	DWG. NAME:	C2725-01
DESIGNED BY:	CMQ/SJL	CHECKED BY:	CMQ

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
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environmental consulting ◆ landscape architecture
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FAX: (781) 935-2896
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

DRAWING TITLE: LAYOUT & MATERIALS PLAN

SHEET No. C-102A