

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK
CITY OF PORTLAND

Please Read
Application And
Notes, If Any,
Attached

BUILDING INSPECTION

PERMIT

Permit Number: 081045

This is to certify that OLD CUMBERLAND ASSOCIATES / Northeast Helical, L.P. / Ric
 has permission to repair settling foundation
 AT 447 CUMBERLAND AVE 036 F020001

provided that the person or persons who accept this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

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

Classification of inspection must be given and when permission is procured before this building or part thereof is started or service is closed-in. 4 HOUR NOISE REQUIRED.

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

PERMIT ISSUED

OTHER REQUIRED APPROVALS

Fire Dept. SEP 15 2008

Health Dept.

Appeal Board

Other CITY OF PORTLAND

Department Name

Chp LMF 9/15/08
 Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

Scanned

City of Portland, Maine - Building or Use Permit Application
 389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

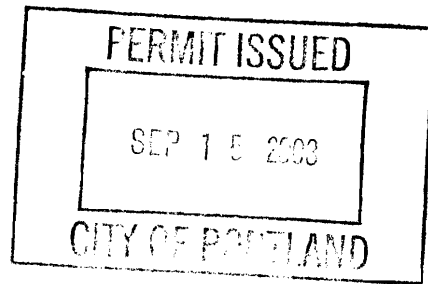
| | | |
|-----------------------|------------------------|---------------------|
| Permit No: 08-1045 | Issue Date: 9/15/08 | CBL: 036 F020001 |
|-----------------------|------------------------|---------------------|

| | | | |
|---|---|---|---------------------|
| Location of Construction: 447 CUMBERLAND AVE | Owner Name: OLD CUMBERLAND ASSOCIAT | Owner Address: 170 NEWBURY ST | Phone: |
| Business Name: | Contractor Name: Northeast Helical, LLC /Rich Porter | Contractor Address: 68 Burgundy Drive Nashua | Phone 6088980089 |
| Lessee/Buyer's Name | Phone: | Permit Type: Additions - Multi Family | Zone: R-6 |

| | | | | |
|---|--|---|---|-------------------------------|
| Past Use: Multi-Family | Proposed Use: Multi-Family - repair settling foundation | Permit Fee: \$600.00 | Cost of Work: \$57,500.00 | CEO District: 2 |
| Proposed Project Description: repair settling foundation <i>legal use; 43 residential dwelling units See conditions</i> | | FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied | INSPECTION: Use Group: R-2 Type: SB IBC-2003 IEBC-2003 | |
| | | Signature: <i>[Signature]</i> | | Signature: <i>[Signature]</i> |
| PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.) | | | | |
| Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied | | | | |
| Signature: _____ Date: _____ | | | | |

| | | | | |
|-----------------------------|---------------------------------|------------------------|--|--|
| Permit Taken By: Idobson | Date Applied For: 08/21/2008 | Zoning Approval | | |
|-----------------------------|---------------------------------|------------------------|--|--|

| | | | |
|--|--|--|---|
| 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.. | Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> Date: <i>9/15/08</i> <i>[Signature]</i> | Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date: _____ | Historic Preservation <input type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date: <i>9/15/08</i> <i>[Signature]</i> |
| | <i>More reviewed OK</i> | | |



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 |

City of Portland, Maine - Building or Use Permit

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

| | | |
|------------------------------|--|----------------------------|
| Permit No: 08-1045 | Date Applied For: 08/21/2008 | CBL: 036 F020001 |
|------------------------------|--|----------------------------|

| | | | |
|--|--|--|--------------------------------|
| Location of Construction: 447 CUMBERLAND AVE | Owner Name: OLD CUMBERLAND ASSOCIAT | Owner Address: 170 NEWBURY ST | Phone: |
| Business Name: | Contractor Name: Northeast Helical, LLC /Rich Porter | Contractor Address: 68 Burgundy Drive Nashua | Phone (608) 898-0089 |
| Lessee/Buyer's Name | Phone: | Permit Type: Additions - Multi Family | |

| | |
|--|--|
| Proposed Use: Multi- Family - repair settling foundation | Proposed Project Description: repair settling foundation |
|--|--|

