

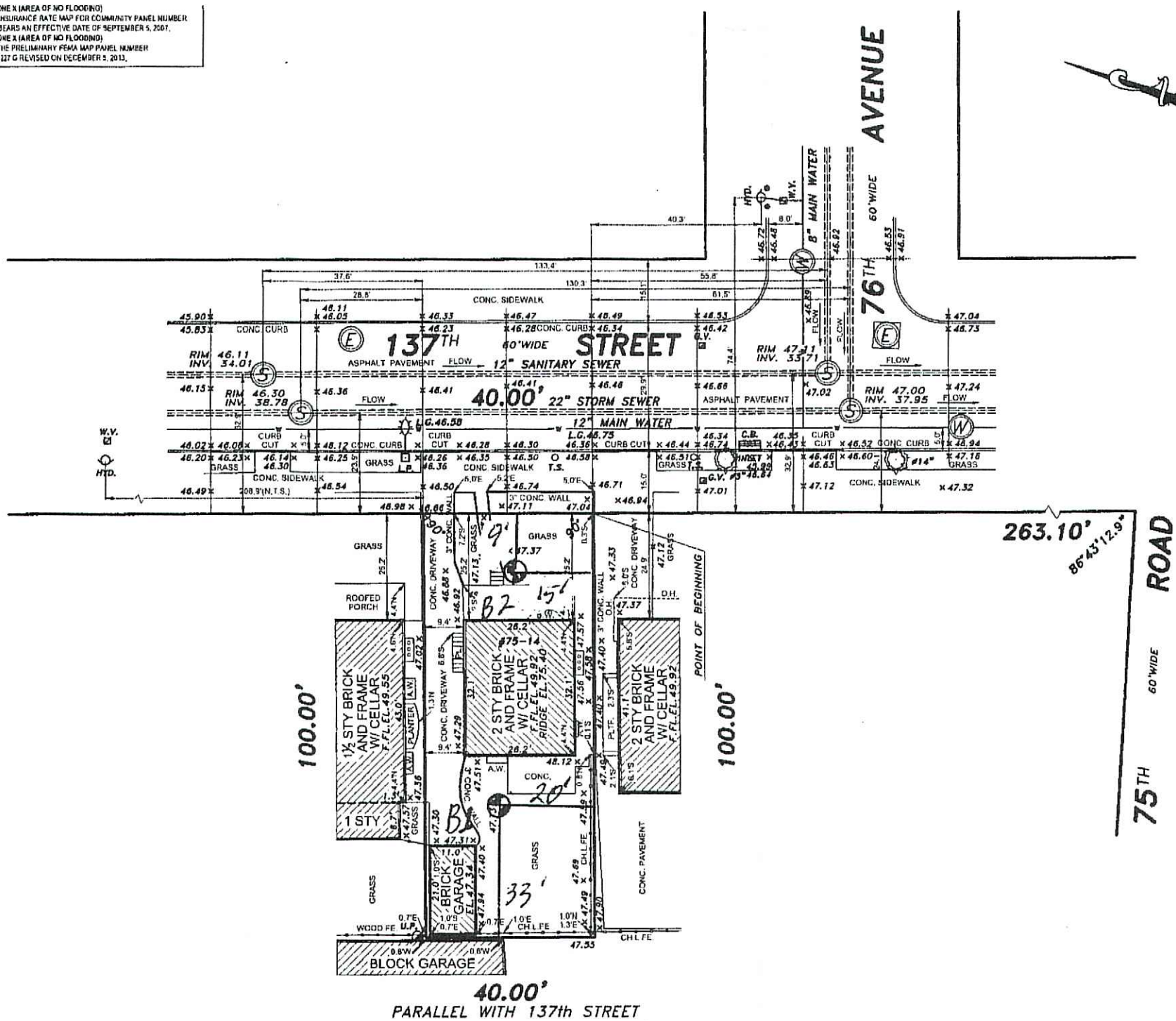
BORING B - 1			
DEPTH FT.	SPOON BLOWS PER 1/2 FT.	HOLLOW STEM AUGER	MATERIAL
GROUND SURFACE			
5.0	10 9	13 13	Fill Material mixed with Fine Brown Sands Class 7
10.0	15 13	17 10	Granular Soils SM Fine Brown Sands with Gravel and Traces of Silts Class 3b Moist
15.0	17 15	21 19	Granular Soils SM Fine Brown Sands with Gravel and Traces of Silts Class 3a Moist
20.0	19 21	17 17	Granular Soils SM Fine Brown Sands with Gravel and Traces of Silts Class 3a Moist
25.0	29 23	37 39	Granular Soils SM Fine Brown Sands with Pieces of Boulders and Traces of Silts Class 3a Moist
30.0	30 36	41 35	Granular Soils SM Fine Brown Sands with Pieces of Boulders and Traces of Silts Class 3a Moist
35.0	25 33	31 35	Granular Soils SM Fine Brown Sands with Pieces of Boulders and Traces of Silts Class 3a Moist End of Hole 32'

