

**TOWN OF HUDSON
PLANNING BOARD
PUBLIC MEETING
TOWN OF HUDSON, NH
JULY 24, 2013**



12 School Street

Hudson, New Hampshire 03051

603/886-6005

The Town of Hudson Planning Board will hold a regularly scheduled meeting on Wednesday, July 24, 2013 at 7:00 p.m. in the "Buxton Community Development Conference Room" at Town Hall. The following items will be on the agenda:

- I. CALL TO ORDER BY CHAIRPERSON AT 7:00 P.M.
- II. PLEDGE OF ALLEGIANCE
- III. ROLL CALL
- IV. SEATING OF ALTERNATES
- V. MINUTES OF PREVIOUS MEETING(S)
- VI. CASES REQUESTED FOR DEFERRAL
- VII. CORRESPONDENCE

A. Proposed Lowell Road (Rte. 3A) Roadway Improvement Project.

- VIII. PERFORMANCE SURETIES
- IX. ZBA INPUT ONLY
- X. PUBLIC HEARINGS
- XI. OLD BUSINESS/PUBLIC HEARINGS

A. Unicorn Industrial Park
SP# 09-12

Map 170/Lot 038
25 Constitution Drive

Purpose of plan: To show a proposed 10,000 sq. ft. industrial building on 4.4 acres +/- with the associated site and drainage improvements. Hearing. Deferred Date Specific from the 06-26-13 Planning Board Meeting.

- XII. DESIGN REVIEW PHASE
- XIII. CONCEPTUAL REVIEW ONLY

XIV. NEW BUSINESS/PUBLIC HEARINGS

A. 4 Candy Lane Site Plan
SP# 03-13

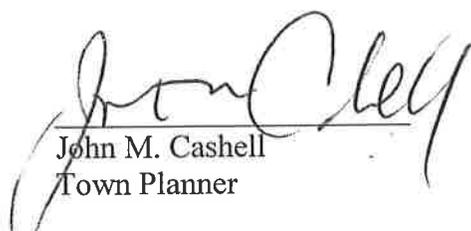
Map 101/Lot 27
4 Candy Lane

Purpose of plan: Remove the existing paved parking area and construct a 25,000 square foot commercial building and associated site improvements. Application Acceptance & Hearing.

XV. OTHER BUSINESS
XVI. ADJOURNMENT

All plans and applications are available for review in the Planning Office. Comments may be submitted in writing until 10:00 a.m. on the Tuesday prior to the day of the meeting.

The public is invited to attend.



John M. Cashell
Town Planner

POSTED: Town Hall, Library, Post Office – 07-11-13

Proposed Lowell Road (Rte. 3A) Roadway Improvement Project

Staff Report

July 24, 2013

This item is on the agenda as correspondence received. That is, below is an email received from Tony Basso, who represents the following clients: Fairview Nursing Home, Haffner's Gas Station and Market Basket. These companies are collaborating with each other, relative to designing, engineering and constructing a new signalized intersection on Lowell Road - between the existing Market Basket driveway and Hardy Lane. Note: with this proposal, the existing Market Basket driveway on Lowell Road will be abandoned. Other planned improvements to Lowell Road, including conceptual site development plans for the 3 companies and their respective sites, will be unveiled at the meeting. Also presented at the meeting, will be the written agreement between the companies for said traffic signal project.

In addition to the above, and most importantly for the Town of Hudson to consider regarding the proposed traffic signal project is that these companies want the Town to participate in the funding of this project. To this effect, in his email, Mr. Basso makes reference to a Town funding source that could be used for this project. In specific terms, the referenced funding source is Account #2050-186 – Impact Fees – Stop & Shop Future Road Improvements, having a current balance of \$34,286.79, plus interest. This Account was established on September 4, 2004, and in accordance with the terms of the Stop & Shop Development Agreement and a legal opinion from Town Counsel, the Town has 10 years (up to and including September 4, 2014) to appropriate or expend the funds in this account, which was originally established at \$50,000.00. Note: \$16,000. of this account has already been expended for road improvements within the allowed locus – see below).

The specific language concerning the above-cited Stop & Shop Impact Fee Acct. is included as condition #14 in the Stop & Shop Development Agreement and reads as follows (the Development Agreement, in its entirety, is attached hereto):

14. Prior to the issuance of a certificate of occupancy, contribution by applicant of \$50,000.00 to the traffic impact fund maintained by the Town of Hudson for Lowell Road corridor improvements for use by the Town of Hudson for future road improvements along Lowell Road from Wason Road to Hardy Lane, including, but not limited to, study, design or construction of a new stop light, pavement widening or installation of median dividers as deemed necessary by the Town in its sole discretion, to be returned if not used within ten years.

DRAFT MOTION:

I move to forward a favorable recommendation to the Board of Selectmen, relative to the Town expending the remaining balance of \$34,286.79, plus interest in Account #2050-186 – Impact Fees – Stop & Shop Future Road Improvements, and for said funds to be expended in accordance with the terms and conditions of their establishment, i.e.,is, per condition of approval #14 in the Stop & Shop Development Agreement-of-Record, HCRD Bk. 7045 Pg. 2468.

Motion by: _____ Second: _____ Carried/Failed: _____.

John

On behalf of our client, we respectfully request to be placed on the July 24, 2013 planning board agenda to discuss the proposed new signalized intersection at Fairview, Market Basket and Haffner's sites in Hudson, NH. We are formally requesting the Hudson Planning Board release the funds, collected for use on the Lowell Road corridor between Hardy Road and Wason Road, to our client for use in design and construction of the new intersection. We will bring the progress plan for the new intersection to the meeting for discussion purposes with the board.

Thank you for your help with this matter, and if you have any questions or need any further information or documentation please do not hesitate to call.

Anthony M. Basso, LLS

Vice President

Keach-Nordstrom Associates, Inc

42.60
2

Hudson
Plan Board
546

TALK to KC
FOR PROPER ACCTS

① MORE SPACE
FOR CORRIDOR
ACCTS

② MORE ACCTS
FOR OTHER

SITE PLAN DEVELOPMENT AGREEMENT

This Agreement is entered into this 30th day of July, 2003, between Manuel and Kathleen M. Sousa 77 Spear Road, Hudson, NH, Hudson Wason Road Associates, LLC with offices at 120 Presidential Way, Suite 300, Woburn, MA and the Town of Hudson at 12 School Street, Hudson, New Hampshire. It represents the understanding of the parties regarding the granting by the Hudson Planning Board of site plan approval to construct a 65,105 S.F. supermarket including front and rear mezzanines, and to contain improvements pursuant to the plans and conditions referenced below.

WHEREAS, the Applicant is proposing a site plan to construct a 65,105 S.F. supermarket, including front and rear mezzanines, on Lowell Road in Hudson, New Hampshire, Tax Map 10 Lots 43, 45 & 46, as shown on the Sagamore Square II Site Plan (Revised), prepared by VHB Engineering, plans numbered C-1 through 13, A-1, SE-1, T-1, Z and Z-1, all last revised 10/15/02.

WHEREAS, the Hudson Planning Board has been duly authorized to regulate the subdivision of land and to approve and disapprove site plans for multifamily dwelling units and nonresidential developments pursuant to RSA 674 et seq.

WHEREAS, Applicant has applied for approval for the above described project in compliance with Town zoning ordinances, subdivision regulations, site plan regulations and the rules and regulations of Hudson Planning Board.

WHEREAS, site plan approval is conditioned upon the execution of a Development Agreement.

In consideration for the Hudson Planning Board granting site plan approval, the parties hereby agree as follows:

1050 ACCTS.

BK 7045 PG 2467

I

Final site plan approval is granted for the project entitled Sagamore Square II (Revised) Site Plan, Map 10, Lot 43, 45 & 46, prepared by VHB, plans numbered C-1 through 13, A-1, SE-1, T-1, Z and Z-1, all last revised 10/15/02 recorded at Hillsborough County Registry of Deeds Plan No. 32647 with the following stipulations:

1. That the stipulations of approval shall be incorporated into this Development Agreement, which is to be signed and recorded with the plan.
2. All improvements and operations of the building to be located on the site shall be per notes on the Plans C-1 through 13 and SE-1.
- ✓ 3. A cost allocation procedure impact fee in the amount of \$384,119.50, subject to annual inflation indexing, as permitted by the impact fee methodology, shall be paid prior to the issuance of a certificate of occupancy.
4. There shall be no outside storage on the site.
5. There shall be no parking of vehicles in areas onsite, which are not designated for that purpose.
6. No loading, unloading or deliveries shall occur before 7:00 a.m. or after 10:00 p.m.
7. The operation of any exterior trash compactor, including the compaction shall not occur before 7:00 a.m. or after 10:00 p.m. The removal or installation of any full refuse container shall not occur before 8:00 am or after 7:00 p.m.
8. The store will be open no earlier than 6:00 a.m. nor later than midnight. The site owner must obtain approval from the Planning Board prior to any expansion in the hours of operation beyond those times.
9. The building on the site shall be constructed having a façade as submitted in the architectural plan identified as Plan A-1 dated August 28, 2002, revised 10/16/02.
10. Prior to the issuance of a certificate of occupancy, the property owner shall grant an easement to the Town of Hudson free and clear of all encumbrances to insure a 100' vegetation buffer between residential property lines and improvements on the property as shown on Plan C-4, which easement shall be reviewed by the Town's legal counsel.
11. Prior to issuance of a certificate of occupancy, the property owner shall grant to the Town of Hudson a license to cross the site on existing driveways to the southwest corner of the site for the purposes of the public accessing land now known as the Circumferential Highway in the area

BK 7045PG2468

identified on Plan Z, provided that such use shall be limited to access to a single youth athletic field. The license shall have a term coincident with the Town's right of use of the Circumferential Highway for a ball field. Provided, however, in the event the applicant or the Town of Hudson shall be able to obtain from the State of New Hampshire a license to the benefit of the Town of Hudson for access by the public across the easterly line of the limited access right-of-way of Lowell Road within the designated corridor of the Circumferential Highway for purposes of public access to any athletic fields to be constructed on the Circumferential Highway land, the owner need not grant the temporary license or, if granted, the license shall be automatically terminated upon receipt of the license from the State of New Hampshire. Any and all licenses hereunder shall be subject to review and approval by Town Counsel.

