Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

B... CTIO

Please Read Application And Notes, If Any, Attached

Permit Number: 041694

PERMIT

PERMIT ISSUED
NOV 15 2004
CITY OF PORTLAND

This is to certify that Reynolds Marianne M/Patco nstructio

has permission to Big Moose Harley/ Addition oundatio nly

AT 375 Riverside St C L 317 B005001

provided that the person or persons, m or ...epting this permit shall comply with a of the provisions of the Statutes of M ne and of th nces of the City of Portland regulatin the construction, maintenance and u of buildings and st tures, and of the application on file i this department.

Apply to Public Works for street line and grade if nature of work requires such information.

N ication inspec n must gi and wr n permis n procu b e this b ding or t thereo la d or c closed-in. H R NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. _____

Health Dept. _____

Appeal Board ___ _____

Other _

Department Name

PENALTY FOR REMOVING THIS CARD

PERMIT ISSUED

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No:	Issue Date:	CBL:
04-1694	NOV 15 2004	317 B005001

CITY OF PORTLAND

Location of Construction:	Owner Name:	Owner Address:	Phone:
375 Riverside St	Reynolds Marianne M	Po Box 99	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Patco Construction	1293 Main St Sanford	2073245574
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		Foundation Only/Commercial	
Past Use:	**Proposed Use:**	**Permit Fee:** / **Cost of Work:** / **CEO District:**	
Commercial/ Big Moose Harley	Big Moose Harley/ Addition - Foundation only	/ $0.00 / 5	

FIRE DEPT: ☐ Approved ☐ Denied — N/A — Signature:

INSPECTION: Use Group: Type: FOUNDATION ONLY 11/15/04 — Signature:

Big Moose Harley/ Addition - Foundation only

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
ldobson	11/15/2004

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☐ Not in District or Landmarl
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: PREVIOUSLY APPROVED	Date:	Date:

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT | ADDRESS | DATE | PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE | DATE | PHONE

31785

R. W. Gillespie & Associates, Inc.
Geotechnical Engineering • Geohydrology • Materials Testing Services

09 June 2003

Mr. Calvin Reynolds
Big Moose Harley Davidson
375 Riverside Street
Portland, Maine 04101

Subject: Geotechnical Investigation
Additions to Big Moose Harley Davidson
Portland, Maine
RWG&A Project No. 235-883

Dear Mr. Reynolds:

In accordance with our Proposal No. P-5024.GI dated 17 April 2003, R. W. Gillespie & Associates, Inc., (RWG&A) has conducted a geotechnical investigation for the proposed addition to Big Moose Harley Davidson in Portland, Maine. The purpose of this investigation was to obtain information regarding subsurface soil and groundwater conditions *on* which io base recommendations for design and construction of foundations, ground floor slabs, and frost mitigation.

Subsoils at the site consist of a 2-foot thick layer of fill over silty clay to depths **of46** to 54 feet below the local ground surface. In addition, a 4-foot thick layer of silty sand was encountered below the fill in borings B-101 and B-104. Isolated column and continuous wall footings are recommended for support of the addition in conjunction with a shallow, frost-protected foundation system for the exterior. Soil supported, slab-on-grade construction is considered appropriate for the ground floors. Foundation drainage, consisting of perimeter footing and underslab drains, is recommended for the addition.

INTRODUCTION

The site is located at 375 Riverside Street in Portland, Maine, about ½ mile south of its intersection with Warren Avenue, as shown on Figure 1, ***Site** Locus **Map.*** The new addition will be located on the north side of the existing showroom.

The project is a 3,050 square foot addition that will have wood framed exterior walls with a wood truss roof. Floors are expected to be slab-on-grade. Loads will be predominately live loads from wind and snow.

SUBSURFACE EXPLORATION

The subsurface exploration program for this investigation consisted of four soil borings drilled to depths of 22 to 58 feet below the local ground surface at the locations shown on Figure 2, *Exploration Location Plan*. Drilling was performed by Great Works Pump & Test Boring, Inc., of Rollinsford, New Hampshire. Explorations were made with a truck-mounted, rotary drill rig using cased hole methodologies.

