TOWN OF BROOKLYN
PLANNING AND ZONING COMMISSION
PUBLIC HEARING
LEGAL NOTICE

The Planning and Zoning Commission will hold a public hearing on Wednesday, August 5, 2020 at 6:30 p.m. on the following:

SPG 20-001 – Gravel Special Permit, Paul R. Lehto, 71.34 acres on the east side of Allen Hill Road (Map 32, Lot 148) in the RA Zone; Excavation of approximately 90,000 cubic yards of sand and gravel on 6.7 acres.

Copies of applications are on file for review.

All interested parties may attend the meeting, be heard and written correspondence received.

Michelle Sigfridson
Chairman

Published on www.brooklynct.org/planning-zoning-commission/news on July 16, 2020.

To join this meeting via the web or phone, follow the below instructions:	
Web **Go to www.webex.com** **On the top right, click Join** **Enter meeting information: 173 465 7410** **Enter meeting password: ruFYA8xiA22** **Click join meeting**	**Phone** **Dial 1-408-418-9388** **Enter meeting number: 173 465 7410** **You can bypass attendee number by pressing #**

TOWN OF BROOKLYN

P.O. Box 356 - Route 6 and 169
BROOKLYN, CONNECTICUT 06234

OFFICE OF SELECTMEN
TELEPHONE: 779-3411

TOWN CLERK
TELEPHONE: 774-9543

ASSESSOR
TELEPHONE: 774-5611

TAX COLLECTOR
TELEPHONE: 774-4072

JUDGE OF PROBATE
TELEPHONE: 774-5973

RECEIVED
JUN 0 3 2020

Received Date _____ LD
Fee $ 250___ State Fee ($60.00) _____

Application #SPG 20-001
Check # 6129

APPLICATION FOR GRAVEL BANK
SPECIAL PERMIT

Name of Applicant Paul R. Lehto Phone 860-208-9789
Mailing Address 40 Almada Drive, Brooklyn, CT 06234
Relation owner

Property Owner Paul R. Lehto Phone 860-208-9789
Mailing Address 40 Almada Drive, Brooklyn, CT 06234

Name of Engineer/Surveyor Provost & Rovero, Inc.
Address P.O. Box 191, Plainfield, CT 06374
Contact Person David J. Held, P.E., L.S. Phone 860-230-0856 Fax 860-230-0860

Name of Attorney N/A
Address
Phone _____ Fax _____

Property address Allen Hill Road (Riverwalk Drive)
Property Location east of Allen Hill Road
Map # 32 Lot # 148 Zone RA Total Acres 71.34

Maximum Area :
Acres of Gravel Removal 6.7 acres Cubic Yards of Gravel Removal 90,000 CY

Is Application for Renewal? Yes_____ No X If Yes, Amount Removed Last Year_____
Original Date of Issuance of Permit_____ Issued To: _____

Compliance with Article 13, Gravel Banks
Compliance with Article 5, Special Permit Requirements

The owner and applicant hereby grant the Brooklyn Planning and Zoning Commission, the Board of Selectman, Authorized Agents of the Planning and Zoning Commission or Board of Selectman, permission to enter the property to which the application is requested for the purpose of inspection and enforcement of the Zoning regulations and the Subdivision regulations of the Town of Brooklyn

Applicant: Paul Lehto Date 5/20/2020

Owner: Paul Lehto Date 5/20/2020

*Note : All consulting fees shall be paid by the applicant

EARTH EXCVATION AND REMOVAL

CHECK LIST

The following items are required as a part of the excavation plan. Note these are minimum requirements. Other information may be required based on your application

__X__ Contours at 2 ' intervals

For renewals:

_____Contours as of original permit approval

--------Contours as of date of survey(updated to present) stamped by a licensed land surveyor

__X__ Amount of material to be removed

For Renewals:

_____ Amount of material originally approved to be removed

------ Amount of material removed to date, by an annual accounting for each 12 month period of the permit

_____ Amount of material to be removed during the next year

_____ Date the permit will next expire if not renewed.

__X__ Maximum depth of excavation

__X__ Depths to water table

__X__ Note measures to be used to protect the water table

__X__ Location of any stock piles

__X__ Areas to be restored

__X__ Restoration Plan

__X__ Erosion and Sediment Control Plan

__X__ Erosion and Sediment Control Narrative

__X__ Erosion and Sediment Control Bond

For renewals:

_____ Amount of bond that has been filed

_____ Verification of Erosion and Sedimentation control measures

__X__ Traffic pattern within the site

____ Will any trucks be repaired on site if so, where

__X__ Location of fueling pad

____ Will any equipment or trucks be stored on site

____ If so , locate on site

__X__ Average number of trips per day

__X__ Maximum number of trips per day

__X__ Note trucks will be covered when leaving the site

Provost & Rovero, Inc.

Civil Engineering • Surveying • Site Planning • Structural • Mechanical • Architectural Engineering

P.O. Box 191
57 East Main Street
Plainfield, CT 06374

Telephone (860) 230-0856
Fax (860) 230-0860
www.prorovinc.com

June 2, 2020

Brooklyn Planning & Zoning Commission
69 South Main Street
Brooklyn, CT 06234

RE: Paul R. Lehto – Proposed Gravel Excavation – Easterly of Allen Hill Road – Brooklyn, CT
P&R Job No. 173055

Dear Commissioners:

This narrative is intended to accompany the special permit application for the proposed gravel excavation by Paul R. Lehto. The proposed excavation site is an extension of a previously permitted excavation and will include 6.7 acres and result in the removal of approximately 90,000 cubic yards of material. An application for this project has also been submitted to the Brooklyn Inland Wetlands & Watercourses Commission.

The zoning regulations require an excavation permittee to provide a bond for restoration of the site following excavation activities. As noted above, the subject property was previously permitted for excavation in an area immediately adjacent to the currently proposed excavation site. The Town is currently in possession of the cash bond which was required as part of that previously approved excavation. The current excavation site encompasses 6.7 acres of new site disturbance. We would propose a restoration bond amount of $10,000.00 per acre or $67,000.00 for the current proposal. If the applicant wishes to bond by phase, the first excavation phase includes 4.1 acres of disturbance with a resulting bond amount of $41,000.00 This amount would cover grading the excavation area in accordance with the zoning regulations (2H:1V maximum slopes), spreading on-site stockpiled topsoil and seeding with an appropriate seed mix. For informational purposes, we have included a conceptual subdivision plan as part of this application to demonstrate the feasible reuse of the property following excavation and restoration.

Thank you for your consideration of this application. If you have any questions or need additional information, please do not hesitate to contact us at your convenience.

Sincerely,

David J. Held, P.E., L.S.
Provost & Rovero, Inc.

PLANNING AND ZONING COMMISSION
TOWN OF BROOKLYN
P.O. BOX 356
CONNECTICUT 06234

TOWN OF BROOKLYN
PLANNING AND ZONING COMMISSION
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LEGAL NOTICE

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Copies of applications are on file for review.

All interested parties may attend the meeting, be heard and written correspondence received.

Dated this 13th day of July 2020

Michelle Sigfridson

Brooklyn Inland Wetlands
Commission
P.O. Box 356
Brooklyn, Connecticut 06234

CERTIFIED#

9489 0090 0027 6215 9001 17

July 30, 2020

Paul R. Lehto
40 Almada Drive
Brooklyn, CT 06234

RE: Notice of Decision – 060920A Paul R. Lehto, Allen Hill Road, Map 32, Lot 148, RA Zone; Excavation of sand and gravel.

