

April 30, 2021

Hingham Planning Board  
210 Central Street  
Hingham, MA 02043

RE: Definitive Subdivision Plan – (#101 Gardner Street)  
Applicant – Boston Golf Club

Dear Board Members:

On behalf of the applicant, Grady Consulting, LLC hereby submits the revised Definitive Subdivision Plan. Additional revisions were made and information provided in response to comments from Amory Engineers, P.C., in a letter dated, April 27, 2021, to the Hingham Planning Board. In addition, the plans were revised in response to comments from Vanasse & Associates Inc., in a letter from Jeffrey S. Dirk, P.E., PTOE, FITE, Managing Partner, to Christine Stickney, Interim Planner, dated April 30, 2021. The revisions are as follows:

Response to comments from Amory Engineers, P.C., dated April 27, 2021.

1. The 30' radius label has been added to Sheet 3 as requested.
2. Street signs have been added to Sheet 4 as requested.
3. The cul-de-sac section on Sheet 11 has been revised to show sloped granite curb as requested.
4. The water trench detail on Sheet 11 has been revised to show sand bedding as requested.
5. The title of the Post-Development O&M has been corrected as requested.
6. Additional soils testing locations and test hole information has been added to the plan as requested.
7. Two permanent benchmarks have been added to the plan as requested.

Response to comments from Vanasse & Associates inc., dated April 30, 2021.  
Comments are shown in *Italic* font and response to comments in **Bold** font.

*As can be seen in Table 1, the available lines of sight at the Project site roadway (Subdivision Road) intersection with Gardner Street were found to exceed the recommended minimum sight distances for safe operation for both the posted speed limit and the measured 85<sup>th</sup> percentile vehicle travel speed. In conjunction with the construction of the Project site roadway, the large pine tree to the east of the roadway will be removed, which will increase sight lines looking to the east to over 500 feet. The removal of the subject tree may be subject to M.G.L. c. 87 § 3, the*

*Public Shade Tree Act, and will require additional approvals from the Town before the tree is removed.*

**Additional approvals shall be obtained from the Town to remove the existing 22” pine tree if necessary.**

*In addition to the review of sight lines at the Project site roadway, we offer the following comments for consideration by the Planning Board:*

1. *A truck turning analysis should be provided for the following design vehicles: SU-30 and the Hingham Fire Department design vehicle. The turning analysis should demonstrate that the subject vehicles are able to access the Project site from Gardner Street and circulate within the development in an unimpeded manner.*  
**A truck turning analysis has been provided for the SU-30 and Hingham Fire Truck as requested.**
2. *Consideration should be given to providing a sidewalk along one side of the Project site roadway.*  
**A sidewalk is not required for a Limited Residential Street Type per Hingham Planning Board Rules and Regulations.**
3. *The slope of the Project site roadway should not exceed 2 percent approaching Garner Street for a minimum distance of 25-feet in order to provide a leveling area for vehicles exiting the Project site.*  
**A 25’ long leveling area has been added to the plan as requested.**
4. *The sight triangle areas for the Project site roadway intersection should be shown along with a note to indicate: “Signs, landscaping and other features located within sight triangle areas shall be designed, installed and maintained so as not to exceed 2.5-feet in height. Snow windrows located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed.”*  
**The site triangles are shown on sheet 12 and the note has been added as requested.**

If you have any questions please do not hesitate to contact us.

Sincerely,

GRADY CONSULTING, L.L.C.



Paul Seaberg  
Project Manager

April 30, 2021

Hingham Planning Board  
210 Central Street  
Hingham, MA 02043

RE: Definitive Subdivision Plan – (#101 Gardner Street)  
Applicant – Boston Golf Club

Dear Board Members:

On behalf of the applicant, Grady Consulting, LLC hereby submits this response to comments from Lieutenant Chris DiNapoli, Fire Marshal, in a letter to the Planning Board, dated March 4, 2021. The response to comments are as follows:

1. A hydrant is proposed at the end of the proposed roadway and the maximum drivable distance from a new structure is 440' meeting the 800' requirement.
2. The proposed roadway is to be built to the current standards.
3. A cul-de-sac turn-a-round is proposed and turning movements provided for a 10 wheel platform aerial truck.
4. There are no proposed grades greater than 10 degrees.