12. In the event the Town of Hudson shall obtain from the State of New Hampshire a license, easement or other permission to allow use of the so-called Circumferential Highway area for athletic fields, prior to the issuance of the certificate of occupancy, the applicant shall design and construct a gravel access driveway from applicant's site (or Lowell Road, per stipulation 11 above) to the area of the athletic field, construct a gravel parking area for parking for one athletic field(s), and construct one athletic field on the Circumferential Highway area, the design of the field to be at the direction of the Town's parks and recreation department. The construction shall be completed within two years of the date or receipt of the license, easement or other permission allowing the use of the Circumferential Highway by the State of New Hampshire. Provided, however, in the event said easement, license or other permission is not obtained prior to the issuance of a certificate of occupancy, the applicant shall contribute the sum of \$25,000.00 to the Town of Hudson recreation fund and be released from this obligation.

1050-201
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13. Prior to the issuance of a certificate of occupancy, completion by the applicant at the expense of the applicant, of the following additional offsite improvements:

- (a) all improvements per Plan T-1 last revised October 16, 2002.
- (b) improvements as described in the traffic mitigation proposal approved by the State of New Hampshire Department of Transportation as addressed in its letter of April 4, 2002, and as reviewed by Vollmer Associates as referenced in its letter dated September, including, but not limited to, improvements to the traffic light at Wason Road/Lowell Road/Flagstone drive intersection;
- (c) construction of bituminous concrete sidewalk running along the southerly side of Wason Road from Lowell Road to Colson Road as per Plan T-1 last revised 10/16/02;

BK 7045 PG 2469

- (d) conformance of road painting within Wason Road to letter of Fire Marshal Chalk dated September 9, 2002;
- (e) design and installation of an additional remote Opticon receiver/transmitter to be located pursuant to letter of Fire Marshal Chalk dated September 9, 2002;
- (f) installation of two signs with flashing red emergency warning lights pursuant to letter of Fire Marshal Chalk dated September 9, 2002;

✓ 14. Prior to the issuance of a certificate of occupancy, contribution by applicant of \$50,000.00 to the traffic impact fund maintained by the Town of Hudson for Lowell Road corridor improvements for use by Town of Hudson for future roadway improvements along Lowell Road from Wason Road to Hardy Lane, including, but not limited to, study, design or construction of a new stop light, pavement widening or installation of median dividers as deemed necessary by the Town in its sole discretion, to be returned if not used within ten years

1050-202
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- 15. The applicant shall maintain visibly displayed a copy of all sheets of the Plans at the store manager's office on the site.
- 16. The conditions and covenants of this approval shall be incorporated in the Development Agreement and shall run with the land. The terms and conditions of this approval shall be part of the Development Agreement.
- 17. Upon opening of the grocery store, if determined by the Town of Hudson Police Department to be reasonably necessary and appropriate due to traffic safety concerns, the applicant shall pay for the cost of a single policeman or private police detail to be maintained at the intersection of the private driveway entrance/exit of the DeMoulas/Market Basket shopping center and Wason Road, for up to four hours per day, six days per week, excluding Sunday.
- 18. Prior to issuance of certificate of occupancy, the applicant shall grant 12' wide easement adjacent to and parallel with south ROW of Wason Road for road purposes except installation of pavement.
- ✓ 19. Prior to issuance of certificate of occupancy, the applicant shall make a contribution of \$10,000.00 to the fund to be reserved for the payment of costs of adding additional paving to Wason Road, provided that construction and slope easements benefiting the Town to allow such pavement widening are obtained by the Town.

BK 7045PG2470

1050-202
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All conditions contained in the notes of the plan are incorporated herein by reference as approved by the Planning Board. Furthermore, all representations of fact or intention made by the applicant or any of applicant's representatives during testimony before the Planning Board relative to the obtaining of approval of this plan, shall be considered conditions of this approval regardless of the fact that such fact or intentions were not specifically stated as part of the motion to grant.

II

Applicant shall comply with all subdivision, site review and zoning regulations which have been promulgated by the Town and which are in effect as of the date of this Agreement. If this Agreement contains terms, including but not limited to variance and special exception stipulations granted by the Hudson Zoning Board of Adjustment, which are stricter or impose higher standards than the above mentioned regulations, the stricter or higher standards shall control. All improvements shall meet the standards of workmanship as required by the Town, as required by the New Hampshire Water Supply and Pollution Control Commission, as required by the New Hampshire Department of Transportation, and as required by the New Hampshire Wetlands Board.

III

Applicant shall obtain all necessary local, state and federal permits prior to commencing work and shall comply fully with their terms.

IV

Applicant shall comply with the plan as submitted to, reviewed by and approved by the Planning Board, including but not limited to, notations set forth on the plan. Deviation from or amendments to the plan may only be made with the written approval of the Planning Board, or the Town Engineer, as appropriate.

V

Applicant acknowledges that it will have sole responsibility for ensuring the quality of the construction and that Applicant will not hold the Town, building inspector or other officers, employees, agents or assigns of the Town responsible for any claims, damages, fees or costs alleged to be incurred on account of the Town's negligent inspection of the improvements to be constructed. Similarly, Applicant agrees to hold harmless and indemnify the Town for any claims, damages, fees or costs sought or asserted by third parties against the Town on the grounds of negligent or improper inspection of the construction of the improvements called for herein.

VI

Applicant shall provide and install erosion and sedimentation control measures as required by the plan, by RSA 149-M, and as deemed necessary by the Town Engineer or his designated agent.

VII

The Applicant shall be responsible for any off-site problems, which arise from this construction. This includes, but is not limited to, erosion, runoff, sedimentation, drainage, and property damage by construction equipment, including damage to existing streets, sewers and drainage systems. Upon notification by the Town in writing, the developer must submit a plan within one week to remedy the problem. The Town Engineer division shall then set a construction schedule in consultation with the developer so that the problem can be corrected as soon as practical.

VIII

It is the intent of the signatories to the Agreement that only they can sue to enforce the Agreement's terms. The Agreement confers no rights on third parties.

IX

The Applicant's promise to perform improvements incorporated herein is an obligation independent from any alleged breach by the Town, once the Planning Board has given the developer site plan/subdivision approval and work on the site has begun.

X

Applicant shall notify the Town Engineer at least sixty (60) days prior to anticipated construction. A pre-construction meeting shall be held at least thirty (30) days prior to commencement of construction. A three-party inspection agreement and any other pertinent documents shall be finalized prior to the pre-construction meeting.

XI

The Agreement to complete bonded or otherwise secured improvements is not contingent upon the commencement of work on the site or on the sale of any of the lots or property contained in the approved plan.

XII

When Applicant completes the site plan improvements, Applicant shall notify the Town Planner in writing of such completion. Promptly after receiving such notification, the Town Planner, or the Planner's designated agent, shall inspect the improvements to determine whether they are in compliance with the Agreement and the site plan in all material respects. If the improvements do not comply, the Town Planner shall notify Applicant of disapproval and grounds therefor. This written notice shall specify in reasonable detail the deficiencies which need to be corrected. If the improvements are in conformity with the Agreement and the building otherwise meets all code requirements, the Town Planner shall issue Applicant a Certificate of Completion within ten (10) working days. Applicant shall then apply to the Building Inspector for a Certificate of Occupancy.

XIII

If the Town shall fail to notify Applicant in writing of its approval or rejection of the completed improvements within forty (40) days of the receipt of any such notice of completion, the improvement shall be deemed to be approved by the Town as completed in accordance with this Agreement. This period may be extended for thirty (30) days upon the Town's showing that the forty (40) day period is insufficient to enable the Town to reach such a determination despite using due diligence due to factors beyond the control of the Town.

XIV

At the time of plan recording, Applicant shall also execute and deliver to the Town easements for sewer, drainage, water, utilities as may be specified by the Hudson Planning Board, or otherwise specified on the plan.

XV

The Applicant shall remove all waste from the particular site prior to the issuance of any Certificate of Completion or occupancy permit. All waste will be removed in compliance with applicable Town, State and Federal regulations.

XVI

Prior to commencing construction, Applicant agrees to pay all fees as required by all ordinances and regulations of the Town in effect at the time of this Agreement, as well as any other fees imposed by the

Hudson Planning Board, upon application for a building permit, unless phased payments are provided for. Applicant shall have an affirmative obligation to supplement this fee schedule, as information about the number of dwelling units per lot becomes available.

XVII

Applicant agrees that if in the future the Town determines that Applicant has committed a material breach of this Agreement or has violated any Town zoning, subdivision, site plan or any State land use or environmental law or regulation or building code, and said material breach or violation is decided against Applicant by a court of competent jurisdiction in a legal action by the Town against Applicant, Applicant agrees to pay, on demand, all reasonable attorney fees, court costs, sheriff charges and related costs incurred by the Town in connection with the breach or violation to the extent that said fees, costs and charges would not have been incurred had the breach or violation not occurred.

XVIII

A note shall be added to the recorded plan. This note shall state the existence of this Development Agreement, and that a copy of it is on file with the Planning Department or other designated Town department. This Agreement shall be recorded with the plan.

XIX

This agreement shall run with the land and shall be binding on any subsequent purchaser of the proposed development on applicant's heirs and assigns, and on any successor entity.

XX

Severability: If any section, clause, provision, article or portion of this contract shall be invalidated by any court of competent jurisdiction, such holding shall not invalidate any other section of this Agreement.

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year first written above.

Emily R. Lyons
Witness

BY: Manuel D. Sousa
Manuel Sousa, Owner

Emily R. Lyons
Witness

Kathleen M. Sousa
Kathleen M. Sousa, Owner

Manuel D. Sousa
Witness

Anthony Colavolpe, Sr.
Hudson Wason Road Assoc., Developer
Anthony Colavolpe, Sr. V.P.