Dept: Historic **Status:** Approved **Reviewer:** Scott Hanson **Approval Date:** 09/09/2008
Note: **Ok to Issue:**

Dept: Zoning **Status:** Approved with Conditions **Reviewer:** Marge Schmuckal **Approval Date:** 08/26/2008
Note: **Ok to Issue:**

- 1) ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
- 2) This is NOT an approval for an additional dwelling unit. You SHALL NOT add any additional kitchen equipment including, but not limited to items such as stoves, microwaves, refrigerators, or kitchen sinks, etc. Without special approvals.
- 3) This property shall remain a forty-three (43) family dwelling building. Any change of use shall require a separate permit application for review and approval.
- 4) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

Dept: Building **Status:** Approved with Conditions **Reviewer:** Chris Hanson **Approval Date:** 09/15/2008
Note: **Ok to Issue:**

- 1) Permit approved based on the plans submitted and reviewed w/owner/contractor, with additional information as agreed on and as noted on plans.
- 2) An inspection of the installation of the steel and concrete and structural bracing shall be conducted by a licensed engineer and his/her certification shall be submitted to this office stating compliance with the approved plans.
- 3) Separate permits are required for any electrical, plumbing, or HVAC systems. Separate plans may need to be submitted for approval as a part of this process.

Dept: Fire **Status:** Approved with Conditions **Reviewer:** **Approval Date:** 09/10/2008
Note: **Ok to Issue:**

- 1) The sprinkler and fire alarm systems shall be operational at all times. OR A fire watch shall be posted.
- 2) Means of egress to remain accessible at all times

Comments:

9/9/2008-gg: received permit from historic. Gave to Captain Cass. /gg

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

to schedule your inspections as agreed upon

Permits expire in 6 months, if the project is not started or ceases for 6 months.

The Owner or their designee is required to notify the inspections office for the following inspections and provide adequate notice. Notice must be called in 48-72 hours in advance in order to schedule an inspection:

By initializing at each inspection time, you are agreeing that you understand the inspection procedure and additional fees from a "Stop Work Order" and "Stop Work Order Release" will be incurred if the procedure is not followed as stated below.

A Pre-construction Meeting will take place upon receipt of your building permit.

Re-Bar Schedule Inspection: Prior to pouring concrete

Foundation Inspection: Prior to placing ANY backfill for below grade occupiable space

Final inspection required at completion of work.

Certificate of Occupancy is not required for certain projects. Your inspector can advise you if your project requires a Certificate of Occupancy. All projects DO require a final inspection.

If any of the inspections do not occur, the project cannot go on to the next phase, REGARDLESS OF THE NOTICE OR CIRCUMSTANCES.

CERIFICATE OF OCCUPANICES MUST BE ISSUED AND PAID FOR, BEFORE THE SPACE MAY BE OCCUPIED.

Signature of Applicant/Designee

Date

Signature of Inspections Official

Date





General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

| | | |
|---|---|---|
| Location/Address of Construction: <u>457 Cumberland Ave</u> | | |
| Total Square Footage of Proposed Structure/Area | | Square Footage of Lot |
| Tax Assessor's Chart, Block & Lot Chart# Block# Lot# <u>36</u> <u>F</u> <u>20</u> | Applicant * must be owner, Lessee or Buyer * Name <u>Northeast Helical LLC</u> Address <u>68 Burgundy Dr</u> City, State & Zip <u>Nashua NH 03062</u> | Telephone: <u>603.598.0089</u> |
| Lessee/DBA (If Applicable) | Owner (if different from Applicant) Name <u>City of Portland</u> Address City, State & Zip | Cost Of Work: \$ <u>57,500.00</u> C of O Fee: \$ _____ Total Fee: \$ <u>600</u> |
| Current legal use (i.e. single family) <u>Housing</u> | | |
| If vacant, what was the previous use? <u>-</u> | | |
| Proposed Specific use: <u>-</u> | | |
| Is property part of a subdivision? <u>NO</u> If yes, please name _____ | | |
| Project description: <u>Repair the settling Foundation</u> | | |
| Contractor's name: <u>Northeast Helical LLC</u> | | |
| Address: <u>68 Burgundy Drive</u> | | |
| City, State & Zip <u>Nashua NH 03062</u> | | Telephone: <u>603.598.0089</u> |
| Who should we contact when the permit is ready: <u>Rich Porter</u> | | Telephone: <u>978.384.8476</u> |
| Mailing address: <u>68 Burgundy Dr. Nashua NH 03062</u> | | |