If you have any questions please do not hesitate to contact us.

Sincerely,

GRADY CONSULTING, L.L.C.



Paul Seaberg  
Project Manager

Cc:

Lieutenant Christopher DiNapoli  
Fire Marshal  
210 Central Street  
Hingham, MA 02043

Commonwealth of Massachusetts  
HINGHAM, Massachusetts  
Soil Suitability Assessment for On-site Sewage Disposal

Performed by: Brendan Kling  
GRADY CONSULTING, L.L.C.  
71 Evergreen Street, Suite 1  
Kingston, MA 02364  
Phone: (781) 585-2300 Fax: (781) 585-2378

Date: 4-29-21

Witnessed by: JOHN CHESSIA

Location Address or Lot #

101 GARDNER ST  
HINGHAM

\*Owner's Name  
\*Address &  
\*Telephone #

NEW BOSTON GOLF CLUB INC  
19 OLD COUNTRY ROAD  
HINGHAM, MA 02043  
781-919-0502

New Construction  Repair

**Office Review**

Published Soil Survey Available: No  Yes

Year Published: \_\_\_\_\_ Publication Scale: \_\_\_\_\_ Soil Map Unit: 262B/262C (QUONSET)  
Drainage Class: A Soil Limitations: EXCESSIVELY DRAINED

Published Soil Survey Available: No  Yes

Year Published: \_\_\_\_\_ Publication Scale: \_\_\_\_\_  
Geologic Material (Map Unit): OUT QUONSET  
Landform: OUTWASH

**Flood Insurance Rate Map:**

Above 500 year flood boundary: No  Yes   
Within 500 year flood boundary: No  Yes   
Within 100 year flood boundary: No  Yes

**Wetland Area:**

National Wetland Inventory Map (map unit): N/A  
Wetlands Conservancy Program Map (map unit): \_\_\_\_\_

**Current Water Resource Conditions (USGS):**

Range: Above Normal \_\_\_\_\_ Month: APRIL  
Normal  Below Normal \_\_\_\_\_

**Other References Reviewed:**

Depth of Naturally Occurring Pervious Material

Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

YES

If not, what is the depth of naturally occurring pervious material?

Certification

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated on the attached soil evaluation form, are accurate and in accordance with CMR 15.100 through 15.107.

Signature: Brendan Kling Date: 4-29-2021

**TITLE 5 ON-SITE REVIEW**

Deep Hole # 7 Date 4-29-21 Time 815 Weather LOUDY 50°  
 Location (Identify on Site Plan) LOT 2 - DRAINAGE  
 Land Use RES / GOLF COURSE Slope(%) 3-8 Surface Stones WALLS  
 Vegetation TREES, WOODED Landform OUTWASH

Distances from: Open Water Body 250+ ft. Possible Wet Area 250+ ft. Drinking Water Well — ft.  
 Drainageway — ft. Propertyline 60+ ft. Other —

**DEEP OBSERVATION HOLE LOG**

Depth From Surface (Inches)	Soil Horizon (USDA)	Soil Texture (Munsell)	Soil Color	Soil Mottling	Other: Structures, Stones, Boulders, Consistency, %Gravel
0-10	A	LOAMY SAND	10YR 3/5	—	
10-30	B	LOAMY SAND	2.5Y 6/4	—	FRIABLE
30-126	C	MED-COARSE GRAVELLY SAND	2.5Y 6/3	—	LOOSE/CAVING S.G. 15-25% COBBLES 10% GRAVEL

DEPTH = 10'-6"

NO WATER

Parent Material (geologic) OUTWASH Depth to Bedrock > 10.5'  
 Depth to Groundwater: Standing Water in Hole: — Weeping from Pit Face —  
 Estimated Seasonal High Groundwater 126"