Dear Mr. Lehto:

At the special meeting on July 28, 2020 of the Inland Wetlands and Watercourses Commission your application 060920A Paul R. Lehto, Allen Hill Road, Map 32, Lot 148, RA Zone; Excavation of sand and gravel was approved with standard conditions.

A copy of the notice of action appears on the Town of Brooklyn's Website and was posted July 29, 2020. Please note that this action of the Brooklyn Inland Wetlands and Watercourses Commission may be appealed for fifteen-day period following the publication.

If you have any questions, please call Margaret Washburn, Wetlands Agent at 860-779-3411 Extension 31.

Signed,

Margaret Washburn

Margaret Washburn
Wetlands Agent

MW/acl
CC: File, D. Held, Provost & Rovero
Enc: Standard Conditions

BROOKLYN INLAND WETLANDS AND WATERCOURSES COMMISSION
STANDARD CONDITIONS FOR IWWC PERMITS 12/13/16

APPLICANT: READ CAREFULLY

IWWC Permit Document. A copy of the IWWC approval motion and the conditions stated herein shall constitute the IWWC permit for the approved activity when the permit document is signed and dated by the IWWC Agent.

Notice of Start and Finish. Permittee shall notify the IWWC agent **at least 48 hours** before the approved activity commences and within 72 hours after completion of the activity.

Permit Duration. This permit is valid for a period in accordance with Section 11.6 of the Brooklyn Inland Wetlands and Watercourses Regulations and the Connecticut General Statutes. Any request to renew or extend the expiration date of a permit can be granted only as authorized by the IWWC Regulations. Expired permits may not be renewed.

Erosion and Sedimentation Controls. Permittee is responsible for implementing the approved erosion and sediment control plan. This responsibility includes the installation and maintenance of control measures, informing all parties engaged on the construction site of the requirements and objectives of the plan. The permittee shall inspect the erosion controls weekly and after rains and repair deficiencies within twenty-four hours. The IWWC and its staff may require additional erosion if needed to prevent erosion and sedimentation. Restabilization of the site shall take place as soon as possible.

Stockpile locations. During construction, piles of fill, erodible material and debris shall not be created within regulated areas. The locations of debris and other stockpiled materials shall be shown on the submitted plans. Any material excavated at the site shall be disposed of at upland or off-site locations reviewed and approved by staff.

Permit Transfer. The permittee shall not transfer this permit without the written permission of the IWWC.

Work in Watercourse to Occur During Low Flow. Work within a watercourse is limited to periods of low flow. Low flow periods normally occur between August and October. Upon request of permittee, wetlands staff can determine if the activity can occur at other times following an on-site field investigation.

Scope of Permit. This permit is for the approved activity ONLY. Additional activity may require an additional permit. Note that if an approval or permit is granted by another agency and

(1) the approved activity will affect wetlands and/or watercourses; and/or

(2) the activity occurs within 125 feet of flagged boundaries and 175 feet from watercourses;

and such activities have not been addressed by this permit, then the applicant shall resubmit the application for further consideration by the Inland Wetlands and Watercourses Commission before any work begins.

Ongoing Compliance with Permit. The permittee shall comply at all times with the permit.

Other Approvals May be Required. Other permits may be required from Town, state or federal agencies. An Army Corps of Engineers permit may be required: U.S. Army Corps of Engineers, 424 Trapelo Rd., Waltham, MA 02254 1-800-362-4367.

NORTHEASTERN CONNECTICUT COUNCIL OF GOVERNMENTS

Engineering Plan Review
Pertaining to Proposed Gravel Excavation
PAUL R. LEHTO
(RIVER WALK DRIVE)
BROOKLYN, CT

(July 14, 2020)

The comments contained herein pertain to my review of plans for a gravel removal operation. The plans under review (7 sheets) are entitled "Proposed Gravel Excavation, Easterly of Allen Hill Road, Brooklyn, Connecticut, Owner/Applicant: Paul R. Lehto," prepared by Provost & Rovero, Inc. and Archer Surveying, LLC, dated June 2, 2020. This review was made in accordance with most recent Town of Brooklyn Zoning and Wetlands Regulations and Public Improvement Specifications.

1. On Sheet 2 of 7, "Existing Conditions," Note 6 states that the existing topographical information was created using aerial photography (and photogrammetric mapping?) from WSP Group. The dates for the photography and mapping should be included in the note.

2. If not already done, the CT State Historic Preservation Office should be contacted regarding any possible archaeological/historical significance to this portion of the site, since it sits high above and only about a quarter mile from the Quinebaug River. The CT Department of Energy and Environmental Protection (DEEP) "Natural Diversity Database" should also be consulted.

3. The haul road running through the previously excavated area to River Walk Drive (see Sheet 2 of 7) crosses a wetland. It is recommended that the Applicant's engineer evaluate and describe the crossing, which has been in place for many years, to determine if it is in good condition for future heavy loads and if any erosion has occurred around it that would require some reconstruction. Additionally, it is important to establish erosion and sediment control systems on both sides of the crossing and other methods to help protect the wetlands from the heavy truck traffic, dust, and material that may fly off haul trucks. Erosion and sediment control system(s), if required, should be shown for the affected area on a plan at a scale of no less than 1" = 40'.

4. There is no estimated time of completion of the proposed gravel removal operation in the "Excavation Notes" on Sheet 5 of 7.

5. Noise and dust from heavy truck traffic may cause an issue with residents living along River Walk Drive and its connected side roads.

By: _____ PE 7/14/2020
Syl Pauley, Jr., P.E., NECCOG Regional Engineer

Jana Roberson

From: Syl Pauley <Syl.pauley@neccog.org>
Sent: Tuesday, August 04, 2020 2:20 PM
To: Jana Roberson
Cc: Margaret Washburn; 'David Held'
Subject: Re: Lehto Gravel Bond

Hi Jana,

I have reviewed the revised bonding figures handwritten on David Held's letter of August 29, 2018, which you emailed to me. The major items to be considered for bonding should remain the same as back then with the estimated cost to do the work as follows:

- Restoration of excavation area: 6.7 acres @ $10,000/acre = $67,000
- Repair of erosion on gravel access road: = $10,000
- Repave Riverwalk Drive with 2" overlay: = $38,000

TOTAL = $115,000

Syl

Syl Pauley, Jr., P.E.
Regional Engineer
Northeastern Connecticut Council of Governments
125 Putnam Pike
P.O. Box 759
Dayville, CT 06241
Phone: (860) 774-1253 x13
FAX: (860) 779-2056
Email: syl.pauley@neccog.com

From: Jana Roberson <J.Roberson@Brooklynct.org>
Sent: Tuesday, August 4, 2020 11:55 AM
To: Syl Pauley <Syl.pauley@neccog.org>; Syl Pauley <Syl.pauley@neccog.org>
Cc: Margaret Washburn <M.Washburn@Brooklynct.org>; 'David Held' <dheld@prorovinc.com>
Subject: Lehto Gravel Bond

Syl,

Paul Lehto is proposing a $67,000 performance bond for his latest gravel excavation proposal on Allen Hill Road.
That is based on $10,000/acre with a 6.7 acres site disturbance.

Back in 2018, we required a $73,000 bond for 2.7 acres of disturbance, repair of gravel access road, and a 2" overlay on Riverwalk Drive.
Please see the attachment.

There is a public hearing on the proposal tomorrow night.
Would you be inclined to recommend these additional bonding items again?
If so, do we need updated figures or are the 2018 ones ok to use?

