



CLIENT NAME:
BRUKLYN BUILDERS

PROJECT NAME:
689-687 5TH AVENUE
BROOKLYN



DATE:
No.

DRILLING DATE:
02/26/2021

DRILLER:
MAX

HELPER:
JOE

DRAWING DATE:
03/03/2021

DRAWING No.:
9592

DRAWN BY:
A.S.

PAGE:
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MAJOR DIVISIONS		GROUP SYMBOLS	TYPICAL NAMES
1	2	3	4
COARSE-GRAINED SOILS MORE THAN HALF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVELS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES.
		GP	POORLY GRADED GRAVELS OR GRAVEL-SAND MIXTURES, LITTLE OR NO FINES.
		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES.
		GC	CLAYEY GRAVELS, GRAVEL SAND-CLAY MIXTURES.
	SANDS MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES.
		SP	POORLY GRADED SANDS OR GRAVELLY SANDS, LITTLE OR NO FINES.
		SM	SILTY SANDS, SAND-SILT MIXTURES.
		SC	CLAYEY SANDS, SAND-CLAY MIXTURES.
	SANDS WITH FINES (APPROXIMATE AMOUNT OF FINES)	ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY.
		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS.
FINE-GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE THE NO. 200 SIEVE SIZE IS ABOUT THE SMALLEST PARTICLE VISIBLE TO THE NAKED EYE	SILTS & CLAYS LIQUID LIMIT IS LESS THAN 50	OL	ORGANIC SILTS, & ORGANIC SILTY CLAYS OF LOW PLASTICITY
		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS.
	SILTS & CLAYS LIQUID LIMIT IS LESS THAN 50	CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.
		OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS.
		Pt	PEAT AND OTHER HIGHLY ORGANIC SOILS.

"N"

STANDARD PENETRATION TEST
(2" SPOON, 140 lb HAMMER, 30" FALL)

SPOON BLOW COUNT IS GENERALLY SHOWN IN 6" INCREMENTS FOR 2' DRIVE, TO OBTAIN BLOWS PER FOOT (N) USE THE 2nd & 3rd 6" INCREMENT

SOIL SAMPLES AND FIELD REPORTS WILL BE DISCARDED AFTER SIX MONTHS. THIS REPORT IS SUBMITTED WITH THE SPECIFIC UNDERSTANDING THAT THE SOLE LIABILITY OF BIG APPLE TESTING, INC., ITS ENGINEERS AND EMPLOYEES FOR ERRORS AND OMISSIONS IS LIMITED TO THE AMOUNT OF THE FEE PAID FOR THIS REPORT. THE USE OF THIS REPORT WILL CONSTITUTE AN ACCEPTANCE BY THE CLIENT OF THIS DISCLAIMER. THE FEE CHARGED FOR THIS REPORT IS PREDICATED UPON THIS LIMITATION OF LIABILITY WHICH IS THE ESSENCE OF THIS AGREEMENT. IF THESE TERMS ARE NOT ACCEPTABLE, CLIENT MUST NOTIFY BAT, INC. IN WRITING BY CERTIFY EMAIL, RETURN RECEIPT REQUESTED WITHIN FIVE (5) DAYS. BIG APPLE TESTING, INC., ITS ENGINEERS AND EMPLOYEES DO NOT ACCEPT ANY LIABILITY OR RESPONSIBILITY FOR PERSONS OTHER THAN THE CLIENT FOR WHOM THIS WORK WAS DIRECTLY PREPARED AND ANY SUCH PERSON, FIRM OR CORPORATION RELIES ON THIS REPORT AT HIS OWN RISK.

BORING CONTRACTOR'S CERTIFICATION

BIG APPLE TESTING, INC. CERTIFIES AS TO THE ACCURACY OF THE SPOON AND CASING BLOWS AND ELEVATIONS AND METHOD OF BORING.

THE FOLLOWING EQUIPMENT WAS USED:

EQUIPMENT:

CME 55	CME-45 G	ACKER-SCOUT	SENTRY
CME 45	MOBIL B61	SIMCO 2800	TRIPOD
OTHER	NAME OF EQUIPMENT AND MODEL:		

TYPE OF CORE BARRELS AND DIAMOND BITS

SIZE	OD	CORE DIAMETERS
AX	1 3/4"	1 1/8"
BX	2 3/8"	1 3/8"
NX	2 3/8"	2 1/8"
AXM	1 3/8"	1 1/8"
NXM	2 3/8"	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)

WATER NOTED ON PRINT IS ONLY FIRST INDICATION OF WATER FOR EXACT RESULTS CALL OUR WELL POINT TEST.
WATER LEVEL MAY FLUCTUATE 5' ±