Please submit all of the information outlined on the applicable Checklist. Failure to do so will result in the automatic denial of your permit.

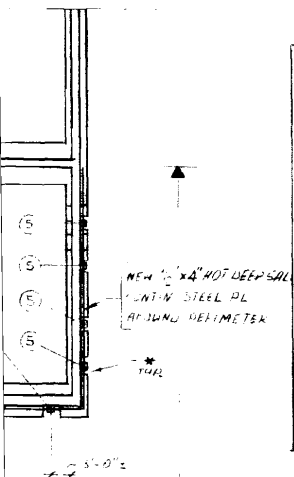
In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information or to download copies of this form and other applications visit the Inspections Division on-line at www.portlandmaine.gov, or stop by the Inspections Division office, room 315 City Hall or call 874-8703.

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

Signature: [Signature] Date: 8/21/2008

This is not a permit; you may not commence ANY work until the permit is issued

AUG 21



| * REQ'D | PIER/BRACKET | DESIGN LOAD (LBS) | INSTALLATION FORCE (LBS) |
|---------|---------------------|-------------------|--------------------------|
| (C) | 2 AP-2-UF-2875,165M | 30,000 | 48,000 LBS |
| (E) | 8 AP-2-UF-2875,165 | 25,000 | 40,000 LBS |
| (S) | 4 AP-2-UF-3500,165M | 40,000 | 64,000 LBS |
| (T) | 4 AP-2-UFVL-400,219 | 50,000 | 80,000 LBS |
| (S) | 8 AP-2-UF-2875,165 | 15,000 | 24,000 LBS |

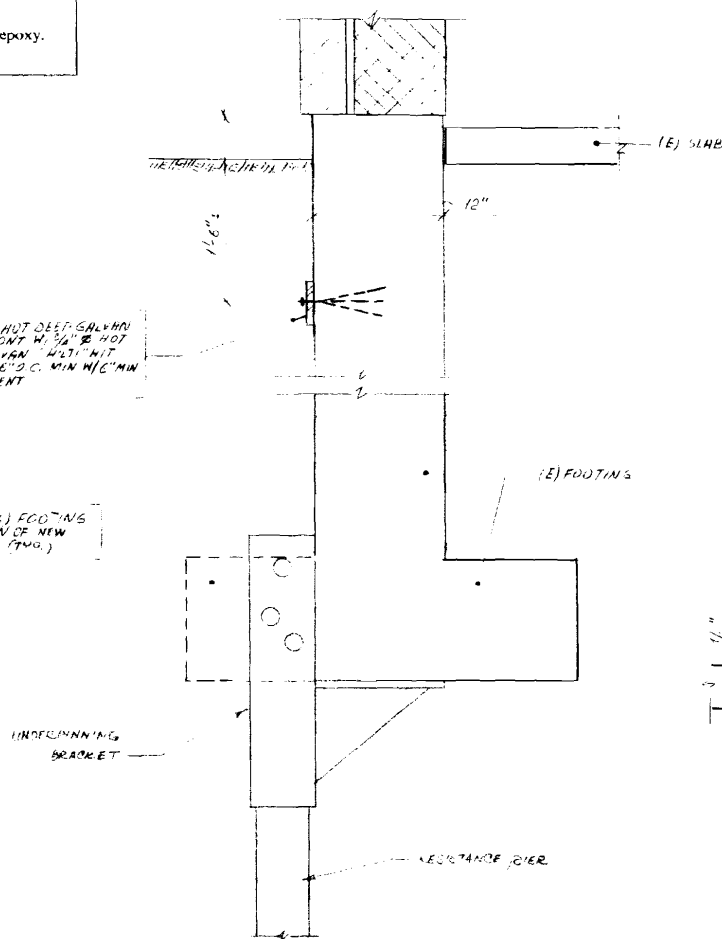
footing to allow erection new UNDERPINNING (TWO)