Please let me know and thank you.

Jana Butts Roberson, AICP
Director of Community Development/Town Planner
Town of Brooklyn, CT

j.roberson@brooklynct.org
(860)779-3411 x.14
PO Box 356
Clifford B. Green Memorial Building, Suite 22
69 South Main Street
Brooklyn, CT 06234

-----Original Message-----
From: Scan <Administrator@Brooklynct.org>
Sent: Tuesday, August 04, 2020 11:43 AM
To: Jana Roberson <J.Roberson@Brooklynct.org>
Subject: Xerox Scan

Please open the scanned attachment

Number of Images: 1
Attachment File Type: PDF

Device Name: VersaLink B7030
Device Location:

Provost & Rovero, Inc.

Civil Engineering • Surveying • Site Planning • Structural • Mechanical • Architectural Engineering

P.O. Box 191
57 East Main Street
Plainfield, CT 06374

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Fax (860) 230-0860
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August 10, 2020

Brooklyn Planning & Zoning Commission
Attention: Jana Roberson, AICP, Director of Community Development
69 South Main Street
Brooklyn, CT 06234

RE: Paul R. Lehto – Proposed Gravel Excavation – Easterly of Allen Hill Road – Brooklyn, CT
P&R Job No. 173055

Dear Ms. Roberson:

On behalf of the applicant for the above referenced project, we kindly request that the public hearing for this special permit not be opened until the September 2, 2020 meeting of the Planning & Zoning Commission. Unfortunately, a schedule conflict on Wednesday, August 18th will prevent me from attending that meeting when the public hearing is currently scheduled to open.

Based on my review of this application, the date of receipt was June 16th, 2020 which would require the opening of the public hearing by August 20th, 2020, exclusive of any time extensions due to executive orders. This letter shall also serve to grant the Commission a 65 day time extension for the completion of the public hearing and decision process.

Thank you for your consideration of the above request. If you have any questions or need additional information, please do not hesitate to contact us at your convenience.

Sincerely,

David J. Held, P.E., L.S.
Provost & Rovero, Inc.

Jana Roberson

From: David Held <dheld@prorovinc.com>
Sent: Thursday, August 20, 2020 11:45 AM
To: Jana Roberson
Subject: Lehto excavation application

Hi Jana,

Just FYI – I updated the hearing notification sign yesterday with the September date.

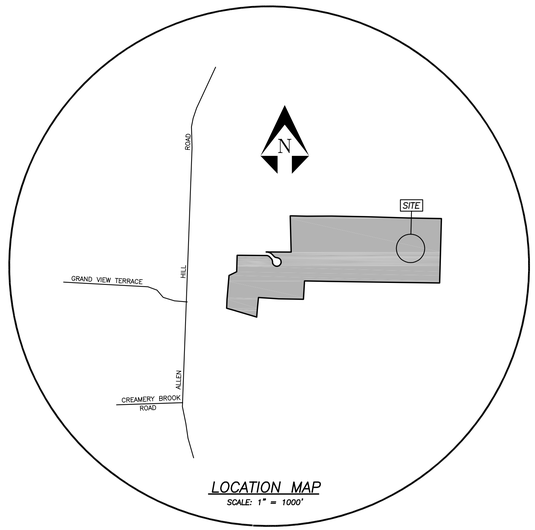
David J. Held, P.E., L.S.
Provost & Rovero, Inc.
57 East Main Street
P.O. Box 191
Plainfield, CT 06374
Phone (860) 230-0856
Cell (860) 234-3183
Fax (860) 230-0860
dheld@prorovinc.com
www.prorovinc.com

PROPOSED GRAVEL EXCAVATION

EASTERLY OF ALLEN HILL ROAD
BROOKLYN, CONNECTICUT

OWNER/APPLICANT:

PAUL R. LEHTO



LOCATION MAP
SCALE: 1" = 1000'

LEGEND

- TEST PIT
- EXISTING TREE LINE
- 102 EXISTING CONTOUR
- 100 EXISTING INDEX CONTOUR
- 100 PROPOSED CONTOUR
- PROPOSED CLEARING LIMITS
- PROPOSED SILT FENCE
- LIMIT OF WETLANDS

INDEX TO DRAWINGS

PREPARED BY:

Provost & Rovero, Inc.

Civil Engineering • Surveying • Site Planning
Structural • Mechanical • Architectural Engineering

57 East Main Street, P.O. Box 191
Plainfield, Connecticut 06374
(860) 230-0856 - FAX: (860) 230-0860
info@prorovinc.com
www.prorovinc.com

REVISIONS	
DATE	DESCRIPTION

JUNE 2, 2020

APPROVED BY THE BROOKLYN INLAND WETLANDS COMMISSION

CHAIRMAN DATE

APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION

CHAIRMAN DATE

I HAVE REVIEWED THE FLAGGED INLAND WETLANDS LOCATION SHOWN ON THIS PLAN AND THEY APPEAR TO BE SUBSTANTIALLY CORRECT.

Certified Soil Scientist Date

ENGINEER DATE

SHEET 1 OF 7
JOB NO: 173055
DWG NO: HF 310

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LEGEND

- PROPERTY LINE
- REFERENCE LINE
- EASEMENT
- BOUNDARY STONEWALL
- EXISTING TREELINE
- 100 EXISTING INDEX CONTOUR
- 100 EXISTING CONTOUR
- 100 PROPOSED CONTOUR
- WETLAND LIMITS
- IRON PIN FOUND
- DRILL HOLE FOUND
- CL&P 1645 UTILITY POLE
- FENCE POST

Notes

1. This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Section 20-300b-20 and the "Standards for Surveys and Maps in State of Connecticut" as adopted by the Connecticut Associations of Land Surveyors, Inc. on September 26, 1996

- This Survey conforms to a Class "A-2" Horizontal Accuracy
- This Survey conforms to a Class "T-3" Vertical Accuracy

- Survey Type: Perimeter Survey
- Boundary Determination: Resurvey
- Intent: Depict Existing Conditions with Respect to Property Lines

2. Parcels shown as 148 on Assessors Tax Map 32 of the Brooklyn Assessors Office

3. Property is owned by: Paul Lehto

4. Wetlands were delineated in the field by Joseph Theroux, Sept. 2016 and field located by Archer Surveying LLC

5. Riverwalk Drive is not a Town Road

6. Topographical information obtained through aerial photography by WSP Group

To My Knowledge and Belief this Map is substantially Correct as noted hereon.

Paul M. Archer LLS #10013 Date

No Certification is expressed or implied unless this map bears the embossed seal of the land surveyor whose signature appears hereon.