**DETERMINATION FOR SEASONAL HIGH WATER TABLE**

Method Used:

\_\_\_ Depth observed standing in observation hole: \_\_\_ inches \_\_\_ Depth to soil mottles: \_\_\_ inches  
 \_\_\_ Depth to weeping from side of observation hole: \_\_\_ inches \_\_\_ Groundwater adjustment \_\_\_ ft  
 Index Well # \_\_\_ Reading Date \_\_\_ Index well level \_\_\_ Adj. factor \_\_\_ Adj. Groundwater level \_\_\_

**PERCOLATION TEST**

Date \_\_\_\_\_ Time \_\_\_\_\_

Observation Hole # \_\_\_\_\_ Time at 9" \_\_\_\_\_  
 Depth of Perc N/A Time at 6" \_\_\_\_\_  
 Start Presoak DRAINAGE Time (9"-6") \_\_\_\_\_  
 End Presoak \_\_\_\_\_ Rate Min/Inch \_\_\_\_\_

Site Suitability Assessment: Site Passed  Site Failed \_\_\_\_\_ Additional Testing Needed: \_\_\_\_\_  
 Performed By BRENDAN ULLING Certification # \_\_\_\_\_  
 Witnessed By JOHN CHESSIA

Comments:

**TITLE 5 ON-SITE REVIEW**

Deep Hole # 8 Date 4-29-21 Time 940 Weather Cloudy 50°  
 Location (Identify on Site Plan) LOT 2 - SEPTIC  
 Land Use RES / GOLF Slope (%) 3-8 Surface Stones WALLS  
 Vegetation WOODED Landform OUTWASH

Distances from: Open Water Body 300+ ft. Possible Wet Area 300+ ft. Drinking Water Well \_\_\_\_\_ ft.  
 Drainageway \_\_\_\_\_ ft. Propertyline 60+ ft. Other \_\_\_\_\_

**DEEP OBSERVATION HOLE LOG**

Depth From Surface (Inches)	Soil Horizon (USDA)	Soil Texture (Munsell)	Soil Color	Soil Mottling	Other: Structures, Stones, Boulders, Consistency, %Gravel
0-8	A	LOAMY SAND	10YR 3/3	-	
8-20	B	LOAMY SAND	2.5Y 6/4	-	FRIABLE
20-126	C	MED-COURSE GRANULY SAND	2.5Y 6/3	-	20-30% COBBLES 10% GRAVEL S.G. LOOSE

DEPTH = 10' - 6"  
 NO WATER

Parent Material (geologic) OUTWASH Depth to Bedrock 126"  
 Depth to Groundwater: Standing Water in Hole: \_\_\_\_\_ Weeping from Pit Face \_\_\_\_\_  
 Estimated Seasonal High Groundwater 126"

**DETERMINATION FOR SEASONAL HIGH WATER TABLE**

**Method Used:**

\_\_\_ Depth observed standing in observation hole: \_\_\_ inches \_\_\_ Depth to soil mottles: \_\_\_ inches  
 \_\_\_ Depth to weeping from side of observation hole: \_\_\_ inches \_\_\_ Groundwater adjustment \_\_\_ ft  
 Index Well # \_\_\_ Reading Date \_\_\_ Index well level \_\_\_ Adj.factor \_\_\_ Adj.Groundwater level \_\_\_

**PERCOLATION TEST**

Date 4-29-2021 Time 940

Observation Hole #	<u>8</u>	Time at 9"	<u>FAILED</u>
Depth of Perc	<u>32-50</u>	Time at 6"	<u>10</u>
Start Presoak	<u>9:40</u>	Time (9"-6")	<u>SATURATE</u>
End Presoak	<u>9:48</u>	Rate Min/Inch	<u>22</u>

Site Suitability Assessment: Site Passed  Site Failed \_\_\_\_\_ Additional Testing Needed: \_\_\_\_\_

Performed By BRENDAN KLING Certification # \_\_\_\_\_

Witnessed By JOHN CHESSIA

Comments:

**TITLE 5 ON-SITE REVIEW**

Deep Hole # 9 Date 4-29-21 Time 10:15 Weather CLOUDY 50°  
 Location (Identify on Site Plan) LOT 1-SEPTIC  
 Land Use RES Slope(%) 3-8 Surface Stones WALLS  
 Vegetation GRASS Landform DIRTWASH

Distances from: Open Water Body — ft. Possible Wet Area — ft. Drinking Water Well 250+ ft.  
 Drainageway — ft. Propertyline 35+ ft. Other —

**DEEP OBSERVATION HOLE LOG**

Depth From Surface (Inches)	Soil Horizon (USDA)	Soil Texture (Munsell)	Soil Color	Soil Mottling	Other: Structures, Stones, Boulders, Consistency, %Gravel
<u>0-12</u>	<u>A</u>	<u>LOAMY SAND</u>	<u>10YR 3/6</u>	<u>—</u>	
<u>12-38</u>	<u>B</u>	<u>LOAMY SAND</u>	<u>2.5Y 6/4</u>	<u>—</u>	<u>FRIABLE</u>
<u>38-126</u>	<u>C</u>	<u>MED-COARSE GRAVELLY SAND</u>	<u>2.5Y 6/3</u>	<u>—</u>	<u>15-25% COBBLES</u> <u>10% GRAVEL</u> <u>Loose, S.G.</u>

DEPTH = 10.5'

NO WATER

Parent Material (geologic) — Depth to Bedrock —  
 Depth to Groundwater: Standing Water in Hole: — Weeping from Pit Face —  
 Estimated Seasonal High Groundwater —

**DETERMINATION FOR SEASONAL HIGH WATER TABLE**

Method Used:

— Depth observed standing in observation hole: — inches — Depth to soil mottles: — inches  
— Depth to weeping from side of observation hole: — inches — Groundwater adjustment — ft  
 Index Well # — Reading Date — Index well level — Adj.factor — Adj.Groundwater level —

**PERCOLATION TEST**

Date 4-29-2021 Time 10:20

Observation Hole #	<u>9</u>	Time at 9"	<u>FAILED</u>
Depth of Perc	<u>40-58</u>	Time at 6"	<u>TO</u>
Start Presoak	<u>10:24</u>	Time (9"-6")	<u>SATURATE</u>
End Presoak	<u>10:29</u>	Rate Min/Inch	<u>&gt;2</u>

Site Suitability Assessment: Site Passed  Site Failed  Additional Testing Needed: —

Performed By BRENDAN KLING Certification # —

Witnessed By JOHN CHERSIA

Comments: —

**TITLE 5 ON-SITE REVIEW**

Deep Hole # 10 Date 4-29-21 Time 10:30 Weather Cloudy 50°  
 Location(identify on Site Plan) LOT 1 - DRAINAGE  
 Land Use RES Slope(%) 3-8 Surface Stones WALLS  
 Vegetation WOODED Landform OUT WASH

Distances from: Open Water Body - ft. Possible Wet Area - ft. Drinking Water Well 200ft.  
 Drainageway - ft. Propertyline 25ft Other -

**DEEP OBSERVATION HOLE LOG**

Depth From Surface (Inches)	Soil Horizon (USDA)	Soil Texture (Munsell)	Soil Color	Soil Mottling	Other: Structures, Stones, Boulders, Consistency, %Gravel
0-12	A	LOAMY SAND	10YR 3/6	-	
12-43	B	LOAMY SAND	2.5Y 6/4	-	FRIABLE
43-126	C	MED-COARSE GRAVELLY SAND	2.5Y 6/3	-	20-25% COBBLES 10% GRAVEL LOOSE, S.G.