NOTES:

- Cracks to be pressure injected with epoxy.
- Soil information see S-2.

NEW 1/2" x 4" HOT DEEP GALV. CONT. W/ 3/16" HOT DEEP GALV. W/ 1/2" W/ 1/2" BOLTS @ 16" O.C. MIN W/ 6" MIN EMBEDMENT

CUT FOR SIGN OFF BY FOOTINGS TO ALLOW ERECTION OF NEW UNDERPINNING (TWO)



TYPICAL DETAIL
Scale 1 1/2" = 1'-0"

2

GENERAL NOTES

STRUCTURAL STEEL

All steel exposed to weather must be hot dip galvanized

All structural steel shall be new steel conforming to the ASTM "Standard Specifications for Structural Steel, Serial Designation A-36" amended to date.

All field connections shall be by welding according to the AISC Manual, latest editions. All field welded connections shall be by certified welders, shall conform with the American Welding Society Code.

All welds shall be inspected by qualified welding inspectors.

REHABILITATION

This office has performed a walk-through visit and a written structural report was issued related to this visit. This report has become part of the contract documents.

When information is missing from contract documents, the Structural Engineer must be notified to provide the missing information. If the Contractor chooses to improvise a solution it will be at his own risk.

When the structural work has been completed, the Structural Engineer must be notified in time to visit the site.

In case of conflict between different construction documents (plans, specifications, etc.) the most stringent requirements would govern. Contractor must bring to the attention of the Structural Engineer any abnormal or unexpected conditions.

(E) denotes existing member
(N) denotes new member

If the structures appear to differ from structural drawings or new problems are encountered during construction, Contractor will have to report immediately to the Structural Engineer.

The Structural Engineer assumes no responsibility for Work not reflected in the structural drawings of this project.

MISCELLANEOUS

Structural Engineer shall not be responsible for fireproofing.

Structural Engineer shall not be responsible for waterproofing.

Structural Engineer shall not be responsible for any other structural work beyond what is shown on the drawings.

All temporary bracing and shoring made necessary for execution of structural work and/or made necessary due to improper structural conditions shall be provided by Contractor who shall assume all responsibility for it. All temporary bracing and shoring shall be removed only after work has been completed and checked by Structural Engineer.

All structural steel exposed to the weather shall be hot dip galvanized.

Contractor shall verify all dimensions on the job.

Contractor shall not scale dimensions from drawings.

No excavation adjacent to existing foundation will encroach a pyramid starting at the perimeter of the existing footing with slopes of 1 one vertical to two horizontal unless otherwise noted.

All requests for changes to the structural drawings from Client, Contractors, etc. or any other party must be made in writing to the Structural Engineer, or any other changes to drawings made on the site must be followed up in writing to the Structural Engineer.

The Structural Engineer shall not have control or charge of, and shall not be responsible for, construction means, methods, techniques, sequences or procedures, for safety precautions and programs in connection with the Work, for the acts or omissions of the Contractor, Subcontractors or any other persons performing any of the Work or for the failure of any of them to carry out the Work in accordance with the Contract Documents.

In case of conflict between notes and/or sections or details, the most stringent condition shall govern.