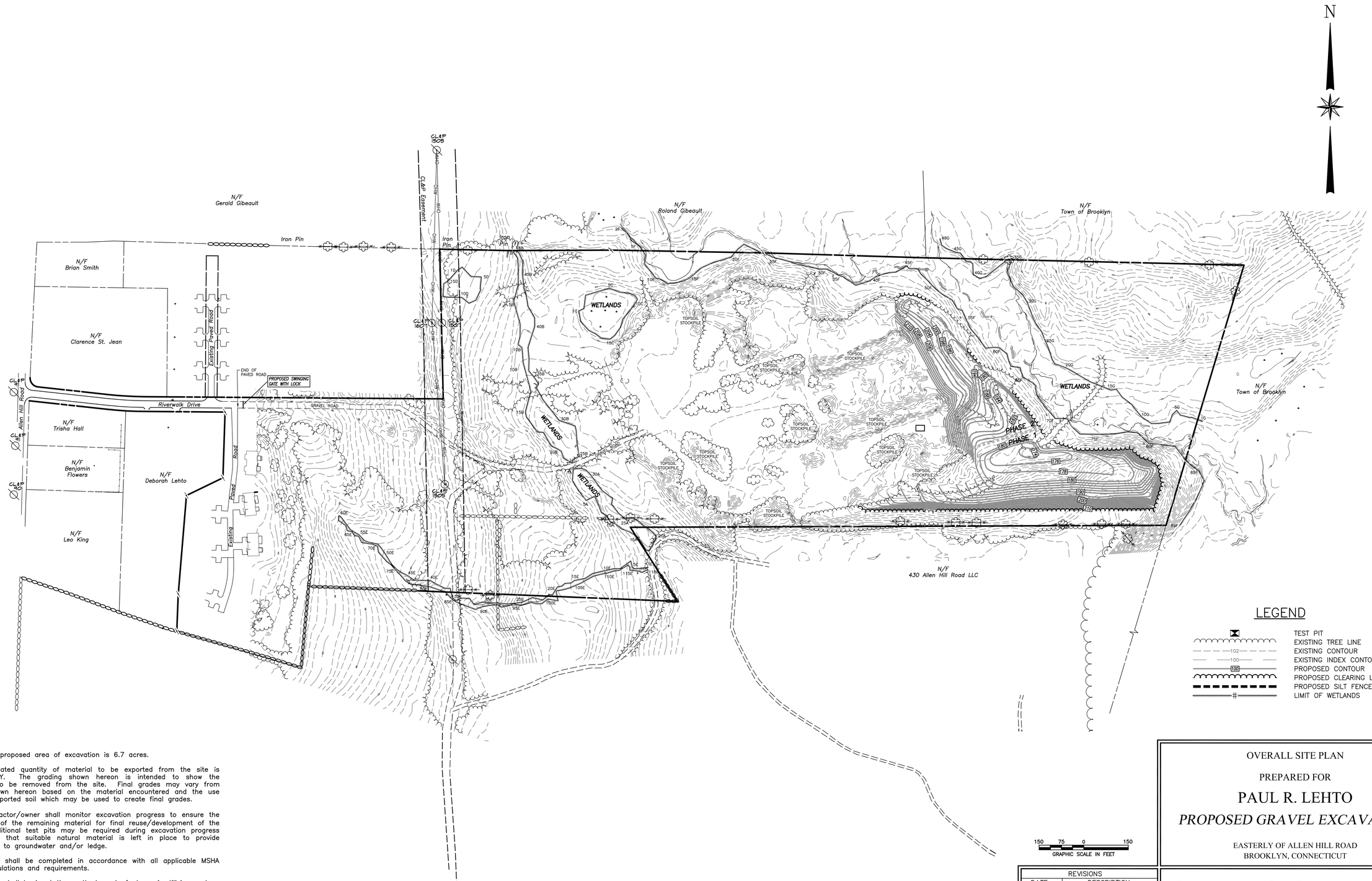
Existing Condition Plan

Prepared For:
Paul Lehto
Allen Hill Road
Brooklyn, Connecticut

DRAWING SCALE: 1"=125' 0 125 250

ARCHER Surveying LLC
18 Providence Road, Brooklyn, CT
(860) 779-2240

Sheet No.	Project No.	Date:
2 OF 7	1366	May 2016 Revised: January 2017 May 8, 2018



LEGEND

- TEST PIT
- EXISTING TREE LINE
- 102 EXISTING CONTOUR
- 100 EXISTING INDEX CONTOUR
- 700 PROPOSED CONTOUR
- PROPOSED CLEARING LIMITS
- PROPOSED SILT FENCE
- LIMIT OF WETLANDS

NOTES:

1. The total proposed area of excavation is 6.7 acres.
2. The estimated quantity of material to be exported from the site is 90,000 CY. The grading shown hereon is intended to show the material to be removed from the site. Final grades may vary from those shown hereon based on the material encountered and the use of any imported soil which may be used to create final grades.
3. The contractor/owner shall monitor excavation progress to ensure the suitability of the remaining material for final reuse/development of the site. Additional test pits may be required during excavation progress to ensure that suitable natural material is left in place to provide separation to groundwater and/or ledge.
4. Excavation shall be completed in accordance with all applicable MSHA rules, regulations and requirements.
5. Excavation shall begin at the northerly end of phase 1 utilizing a down cutting technique to ensure that the disturbed site area retains all runoff from the disturbed area (bowl effect). Perimeter silt fence and/or staked hay bales shall be installed as shown prior to grubbing and stripping topsoil.
6. Stumps shall not be buried. They shall be either chipped or removed from the site.
7. All topsoil and subsoil stripped from the excavation area shall be retained on site in the designated stockpile area for use in final site restoration. Topsoil and subsoil shall be stripped and stockpiled separately.

APPROVED BY THE BROOKLYN INLAND WETLANDS COMMISSION

CHAIRMAN DATE

APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION

CHAIRMAN DATE

ENGINEER DATE

OVERALL SITE PLAN

PREPARED FOR

PAUL R. LEHTO

PROPOSED GRAVEL EXCAVATION

EASTERLY OF ALLEN HILL ROAD
BROOKLYN, CONNECTICUT

REVISIONS	
DATE	DESCRIPTION

DATE: 6/2/2020	DRAWN: DJH
SCALE: 1" = 150'	DESIGN: DJH
SHEET: 3 OF 7	CHK BY: ---
DWG. No: HF 310	JOB No: 173055

Provost & Rovero, Inc.

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Structural • Mechanical • Architectural Engineering

57 East Main Street, P.O. Box 191
Plainfield, Connecticut 06374
(860) 230-0856 - FAX: (860) 230-0860
info@prorovinc.com
www.prorovinc.com