Standard penetration resistance tests were taken at ground surface and at 5-foot intervals thereafter to depths of 10to 20 feet. In addition, thin walled tube samples were taken in boring B-102 and field vane shear tests were performed in borings B-102 and B-103. Recovered samples and auger cuttings were used to describe the soils and prepare the boring logs presented in Appendix **A.** Stratification lines shown on the boring logs represent the approximate boundaries between soil types encountered; the actual transitions will be more gradual and vary over short distances. The standard penetration and field vane shear tests were performed and the thin walled tube samples obtained in general accordance with the following standards; *ASTM D1586, Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils, ASTM D2573, Standard Test Method for Field Vane Shear Test in Cohesive Soil,* and *ASTM D1587, Standard Practice for Thin-Walled Tube Geotechnical Sampling of Soils.*

LABORATORY TESTING

All samples were visually examined and, when necessary, reclassified using the procedures outlined in *ASTM 02488, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure).* Moisture content, laboratory miniature vane shear, and one-dimensional consolidation tests were performed on seiected samples to estimate the engineering properties of undrained shear strength and consolidation for the soils encountered in the test borings. The laboratory testing was performed in general accordance with *ASTM D2216, Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass, ASTM D4648, Standard Test Method for Laboratory Miniature Vane Shear Test for Saturated Fine-Grained Clayey Soil,* and *ASTM D2435, Standard Test Method for One-Dimensional Consolidation Properties of Soils;* test results are present in Appendix **A.**

SUBSURFACE CONDITIONS

Subsoils

Below the surficial cover of the asphaltic pavement sections, the subsoils consist of fill over silty clay to depths of 48 to 58 feet below local ground surface. In addition 4 feet of silty sand was encountered below the fill in borings B-101 and B-104. The thickness of the fill is about **2** feet in all the borings and is a medium dense gravelly sand. The silty sand encountered in B-101 and B-104 is a medium dense, fine grained sand. The silty clay is generally medium stiff in the upper 5 to 10 feet and then becomes soft to very soft for the balance of the stratum.

Groundwater

Free water was observed in the completed boreholes at depths of about 0.2 to 2.0 feet below the local ground surface. In, general groundwater levels across the site will fluctuate due to season, temperature, precipitation, and construction activity in the area; therefore, water levels during and following construction will vary from those observed in the subsurface explorations.

EVALUATION OF GEOTECHNICAL DATA

The site is considered appropriate for the proposed addition from a geotechnical standpoint. Subsurface conditions are suitable for the use of shallow, frost-protected foundations consisting of spread footings at shallow depth with exterior insulation and drainage. The footings may bear on undisturbed, naturally-deposited soils or compacted structural fill where utilities or other features require foundation subgrades to be undercut. Post-construction settlements between the addition and the existing building are anticipated to be less than 1 inch. Foundation drainage is recommended to reduce water levels around and within the area of the proposed addition.

RECOMMENDATIONS

Recommendations pertaining to foundation design and construction, and site development are presented in the following sections. Foundation requirements and site development considerations are significantly affected by the subsurface conditions present at the proposed site. RWG&A recommends that foundation design and construction be in accordance with all applicable codes. It is understood that design of the addition will be subject to the requirements of 2000 *International Building Code'.*

Excavation and Filling

1. All topsoil, organic material, debris, pavements, utilities, fill, and other unsuitable foundation bearing materials should be removed from the areas receiving new constructed facilities.

2. Site grading should provide positive drainage away from constructed facilities both during and after construction.

3. Dewatering requirements will vary across the site based on groundwater levels encountered during construction and soil type. In general, it should be practical to accomplish construction dewatering from within excavations by open pumping methods to depths of one to two feet below groundwater. Dewatering to greater depths below groundwater will likely require the use of wells and/or well points. Surface runoff and infiltration of groundwater should be controlled so that excavation, filling, and foundation construction can be completed in-the-dry.

4. Structural fill for support of footings and floor slabs, and for use as backfill, should be a clean, well-graded sand and gravel mixture meeting the following gradation.

Structural Fill Gradation

Screen or Sieve Size	Percent Passing
6 inches	100
3 inches	70 - 100
No. 4	35 - 70
No. 40	5 - 35
No. 200	0 - 5

5. In open areas, structural fill should be placed in level, uniform lifts not exceeding 9 inches in uncompacted thickness and be compacted with self-propelled compaction equipment. In confined areas, structural fill should be placed in lifts not exceeding 6 inches in uncompacted thickness (note: maximum particle size 3 inches) and be compacted with hand-operated compaction equipment. Structural fill should be compacted to at least 92 percent of the maximum dry density as determined by ASTM D1557, *Test Method for*

Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN-m/m³)).

Compaction with large roller compactors might produce vibrations that are noticeable to occupants of the existing building. It is recommended that this issue be reviewed prior to construction.