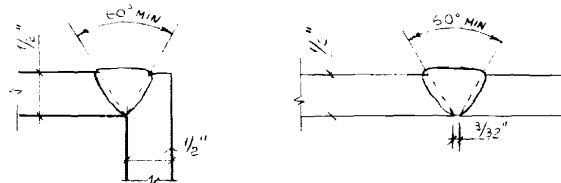
In case existing conditions differ from those shown on drawings, Contractor shall notify the Structural Engineer before proceeding with pertinent work.

Contractor must have the expertise to execute all work indicated on the drawings or shall hire qualified help to do it.

Contractor shall submit proposed methods of underpinning existing structures, if required, to the engineer for approval before proceeding with the work. Approval of the engineer shall not relieve the contractor of the responsibility for the safety of the structure.


VERY IMPORTANT NOTE:

This underpinning is for exterior walls of this front portion of the building only and does not address the slab on grade condition.



TYPICAL BUILDING JOINTS FOR
1/2" x 4" CONTIN. STEEL PLATE

Scale 16" = 1'-0"

| | | |
|---|-----------------|------|
|  RENE MUGNIER ASSOCIATES, INC. 777 Concord Avenue, Suite 201 Cambridge, Massachusetts 02138 Phone (617) 547-7773, Fax (617) 547-7785 | | |
| NO. | REVISIONS/ISSUE | DATE |
| TITLE: 457 CUMBERLAND AVE. PORTLAND, MAINE PARTIAL FOUNDATION PLAN (UNDERPINNING ONLY) | | |
| Copyright © RENE MUGNIER ASSOCIATES, INC. | | |
| DRAWN: GR | DATE: 08.04.08 | |
| CHECKED: R M | SCALE: AS NOTED | |
| DRAWING NO.: | | |
| S-1 | | |

457 Cumberland Avenue Crack Evaluation
Portland, Maine

Boring No.: GZ-1
Page: 1 of 1
File No.: 09.0025476.00
Check:

Contractor: Maine Test Borings, Inc.
Foreman: Ron Marie
Logged by: Adam Gustafson
Date Start/Finish: 1-5-02 / 1-5-02
Boring Location: See Location Plan
Datum: Hammer Fall
GS Elev.: Hammer Fall
Rig Type: Hammer Fall

Auger/Casing: HSA / SS
Sampler: SS
Date: 1/5/02
Time: 10:55
Depth: 19.1 ft
Casing: 19.1 ft
Stab: 0

| Depth (ft) | Blows (ft) | N Value | Sample Description & Classification | Stratum Desc. | Remarks | Equipment Installed |
|------------|------------|---------|---|---------------|---------|------------------------|
| 0.0 | 5.6 | 1 | 2.25 inch thick brick sidewalk | | | No Equipment Installed |
| 2.0 | 5.2 | 1 | Medium dense, gray to brown tan, fine to medium SAND, trace S&L, trace Gravel, Asphalt Dry | | | No Equipment Installed |
| 7.0 | 3.2 | 5 | Soft tan, fine to medium SAND, trace S&L, trace Gravel in top of spoon. Dry | | | No Equipment Installed |
| 4.0 | 8.5 | 13 | Top 4 inches: Medium dense, tan fine to medium SAND, trace S&L, trace Gravel, gray-brown, fine to medium SAND and GRAVEL, trace S&L, trace PVC, Dry. | 1A1 | | No Equipment Installed |
| 6.0 | 13-18 | 51 | Very dense, brown, fine to coarse SAND, trace S&L, trace Gravel, trace PVC, Dry. | | | No Equipment Installed |
| 8.0 | 33-26 | 131 | Very dense, brown, fine to coarse SAND, trace S&L, trace Gravel, trace PVC, Glass Dry | | | No Equipment Installed |
| 5.0 | 16-25 | 63 | Very dense, brown, fine to coarse SAND, trace S&L, trace Gravel, trace PVC, Glass Dry | | | No Equipment Installed |
| 10.0 | 36-19 | 147 | Very dense, brown, fine to coarse SAND, trace S&L, trace Gravel, trace PVC, Glass Dry | | | No Equipment Installed |
| 10.0 | 6-8 | 14 | Medium dense, gray-brown, fine to medium SAND, trace S&L, trace Gravel, trace Ash, trace PVC, Glass Dry | 19.6R | | No Equipment Installed |
| 12.0 | 4-15 | 29 | Medium dense, brown, fine to medium SAND, trace S&L, trace Gravel, trace Ash, trace PVC, Glass Dry | | | No Equipment Installed |
| 14.0 | 10-12 | 29 | Medium dense, brown, fine to medium SAND, trace S&L, trace Gravel, trace Ash, trace PVC, Glass Dry | | | No Equipment Installed |
| 15.0 | 14-27 | 53 | Top 12 inches: Very dense, gray to orange-brown, fine SAND, trace S&L, trace Gravel, trace Ash, trace PVC, Glass Dry. Bottom 4 inches: Hard, gray-brown, mottled, clayey S&L with weathered bedrock. Wet. | 19.6R | | No Equipment Installed |
| 19.1 | 250* | >100 | Bottom of boring at 19.1 feet below ground surface. Auger and split spoon refusal encountered. | 19.1R | | No Equipment Installed |