Pamela Levine
Witness

BY: Richard Maddox
Planning Board Chairman

25 Constitution Drive Site Plan (Unicorn)

STAFF REPORT

July 24, 2013

SITE: 25 Constitution Drive -- Map 170/Lot 38 -- SP# 09-12

ZONING: Industrial (I)

PURPOSE OF PLAN: To show proposed 10,000 sf industrial building on 4.4 acres +/- with associated site and drainage improvements. Hearing. Deferred Date Specific from the 06-26-13 Planning Board Meeting.

PLAN UNDER REVIEW ENTITLED: Non-Residential Site Plan Unicorn Industrial Park Map 170 Lot 038, Hudson, NH, prepared by Keach-Nordstrom Associates, Inc., dated: October 22, 2008, last revised on January 30, 2013, consisting of Sheets 1 - 15 and Notes 1 – 29 (said plans are attached hereto).

OUTSTANDING ISSUES:

1. Since the last meeting the Planning Board reviewed this application (May 22, 2013), the applicant worked out an agreement with the BOS, relative to completing that portion of the ROW running along the east border of the Map170/Lot 038 (a.k.a. Wall Street) to Town standards. Said ROW will be constructed as described in the below memorandum by Road Agent, Kevin Burns, who will also oversee Wall St's construction.

From: Burns, Kevin
Sent: Tuesday, March 26, 2013 12:08 PM
To: Richard Maddox
Cc: Colburn, Patrick
Subject: Wall Street

Selectman Maddox,

Per your request, below is an estimate of what it would cost for us to bring Wall Street (approximately 602 LF) to a point where I could recommend street acceptance.

Paving work-	\$16,000
Structure adjustment-	\$1,200
Clean up, landscaping-	\$5,000
Signs, Gate -	\$4,000
 Total-	 \$26,200

If sloped granite curbing is required add \$15,000. I don't believe curbing on this short section of flat road is necessary for acceptance.

These cost are figured using our current bid prices.

Another aspect of the above-cited Wall St. roadwork involves the creation of a turnaround easement for the benefit of the Town of Hudson, relative to providing snowplowing, and emergency services along Wall St. This easement and its favorable review by Town Counsel is cited in the below DRAFT MOTION to approve this Site Plan application.

2. In addition to the above, the applicant and the abutter, John Wolters, are still negotiating on an agreement regarding landscape screening. As of July 16, 2013, the negotiations stand as presented by project eng., Jeffrey Merritt, P.E., in his below email to staff:

John,

Sorry for the delay. We will be at the PB meeting and will either be continuing to present our current application, or if we can come to an agreement before the PB meeting with John Wolters we will present to the PB an alternative concept. At this point Wolters is still reviewing an alternative layout, but he has not given his blessing yet. Either way, we will be at the PB meeting to present a plan.

Jeffrey Merritt, P.E.
Project Manager
Keach-Nordstrom Assoc., Inc.
10 Commerce Park North, Suite 3B
Bedford, NH 03110
(P) 603-627-2881
(F) 603-627-2915
e-mail: jmerritt@keachnordstrom.com

3. The last remaining issue (stormwater management) has been resolved. That is, the applicant's engineer redesigned the retention capacity of the site, so that the following waiver no longer applies to this submission: HTC 275-9A(1) -- Volume Discharge (Stormwater). Revised plans reflecting the aforementioned change will be provided at the meeting.

ATTACHMENTS: N/A

REQUESTED WAIVERS:

1. HTC 275-9B -- Traffic Study
2. HTC 275-9(D) -- Fiscal Impact Study
3. HTC 275-9(C) -- Noise Study
4. HTC 10B – 10E-- Sight Distance

APPLICATION TRACKING:

- 11/13/12 application submitted.

- 01/09/13 initial public hearing was postponed at the applicant's request, in writing. Hearing rescheduled for 02/27/2013.
- 02/27/13 Initial public hearing conduct, application acceptance deferred date specific to the 03/27/2013 meeting.
- 03/27/2013 this application was accepted and deferred date specific to the 05/08/2013 meeting, which was canceled. In turn, at the 04/24/2013 meeting this item was deferred date specific, per the applicant's written request, to the 05/22/2013 meeting.
- 05/22/2013, per the applicant's request further review deferred date specific to the 06/26/13 meeting.
- 06/26/13, at the applicant's request deferred date specific to the 07/24/13 meeting.

RECOMMENDATION: staff has been informed by the applicant's attorney, Brad Westgate, that if an agreement is not reached between the applicant and Mr. Wolters by the time of next Wednesday night's meeting, re: landscape screening, he will ask for a deferral. If this scenario occurs, staff provides such a motion below. If said agreement is attained by the time of the meeting, staff recommends approval of this Site Plan in accordance with the DRAFT MOTION also provided below.

DRAFT MOTION:

I move to defer further review of the 25 Constitution Drive Site Plan application, Map 170/Lot 038, date specific, to the August 14, 2013 meeting.

Motion by: _____ Second: _____ Carried/Failed: _____.

REQUESTED WAIVERS:

1. HTC 275-9B -- Traffic Study
2. HTC 275-9(D) -- Fiscal Impact Study
3. HTC 275-9(C) -- Noise Study
4. HTC 10B – 10E-- Sight Distance

1) HTC 275-9B - Traffic Study

I move to grant the requested waiver HTC 275-9B - Traffic Study - because this project is expected to create minimal traffic increase within the affected roadway system, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan Review regulations.

Motion by: _____ Second: _____ Carried/Failed: _____.

2) HTC 275-9C – Noise Study

I move to grant the requested waiver: HTC 275-9C - Noise Study - because such a study is unnecessary, taking into consideration that the majority of the industrial activity associated with the proposed use shall be conducted inside the building, thus reducing the noise impact upon abutting properties, which are existing industrial/commercial uses, all of which are located in the same Industrial (I) Zoning District, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan Review regulations.

Motion by: _____ Second: _____ Carried/Failed: _____

3) HTC 275-9D – Fiscal Impact Study

I move to grant the requested waiver: HTC 275-9D - Fiscal Impact Study - because in addition to the submitted plans, CAP fee and other submitted application materials, said study is unnecessary in order to evaluate the fiscal impact of this development, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan Review regulations.

Motion by: _____ Second: _____ Carried/Failed: _____

4) HTC 10B – 10E-- Sight Distance

I move to grant the requested waiver: HTC 10B – 10E-- Sight Distance – because the proposed driveway location provides the most sight distance (365 ft. v. the required 400 ft.) available for this development site, leading to the intersection of Wall St. and Constitution Dr. ft., as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan Review regulations.

Motion by: _____ Second: _____ Carried/Failed: _____

MOTION to APPROVE:

I move to grant approval for the Site Plan entitled: Non-Residential Site Plan Unicorn Industrial Park Map 170 Lot 038, Hudson, NH, prepared by Keach-Nordstrom Associates, Inc., dated: October 22, 2008, last revised _____, 2013, consisting of Sheets 1 - 15 and Notes 1 – 29, in accordance with the following terms and conditions:

- 1) All stipulations of approval shall be incorporated into the Development Agreement, which shall be recorded at the HCRD, together with the Site Plan-of-Record (hereinafter referred to as the Plan).

- 2) Prior to the Planning Board endorsement of the Plan, the Development Agreement shall be favorably reviewed and recommended on by Town Counsel, together with the turnaround easement on the subject lot (Map170/Lot 038).
- 3) All improvements shown on the Plan, including Notes 1-29, shall be completed in their entirety and at the expense of the Applicant or his assigns.
- 4) After the issuance of the foundation permit and prior to the issuance of the framing permit, the applicant shall submit to the Hudson Community Development Department a foundation "As-Built" plan on a transparency and to the same scale as the approved site plan. The foundation "As-Built" plan shall include all structural dimensions and lot line setback measurements to the foundation and be stamped by a licensed land surveyor. Any discrepancy between the approved site plan and foundation "As-Built" plans shall be documented by the applicant and be part of the foundation "As-Built" submission.
- 5) Prior to the issuance of a final certificate of occupancy, a L.L.S. certified "As Built" site plan shall be provided to the Town of Hudson Community Development Department, confirming that the site conforms with the Planning Board approved Plan.
- 6) Onsite landscaping shall be provided for in accordance with the plant and tree species specified on Sheet 7 of 15 of the Plan.
- 7) Construction activities on the site shall be limited to between 7:00 A.M. and 7:00 P.M. Monday through Saturday. No construction activities shall occur on Sunday.
- 8) This approval shall be subject to final engineering review, including approval of the SWPPP.
- 9) The Applicant shall be responsible for implementing and maintaining the Stormwater Pollution Prevention Plan (SWPPP).
- 10) In lieu of a CAP fee being paid by the applicant, \$ _____ shall be submitted by said party to the Town on or before _____, and upon receipt of said funds the Town shall complete the construction of Wall Street in accordance with the construction requirements specified by the Road Agent, Kevin Burns, in his attached memorandum dated 03/26/2013.

Motion by: _____ Second: _____ Carried/Failed: _____

4 Candy Lane Site Plan

STAFF REPORT

July 24, 2013

SITE: 4 Candy Lane -- Map 101/Lot 27 -- SP# 03-13

ZONING: Industrial (I)

PURPOSE OF PLAN: Remove the existing paved parking area and construct a 25,000 square foot commercial building and associated site improvements. Application Acceptance & Hearing.

PLAN UNDER REVIEW ENTITLED: Non-Residential Site Plan 4 Candy Lane Map 101 Lot 027, Hudson, NH, prepared by Keach-Nordstrom Associates, Inc., dated: May 1, 2013, last revised July 12, 2013, consisting of Sheets 1 - 17 and Notes 1 – 31 (said plans are attached hereto).

ATTACHMENTS:

- 1) Site Plan application, Checklist and Waiver Forms, including an aerial site photo date stamped June 18, 2013 – Attachment “A”.
- 2) CLD’s Initial Comments Report, dated July 11, 2013 – “B”.
- 3) Keach-Nordstrom Response Letter to CLD’s above Comments Report, dated July 15, 13 – “C”.
- 4) GPI’s Project Traffic Impact Assessment, dated July 16, 2013 – “D”.
- 5) Comments/Memos from Zoning Administrator, Bill Oleksak, Road Agent, Kevin Burns, HFD Deputy Fire Chief, John O’Brien, , and Asst. Assessor, various date stamps – “E”.
- 6) C.A.P. Fee Worksheet – “F”.