ALLOWABLE SOIL BEARING PRESURES N.Y.C. BUILDING CODE 2014 TABLE 1804.1		
CLASS OF MATERIALS (Notes 1 and 3)	MAXIMUM ALLOWABLE BEARING PRESURE (TSF)	MAXIMUM ALLOWABLE BEARING PRESURE (KPa)
1. Bedrock (Notes 2 and 7) 1a. Hard sound rock 1b. Medium rock 1c. Intermediate rock 1d. Soft rock	60 40 20 0	5,746 3,830 1,915 766
2. Sandy gravel and gravel (GM, GP) (Notes 3, 4, 8, and 9) 2a. Dense 2b. Medium	10 6	958 575
3. Granular soils (GC, GM, SM, SP, SM, and SC) (Notes 4, 5, 8, and 9) 3a. Dense 3b. Medium	6 3	575 287
4. Clays (SC, CL, and CH) (Notes 4, 6, 8, and 9) 4a. Hard 4b. Stiff 4c. Medium	5 3 2	479 287 192
5. Silts and silty soils (ML and MH) (Notes 4, 8, and 9) 5a. Dense 5b. Medium	3 1.5	287 144
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
7. Controlled and uncontrolled fills	See 1804.2.2 or 1804.2.3	See 1804.2.2 or 1804.2.3

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 pressures 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 soils 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.

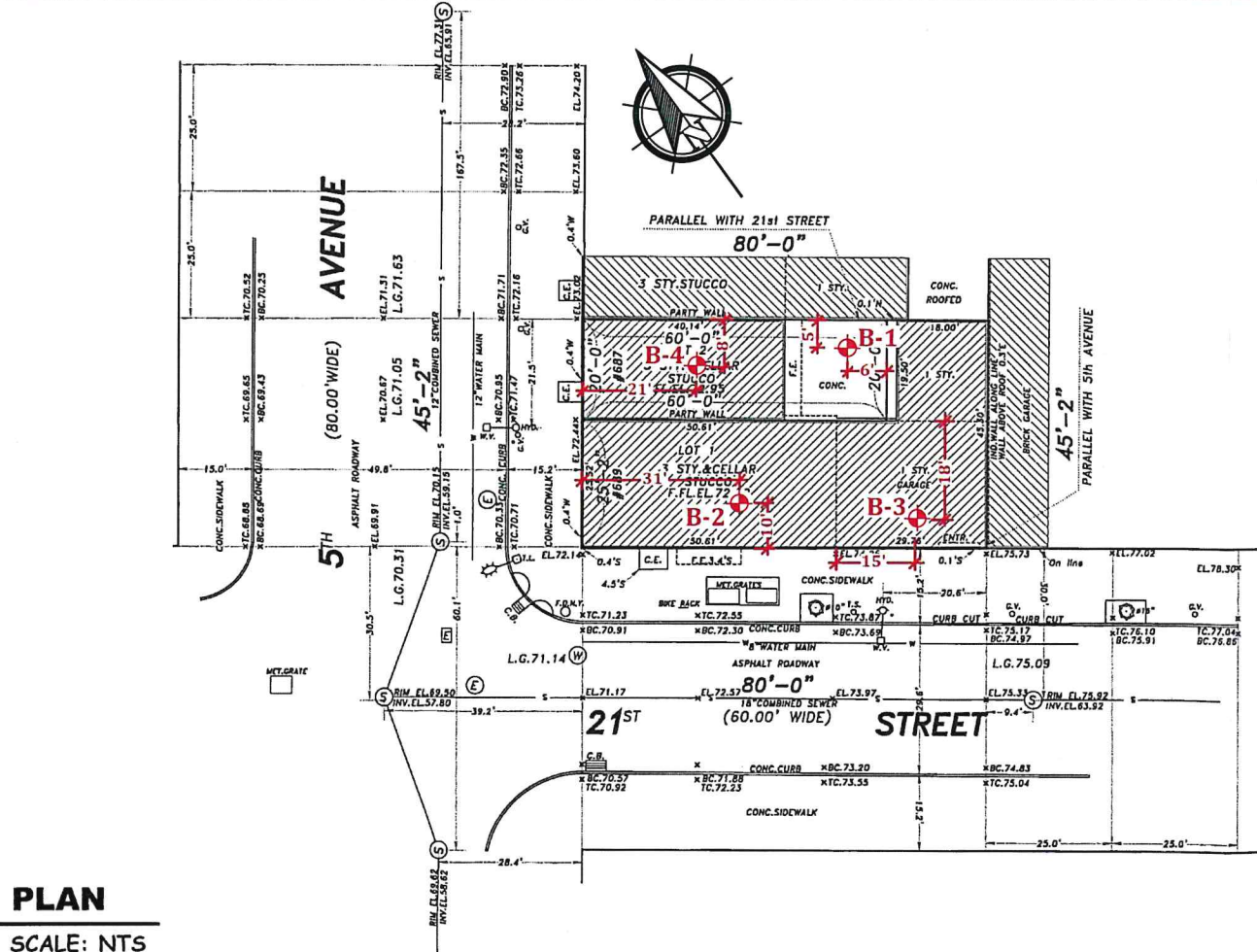
6. Allowable bearing pressure of clay soils shall be established on the basis of the strength of such soils as determined by field or laboratory tests and shall provide a factor of safety against failure of the soil of not less than 2.0 computed on the basis of a recognized procedure of soils analysis, 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) 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 is or has been rendered unsound, 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 bearing stratum below the bottom of the footings increases with depth and is not underlain 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 it is demonstrated that the heel of the footing is not subjected to tension.