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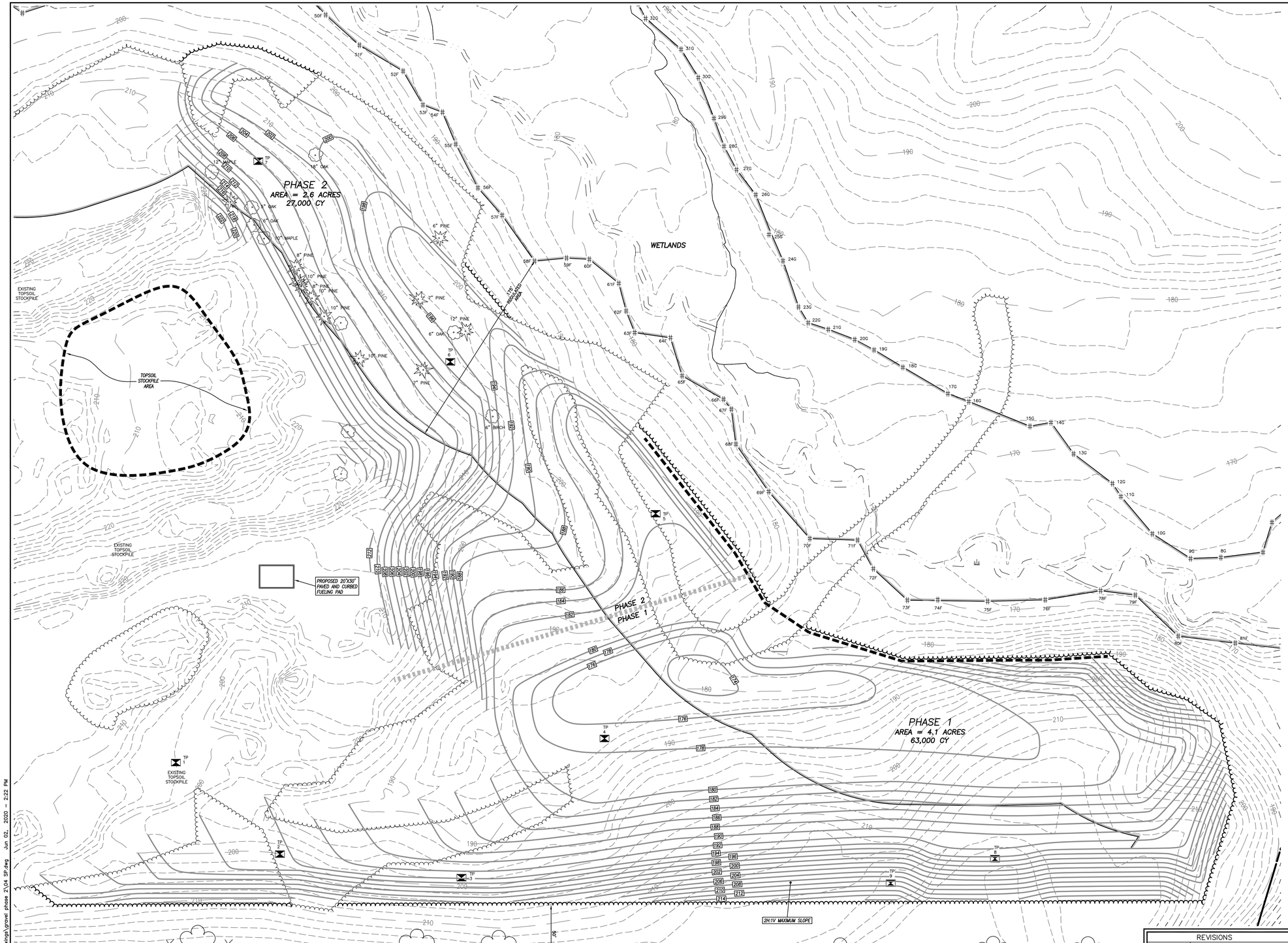

N

40 20 0 40
GRAPHIC SCALE IN FEET

APPROVED BY THE BROOKLYN INLAND WETLANDS COMMISSION

CHAIRMAN DATE

APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION

CHAIRMAN DATE

LEGEND

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5. Excavation shall begin at the northerly end of phase 1 utilizing a down cutting technique to ensure that the disturbed site area retains all runoff from the disturbed area (bowl effect). Perimeter silt fence and/or staked hay bales shall be installed as shown prior to grubbing and stripping topsoil.
6. Stumps shall not be buried. They shall be either chipped or removed from the site.
7. All topsoil and subsoil stripped from the excavation area shall be retained on site in the designated stockpile area for use in final site restoration. Topsoil and subsoil shall be stripped and stockpiled separately.

PROPOSED EXCAVATION PLAN

PREPARED FOR

PAUL R. LEHTO

PROPOSED GRAVEL EXCAVATION

EASTERLY OF ALLEN HILL ROAD
BROOKLYN, CONNECTICUT

REVISIONS	
DATE	DESCRIPTION

ENGINEER DATE

DATE: 6/2/2020	DRAWN: DJH
SCALE: 1" = 40'	DESIGN: DJH
SHEET: 4 OF 7	CHK BY: ---
DWG. No: HF 310	JOB No: 173055

Provost & Rovero, Inc.

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Structural • Mechanical • Architectural Engineering

57 East Main Street, P.O. Box 191
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info@prorovinc.com
www.prorovinc.com

C:\Users\Dave\Desktop\JOBS\173055\Drawings\gravel phase 2\04 SP.dwg Jun 02, 2020 - 2:22 PM

EROSION AND SEDIMENT CONTROL PLAN:

REFERENCE IS MADE TO:

1. Connecticut Guidelines for Soil Erosion and Sediment Control 2002 (2002 Guidelines).
2. Soil Survey of Connecticut, N.R.C.S.

SILT FENCE INSTALLATION AND MAINTENANCE:

1. Dig a 6" deep trench on the uphill side of the barrier location.
2. Position the posts on the downhill side of the barrier and drive the posts 1.5 feet into the ground.
3. Lay the bottom 6" of the fabric in the trench to prevent undermining and backfill.
4. Inspect and repair barrier after heavy rainfall.
5. Inspections will be made at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs.
6. Sediment deposits are to be removed when they reach a height of 1 foot behind the barrier or half the height of the barrier and are to be deposited in an area which is not regulated by the inland wetlands commission.
7. Replace or repair the fence within 24 hours of observed failure. Failure of the fence has occurred when sediment fails to be retained by the fence because:
   - the fence has been overtopped, undercut or bypassed by runoff water,
   - the fence has been moved out of position (knocked over), or
   - the geotextile has decomposed or been damaged.

HAY BALE INSTALLATION AND MAINTENANCE:

1. Bales shall be placed as shown on the plans with the ends of the bales tightly abutting each other.
2. Each bale shall be securely anchored with at least 2 stakes and gaps between bales shall be wedged with straw to prevent water from passing between the bales.
3. Inspect bales at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inches or greater to determine maintenance needs.
4. Remove sediment behind the bales when it reaches half the height of the bale and deposit in an area which is not regulated by the Inland Wetlands Commission.
5. Replace or repair the barrier within 24 hours of observed failure. Failure of the barrier has occurred when sediment fails to be retained by the barrier because:
   - the barrier has been overtopped, undercut or bypassed by runoff water,
   - the barrier has been moved out of position, or
   - the hay bales have deteriorated or been damaged.

TEMPORARY VEGETATIVE COVER:

SEED SELECTION

Grass species shall be appropriate for the season and site conditions. Appropriate species are outlined in Figure TS–2 in the 2002 Guidelines.

TIMING CONSIDERATIONS

Seed with a temporary seed mixture within 7 days after the suspension of grading work in disturbed areas where the suspension of work is expected to be more than 30 days but less than 1 year.

SITE PREPARATION

Install needed erosion control measures such as diversions, grade stabilization structures, sediment basins and grassed waterways.

Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application, and mulch anchoring.

SEEDBED PREPARATION

Loosen the soil to a depth of 3–4 inches with a slightly roughened surface. If the area has been recently loosened or disturbed, no further roughening is required. Soil preparation can be accomplished by tracking with a bulldozer, discing, harrowing, raking or dragging with a section of chain link fence. Avoid excessive compaction of the surface by equipment traveling back and forth over the surface. If the slope is tracked, the cleat marks shall be perpendicular to the anticipated direction of the flow of surface water.

If soil testing is not practical or feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 7.5 pounds per 1,000 square feet of 10–10–10 or equivalent. Additionally, lime may be applied using rates given in Figure TS–1 in the 2002 Guidelines.

SEEDING

Apply seed uniformly by hand cyclone seeder, drill, cultipacker type seeder or hydroseeder at a minimum rate for the selected species. Increase seeding rates by 10% when hydroseeding.

MULCHING

Temporary seedings made during optimum seeding dates shall be mulched according to the recommendations in the 2002 Guidelines. When seeding outside of the recommended dates, increase the application of mulch to provide 95%–100% coverage.

MAINTENANCE

Inspect seeded area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and rill erosion.