REQUESTED WAIVERS (see Note 20 on Sheet 1 of 17):

1. HTC 275-9(D) -- Fiscal Impact Study
2. HTC 275-9(C) -- Noise Study

STAFF COMMENTS/OUTSTANDING ISSUES:

As cited in the Project Narrative, Application and Site Plans, this development consists of transforming a former School Bus Depot (approved by Site Plan) and present “firewood” operation into a 25,000 sf commercial building (contractor’s building units to include: with interior storage, interior parking of vehicles and office space). Appropriate parking, exterior lighting, onsite vehicle movement and exterior lighting are provided, see attached Site Plans and Keach-Nordstrom’s response letter (“C”) to CLD’s Initial Comments Report (“B”).

As cited in Keach-Nordstrom’s response letter, except for CLD’s pending traffic review of GPI’s Traffic Impact Assessment (“D”), the latter party’s outstanding issues have been resolved, and reflected as such, in the attached revised Site Plans. These issues include: Site Plan and Driveway review codes, Utility, Drainage & Stormwater Management improvements, together with Landscaping, Status of State and Local Permits and Comments regarding HFD’s recommendation (“E”). Note: one additional site feature, exterior light, is depicted on Sheet 9 of 17 of the attached Plans.

In regard to GPI's Traffic Impact Assessment ("D"), it definitely appears that the impact on the associated roadway network will be minimal, especially taking into account the previously approved School Bus use of the site. This being said, however, the report does cite an important feature missing from the intersection of Rebel Road and Rte. 102 (Derry St.), i.e., the travel lane stripping within the intersection needs to be reestablished. Please note, this is a NHDOT maintained stretch of Rte. 102. In regard to this deficiency, staff will contact Road Agent, Kevin Burns, relative to having him coordinate with NHDOT the reestablishment of said stripping of the travel lanes.

At the meeting, the applicant's representative will be prepared to present this Site Plan in its entirety, address all of the aforementioned site development aspects and address any questions/concerns abutters and board members may have on this proposal.

RECOMMENDATION: Taking the abovementioned outstanding issues/comments into consideration, and that this application is reading for application acceptance, for this meeting staff recommends for Wednesday night's initial public hearing:

- (i) Board vote for application acceptance;
- (ii) Open and conduct the public hearing;
- (iii) Allow the applicant to present the project and address all of the issues involved in this application, including those cited-above and in CLD's attached Comments Report "B".
- (iv) Hear any pro/con public input, and
- (v) Defer further review of this site plan, date specific to the Aug. 14th or Aug. 28th meeting. In the event the board move to approve the waivers and the application, staff has provided below the appropriate DRAFT MOTIONS.

APPLICATION TRACKING:

- Application was submitted on 06/18/13; initial public hearing scheduled for 07/24/13.

DRAFT MOTIONS:

I move to accept the Site Plan application for 4 Candy Lane -- Map 101/Lot 27.

Motion by: _____ Second: _____ Carried/Failed: _____.

I move to defer further review of the 4 Candy Lane Site Plan application, date specific, to the Aug. 14 or 28, 2013 meeting.

Motion by: _____ Second: _____ Carried/Failed: _____.

REQUESTED WAIVERS:

1. HTC 275-9(D) -- Fiscal Impact Study
2. HTC 275-9(C) -- Noise Study

1) HTC 275-9D – Fiscal Impact Study

I move to grant the requested waiver: HTC 275-9D - Fiscal Impact Study - because in addition to the submitted plans, CAP fee and other submitted application materials, said study is unnecessary in order to evaluate the fiscal impact of this development, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan Review regulations.

Motion by: _____ Second: _____ Carried/Failed: _____

2) HTC 275-9C – Noise Study

I move to grant the requested waiver: HTC 275-9C - Noise Study - because such a study is unnecessary, taking into consideration that the majority of the commercial activities associated with the proposed use shall be conducted inside the subject building, thus reducing the noise impact upon abutting properties, which are existing industrial/commercial uses, all of which are located in the same Industrial (I) Zoning District, and as such, the granting of this waiver is not contrary to the spirit and intent of the Site Plan Review regulations.

Motion by: _____ Second: _____ Carried/Failed: _____

MOTION to APPROVE:

I move to grant approval for the Site Plan entitled: Non-Residential Site Plan 4 Candy Lane Map 101 Lot 027, Hudson, NH, prepared by Keach-Nordstrom Associates, Inc., dated: May 1, 2013, last revised July 12, 2013, consisting of Sheets 1 - 17 and Notes 1 – 31, in accordance with the following terms and conditions:

- 1) All stipulations of approval shall be incorporated into the Development Agreement, which shall be recorded at the HCRD, together with the Site Plan-of-Record (hereinafter referred to as the Plan).
- 2) Prior to the Planning Board endorsement of the Plan, the Development Agreement shall be favorably reviewed and recommended on by Town Counsel.
- 3) All improvements shown on the Plan, including Notes 1-31, shall be completed in their entirety and at the expense of the Applicant or his assigns.
- 4) After the issuance of the foundation permit and prior to the issuance of the framing permit, the applicant shall submit to the Hudson Community Development Department a foundation "As- Built" plan on a transparency and to the same scale as the approved site plan. The foundation "As-Built" plan shall include all structural dimensions and lot line setback measurements to the foundation and be stamped by a licensed land surveyor. Any discrepancy between the approved site plan and

foundation "As-Built" plans shall be documented by the applicant and be part of the foundation "As-Built" submission.

- 5) Prior to the issuance of a final certificate of occupancy, a L.L.S. certified "As Built" site plan shall be provided to the Town of Hudson Community Development Department, confirming that the site conforms with the Planning Board approved Plan.
- 6) Onsite landscaping shall be provided for in accordance with the plant and tree species specified on Sheet 9 of 17 of the Plan.
- 7) Construction activities on the site shall be limited to between 7:00 A.M. and 7:00 P.M. Monday through Saturday. No construction activities shall occur on Sunday.
- 8) This approval shall be subject to final engineering review.
- 9) A CAP Fee of , calculated in accordance with the 2013 CAP Fee Matrix relative to new PM Peak Hour Trips In lieu of a CAP fee being paid by the applicant, \$ shall be submitted by said party to the Town on or before , and upon receipt of said funds the Town shall complete the construction of Wall Street in accordance with the construction requirements specified by the Road Agent, Kevin Burns, in his attached memorandum dated 03/26/2013.

Motion by: _____ Second: _____ Carried/Failed: _____

4 Candy Lane

Map Output

Town of Hudson New Hampshire Geographic Information System

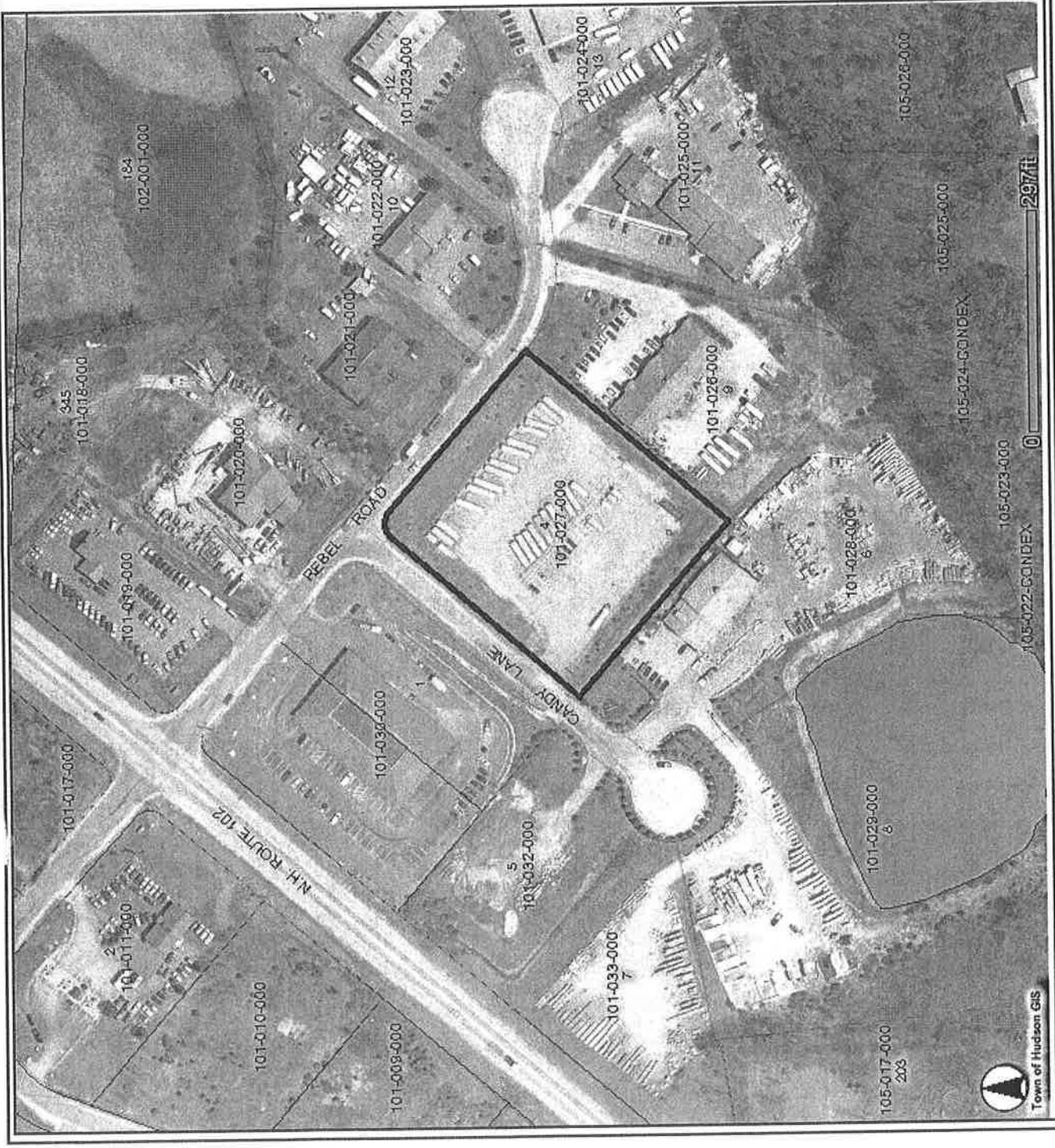
GIS Map Print My Map

Subject Property Data

Parcel ID	101-027-000
Owner	NOTTINGHAM SQUARE CORP
Location	4 CANDY LANE
Account Number	5826
Co-Owner	
Owner Addr	46 LOWELL RD.
Owner CSZ	HUDSON, NH 03051
Land Value	358800
Yard Value	109900
Building Value	0
Total Value	468700
Acreage	2.438
zone1	BD
Use Code	337
Year Built	0
Building Style	
Bedrooms	0
Fuel Type	
Sale Date	6/18/2012
Sale Price	340000
Book/Page	8438-1363

Disclaimer

The Town of Hudson makes no warranty or representation as to the accuracy, timeliness or completeness of any of the data. The Town of Hudson shall have no liability for the data or lack thereof, or any decision made or action taken or not taken in reliance upon any of the data.