6. Only structural fill should be used to raise grade and support slab-on-grade floors for the proposed addition.

Foundations

7. The proposed building may be supported on spread and/or continuous footings bearing on undisturbed, naturally deposited soil or compacted structural fill. Footings should be designed for a maximum contact pressure of 1,500 pounds per square foot. For footings with bearing areas having a least lateral dimension smaller than three feet, the allowable bearing pressure shall be 1/3 of the above maximum times a footing's least lateral dimension in feet. Minimum footing width should be in accordance with concrete design and building code requirements, and not less than two feet.

8. A smooth edged bucket should be used during footing excavation to minimize disturbance to the clay subgrade. The exposed subgrade should be protected from further disturbance, moisture, and freezing until the footings are placed. Areas where fill is encountered should be over excavated to undisturbed soil and replaced with compacted structural fill. Any soft areas or areas where moisture has accumulated should be over excavated and replaced with compacted structural fill.

9. Exterior footings may be located at a depth of 2 feet below exterior finished grade and should be frost protected with a minimum of 2 inches of rigid insulation placed on top of the footings and extending 4 feet outward from the foundation walls. It is recommended that two pieces of 1-inch insulation with lapped joinrs be used to reduce vertical moisture infiltration and gaps in the insulation. The insulation should be pitched away from the foundation to reduce water accumulation.

At heated interior locations, footings may be designed to bear a minimum of 18 inches below the top of the ground floor slab. If exposure *to* freezing is anticipated, either during or following construction, then interior footings should be lowered and protected in accordance with the above recommendations for exterior footings.

10. The building foundation should he design to withstand lateral, uplift, and overturning forces due to earthquakes. In accordance with 2000 *International Building Code®* the site is classified as Site Class E.

11. Lateral foundation loads from wind and earthquake may be resisted by cohesion between the bottom of the spread footing and bearing subgrade. **A** cohesion value of 1,000 psf is recommended for use in design.

12. Perimeter and underslab drainage should be provided around the foundation and under the floor slab. The perimeter drain should be installed at an elevation equal to the bottom of the exterior footings. Invert of the underslab drain pipes should be located at least a foot below the bottom of the floor slab. Two outlets should be provided so as to not be reliant upon a single flow path. The outlets should provide free flow of water under all runoff conditions and, at a minimum, be above the 100-year flood level.

Ground Floor Slabs

13. Subsurface conditions are suitable for slab-on-grade floors. A minimum of 12 inches of structural fill should be placed beneath ground floor slabs and compacted in accordance with the above recommended criteria. **A** modulus of subgrade reaction of 150 pounds **per** cubic inch may be used in the design of slab-on-grade floors.

14. A vapor barrier should be installed beneath interior ground floors to minimize moisture infiltration. It is anticipated that details of the type, thickness, depth, bedding, and cover of the vapor barrier will be provided by the Architect or Structural Engineer.

Utilization **of On-Site Soils**

15. Excavated, on-site soils should be segregated and stockpiled during construction. Laboratory testing will be needed to verify the suitability of on-site soils for reuse as structural or common fill and compaction characteristics.

Geotechnical Observation

16. Since the above geotechnical recommendations are based on limited numbers of observations and tests, the Owner should be particularly sensitive to the potential need for adjustments in the field. It would be in the best interest of the Owner and project to retain RWG&A to observe geotechnical construction aspects of the project, observe general compliance with the design concepts, specifications, and recommendations, and to assist in development of design changes should subsurface conditions differ from those anticipated. Such observation increases the likelihood of the design intent being considered adequately during construction and will allow RWG&A to confirm its design recommendations.

CLOSURE

This report has been prepared for specific application to the Proposed Addition to Big Moose Harley Davidson in Portland, Maine, and for the exclusive use of Big Moose Harley Davidson. This work has been completed in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made. In the event any changes are made in the nature or location of the project, the conclusions and recommendations of this report should be reviewed by RWG&A.

The recommendations presented are based on the results of the referenced soil explorations. The nature of variation between the explorations may not become evident until construction has begun. If significant variations are encountered, it will be necessary for RWG&A to re-evaluate the recommendations presented in this report. RWG&A requests an opportunity for a general review of the final design and specifications in order to determine that foundation recommendations have been interpreted in the manner in which they were intended.

We appreciate the opportunity to be of service to Big Moose Harley Davidson on this project. Please do not hesitate to contact us if you have any questions or if we can be of further service.

Very truly yours,
R. W. GILLESPIE & ASSOCIATES, INC.