Where seed has moved or where soil erosion has occurred, determine the cause of the failure. Repair eroded areas and install additional controls if required to prevent reoccurrence of erosion.

Continue inspections until the grasses are firmly established. Grasses shall not be considered established until a ground cover is achieved which is mature enough to control soil erosion and to survive severe weather conditions (approximately 80% vegetative cover).

PERMANENT VEGETATIVE COVER:

Refer to Permanent Seeding Measure in the 2002 Guidelines for specific applications and details related to the installation and maintenance of a permanent vegetative cover. In general, the following sequence of operations shall apply:

1. Topsoil will be replaced once the excavation and grading has been completed. Topsoil will be spread at a minimum compacted depth of 4".
2. Once the topsoil has been spread, all stones 2" or larger in any dimension will be removed as well as debris.
3. Apply agricultural ground limestone at a rate of 2 tons per acre or 100 lbs. per 1000 s.f. Apply 10–10–10 fertilizer or equivalent at a rate of 300 lbs. per acre or 7.5 lbs. per 1000 s.f. Work lime and fertilizer into the soil to a depth of 4".
4. Inspect seedbed before seeding. If traffic has compacted the soil, retill compacted areas.
5. Apply the chosen grass seed mix. The recommended seeding dates are: April 1 to June 15 & August 15 – October 1.
6. Following seeding, firm seedbed with a roller. Mulch immediately following seeding. If a permanent vegetative stand cannot be established by September 30, apply a temporary cover on the topsoil such as netting, mat or organic mulch.

EROSION AND SEDIMENT CONTROL NARRATIVE:

PRINCIPLES OF EROSION AND SEDIMENT CONTROL

The primary function of erosion and sediment controls is to absorb erosional energies and reduce runoff velocities that force the detachment and transport of soil and/or encourage the deposition of eroded soil particles before they reach any sensitive area.

KEEP LAND DISTURBANCE TO A MINIMUM

The more land that is in vegetative cover, the more surface water will infiltrate into the soil, thus minimizing stormwater runoff and potential erosion. Keeping land disturbance to a minimum not only involves minimizing the extent of exposure at any one time, but also the duration of exposure. Phasing, sequencing and construction scheduling are interrelated. Phasing divides a large project into distinct sections where construction work over a specific area occurs over distinct periods of time and each phase is not dependent upon a subsequent phase in order to be functional. A sequence is the order in which construction activities are to occur during any particular phase. A sequence should be developed on the premise of "first things first" and "last things last" with proper attention given to the inclusion of adequate erosion and sediment control measures. A construction schedule is a sequence with time lines applied to it and should address the potential overlap of actions in a sequence which may be in conflict with each other.

- Limit areas of clearing and grading. Protect natural vegetation from construction equipment with fencing, tree armoring, and retaining walls or tree wells.
- Route traffic patterns within the site to avoid existing or newly planted vegetation.
- Phase construction so that areas which are actively being developed at any one time are minimized and only that area under construction is exposed. Clear only those areas essential for construction.
- Sequence the construction of storm drainage systems so that they are operational as soon as possible during construction. Ensure all outlets are stable before outletting storm drainage flow into them.
- Schedule construction so that final grading and stabilization is completed as soon as possible.

SLOW THE FLOW

Detachment and transport of eroded soil must be kept to a minimum by absorbing and reducing the erosive energy of water. The erosive energy of water increases as the volume and velocity of runoff increases. The volume and velocity of runoff increases during development as a result of reduced infiltration rates caused by the removal of existing vegetation, removal of topsoil, compaction of soil and the construction of impervious surfaces.

- Use diversions, stone dikes, silt fences and similar measures to break flow lines and dissipate storm water energy.
- Avoid diverting one drainage system into another without calculating the potential for downstream flooding or erosion.

KEEP CLEAN RUNOFF SEPARATED

Clean runoff should be kept separated from sediment laden water and should not be directed over disturbed areas without additional controls. Additionally, prevent the mixing of clean off–site generated runoff with sediment laden runoff generated on–site until after adequate filtration of on–site waters has occurred.

- Segregate construction waters from clean water.
- Divert site runoff to keep it isolated from wetlands, watercourses and drainage ways that flow through or near the development until the sediment in that runoff is trapped or detained.

REDUCE ON SITE POTENTIAL INTERNALLY AND INSTALL PERIMETER CONTROLS

While it may seem less complicated to collect all waters to one point of discharge for treatment and just install a perimeter control, it can be more effective to apply internal controls to many small sub–drainage basins within the site. By reducing sediment loading from within the site, the chance of perimeter control failure and the potential off–site damage that it can cause is reduced. It is generally more expensive to correct off–site damage than it is to install proper internal controls.

- Control erosion and sedimentation in the smallest drainage area possible. It is easier to control erosion than to contend with sediment after it has been carried downstream and deposited in unwanted areas.
- Direct runoff from small disturbed areas to adjoining undisturbed vegetated areas to reduce the potential for concentrated flows and increase settlement and filtering of sediments.
- Concentrated runoff from development should be safely conveyed to stable outlets using rip rapped channels, waterways, diversions, storm drains or similar measures.
- Determine the need for sediment basins. Sediment basins are required on larger developments where major grading is planned and where it is impossible or impractical to control erosion at the source. Sediment basins are needed on large and small sites when sensitive areas such as wetlands, watercourses, and streets would be impacted by off–site sediment deposition. Do not locate sediment basins in wetlands or permanent or intermittent watercourses. Sediment basins should be located to intercept runoff prior to its entry into the wetland or watercourse.
- Grade and landscape around buildings and septic systems to divert water away from them.

EXCAVATION NOTES:

1. No blasting is anticipated for completion of the work shown. If blasting is required, the owner is responsible for obtaining all necessary permits.
2. There are no anticipated sales of excavated materials to the public from the subject site.
3. Bulk storage of fuel and lubricants for excavation equipment is not allowed on site. All fueling and lubrication of equipment shall be completed on the fueling pad. Fuel trucks shall be equipped with a spill kit and any spills shall be cleaned immediately. No equipment service work which is likely to result in the release of fuel or lubricants shall take place on site.
4. The emergency contact for operations at this site is Paul Lehto (860) 208–9789.
5. The allowable hours of operation for excavation shall be 7:00 AM to 6:00 PM, Monday through Friday and 7:00 AM to 12:00 noon on Saturday. No operations shall be allowed on Sundays, Christmas, New Years Day, Memorial Day, Fourth of July, Labor Day and Thanksgiving except by special permission of the Brooklyn Planning & Zoning Commission.
6. The owner and/or site operator shall provide adequate dust control to prevent any off–site nuisance. The preferred dust control measure is the application of water to vehicular travel areas. The application of calcium chloride may also be used.
7. The owner/operator shall install any necessary barricades or barriers to provide protection around the perimeter of open excavation faces and steep slopes.
8. Excavation operations shall be completed in accordance with all appropriate Mine Safety & Health Administration (MSHA) rules and regulations.
9. There is to be no on–site processing of excavated materials.
10. The estimated total number of truck trip ends entering or exiting the site is 11,200 during the excavation duration. The estimated daily average number of truck trip ends entering or exiting the site is 60 during the excavation duration. The estimated maximum number of daily truck trip ends entering or exiting the site is 80.
11. The site operator is responsible for determining the most appropriate means and methods for excavating material. In general, excavation shall begin with stripping and stockpiling of topsoil and subsoil which will be utilized for site restoration. Topsoil (A horizon) and subsoil (B horizon) shall be stockpiled separately. Removal of material should be accomplished with a downcutting technique to ensure complete internal drainage at all times.
12. All trucks leaving the site shall have the loads covered.
13. Prior to the start of excavation work, two elevation bench marks shall be installed on the perimeter of the work area for monitoring purposes. Benchmarks shall be maintained or replaced as necessary as the work progresses.
14. It is anticipated that all excavation work will be completed with the use of one (1) wheel loader (Cat 980 or equivalent), one (1) 50 ton excavator (Cat 349 or equivalent), and triaxle dump trucks (16± CY capacity). Additional equipment may be utilized for final site restoration.