1. This boring was located in a brick sidewalk. Bricks were removed prior to drilling. Depths were measured from brick subgrade elevation. 2. The auger plug dropped approximately 0.5 feet below the augers of 6 feet. The undisturbed sample interval was 6.5 to 8 feet below ground surface. 3. WOP = Weight of Plug 4. The drill noted a layer of Gravel and/or Cobble at approximately 17 to 17.3 feet below ground surface. 5. The borehole was backfilled with auger cuttings and bricks were replaced.

Soil Classification: 1A1

SOIL CLASSIFIED BY: D - Dave Brown, C - 2" Shelby Tube, U - 25" Shelby Tube
REMARKS: * 2 3/8"

457 Cumberland Avenue Crack Evaluation
Portland, Maine

Boring No.: GZ-2
Page: 1 of 1
File No.: 09.0025476.00
Check:

Contractor: Maine Test Borings, Inc.
Foreman: Ron Marie
Logged by: Adam Gustafson
Date Start/Finish: 1-5-02 / 1-5-02
Boring Location: See Location Plan
Datum: Hammer Fall
GS Elev.: Hammer Fall
Rig Type: Hammer Fall

Auger/Casing: HSA / SS
Sampler: SS
Date: 1/5/02
Time: 13:20
Depth: 12.1 ft
Casing: 15.0 ft
Stab: 0

| Depth (ft) | Blows (ft) | N Value | Sample Description & Classification | Stratum Desc. | Remarks | Equipment Installed |
|------------|------------|---------|--|---------------|---------|------------------------|
| 0.0 | 24/ | 32 | 2.25 inch thick Brick Sidewalk | | | No Equipment Installed |
| 1.0 | 24/ | 20 | Dense, brown, fine to coarse SAND, trace S&L, trace Gravel, trace S&L, Asphalt Dry | | | No Equipment Installed |
| 2.0 | 8 | 13 | Medium dense, tan, fine to medium SAND, trace Gravel, trace S&L Dry | | | No Equipment Installed |
| 3.0 | 24/ | 8 | Loose, brown, fine SAND, some S&L, trace Gravel, trace Ash, trace PVC, trace Moist | | | No Equipment Installed |
| 5.0 | 24/ | 6 | Medium dense, brown, fine to medium SAND, trace S&L, trace Gravel, trace Ash, trace PVC, trace Moist | | | No Equipment Installed |
| 6.0 | 6/ | 15 | Medium dense, brown, fine to medium SAND, trace S&L, trace Gravel, trace Ash, trace PVC, trace Moist | | | No Equipment Installed |
| 7.0 | 3/ | 11 | Top 2 inches: Dark Gravel and Ash. Middle 7 inches: Medium dense brown, fine to medium SAND, trace S&L, trace Roots. Bottom 3 inches: Brown TOPSOIL (fine Sand), trace Roots, trace Moist. | | | No Equipment Installed |
| 10.0 | 24/ | 10 | Loose, gray-brown, fine to medium SAND, trace S&L, trace Gravel, trace Ash, trace Moist to wet | | | No Equipment Installed |
| 10.0 | 13 | 7 | Medium dense, gray-brown, fine to medium SAND, trace S&L, trace Gravel, trace Ash, trace Moist to wet | | | No Equipment Installed |
| 15.0 | 24/ | 11 | Loose, dark brown, fine to medium SAND, trace S&L, trace Gravel, trace Organic, Wet | | | No Equipment Installed |
| 15.0 | 24/ | 7 | Loose, dark brown, fine to medium SAND, trace S&L, trace Gravel, trace Organic, Wet | | | No Equipment Installed |
| 20.0 | 24/ | 0 | Bottom of boring at 19.8 feet below ground surface. Auger and split spoon refusal encountered. | | | No Equipment Installed |