BORING B - 2			
DEPTH FT.	SPOON BLOWS PER 1/2 FT.	HOLLOW STEM AUGER	MATERIAL
GROUND SURFACE			
5.0	10 11	9 11	Fill Material mixed with Fine Brown Sands Class 7
10.0	15 10	13 16	Granular Soils SM Fine Brown Sands with Gravel and Traces of Silts Class 3b Moist
15.0	10 17	15 13	Granular Soils SM Fine Brown Sands with Gravel and Traces of Silts Class 3b Moist
20.0	19 17	23 21	Granular Soils SM Fine Brown Sands with Gravel and Traces of Silts Class 3a Moist
25.0	34 33	27 36	Granular Soils SM Fine Brown Sands with Pieces of Boulders and Traces of Silts Class 3a Moist
30.0	39 41	35 34	Granular Soils SM Fine Brown Sands with Pieces of Boulders and Traces of Silts Class 3a Moist End of Hole 32'

SB-523
B-1 PERCOLATION TEST RESULTS
TIME (MINUTES) DROP IN WATER LEVEL (FEET)

1	0.8
5	1.9
10	2.9
15	4.1
30	5.0
45	6.3
60	7.4

SB-523
Note: During Drilling Operation the Ground Water Table was not Encountered. Please note the moist conditions listed on the borings.



LOT AREA = 4000.00 sq.ft. = 0.0918 acre

TABLE 1804.1 ALLOWABLE BEARING PRESSURES		TABLE 1804.2 UNIFIED SOIL CLASSIFICATION	
CLASS OF MATERIALS (Notes 1 and 3)	MAXIMUM ALLOWABLE BEARING PRESSURE (TSF)	MAXIMUM ALLOWABLE BEARING PRESSURE (kPa)	UNIFIED SOIL CLASSIFICATION
1. Bedrock (Notes 2 and 7) 1a Hard sound rock 1b Medium rock 1c Intermediate rock 1d Soft rock	60 40 20 8	5,748 3,830 1,915 766	1. Bedrock (Notes 2 and 7) 1a Hard sound rock 1b Medium rock 1c Intermediate rock 1d Soft rock
2. Sandy gravel and gravel (GW, GP) (Notes 3, 4, 8, and 9) 2a Dense 2b Medium	10 6	958 575	2. Sandy gravel and gravel (GW, GP) (Notes 3, 4, 8, and 9) 2a Dense 2b Medium
3. Granular soils (GC, GM, SW, SP, SM, and SC) (Notes 4, 5, 8, and 9) 3a Dense 3b Medium	6 3	575 287	3. Granular soils (GC, GM, SW, SP, SM, and SC) (Notes 4, 5, 8, and 9) 3a Dense 3b Medium
4. Clays (SC, CL, and CH) (Notes 4, 6, 8, and 9) 4a Hard 4b Stiff 4c Medium	5 3 2	479 287 192	4. Clays (SC, CL, and CH) (Notes 4, 6, 8, and 9) 4a Hard 4b Stiff 4c Medium
5. Silts and silty soils (ML and MH) (Notes 4, 5, and 9) 5a Dense 5b Medium	3 1.5	287 144	5. Silts and silty soils (ML and MH) (Notes 4, 5, and 9) 5a Dense 5b Medium
6. Nominally Unsatisfactory Bearing Materials: Loose granular soils Soft clay soils Loose silt *All organic silts, organic clays, peats, soft clays, granular soils and varved silts	See 1804.2.1	See 1804.2.1	6. Nominally Unsatisfactory Bearing Materials: Loose granular soils Soft clay soils Loose silt *All organic silts, organic clays, peats, soft clays, granular soils and varved silts
7. Controlled and uncontrolled fills	See 1804.2.2 or 1804.2.3	See 1804.2.2 or 1804.2.3	7. Controlled and uncontrolled fills