PLAN

SCALE: NTS

NOTES

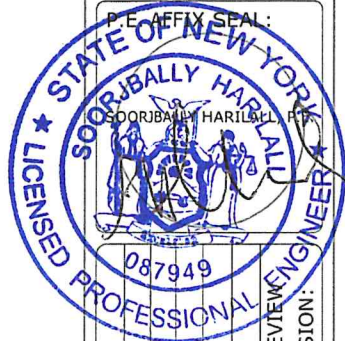
1. DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS, FOR WHICH NO SCALE IS SHOWN, ARE DRAWN PROPORTIONAL AND ARE FULLY DIMENSIONED.

BORING TRIPOD B-1 02/25/2021			BORING TRIPOD B-2 02/25/2021			BORING TRIPOD B-3 02/26/2021			BORING TRIPOD B-4 02/26/2021		
DEPTH FEET	SPOON BLOWS PER 1/2 FT.	MATERIAL	DEPTH FEET	SPOON BLOWS PER 1/2 FT.	MATERIAL	DEPTH FEET	SPOON BLOWS PER 1/2 FT.	MATERIAL	DEPTH FEET	SPOON BLOWS PER 1/2 FT.	MATERIAL
GROUND SURFACE 2 FT +/- ABOVE CURB LEVEL			GROUND SURFACE 7 FT +/- BELOW CURB LEVEL			GROUND SURFACE 3 FT +/- BELOW CURB LEVEL			GROUND SURFACE 6.6 FT BELOW CURB LEVEL		
5	9 7	0 to 2 Feet Silt, sand, clay, bricks Uncontrolled Fill Class 7	5	5 5	0 to 4 Feet Silty sand (SM) Class 6	5	10 7	0 to 6 Feet Fine sand (SP) Class 3b	5	3 5	0 to 2 Feet Top soil, silt, sand, clay, concrete Uncontrolled Fill Class 7
	8 9			4 3			9 10			3 2	
	7 9			5 3			9 5			10 5	
	8 9			3 2			7 10			7 3	
	8 9			2 5			13 14			6 6	
10	11 13	2 to 8 Feet Clayey sand (SC) Class 3b	10	5 5	4 to 6 Feet Clayey sand (SC) Class 3b	10	10 15	6 to 8 Feet Clayey sand (SC) Class 3b	10	7 8	2 to 4 Feet Clay (CL) Class 4b
	5 7			9 12			9 10			10 13	
	4 5			15 10			7 12			13 15	
	7 9			12 12			3 5			11 17	
	12 14			9 15			4 3			10 15	
15	10 27	8 to 10 Feet Clay (CL) Class 4c	15	11 13	6 to 10 Feet Silty sand (SM) Class 3b	15	5 11	8 to 10 Feet Sandy clay (CL) Class 4b	15	12 12	4 to 6 Feet Clayey sand (SC) Class 3b
	32 50+			13 10			15 10			14 16	
				16 14			12 16			12 16	
				10 12			10 13			25 50+	
				17 19			13 16				
20		10 to 12 Feet Clay (CL) Class 4b	20	29 50+	10 to 16 Feet Fine sand (SP) Class 3b	20	21 33	10 to 16.5 Feet Fine sand (SP) Class 3b	20		6 to 10 Feet Silty sand (SM) Class 3b
							50+ - - - -				
25		SPOON REFUSAL	25		SPOON REFUSAL	25		SPOON REFUSAL	25		10 to 14 Feet Silty fine sand (SM) Class 3b
30		SPOON REFUSAL	30		SPOON REFUSAL	30		SPOON REFUSAL	30		SPOON REFUSAL
35		SPOON REFUSAL	35		SPOON REFUSAL	35		SPOON REFUSAL	35		SPOON REFUSAL
40		SPOON REFUSAL	40		SPOON REFUSAL	40		SPOON REFUSAL	40		SPOON REFUSAL
45		SPOON REFUSAL	45		SPOON REFUSAL	45		SPOON REFUSAL	45		SPOON REFUSAL
50		SPOON REFUSAL	50		SPOON REFUSAL	50		SPOON REFUSAL	50		SPOON REFUSAL
55		SPOON REFUSAL	55		SPOON REFUSAL	55		SPOON REFUSAL	55		SPOON REFUSAL



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