DEPTH = 10' - 6"  
 NO WATER

Parent Material (geologic) OUTWASH Depth to Bedrock >126"  
 Depth to Groundwater: Standing Water in Hole: \_\_\_\_\_ Weeping from Pit Face \_\_\_\_\_  
 Estimated Seasonal High Groundwater 126"

**DETERMINATION FOR SEASONAL HIGH WATER TABLE**

**Method Used:**

\_\_\_ Depth observed standing in observation hole: \_\_\_ inches \_\_\_ Depth to soil mottles: \_\_\_ inches  
 \_\_\_ Depth to weeping from side of observation hole: \_\_\_ inches \_\_\_ Groundwater adjustment \_\_\_ ft  
 Index Well # \_\_\_ Reading Date \_\_\_ Index well level \_\_\_ Adj.factor \_\_\_ Adj.Groundwater level \_\_\_

**PERCOLATION TEST**

Date \_\_\_\_\_ Time \_\_\_\_\_

Observation Hole # X Time at 9" \_\_\_\_\_  
 Depth of Perc X Time at 6" \_\_\_\_\_  
 Start Presoak X Time (9"-6") \_\_\_\_\_  
 End Presoak X Rate Min/Inch \_\_\_\_\_

Site Suitability Assessment: Site Passed \_\_\_ Site Failed \_\_\_ Additional Testing Needed: \_\_\_\_\_  
 Performed By BRENDA H ULLING Certification # \_\_\_\_\_  
 Witnessed By JOHN CHESIA

Comments:

TITLE 5 ON-SITE REVIEW

Deep Hole # 11 Date 4-29-21 Time 1145 Weather DRIZZLE 55°  
 Location (Identify on Site Plan) LOT A - DRAINAGE  
 Land Use DRAINAGE Slope(%) 3-8 Surface Stones WALLS  
 Vegetation WOODED Landform OVERWASH

Distances from: Open Water Body - ft. Possible Wet Area - ft. Drinking Water Well 250 ft.  
 Drainageway - ft. Propertyline 20+ ft. Other -

**DEEP OBSERVATION HOLE LOG**

Depth From Surface (Inches)	Soil Horizon (USDA)	Soil Texture (Munsell)	Soil Color	Soil Mottling	Other: Structures, Stones, Boulders, Consistency, %Gravel
0-10	A	LOAMY SAND	10YR 3/3	-	
10-22	B	LOAMY SAND	2.5Y 6/4	-	FRIABLE
22-102	C	MED-COARSE GRAVELLY SAND	2.5Y 6/3	-	LOOSE, S.G., CAVING 15% GRAVEL 15% COBBLES

DEPTH = 8'-6"

NO WATER

Parent Material (geologic) \_\_\_\_\_ Depth to Bedrock > 8'-6"  
 Depth to Groundwater: Standing Water in Hole: \_\_\_\_\_ Weeping from Pit Face \_\_\_\_\_  
 Estimated Seasonal High Groundwater 102"

**DETERMINATION FOR SEASONAL HIGH WATER TABLE**

Method Used:

Depth observed standing in observation hole: \_\_\_\_\_ inches Depth to soil mottles: \_\_\_\_\_ inches  
 Depth to weeping from side of observation hole: \_\_\_\_\_ inches Groundwater adjustment \_\_\_\_\_ ft  
 Index Well # \_\_\_\_\_ Reading Date \_\_\_\_\_ Index well level \_\_\_\_\_ Adj. factor \_\_\_\_\_ Adj. Groundwater level \_\_\_\_\_

**PERCOLATION TEST**

Date \_\_\_\_\_ Time \_\_\_\_\_

Observation Hole # \_\_\_\_\_ Time at 9" \_\_\_\_\_  
 Depth of Perc DRAINAGE Time at 6" \_\_\_\_\_  
 Start Presoak \_\_\_\_\_ Time (9"-6") \_\_\_\_\_  
 End Presoak \_\_\_\_\_ Rate Min/Inch \_\_\_\_\_

Site Suitability Assessment: Site Passed \_\_\_\_\_ Site Failed \_\_\_\_\_ Additional Testing Needed: \_\_\_\_\_

Performed By BRENDAN KLINE Certification # \_\_\_\_\_

Witnessed By JOHN CHESSIA

Comments:

BOULDERS @ BOTTOM