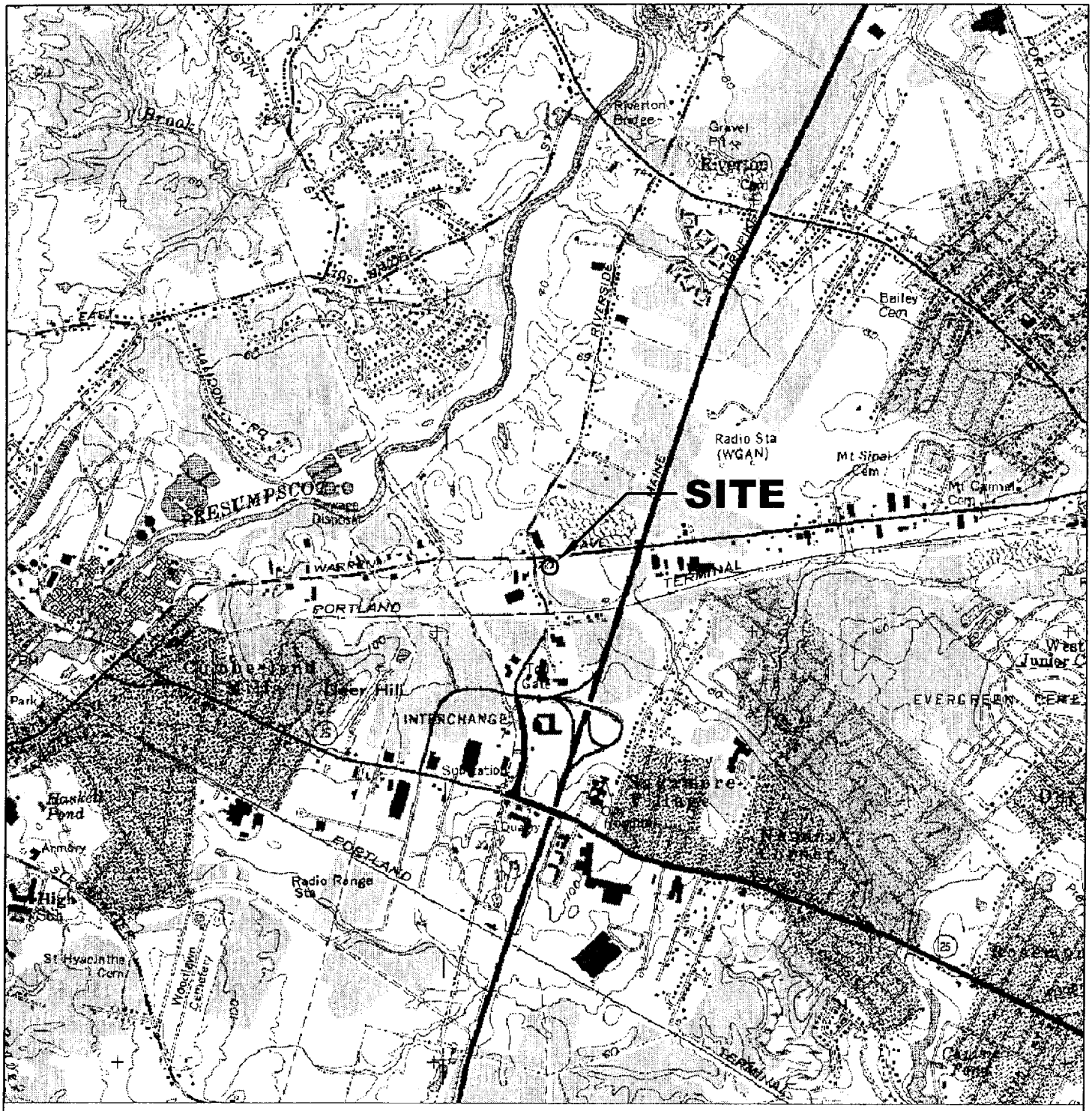
Matthew P. Lilley, E. I.
Geotechnical Engineer

Robert W. Gillespie, P. E.
Principal Geotechnical Engineer

STATE OF MAINE
ROBERT W. GILLESPIE
4975
REGISTERED PROFESSIONAL ENGINEER

MPL/RWG:ci
In Duplicate
cc: PATCO Construction, Inc. **(2)**
Attn: Dennis Waters

Attachments:
Figure 1 - Site Locus Map
Figure **2** - Exploration Location Plan
Appendix **A** - Test Boring Logs
Appendix B - Laboratory Test Results