1. This boring was located in a brick sidewalk. Bricks were removed prior to drilling. Depths were measured from brick subgrade elevation. 2. The auger plug dropped approximately 0.5 feet below the augers of 6 feet. The undisturbed sample interval was 6.5 to 8 feet below ground surface. 3. WOP = Weight of Plug 4. The drill noted a layer of Gravel and/or Cobble at approximately 17 to 17.3 feet below ground surface. 5. The borehole was backfilled with auger cuttings and bricks were replaced.

SOIL CLASSIFIED BY: D - Dave Brown, C - 2" Shelby Tube, U - 25" Shelby Tube
REMARKS: (MEDIUM SAND)

457 Cumberland Avenue Crack Evaluation
Portland, Maine

Boring No.: GZ-3
Page: 1 of 1
File No.: 09.0025476.00
Check:

Contractor: Maine Test Borings, Inc.
Foreman: Ron Marie
Logged by: Adam Gustafson
Date Start/Finish: 1-5-02 / 1-5-02
Boring Location: See Location Plan
Datum: Hammer Fall
GS Elev.: Hammer Fall
Rig Type: Hammer Fall

Auger/Casing: HSA / SS
Sampler: SS
Date: 1/5/02
Time: 15:00
Depth: 12.1 ft
Casing: 15.0 ft
Stab: 0

| Depth (ft) | Blows (ft) | N Value | Sample Description & Classification | Stratum Desc. | Remarks | Equipment Installed |
|------------|------------|---------|--|---------------|---------|------------------------|
| 0.0 | 6/ | 9 | Light brown/tan, fine to medium SAND, trace S&L, trace Roots. Dry | | | No Equipment Installed |
| 5.0 | 24/ | 73 | Very dense, brown, fine to coarse SAND, trace S&L, trace Gravel, trace S&L, trace Dry | | | No Equipment Installed |
| 5.0 | 13/ | 7 | Very dense, brown, fine to coarse SAND and GRAVEL, trace S&L, trace Dry | 19A | | No Equipment Installed |
| 10.0 | 24/ | 63 | Very dense, brown, fine to medium SAND, some fine to coarse Gravel, trace S&L, trace Gravel, trace Ash, trace Moist. | | | No Equipment Installed |
| 10.0 | 24/ | 75 | Dense, brown, fine to medium SAND, some Black, trace S&L, trace Gravel, trace Moist | | | No Equipment Installed |
| 15.0 | 24/ | 34 | Dense, gray-brown, fine to coarse SAND and GRAVEL (some weathered rock fragments), trace S&L, trace Wet. | 19.5R | | SOIL AND GRAVEL |
| 20.0 | 24/ | 22 | Medium dense, dark brown, fine to medium SAND, trace S&L, trace Gravel, trace Wood (furs), trace Organic, trace Wet. | 19.5R | | (MEDIUM SAND) |
| 25.0 | 24/ | 2 | Very loose, gray, fine to medium SAND, some S&L, trace fine Gravel, trace Wet. | 19.5R | | SOIL AND GRAVEL |
| 25.0 | 25.4 | >100 | Bottom of boring at 25.5 feet below ground surface. Auger refusal encountered. | 19.5R | | SOIL AND GRAVEL |