"B"

July 11, 2013

Mr. John Cashell, Town Planner
Town of Hudson
12 School Street
Hudson, NH 03051

Re: Town of Hudson Planning Board Review
4 Candy Lane Site Plan, 4 Candy Lane
Tax Map 101, Lot 27, PO #1350-175
CLD Reference No. 03-0249.1270

Dear Mr. Cashell:

CLD has reviewed the first submission of the materials received on June 27, 2013 related to the above-referenced project. A list of items reviewed is enclosed. The scope of our review is based on the Site Plan Review Codes, Stormwater Codes, Driveway Review Codes, Sewer Use Ordinance 77, and criteria outlined in the CLD Proposal approved September 16, 2003, revised September 20, 2004, June 4, 2007, and September 3, 2008.

We have included a copy of CLD's evaluation of the checklist for your reference. We note that several items could not be verified by CLD and require action by the Town.

The project consists of constructing a 25,000-square-foot, one-story building, with associated site improvements. The site will be serviced by a proposed well and a proposed septic system.

The following items are noted:

1. Site Plan Review Codes

- a. Hudson Regulations (HR) 275-8.B(17) The applicant has provided locations of two temporary benchmarks on the plan set, but has not referenced the survey to a specific USGS benchmark. Also, we note that the topographic information provided should be expanded to cover the area at the bottom of the proposed retaining wall on the southwest side of the parcel.
- b. HR 275-9.A. See comments below.
- c. HR 275-9.C. A Noise Study was not provided for review. The applicant has noted on the plan set that a waiver has been requested.
- d. HR 275-9.D. A Fiscal and Environmental Impact Study were not provided for review. The applicant has noted on the plan set that a waiver has been requested.
- e. HR 275-9.E. See comments below.



Mr. John Cashell
CLD Reference No. 03-0249.1270
July 11, 2013
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- f. HR 275-9.F. Copies of deeds or easements were not received for review as part of the package.
- g. HR 275-9.G. See comments below.

2. Driveway Review Codes (HR 275-8.B.(34)/Chapter 193)

- a. HR 193-10.E. The applicant has not shown any sight distance information on the plan set for the proposed driveway; however, we note that it is less than 400 feet in both directions to a stop condition.
- b. HR 275-8.B.(30)(b) and HR 275-8.B.(30)(d) The applicant should note the type of trucks proposed to access the building, as vehicles larger than a passenger car or truck will likely not be able to complete the turns to or from the rear of the building to the proposed loading spaces, especially if parking spaces in the rear of the site are used. We note that the current configuration also does not allow for emergency vehicles to access the rear of the building. If the configuration remains as proposed we recommend that protective measures be provided at the building corners to minimize the likelihood of building damage. The applicant has also not indicated any type of rear entry into the building implying that any deliveries will have to be unloaded and walked around to the front of the building.
- c. HR 275-9.B. A Traffic Impact Study was not provided for review.
- d. The applicant has shown the dumpster in the rear of the building. Due to the extremely tight nature of the drive area at the building corners, the applicant should demonstrate how the trash truck will access and exit from the rear of the building when the parking spaces are occupied. We are concerned that even when the parking and loading spaces are empty, a standard trash truck will not be able to navigate the corners.

3. Utility Design/Conflicts (HR 275-9.E.)

- Septic system review was not performed as part of this review.

4. Drainage Design /Stormwater Management (HR 275-9.A./Chapter 290)

- a. HR 290-5.B.(2)(b) The applicant should provide an Inspection and Maintenance schedule within the Stormwater Management Report as required.
- b. The applicant has shown a total land disturbance just under the 100,000-square-foot New Hampshire Department of Environmental Services (NHDES) Alteration of Terrain (AoT) threshold. In order to be sure this limit is not exceeded during construction we recommend that areas shown on the plan which are to remain undisturbed be provided with protective measures clearly showing the intent. Often these areas are used as an



Mr. John Cashell
CLD Reference No. 03-0249.1270
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expansion of designated staging or stockpile areas, which in this case could cause the site to be required to prepare and submit a complete AoT package during construction.

- c. The applicant should provide design information such as slope, elevation, etc. for the Underdrain tying into CB#12.
- d. The applicant should review and clarify the design intent of the *Outlet Control Structure (OS#110) Detail* and the *Stormwater Management Report*, as we note a discrepancy. The side view of the detail illustrates “top of weir Elev=265.85,” the weir plate illustrates “Elev=266.10,” and the Stormwater Management Report illustrates a 0.45’ orifice at the Elevation of 266.10.
- e. We note Section D of the Stormwater Management Report (Summary) states “Proposed stormwater best management practices (BMP) are designed in accordance with New Hampshire Stormwater Manual Volume 2: Post-Construction Best Management Practices Selection and Design, and BMP worksheets provided by the NHDES. We did not find the BMP worksheets in the package received for review by CLD. The applicant should provide the referenced BMP worksheets for review.

5. Landscaping

- a. HR 275-8.B.(31)(a) and HR 275-8.B.(31)(b) The applicant appears to have only used the drive aisle area to calculate the total paved area for the interior parking lot landscape calculation, but does appear to have provided an interior landscaped area as 10% of total paved area as required. We suggest that the plan be updated to reflect the current paved area total.
- b. HR 275-8.B.(31)(c) The applicant appears to have only used the drive aisle area to calculate the total paved area related to the shade tree calculation. In this case, twenty one (21) shade trees are required and the applicant has provided thirteen (13) trees (7 existing and 6 new).
- c. HR 275-8.B.(32) The applicant has not proposed any screening between the proposed loading area and the adjacent nonresidential building site.

6. Erosion Control/Wetland Impacts

- The Town should reserve the right to require additional erosion control measures during construction if needed.

7. State and Local Permits (HR 275-9.G.)

- a. The applicant should note the status of the NHDES Individual Subsurface Disposal System Permit on the plan set.
- b. The applicant has noted a maximum of 24 employees in the plan set. We note that if the site has 25 employees in the future, additional State of New Hampshire well permitting



Mr. John Cashell
CLD Reference No. 03-0249.1270
July 11, 2013
Page - 4

will be required.

- c. Additional local permitting may be required.

8. Other

- a. The applicant should provide more detailed information, including a general construction detail showing the design intent for the proposed stone retaining wall, which is to be designed by others.
- b. The applicant should provide a "One Way" pavement marking detail.
- c. The applicant should review the layout of the proposed ADA detectable warning pads. We note that that ADA Accessibility Guidelines for Buildings and Facilities (ADAAG) recommends installation of the detectable warning pads at the curb line. The current design location proposes them perpendicular to the curb line.
- d. The applicant should confirm that a construction easement will not be needed for the construction of the proposed 235-foot-long retaining wall located within five feet of the south westerly property line.

Please feel free to call if you have any questions.

Very truly yours,

Handwritten signature of Heidi J. Marshall in blue ink.

Heidi J. Marshall, P.E.

Handwritten signature of Paul Konieczka in blue ink.

Paul Konieczka, AICP

HJM/PK:dc

Enclosure

cc: Town of Hudson Engineering Division – File
Keach-Nordstrom Associates, Inc.
10 Commerce Park North, Suite 3B
Bedford, NH 03110
Fax (603) 627-2915



540 Commercial Street Manchester, NH 03101
(603) 668-8223 • Fax: (603) 668-8802
cld@cldengineers.com • www.cldengineers.com
New Hampshire • Vermont • Maine

TO: File

FROM: Kelsey M. Gagnon *KMG*

DATE: July 11, 2013

RE: Town of Hudson Planning Board Review
4 Candy Lane Site Plan, 4 Candy Lane
Tax Map 101, Lot 27; PO #1350-175
CLD Reference No. 03-0249.1270

The following list itemizes the documents reviewed related to the 4 Candy Lane Site Plan review comments.

- Letter from the Town of Hudson to CLD, June 25, 2013 and received June 27, 2013, including the following:
 1. Copy of *Letter of Transmittal*, prepared by Keach-Nordstrom Associates, Inc., dated June 18, 2013.
 2. Copy of *Preliminary and Final Site Plan Application for Plan Review*, dated June 12, 2012.
 3. *Stormwater Management Report, 4 Candy Lane Site Plan*, prepared by Keach-Nordstrom Associates, Inc., dated May 20, 2013, including the following:
 - a. *Pre-Development Drainage Areas Plan*, Sheet 1 of 2, dated May 1, 2013.
 - b. *Post-Development Drainage Areas Plan*, Sheet 2 of 2, dated May 1, 2013.
 4. Copy of *Non-Residential Site Plan, 4 Candy Lane, Map 101; Lot 27, Hudson, New Hampshire*, prepared by Keach-Nordstrom Associates, Inc., dated, May 1, 2013, with no revisions noted, including the following:
 - a. Cover Sheet.
 - b. *Master Plan*, Sheet 1 of 17.
 - c. *Existing Conditions Plan*, Sheet 2 of 17.
 - d. *Removals/Demolition Plan*, Sheet 3 of 17.
 - e. *Non-Residential Site Layout Plan*, Sheet 4 of 17.
 - f. *Grading, Drainage, and Utility Plan*, Sheet 5 of 17.
 - g. *Erosion Control Plan*, Sheet 6 of 17.
 - h. *Septic System Design Plan*, Sheet 7 of 17.
 - i. *Septic System Design Details*, Sheet 8 of 17.
 - j. *Landscape Plan*, Sheet 9 of 17.
 - k. *Lighting Plan*, Sheet 10 of 17, prepared by Charron Inc.