N

0 2000 3000 4000

SCALE, FEET

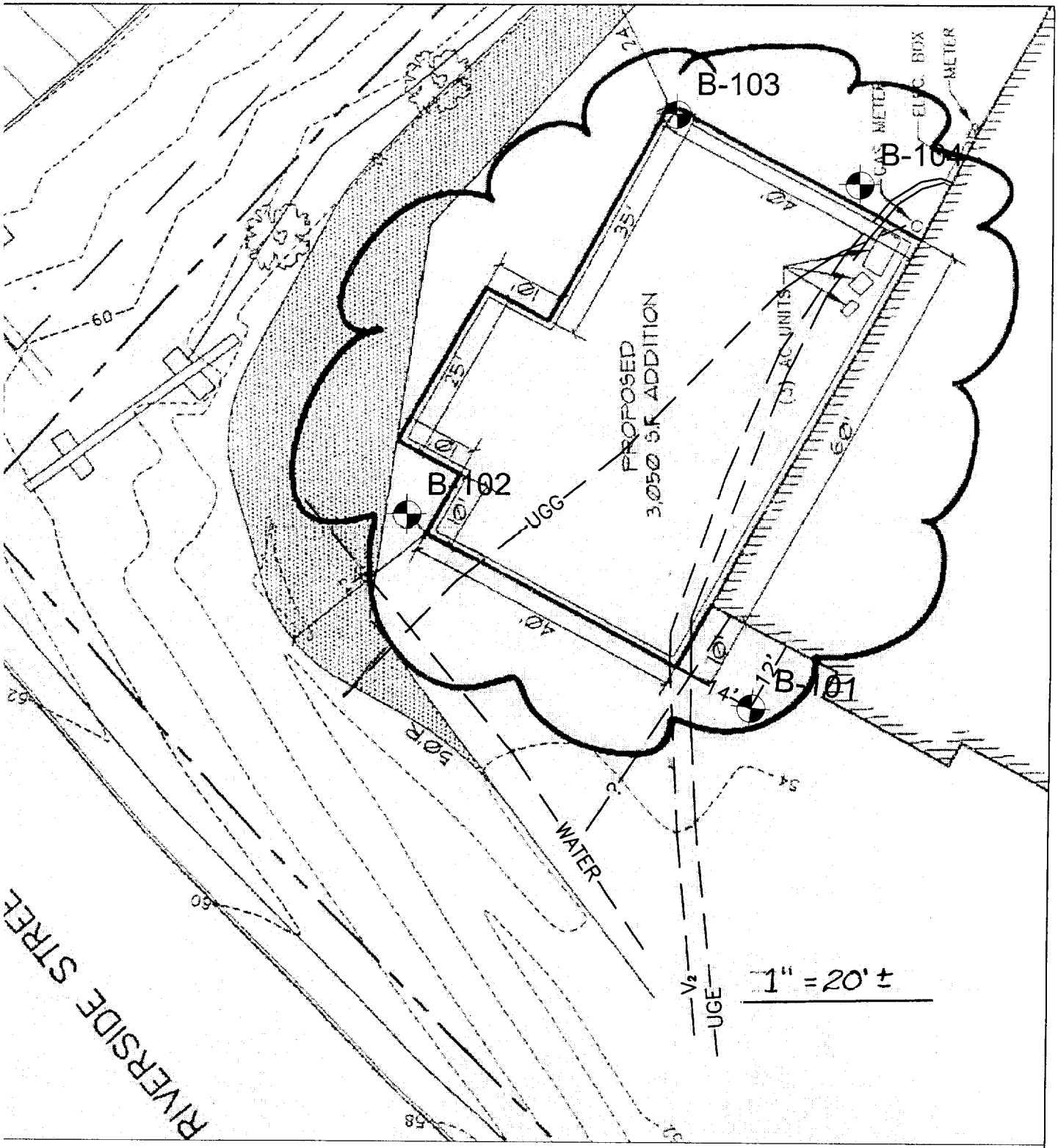
SOURCE:

USGS 7.5–MINUTE TOPOGRAPHIC QUADRANGLE OF PORTLAND WEST, ME, DATED 1978.

FIGURE 1
SITE LOCUS MAP
ADDITION TO BIG MOOSE HARLEY DAVIDSON
PORTLAND, MAINE

PROJECT NO. 235–883

R.W. Gillespie & Associates, Inc.
CONSULTING GEOTECHNICAL & ENVIRONMENTAL SPECIALISTS
86 Industrial Park Rd., Suite 4 Saco, Maine 04072 (207) 286-8008
Fax: (207) 286–2882 E–mail: rwg–a@rwg–a.com



APPROXIMATE

LEGEND:

B-104 LOCATION OF BORING

FIGURE 2
EXPLORATION LOCATION PLAN
ADDITION TO BIG MOOSE HARLEY DAVIDSON
PORTLAND, MAINE

JUNE 2003 PROJECT NO. 235-883

R.W. Gillespie & Associates, Inc.
CONSULTING GEOTECHNICAL & ENVIRONMENTAL SPECIALISTS
86 Industrial Park Rd., Suite 4 Saco, Maine 04072 (207) 286-8008
Fax: (207) 286-2882 E-mail: rwg-a@rwg-a.com