RESTORATION NOTES:

The restoration requirements described below will be applicable to the 6.7 acre permitted area.

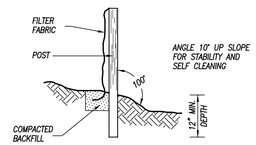
1. Restoration of disturbed areas shall take place following the completion of excavation in the respective phase. The respective phase shall have subsoil and topsoil spread and be seeded and mulched no later than the end of the growing season for the calendar year following completion of excavation operations. Mulching and seeding shall be completed in accordance with the recommendations of the New York State Revegetation Procedures Manual for Surface Mining Reclamation. Sufficient restoration bonding should be maintained as required by the Town to cover the restoration cost for the permitted excavation area. The sediment/infiltration basin in the lowest part of the site shall not be restored with topsoil and vegetation until the completion of excavation in phase 2.
2. Final restoration shall begin with establishing the required subgrade elevations. Proposed grades shown are approximate and may be adjusted to match field conditions at the time of restoration. In general, all disturbed slopes shall be graded to a 30% maximum gradient.
3. Prepare the restoration area by spreading subsoil (B horizon) material to a uniform depth.
4. Complete restoration by spreading on–site stockpiled topsoil (A horizon) to an approximate minimum thickness of 6" and seeding for a permanent vegetative cover. On–site topsoil stockpiles may be supplemented with composted organic matter, wood chips and imported topsoil as necessary to provide a suitable planting medium.
5. Spread seed for a permanent vegetative cover over the prepared restoration area. The permanent vegetative cover may be a suitable wildlife habitat mix or the following mixture which is suitable for use in all locations:

Variety	Lbs/Acre
Switchgrass (Blackwell, Shelter, Cave–in–rock)	4.0
Big Bluestem (Niagra, Kaw)	4.0
Little Bluestem (Blaze, Aldous, Camper)	2.0
Sand Lovegrass (NE–27, Bend)	1.5
Bird's–foot Trefoil (Empire, Viking)	2.0
TOTAL	13.5

6. Hay or straw mulch shall be utilized on slopes to provide temporary stabilization during establishment of permanent vegetative cover. In general, no slopes greater than 2H:1V will be allowable.
7. Fertilizer and lime shall be provided as required to establish a permanent vegetative cover based on laboratory soil testing results.
8. Restoration cover vegetation shall be maintained by the permit holder or applicant for a minimum of 24 months prior to the release of any restoration bonding.
9. In lieu of the manual application of mulch and fertilizer, the restoration area may be planted with hydroseeding methods with a suitable tackifier, mulch and fertilizer mix.

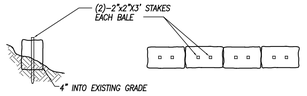
TEST PIT OBSERVATIONS – AUGUST 7, 2017

TEST PIT	DEPTH	PROFILE
1	0–96"	Topsoil and subsoil
	No GWT	
	No ledge	
	No mottling	
2	0–12"	Topsoil
	12–18"	Subsoil
	18–84"	Coarse sand and gravel
	No GWT	
	No ledge	
	No mottling	
3	0–18"	Topsoil
	18–34"	Subsoil
	34–84"	Coarse sand and gravel
	No GWT	
	No ledge	
	No mottling	
4	0–43"	Topsoil and organics
	43–64"	Subsoil
	64–136"	Coarse sand and gravel
	GWT @ 111"	
	No ledge	
	No mottling	
5	0–8"	Topsoil
	8–18"	Subsoil
	18–57"	Fine silty sand
	57–104"	Fine–medium silty sand and gravel
	No GWT	
	No ledge	
	No mottling	
6	0–7"	Topsoil
	7–24"	Subsoil
	24–131"	Coarse sand and gravel
	No GWT	
	No ledge	
	No mottling	
7	0–7"	Topsoil
	7–17"	Subsoil
	17–96"	Coarse sand and gravel
	No GWT	
	No ledge	
	No mottling	
8	0–12"	Topsoil
	12–75"	Subsoil
	75–117"	Medium/coarse sand and gravel
	No GWT	
	No ledge	
	No mottling	
9	0–10"	Topsoil
	10–20"	Subsoil
	20–138"	Coarse sand & gravel



SILT FENCE

NOT TO SCALE



HAYBALE BARRIER

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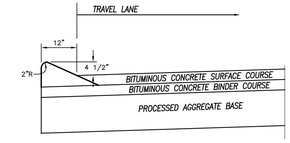
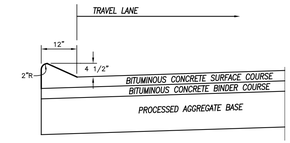


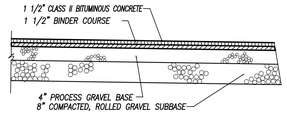
ALTERNATE 1 – CURB ON BINDER



ALTERNATE 2 – MONOLITHIC CONSTRUCTION

CAPE COD CURBING

NOT TO SCALE



BITUMINOUS CONCRETE PAVEMENT

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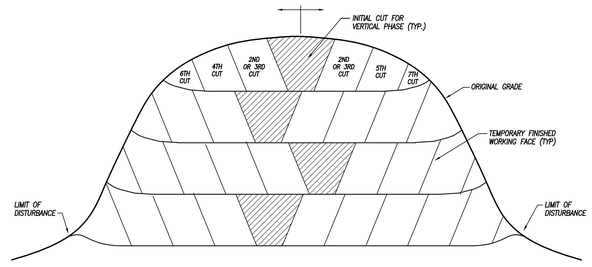

EXCAVATION PROGRESSES IN BOTH DIRECTIONS FOR ENTIRE LENGTH OF EACH VERTICAL SUBPHASE, STARTING AT BOTTOM OF INITIAL CUT, THEN AN INITIAL CUT IS MADE FOR THE SUBSEQUENT LOWER VERTICAL SUBPHASE AND THE PROCESS CONTINUES.

DETAIL SHOWING "DOWNCUTTING" EXCAVATION METHOD

NOT TO SCALE

APPROVED BY THE BROOKLYN INLAND WETLANDS COMMISSION

CHAIRMAN DATE

APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION

CHAIRMAN DATE

ENGINEER DATE

DETAIL SHEET

PREPARED FOR

PAUL R. LEHTO

PROPOSED GRAVEL EXCAVATION

EASTERLY OF ALLEN HILL ROAD
BROOKLYN, CONNECTICUT

REVISIONS	
DATE	DESCRIPTION

DATE: 6/2/2020	DRAWN: DJH
SCALE: AS SHOWN	DESIGN: DJH
SHEET: 5 OF 7	CHK BY: ---
DWG. No: HF 310	JOB No: 173055

Provost & Rovero, Inc.