Memorandum to File
CLD Reference No. 03-0249.1270
July 11, 2013
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1. *Drainage Profiles*, Sheet 11 of 17.
- m. *Construction Details*, Sheets 12 through 17 of 17.

KMG:dc

cc: **John Cashell – Town of Hudson Planner**
Town of Hudson Engineering Division – File

**APPLICATION FOR SITE PLAN REVIEW
TOWN OF HUDSON, NEW HAMPSHIRE**

Thirty (30) days prior to Planning Board Meeting, a complete site plan to include all supporting materials/documents must be submitted in final form. The site plan shall comply with the following specifications/requirements:

Applicant
Initials

Staff
Initials

- _____ a) Submission of nine (9) full sets of Site Plans (sheet size: 22" x 34") at the time of application filing, followed by the submission of seventeen (17) 11" X 17" plan sets (revised if applicable) to the Community Development Department no later than 10:00 A.M. Tuesday the week prior to the scheduled public hearing/conceptual review date.
- _____ b) A Site Plan narrative, describing the purpose, locations, long range plans, impacts on traffic, schools, and utilities
- _____ c) Plan scale at not less the one inch equals fifty feet (1" = 50')
- _____ d) Locus plan with 1,000' minimum radius of site to surrounding area
- _____ e) Plan date by day/month/year
- _____ f) Revision block inscribed on the plan
- _____ g) Planning Board approval block inscribed on the plan
- _____ h) Title of project inscribed on the plan
- _____ i) Names and addresses of property owners and their signatures inscribed on the plan
- _____ j) North point inscribed on the plan
- _____ k) Property lines: exact locations and dimensions
- _____ l) Square feet and acreage of site
- _____ m) Square feet of each building (existing and proposed)
- _____ n) Names and addresses of bordering abutters, as shown on Tax Assessor's records not more than five (5) days prior to application date to be listed on the plan.





CLD/KMG

CLD/KMG



CLD/KMG

CLD/KMG

CLD/KMG

 AT THE MEETING

CLD/KMG

CLD/KMG

CLD/KMG

CLD/KMG



Applicant
Initials

Staff
Initials

- _____ o) Location of all structures, roads, wetlands, hydrants, wells, septic systems, 4k reserve areas, floodways/ floodplains, driveways, travel areas, parking areas and natural features within 200 feet of the tract *JR REVISID PLANS*
- _____ p) Locations of existing and proposed permanent monuments and bench marks within 200 feet of the development tract CLD/KMG
- _____ q) Pertinent highway projects N/A
- _____ r) Assessor's Map and Lot number(s) CLD/KMG
- _____ s) Waiver application form shall be submitted with the site plan application, note on plan listing waivers requested/granted; and all waivers granted to the site plan regulations shall be listed on the final plan; waivers to checklist shall be reduced to writing and be signed by the Planning Board Chairman and Planning Board Secretary and recorded with the plan *JR SUBMITTED*
- _____ t) Delineate zoning district on the plan *JR*
- _____ u) Stormwater drainage plan CLD/KMG
- _____ v) Topographical elevations at 2-foot intervals contours: existing and proposed *JR revised*
- _____ w) Utilities: existing and proposed CLD/KMG
- _____ x) Parking: existing and proposed CLD/KMG
- _____ y) Parking space: length and width CLD/KMG
- _____ z) Aisle width/maneuvering space CLD/KMG
- _____ aa) Landscaping: existing and proposed CLD/KMG
- _____ ab) Building and wetland setback lines CLD/KMG
- _____ ac) Curb cuts CLD/KMG
- _____ ad) Rights of way: existing and proposed CLD/KMG
- _____ ae) Sidewalks: existing and proposed N/A JR
- _____ af) Exterior lighting plan CLD/KMG
- _____ ag) Sign locations: size and design *JR*
- _____ ah) Water mains and sewerage lines CLD/KMG
- _____ ai) Location of dumpsters on concrete pads CLD/KMG
- _____ aj) All notes from plats CLD/KMG

Applicant Initials	Staff Initials
_____ ak) Buffer as required by site plan regulations	<u>CLD/KMG</u>
_____ al) Green and open space requirements met with percentages of both types of spaces inscribed on the plan	<u>CLD/KMG</u>
_____ am) Soil types and boundaries, Note: If site contains marginal or questionable soils, a High Intensity Soil; Survey (HISS) may be deemed necessary to submit as part of the application. Said HISS, if required, shall be performed by a State of New Hampshire certified Soil Scientist, who shall affix his/her stamp and signature shall be inscribed on the plan.	<u>CLD/KMG</u>
_____ an) Wetlands (and poorly-drained and very poorly-drained soils, also identified as Class 5 and Class 6 High Intensity Soil Survey (HISS soils), and permanent and seasonal wetlands shall be identified on the plan by a New Hampshire certified wetland or soil scientist, who shall affix his/her stamp and signature to the respective plan.	<u>CLD/KMG</u>
_____ ao) "Valid for one year after approval" statement inscribed on the plan	<u>CLD/KMG</u>
_____ ap) Loading bays/docks	<u>CLD/KMG</u>
_____ aq) State of New Hampshire engineer's stamp, signature, surveyor's stamp, and signature	<u>CLD/KMG</u>
_____ ar) Error of closure (1 in 10,000 or better)	<u>CLD/KMG</u>
_____ as) Drafting errors/omissions	<u>CLD/KMG</u>
_____ at) Developer names, addresses, telephone numbers and signatures	<i>JL at meeting</i>
_____ au) Photographs, electronic/digital display or video of site and area	<u>CLD/KMG</u>
_____ av) Attach one (1) copy of the building elevations	<i>JL at the meeting</i>
_____ aw) Fiscal impact study	<i>JL</i>
_____ ax) Traffic study	<i>JL TRAFFIC ASSESSMENT</i>
_____ ay) Noise study	<i>W SUBMITTED 7/16/</i>

Applicant

Staff

Initials

Initials

_____ az) Copies of any proposed or existing easements, covenants, deed restrictions, right of way agreements or other similar documents



_____ ba) Copy of applicable Town, State, Federal approval/ permits to include but not limited to the following:



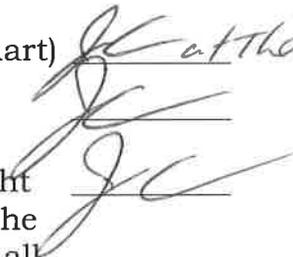
- industrial discharge application
- sewer application
- flood plain permit
- wetlands special exception
- variance
- erosion control permit (149:8a)
- septic construction approval
- dredge and fill permit
- curb cut permit
- shoreland protection certification in accordance with RSA483-B
- if applicable, review application with Lower Merrimack River Local Advisory Committee (LMRLAC) and attach LMRLAC project comments hereto.

_____ bb) Presentation plan (colored, with color coded bar chart)

at the meeting

_____ bc) Fees paid to clerk

_____ bd) Five (5) 22" x 34" copies of the plan shall be brought to the Planning Board meeting and distributed to the Planning Board members at the meeting. Note: for all subsequent meetings involving revised plans, five 22" x 34" copies of said plan shall be brought to the meeting for distribution to the board members.



*Under the purview of the Planning Board any and all items may be waived.

"C"

July 15, 2013

Town of Hudson
12 School Street
Hudson, New Hampshire 03051

Re: Candy Lane – Response to Engineering Review
4 Candy Lane
Hudson, NH
KNA# 13-0214-1

Dear Mr. Cashell,

We are in receipt of a letter dated July 11, 2013 from CLD Consulting Engineers and a letter dated July 8, 2013 from the Hudson Fire Department. Both letters contain comments relative to a plan review of the above referenced project. In response to the comments contained within those letters, we offer the following explanations and/or plan changes:

CLD Review Letter dated July 11, 2013

1. Site Plan Review Codes

- a. Hudson Regulations (HR) 275-8.B(17). The applicant has provided locations of two temporary benchmarks on the plan set, but has not referenced the survey to a specific USGS benchmark. Also, we note that the topographic information provided should be expanded to cover the area at the bottom of the proposed retaining wall on the southwest side of the parcel.

We have expanded the site survey to include the area on the southwest side of the site. The horizontal datum is New Hampshire State Plane Coordinates (NAD 83). The Vertical Datum is NGVD 1929. Both datum's were established using Trimble kinematic GPS. Note 17 on the Master Site Plan has been added to state this.

- b. HR 275-9.A. See comments below.

No response required.

- c. HR 275-9.C. A Noise Study was not provided for review. The applicant has noted on the plan set that a waiver has been requested.

No response required.

- d. HR 275-9.D. A Fiscal and Environmental Impact Study were not provided for review. The applicant has noted on the plan set that a waiver has been requested.

No response required.

- e. HR 275-9.E. See comments below.

No response required.

- f. HR 275-9.F. Copies of deeds or easements were not received for review as part of the package.

Enclosed with this revised submittal is a copy of the property deed.

- g. HR 275-9.G. See comments below.

No response required.

2. Driveway Review Codes (HR 275-8.B.(34)/Chapter 193)

- a. HR 193-10.E. The applicant has not shown any sight distance information on the plan set for the proposed driveway; however, we note that it is less than 400 feet in both directions to stop condition.

We have revised the Master Site Plan to illustrate the available sight lines and associated distances.