APPENDIX A

TEST BORING LOGS

Geotechnical Investigation
Addition to Big Moose Harley Davidson
Portland, Maine

BORING LOG B-101

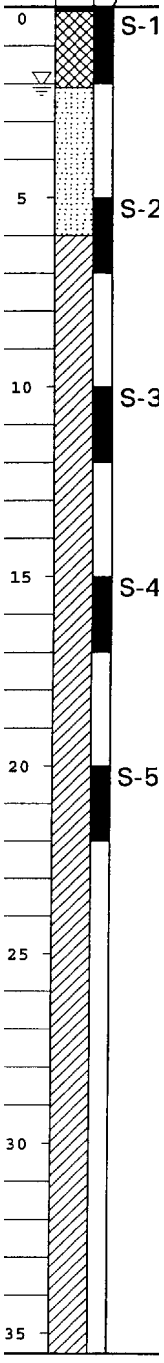
'roject: Big Moose Harley Davidson
_ocation: Portland, Maine

Approximate Surface Elevation:
Ground Water Depth: 2'±

Client: Calvin Reynolds

Date: 09 May 200:

Project No. 235-883



DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT	Lab Tests
0			S-1	\ASPHALTIC PAVEMENT (1.5 inches).	14	10	19		
				FILL: Gravelly Sand, medium dense, moist, coarse to medium sand, some gravel, trace silt, brown.		10			
				SILTY SAND (SP); medium dense, wet, fine sand, some silt, gra with thin (<1") clay seems, stratified.		9			
						8			
5			S-2		19	12	30	24.1	
				SILTY CLAY (CL); medium stiff then soft, wet, gray with thin (<1") sand seems.		15			
						15			
						8			
10			S-3		24	2	5	32.2	
						3			
						2			
						2			
15			S-4		24	WOH		46.6	
20			S-5	-GLACIAL MARINE DEPOSITS-	24	WOR		44.1	
				Probed with "A" rod and hydraulic push from *22'* to 54'					
25									
30									
35									

R.W. Gillespie & Associates
Saco, Maine

BORING LOG B-101

'roject: Big Moose Harley Davidson
_ocation: Portland, Maine

Approximate Surface Elevation
Ground Water Depth: 2'-

Client: Calvin Reynolds

Date: 09 May 200

Project No. 235-883

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT	Lab Tests
40									
45									
50									
55				**SAND (SP);** logged from change in probe resistance and hammer blow count). Depth Blows 54.0 - *55.0* **48** **55.0** - *56.0* **44** 56.0 - **57.0** **38** **57.0** - 58.0 38					
60				Bottom of Exploration at 58': not refusal, boring terminated 4' intc sand.					
65									
70									

R.W. Gillespie & Associates
Saco, Maine

BORING LOG B-102

Project: Big Moose Harley Davidson
Location: Portland, Maine

Approximate Surface Elevation:
Ground Water Depth: 0.2

Client: Calvin Reynolds

Date: 09 May 200

Project No. 235-883

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT	Lab Tests
0			S-1	ASPHALTIC PAVEMENT (2 inches).	NR	10	20		
				FILL: Gravelly Sand, medium dense, wet, coarse to fine sand, some gravel, trace silt, brown.		12			
				SILTY CLAY (CL); medium stiff then soft, wet, gray with thick (2"-4") sand seems.		8			
						8			
5			S-2		20	4	5	30.9	
						2			
						3			
						2			
10			U-1		NR			45.9	Lab Vane
			U-1A		22/24				
15			FV	Field Vane: Undrained Shear Strength; Su = 0.44 ksf; Residual, Su = 0.03 ksf.					
			FV						
20			U-2		23/24			47.8	Cons Lab Vane
25			FV	Field Vane: Undrained Shear Strength; Su = 0.68 ksf, Residual; Su = 0.03 ksf.					
			FV	-GLACIAL MARINE DEPOSITS- Probed with "A" rod and hydraulic push from 26' to 57'.					
30									
35									

R.W. Gillespie & Associates
Saco, Maine

BORING LOG B-102

'roject: Big Moose Harley Davidson
.ocation: Portland, Maine

Approximate Surface Elevation
Ground Water Depth: 0.2

Client: Calvin Reynolds

Date: 09 May 200

Project No. 235-883

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT	Lab Tests
40									
45									
50									
55				**SAND** (SP); (logged from change in probe resistance and/or hammer blow count. Depth 57.0 - 58.0 Blows 62					
60				Bottom of Exploration at 58': not refusal, boring terminated **4.5"** into sand.					
65									
70									