Notes:
1. Where there is doubt as to the applicable classification of a soil or rock stratum, the allowable bearing pressure applicable to the lower class of material to which the given stratum might conform shall apply.
2. The tabulated values of allowable bearing pressure apply only for massive rocks, or for sedimentary or foliated rocks where the strata are level or nearly so, and then only if the area has ample lateral support. The allowable bearing pressure for tilted strata and their relation to nearby slopes or excavations shall be evaluated by the engineer responsible for the geotechnical investigation. The tabulated values for Class 1a materials (hard sound rock) may be increased by 25 percent provided the engineer performs additional tests and/or analyses substantiating the increase.
3. For intermediate conditions, values of allowable bearing pressure shall be estimated by interpolation between indicated extremes.
4. Footing embedment in soil shall be in accordance with Section 1805.3 and the width of the loaded area shall not be less than 18 inches (457 mm), unless analysis demonstrates that the proposed construction will have a minimum factor of safety of 2.0 against shear failure of the soil.
5. Estimates of settlements shall govern the allowable bearing pressure, subject to the maximums given in this table, and as provided in Section 1804.2.
6. Allowable bearing pressure of clay soils shall be established on the basis of the strength of such soils as determined by field or laboratory tests and shall provide a factor of safety against failure of the soil of not less than 2.0 computed on the basis of a recognized procedure of soils analysis, shall account for probable settlements of the building and shall not exceed the tabulated maximum values.
7. Allowable bearing pressure may be increased due to embedment of the foundation. The allowable bearing pressure for intermediate rock (1c), medium hard rock (1b), and hard sound rock (1a) bearing pressure for intermediate rock (1c), medium hard rock (1b), and hard sound rock (1a) shall apply where the loaded area is on the rock surface. Where the loaded area is below the rock surface and is fully confined by the adjacent rock mass and provided that the adjacent rock mass above the bearing surface is of the same rock class or better, and the rock mass has not been shattered by blasting or otherwise in or has been rendered unbound, the allowable bearing pressure may be increased 10 percent of the base value for each 1 foot (0.3 meters) of embedment below the surface of the adjacent rock surface in excess of 1 foot (0.3 meters), but shall not exceed 200 percent of the values.
8. The allowable bearing pressure for soils of Classes 2.3.4, and 5 determined in accordance with Notes 3.4, and 5 above, shall apply where the loaded area is embedded 4 feet (1219 mm) or less in the bearing stratum. Where the loaded area is embedded more than 4 feet (1219 mm) below the adjacent surface of the bearing stratum, and is fully confined by the weight of the adjacent soil, the allowable bearing pressure may be increased 5 percent of the base value for each 1-foot (305 mm) additional embedment, but shall not exceed twice the values; increases in allowable bearing pressure due to embedment shall not apply to soft rock, clays, silts and soils of Classes 6 and 7.
9. The allowable bearing pressure for soils of Classes 2.3.4, and 5 determined in accordance with this table and the notes thereto, may be increased up to 1/3 where the density of the foundation below the bottom of the footings increases with depth and is not unduly by materials of a lower allowable bearing pressure. Such allowable bearing pressure shall be demonstrated by a recognized means of analysis that the probable settlement of the foundation due to compression, and/or consolidation does not exceed acceptable limits for the proposed building.
10. The maximum toe pressure for eccentrically loaded footings may exceed the allowable bearing pressure by up to 25 percent if R is demonstrated that the heel of the footing is not subjected to tension.

Soil descriptions are by visual examination of soil samples recovered during drilling operations. Soil descriptions are in accord with the Unified Soils Classification System and N.Y.C. Building Code BC-1804.2. Ground water was measured inside the drill casing or hollow auger at the completion of each borehole. All boring elevations are referenced to existing ground level as zero elevation.

"N" STANDARD PENETRATION TEST (2" SPOON, 140LB HAMMER, 30" FALL)
N = 17 BLOWS PER FOOT
SPOON BLOW COUNT IS GENERALLY SHOWN IN 6" INCREMENTS FOR 2' DRIVE TO OBTAIN BLOWS PER FOOT (N) USE THE 2ND & 3RD 6" INCREMENT

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TYPE OF CORE BARRELS AND DIAMOND BITS:
SIZE O.D. CORE DIAMETERS
AX 1-7/8" 1-1/8"
BX 2-3/8" 1-5/8"
NX 2-15/16" 2-1/8"
AXM 1-7/8" 1-1/8"
NXM 2-15/16" 2-1/8"
B 2" 1-3/8"

WEIGHT OF HAMMERS:
300 LBS. ON 2 1/2" CASING-18" DROP
140 LBS. ON 2" SPOON-30" DROP
SPOON-SPLIT SAMPLER-2" O.D.-1 3/8" I.D. (24" LONG)

GROUND WATER TABLE (G.W.T.) AS NOTED ON BORING LOGS, IS ONLY THE FIRST INDICATION OF WATER ENCOUNTERED BY OUR DRILLERS.

TRIANGLE INSPECTION AND TESTING SERVICES, INC.
SUBSOIL INVESTIGATION
110-25 156th STREET JAMAICA, NY 11433 (718) 807-1160

TITLE:

APPLICANT SEAL DRAWN BY: Shazad Khan
CHECKED BY: Rajasekhar Sakhamuni P.E.
DATE DRAWN: 12-02-2020
DATE REVISED:
PROJECT: 75-14 137th Street, Queens
CLIENT: Abris Design Studio Corp.
B-523.00
DRAWING REF: SB-0523
SHEET NO: 1 OF 1

DEPARTMENT OF BUILDINGS

SELF CERTIFICATION