- b. HR 275-8.B.(30)(b) and HR 275-8.B(30)(d). The applicant should note the type of trucks proposed to access the building, as vehicles larger than a passenger car or truck will likely not be able to complete the turns to or from the rear of the building to the proposed loading spaces, especially if parking spaces in the rear of the site are used. We note that the current configuration also does not allow for emergency vehicles to access the rear of the building. If the configuration remains as proposed we recommend that protective measures be provided at the building corners to minimize the likelihood of building damage. The applicant has also not indicated any type of rear entry into the building implying that any deliveries will have to be unloaded and walked around to the front of the building.

Enclosed, please find an auto turn exhibit that illustrates the maneuvering of the anticipated largest delivery vehicle, garbage truck and fire truck. Additionally, we have added bollards at the corners of the building as suggested. The locations of the proposed overhead doors have also been added to the back side of the building.

- c. HR 275-9.B. A Traffic Impact Study was not provided for review.

Greenman-Pedersen, Inc. is preparing a traffic memorandum for the project. A copy of the noted document will be provided under separate cover.

- d. The applicant has shown the dumpster in the rear of the building. Due to the extremely tight nature of the drive area at the building corners, the applicant should demonstrate how the trash truck will access and exit from the rear of the building when the parking spaces are occupied. We are concerned that even when the parking and loading spaces are empty, a standard trash truck will not be able to navigate the corners.

Enclosed, please find an auto turn exhibit that illustrates the maneuvering of the anticipated largest delivery vehicle, garbage truck and fire truck. We have oriented the dumpster so that a front load garbage truck has easy access to the dumpster.

3. Utility Design/Conflicts (HR 275-9.E.)

- Septic system review was not performed as part of this review.

No response required.

4. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)

- a. HR 290-5.B.(2)(b). The applicant should provide an Inspection and Maintenance schedule within the Stormwater Management Report as required.

We have revised the stormwater management report to include an operation and maintenance plan and associated inspection report.

- b. The applicant has shown a total land disturbance just under the 100,000-square foot New Hampshire Department of Environmental Services (NHDES) Alteration of Terrain (AoT) threshold. In order to be sure this limit is not exceeded during construction we recommend that areas shown on the plan which are to remain undisturbed be provided with protective measures clearly showing the intent. Often these areas are used as an expansion of designated staging or stockpile areas, which in this case could cause the site to be required to prepare and submit a complete AoT package during construction.

The grading and drainage plan and erosion control plan have been revised to illustrate an area that shall not be disturbed during construction. Non-disturbance of this noted area will safely ensure that an AOT Permit will not be needed.

- c. The applicant should provide design information such as slope, elevation, etc. for the Underdrain tying into CB#12.

The noted information has been added to the grading and drainage plan. Additionally, the profile for CB#12 has been revised to include an invert for the underdrain.

- d. The applicant should review and clarify the design intent of the *Outlet Control Structure (OS#110) Detail and the Stormwater Management Report*, as we note a discrepancy. The side view of the detail illustrates “top of weir Elev=265.85,” the weir plate illustrates

“Elev=266.10,” and the Stormwater Management Report illustrates a 0.45” orifice at the Elevation of 266.10.

The weir elevation should be 266.10. The detail has been revised accordingly. Additionally, the hydroCAD report has been revised to eliminate the .45” orifice and to specify the 4’ weir at elevation 266.10.

- e. We note Section D of the Stormwater Management Report (Summary) states “Proposed stormwater best management practices (BMP) are designed in accordance with New Hampshire Stormwater Manual Volume 2: Post-Construction Best Management Practices Selection and Design, and BMP worksheets provided by the NHDES. We did not find the BMP worksheets in the package received for review by CLD. The applicant should provide the referenced BMP worksheets for review.

The GRV work sheet has been added to the report. Note that because the site is paved in the pre-development scenario the GRV is zero. Additionally, we have added the BMP sheet for the three FocalPoint Systems. NHDES does not have a specific BMP sheet for the FocalPoint system, however for past projects requiring NHDES AOT approval we have adapted the General Calculations WQV and WQF (optional worksheet) and used it for the FocalPoint Systems.

5. Landscaping

- a. HR 275-8.B.(31)(a) and HR 275-8.B.(31)(b). The applicant appears to have only used the drive aisle area to calculate the total paved area for the interior parking lot landscape calculation, but does appear to have provided an interior landscaped area as 10% of total paved area as required. We suggest that the plan be updated to reflect the current paved area total.

The interior parking lot area was calculated as the sum of the parking stall area plus the associated adjacent access isle. This calculation includes the parking out front as well as the parallel spaces behind the building. We have rechecked the calculation and have confirmed that our initial calculation is correct.

- b. HR 275-8.B.(31)(c). The applicant appears to have only used the drive aisle area to calculate the total paved area related to the shade tree calculation. In this case, twenty one (21) shade trees are required and the applicant has provided thirteen (13) trees (7 existing and 6 new).

See response above.

- c. HR 275-8.B.(32). The applicant has not proposed any screening between the proposed loading area and the adjacent nonresidential building site.

Screening is required when the abutting use is incompatible with the proposed use or when abutting a residential zone. In this instance we believe that the proposed

site is compatible with the abutting use and it does not abut a residential zone. Therefore screening is not required in this instance.

6. Erosion Control/Wetland Impacts

- The Town should reserve the right to require additional erosion control measures during construction if needed.

Note 10 on sheet 6 and note 29 on sheet 1 states this requirement.

7. State and Local Permits (HR 275-9.G.)

- a. The applicant should note the status of the NHDES Individual Subsurface Disposal System Permit on the plan set.

Note 30 on sheet 1 has been added to state that this permit is pending.

- b. The applicant has noted a maximum of 24 employees in the plan set. We note that if the site has 25 employees in the future, additional State of New Hampshire well permitting will be require.

No response required.

- c. Additional local permitting may be required.

No response required.

8. Other

- a. The applicant should provide more detailed information, including a general construction detail showing the design intent for the proposed stone retaining wall, which is to be designed by others.

A detail of the proposed redi rock retaining wall has been added to the plan set (sheet 12 of 17). Final design of the wall be prepared by a structural engineer based on site geotechnical testing results of the parent soil.

- b. The applicant should provide a “One Way” pavement marking detail.

The requested detail has been added to the plan set (sheet 12 of 17).

- c. The applicant should review the layout of the proposed ADA detectable warning pads. We note that ADA Accessibility Guidelines for Buildings and Facilities (ADAAG) recommends installation of detectable warning pads at the curb line. The current design location proposes them perpendicular to the curb line.

Revised as requested.

- d. The applicant should confirm that a construction easement will not be needed for the construction of the proposed 235-foot long retaining wall located within five feet of the south westerly property line.

The proposed retaining wall is in a fill section. We have discussed this situation with the Applicant and future site contactor and do not anticipate the need for a temporary construction easement.

Hudson Fire Department letter dated July 8, 2013

- A) Site Access NFPA 1141 requires access roads to have unobstructed access of not less than 20 feet. Please pay particular attention to this during the design phase. Weather and parked vehicles can reduce this clearance considerably.

The site has been laid out such that 24 feet of travel way is available around the building. Additionally, the parking has been positioned so that it will not interfere with access. Enclosed with this letter is a copy of a turning movement plan that shows the accessibility for a fire truck.

- B) Water supply. This proposed building of 25,000 square feet is required to have a full NFPA 13 sprinkler system installed per The International Building Code Section 903 and NFPA 1. Both documents adopted by the State of New Hampshire. I see not provisions for water supply in the site plan documents. I call your attention to NFPA 1 Annex H Fire Flow Requirements for Building Table H.5.1 outlines the minimum required fire flow.

Note 31 on the Master Site Plan has been added to state that the building must be equipped with an NFPA approved fire sprinkler system.

We trust that the noted plan revisions and/or explanations will adequately address the comments listed above. Please do not hesitate to contact this office if you have any questions.

Sincerely,



Jeffrey Merritt, P.E.
Project Manager

Keach-Nordstrom Associates, Inc.

REF.: MAX-2013067.00

July 16, 2013

Mr. Anthony Basso, LLS
Keach-Nordstrom Associates, Inc.
10 Commerce Park North, Suite 3B
Bedford, New Hampshire 03110

SUBJECT: Traffic Impact Assessment
Proposed Commercial Building
4 Candy Lane
Hudson, New Hampshire

Greenman-Pedersen Inc. (GPI) has prepared this letter to evaluate the expected trips associated with the redevelopment of a bus depot to a commercial building located at 4 Candy Lane in Hudson, New Hampshire. The site currently consists of a vacant bus depot which includes 28 standard vehicle parking spaces and 38 school bus parking spaces. The proposed project consists of razing the existing paved area and constructing a 25,000 square foot commercial building. Access to and egress from the site is currently provided via one unsignalized driveway on Candy Lane at the western property line. As proposed, one unsignalized driveway will continue to provide access and egress to the site; however, the driveway will be relocated approximately 120 feet to the east, at the center of the Candy Lane site frontage. The location of the project site in relation to the surrounding roadway system is shown on Figure 1.