R.W. Gillespie & Associates
Saco, Maine

BORING LOG B-103

'roject: Big Moose Harley Davidson
_ocation: Portland, Maine

Approximate Surface Elevation:
Ground Water Depth: 0.2'

Client: Calvin Reynolds

Date: 09 May 2003

Project No. *235-883*

DEPTH, FT.	SYMBOL	SAMPLES SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS per 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT	Lab Tests
0		S-'	\ASPHALTIC PAVEMENT (2 inches).	11	9	15		
			FILL: Gravelly Sand, medium dense, wet, coarse to fine sand, \some gravel, trace **silt,** brown.		8 7 2			
			SILTY CLAY (CL); medium stiff to soft, wet, olive brown then gray.					
5		S-:		24	2 2 2 2	4	39.4	
10		S-:		24	2 2 1 1	3	48.6	
15		FV	Field Vane: Undrained Shear Strength; Su = 0.38 ksf, Residual; Su = 0					
		FV						
20		FV	Field Vane: Undrained Shear Strength; Su = 0.53 ksf, Residual; su = 0.01 ksf.					
		FV						
25		FV	Field Vane: Undrained Shear Strength; Su = 0.46 ksf, Residual; su =0					
		FV						
			-GLACIAL **MARINE** DEPOSITS- Probed with "**A**" rod and hydraulic push from 27' to 46.5'					
30								
35								

R.W. Gillespie & Associates
Saco, Maine

BORING LOG B-103

Project: Big Moose Harley Davidson
Location: Portland, Maine

Approximate Surface Elevation
Ground Water Depth: 0.2

Client: Calvin Reynolds

Date: 09 May 200

Proiect No. 235-883

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS PER 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT	Lab Tests
40									
45									
				SAND (SP); (logged from change in probe resistance and hammer blow count) .					
				Depth Blows 46.5 - 47.5 33 47.5 - 48.5 42					
50				Bottom of Exploration at 48.5': not refusal, boring terminated 2' into sand.					
55									
60									
65									

BORING LOG B-104

'roject: Big Moose Harley Davidson
.ocation: Portland, Maine

Approximate Surface Elevation:
Ground Water Depth:

:lient: Calvin Reynolds

Date: 09 May 2003

Proje ct No. 235-883

DEPTH, FT.	SYMBOL	SAMPLES	SAMPLE #	DESCRIPTION OF MATERIAL	SAMPLE RECOVERY, IN.	BLOWS per 6"	SPT-N BLOWS PER FT.	MOISTURE CONTENT	Lab Tests
0			S-1	ASPHALTIC PAVEMENT (1 inch).	10	8	20		
				FILL: Gravelly Sand, medium dense, wet, coarse to fine sand, some gravel, trace silt, brown.		7 13 8			
				SILTY SAND (SM); medium dense, wet, fine sand, some silt with thick (4-6") clay seems.					
5			S-2		20	8 7 5 4	12		
				SILTY CLAY (CL); medium stiff to soft, wet, gray.					
10			S-3		24	WOH		16.4	
15			S-4			WOR		41.0	
20			S-5	-GLACIAL MARINE DEPOSITS-		WOR		38.3	
				Bottom of Exploration at 22': not refusal.					
25									
30									
35									

R.W. Gillespie & Associates
Saco, Maine

APPENDIX B

LABORATORY TEST RESULTS

Geotechnical Investigation
Addition to Big Moose Harley Davidson
Portland, Maine

Laboratory Vane Shear Test Results

Project: Addition to Big Moose Harley Davidson **Client:** Big Moose Harley Davidson
Project No.: 235-883