1. The boring was actually located in a paved parking lot. Encountered 2 inches of Asphalt underneath Concrete. Drilling was stopped and the borehole was moved 2.5 feet towards the building (sandspike/brick strip). The anchor was patched with cold beach. 2. Sample S-1 collected from auger cuttings while drilling from 0 to 5 feet. 3. Split spoon refusal encountered at 25.4 feet below ground surface. 4. The borehole covered in at approximately 8.5 feet below ground surface during auger removal. No stabilized groundwater elevations were obtained. 5. The borehole was backfilled with auger cuttings.

SOIL CLASSIFIED BY: D - Dave Brown, C - 2" Shelby Tube, U - 25" Shelby Tube
REMARKS: (MEDIUM SAND)

32 FAX 2078482403
NGS, INC.

5 W COLE-BANGOR

PROJECT NAME: Heston Associates
SHEET 1 of 6000
HOLE NO. B-8

LOCATION: Cumberland Arms, Portland, Maine
OFFSET: 100

DATE START: 10-13-82 DATE END: 10-18-82
SURFACE ELEV: 33.0
GROUND WATER ELEV: 30.0

| DEPTH | BLOWS PER FOOT | TYPE | STRATUM DESCRIPTION |
|-------|----------------|------|---|
| 3.5 | 1.5 | 1 | Brown silty fine-medium sand w/gravel, ashes (fill) |
| 6.5 | 2 | 2 | Brown silty fine-medium sandy w/gravel, brick, ash, wood, glass, cobbles (fill) |
| 11.5 | 2 | 3 | Brown silty fine-medium sand w/gravel, cobbles w/ash (fill) |
| 60 | 18.7 | 100* | Bedrock GAA GRANITE RQD = 80% |
| | | | Bottom of boring @ 18.7' |

SOIL CLASSIFIED BY: D - Dave Brown, C - 2" Shelby Tube, U - 25" Shelby Tube
REMARKS: * 2 3/8"

01/19/2005 14:32 FAX 2078482403
MAINE TEST BORINGS, INC.
BREWER MAINE 04012

5 W COLE-BANGOR

PROJECT NAME: Heston Associates
SHEET 1 of 6000
HOLE NO. B-5

LOCATION: Cumberland Arms, Portland, Maine
OFFSET: 100

DATE START: 10-19-82 DATE END: 10-20-82
SURFACE ELEV: 37.0
GROUND WATER ELEV: 32.0

| DEPTH | BLOWS PER FOOT | TYPE | STRATUM DESCRIPTION |
|-------|----------------|------|--|
| 10 | 2 | 18" | Brown silty fine-coarse sand w/gravel, brick, ash, wood, glass, cobbles (fill) |
| 20 | 2 | 18" | Loose |
| 20 | 2 | 18" | Brown silty fine-coarse sand w/gravel, cobbles, trace boulders (fill) |
| 40 | 2 | 18" | Loose |
| 50 | 2 | 18" | Brown silty f-w sand w/gray silty clay |
| 52.5 | 2 | 0" | Gray clayey silty f-w sand w/gravel, cobbles |
| | | | Refusal @ 22.5' |

SOIL CLASSIFIED BY: D - Dave Brown, C - 2" Shelby Tube, U - 25" Shelby Tube
REMARKS: (C)

RENE MUGNIER ASSOCIATES, INC.
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NO. REVISIONS/ISSUE DATE

TITLE:
457 CUMBERLAND AVE.
PORTLAND, MAINE
SUBSURFACE SOIL
INFORMATION

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DRAWN: GR DATE: 02.21.07
CHECKED: RM SCALE:

DRAWING NO.:
S-2

07-007