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info@prorovinc.com
www.prorovinc.com

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N

N/F
Gerald Gibeault

CL&P Easement

Iron Pin

Iron
Pin

Iron
Pin (f)

N/F
Roland Gibeault

N/F
Brian Smith

N/F
Clarence St. Jean

Existing Paved Road

Riverwalk Drive

Allen Hill Road

N/F
Trisha Hall

N/F
Benjamin
Flowers

N/F
Deborah Lehto

Paved Road

Existing

N/F
Leo King

PHASE 1
11.814 AC.
(514,608 S.F.)

OPEN SPACE
37.967 AC.
(1,653,854 S.F.)

18
1.073 AC.
(46,761 S.F.)

17
1.061 AC.
(46,199 S.F.)

19
0.735 AC.
(32,033 S.F.)

16
0.722 AC.
(31,470 S.F.)

15
0.801 AC.
(34,908 S.F.)

14
0.864 AC.
(37,652 S.F.)

13
0.771 AC.
(33,581 S.F.)

12
0.755 AC.
(32,906 S.F.)

20
0.735 AC.
(32,017 S.F.)

1
1.277 AC.
(55,619 S.F.)

5
0.999 AC.
(43,514 S.F.)

6
1.130 AC.
(49,222 S.F.)

7
0.851 AC.
(37,081 S.F.)

8
0.875 AC.
(38,108 S.F.)

9
0.909 AC.
(39,595 S.F.)

10
0.856 AC.
(37,290 S.F.)

11
0.888 AC.
(38,681 S.F.)

2
1.335 AC.
(57,272 S.F.)

3
0.773 AC.
(33,689 S.F.)

4
1.643 AC.
(71,548 S.F.)

150 75 0 150
GRAPHIC SCALE IN FEET

ENGINEER DATE

REVISIONS	
DATE	DESCRIPTION

DATE: 6/2/2020	DRAWN: DJH
SCALE: 1" = 150'	DESIGN: DJH
SHEET: 6 OF 7	CHK BY: ---
DWG. No: HF 310	JOB No: 173055

SITE REUSE PLAN
CONCEPTUAL CONSERVATION SUBDIVISION
PREPARED FOR
PAUL R. LEHTO
PROPOSED GRAVEL EXCAVATION
EASTERLY OF ALLEN HILL ROAD
BROOKLYN, CONNECTICUT

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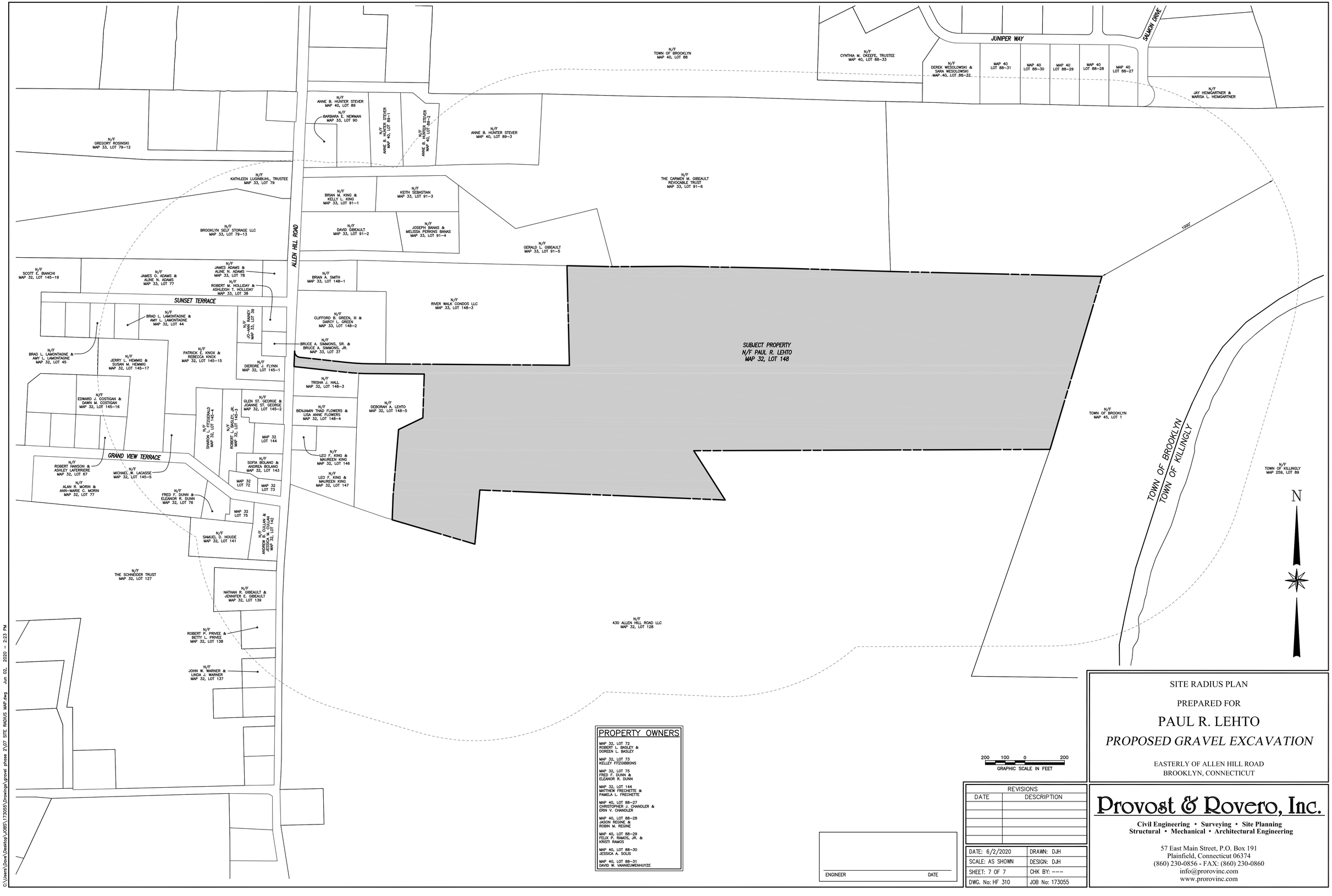

PROPERTY OWNERS

MAP 32, LOT 72
ROBERT L. BASLEY &
DOREEN L. BASLEY

MAP 32, LOT 73
KELLEY FITZGIBBONS

MAP 32, LOT 75
FRED F. DUNN &
ELEANOR R. DUNN

MAP 32, LOT 144
MATTHEW FRECHETTE &
PAMELA L. FRECHETTE

MAP 40, LOT 88-27
CHRISTOPHER J. CHANDLER &
ERIN V. CHANDLER

MAP 40, LOT 88-28
JASON REGINE &
ROBIN M. REGINE

MAP 40, LOT 88-29
FELIX P. RAMOS, JR. &
KRISTI RAMOS

MAP 40, LOT 88-30
JESSICA A. SOLIS

MAP 40, LOT 88-31
DAVID W. VANNIEUWENHUYZE

200 100 0 200
GRAPHIC SCALE IN FEET

ENGINEER DATE

REVISIONS	
DATE	DESCRIPTION

DATE: 6/2/2020	DRAWN: DJH
SCALE: AS SHOWN	DESIGN: DJH
SHEET: 7 OF 7	CHK BY: ---
DWG. No: HF 310	JOB No: 173055

SITE RADIUS PLAN

PREPARED FOR

PAUL R. LEHTO

PROPOSED GRAVEL EXCAVATION

EASTERLY OF ALLEN HILL ROAD
BROOKLYN, CONNECTICUT

Provost & Rovero, Inc.

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