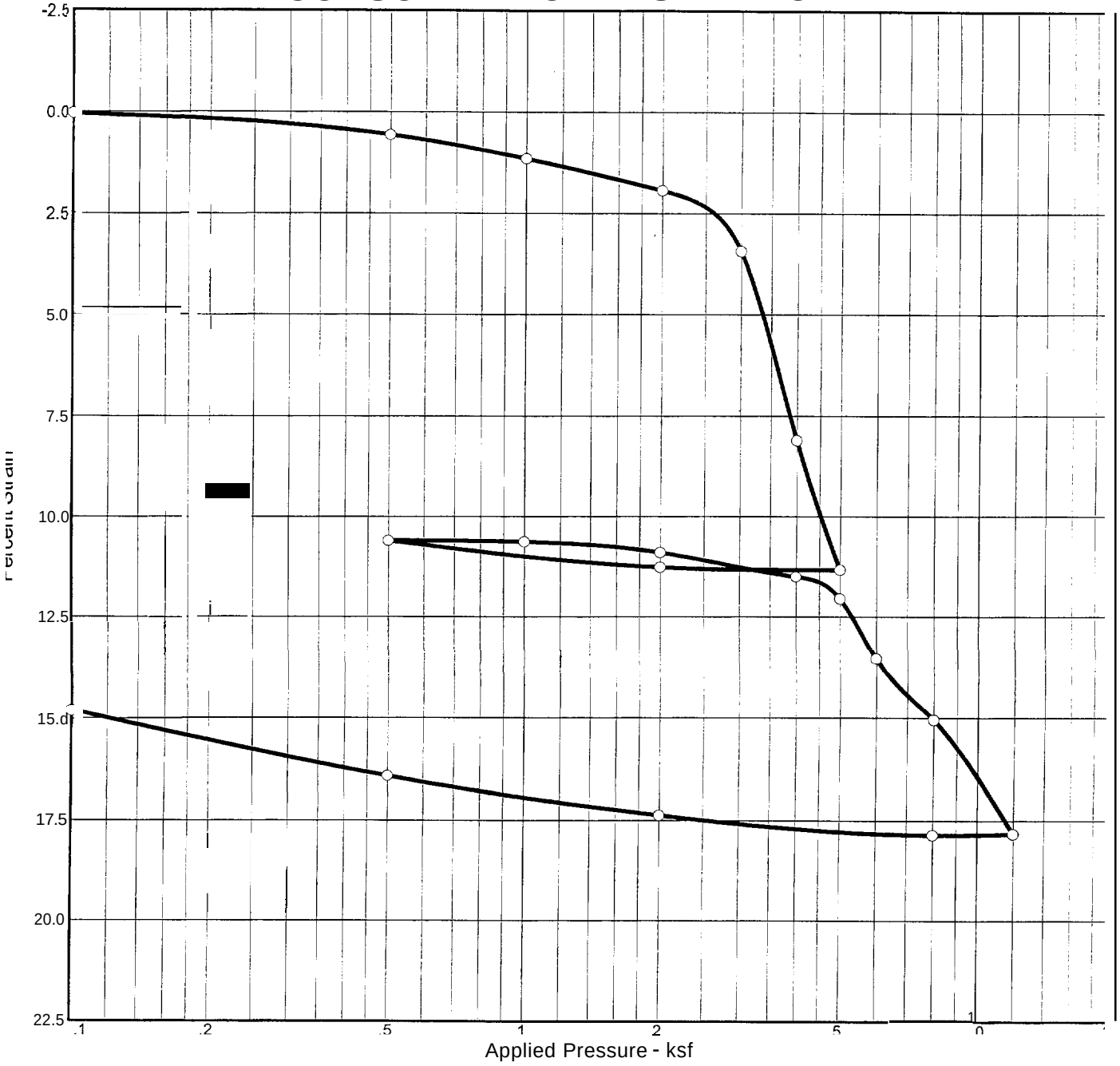
Boring No.	B-102	**Lab No.**	6621F
Sample No.	12.5' - 14.5'		
Test No.	**S_u (Undisturbed)**	**S_u (Residual)**	**Moisture Content**
1	480 psf	40 psf	45.9%
2	640 psf	100 psf	37.3%
3	240 psf	80 psf	48.5%

Laboratory Vane Shear Test Results

Project: Addition to Big Moose Harley Davidson **Client:** Big Moose Harley Davidson
Project No.: 235-883

Boring No.	B-102	**Lab No.**	6621G
Sample No.	20' - 22'		
Test No.	**S, (Undisturbed)**	**S, (Residual)**	**Moisture Content**
1	320 psf	0 psf	46.0%
2	340 psf	10 psf	47.8%
3	360 psf	0 psf	48.4%

CONSOLIDATION TEST REPORT



Natural		Dry Dens. (pcf)	LL	PI	Sp. Gr.	Overburden (ksf)	P_c (ksf)	C_c	C_r	Initial Void Ratio
iaturation	Moisture									
94.7 %	43.9 %	75.7			2.77		2.94	0.87	0.03	1.283

MATERIAL DESCRIPTION	USCS	AASHTO
Silty Clay		

'roject No. 235-883 **Client:** Big Moose Harley Davidson

'roject: Addition to Big Moose Harley Davidson

ocation: B-102, U-2 (20'-22')

Remarks:
rested by MPL

CONSOLIDATION TEST REPORT

R.W. Gillespie & Associates, Inc.

Lab No. 66216