Geometrics and Traffic Control

NH Route 102 (Derry Road)

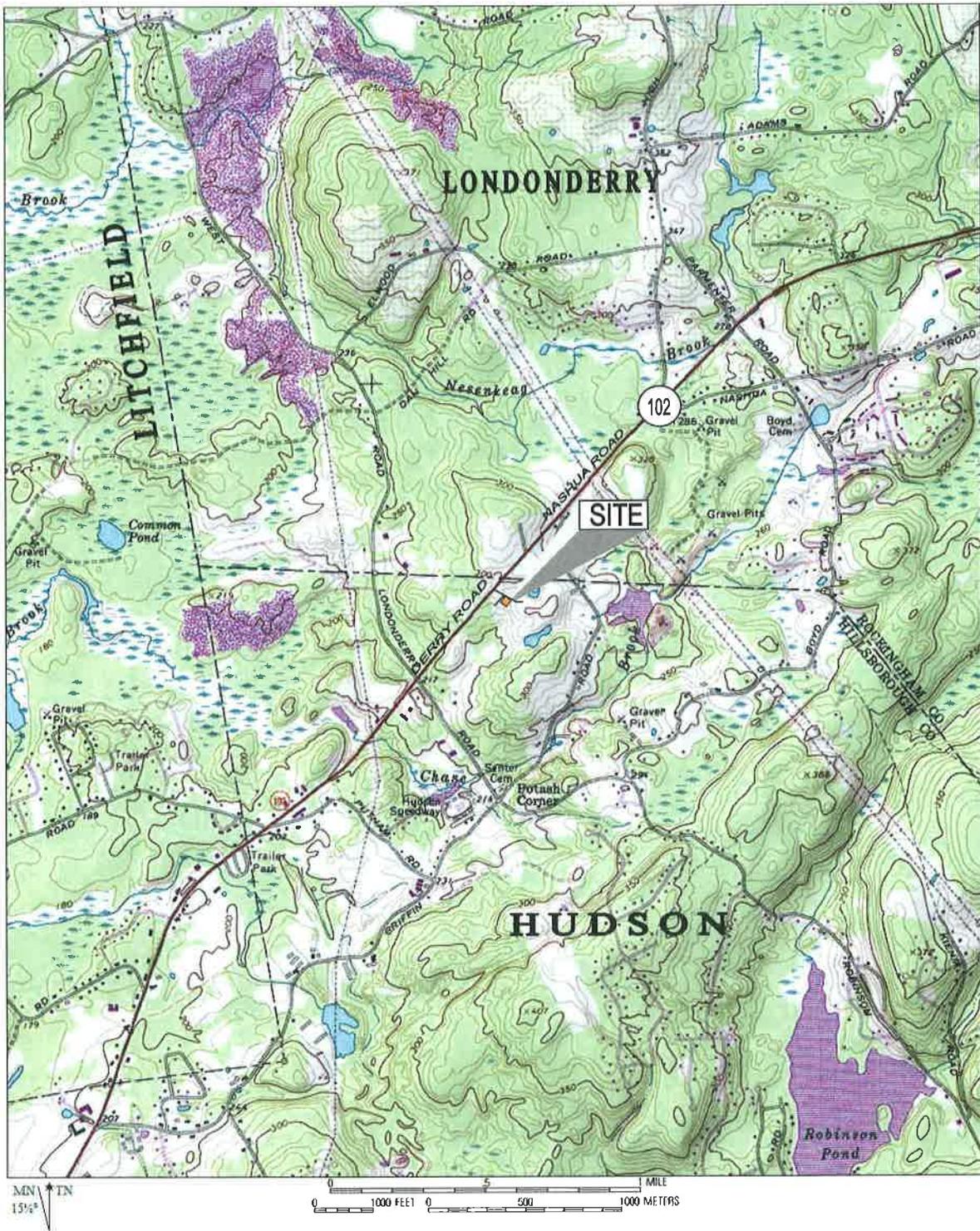
Within the study area, NH Route 102 is a state-maintained roadway and is generally oriented in an east-west direction. NH Route 102 connects Route 111 to the southwest with Route 107 in Raymond to the northeast. In the vicinity of the site, NH Route 102 maintains a two-lane cross section with one travel lane per direction and exclusive turn lanes at major intersections. Land use along NH Route 102 within the study area consists of commercial and industrial uses. In the vicinity of the site, the posted speed limit along NH Route 102 is 40 miles per hour (mph).

Rebel Road

Rebel Road and Tracy Lane intersect NH Route 102 from the south and north, respectively, to form standard 4-way unsignalized intersection. Rebel Road is a town-maintained roadway approximately 775 feet in length and is generally oriented in a north-south direction. Rebel Road maintains a two-lane

TRAFFIC IMPACT ASSESSMENT

Proposed Commercial Building – Hudson, New Hampshire



GPI Greenman-Pedersen, Inc.
Engineers, Architects, Planners, Construction Engineers & Inspectors

Figure 1
Site Location Map

Mr. Anthony Basso, LLS

July 16, 2013

Page 3 of 6

cross section with one travel lane per direction although pavement markings are not present. Land use along the roadway consists of commercial and industrial uses. There is no posted speed limit on Rebel Road; however, based on correspondence with the Hudson Police Department the enforced speed limit is 30 mph.

Candy Lane

Candy Lane intersects Rebel Road from the west to form T-type unsignalized intersection. Candy Lane is a town-maintained roadway approximately 540 feet long and is generally oriented in an east-west direction. Candy Lane maintains a two-lane cross section with one travel lane per direction although there are no pavement markings. Land use along the roadway consists of commercial and industrial uses. There is no posted speed limit on Candy Lane; however, based on correspondence with the Hudson Police Department the enforced speed limit is 30 mph.

Trip-Generation Estimates

Existing Bus Depot Site

For trip-generation purposes, traffic to be generated by the vacant school bus depot was researched from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*¹ as well as the existing number of parking spaces that exist on the site. Since no Land Use Code (LUC) exists within the ITE *Trip Generation Manual* that is comparable to the existing site, the existing parking spaces were used to determine trip generation for the site. Currently the site accommodates 28 standard vehicle spaces and 38 school bus spaces for a total of 66 parking spaces. It was assumed that there are extra bus spaces on-site which are allocated for buses that need repair, are out-of-service, are used for special events, etc. Accordingly, it is expected that 28 vehicles would enter during the weekday AM peak hour (28 standard vehicle parking spaces) and 28 school buses would exist during the weekday AM peak hour. During the weekday PM peak hour, it was assumed that many of the school buses would return prior to the peak hour of roadway traffic (before 4:00 PM). Accordingly it was assumed that 50 percent of the 28 buses that left in the morning would enter the site during the weekday PM peak hour and those 14 bus drivers would exit the site in their own vehicles during the weekday PM peak hour.

Proposed Commercial Building Site

As proposed, the project consists of redeveloping the site and constructing a 25,000 square foot commercial building. There could be as many as 10-2,500 square foot units with a total of 50 square feet of office per unit. Accordingly, the building would consist of 20,000 square feet of garage storage space and 5,000 square feet of office space. Traffic to be generated by the proposed development was forecast using the trip rates contained in the ITE *Trip Generation Manual*. Table 1 provides a trip-generation

¹ *Trip Generation Manual*, 9th Edition; Institute of Transportation Engineers; Washington, DC; 2012.

Mr. Anthony Basso, LLS

July 16, 2013

Page 4 of 6

comparison assuming the proposed project contains 25,000 square feet of office space versus a 20,000 square foot self-storage facility for the garage component and 5,000 square feet of office space. All trip-generation data are attached to this letter.

Table 1
TRIP-GENERATION SUMMARY

Time Period	Proposed Office Space ^a	Proposed Garage Space ^b	Proposed Office Space ^c	Total Trips ^d
Weekday Daily	280	50	60	110
Weekday AM Peak Hour:				
<i>Enter</i>	34	2	7	9
<i>Exit</i>	<u>5</u>	<u>1</u>	<u>1</u>	<u>2</u>
<i>Total</i>	39	3	8	11
Weekday PM Peak Hour:				
<i>Enter</i>	6	3	1	4
<i>Exit</i>	<u>31</u>	<u>2</u>	<u>6</u>	<u>8</u>
<i>Total</i>	37	5	7	12

^a ITE Land Use Code 710 (General Office Building) for 25,000 sf.

^b ITE Land Use Code 151 (Mini-Warehouse) for 20,000 sf.

^c ITE Land Use Code 710 (General Office Building) for 5,000 sf.

^d Proposed Garage Space (20,000 sf) plus Proposed Office Space (5,000 sf).

As shown in Table 1, the trip-generation estimates for the full office building alternative provides a higher estimate of site trips. Although the garage storage space will be used by the tenants of the proposed office component of the project and the new traffic to study area for the storage space component is expected to be negligible, the trips for the full office building alternative were used to provide a more conservative (worse case) analysis scenario.

Trip Generation Comparison

For comparison purposes, trip-generation estimates were developed for the existing and proposed uses on the site. The proposed commercial building is expected to have similar operating characteristics as the existing bus depot. That is, employees are expected to arrive at the site in the morning in order to collect the items they need for the day and then leave in their work vehicle within one hour of arriving at the site, similar to those showing up to begin their bus route. This differs from a “normal” office operation;

therefore, the rates for general office were used, however, not the distribution (entering/exiting). Accordingly, using the trip-generation estimates based on 25,000 square feet of office space it was determined that the entering trips during the weekday AM peak hour would also exit the site during the weekday AM peak hour and the exiting trips during the weekday PM peak hour would also enter during the weekday PM peak hour. Table 2 summarizes the additional peak-hour trips expected to be generated as part of the project.

**Table 2
 TRIP-GENERATION COMPARISON**

Time Period	Existing Bus Depot Trips ^a	Currently Proposed Office Trips ^b	Additional Trips ^c
Weekday AM Peak Hour:			
<i>Enter</i>	28	34	6
<i>Exit</i>	<u>28</u>	<u>34</u>	<u>6</u>
<i>Total</i>	56	68	12
Weekday PM Peak Hour:			
<i>Enter</i>	14	31	17
<i>Exit</i>	<u>14</u>	<u>31</u>	<u>17</u>
<i>Total</i>	28	62	34

^a Based on existing parking spaces on the site.

^b From Table 1: AM Peak Hour Entering volume and PM Peak Hour Exiting volume for 25,000 sf of office space.

^c Currently Proposed Office Trips minus Existing Bus Depot Trips.

As shown in Table 2, based on the proposed redevelopment project as compared to the bus depot use is expected to generate 12 additional vehicle trips (6 entering and 6 exiting) during the weekday AM peak hour and 34 additional vehicle trips (17 entering and 17 exiting) during the weekday PM peak hour.

Trip Distribution

Having estimated project-generated vehicle trips, the next step is to determine the distribution of project traffic and assign these trips to the local roadway network. The directional distribution of site traffic is dependent on expected travel routes to and from the site and existing travel patterns. Based on a traffic count conducted at the intersection of NH Route 102 at Robinson Road and West Road for a nearby project, approximately 60 percent of the site-generated traffic is expected to travel to and from the west along NH Route 102 and 40 percent is expected to and from the east on NH Route 102.

Mr. Anthony Basso, LLS
July 16, 2013
Page 6 of 6

Traffic Increases

The proposed project will result in increases in traffic on Candy Lane, Rebel Road, and NH Route 102. Peak-hour traffic-volume increases in the range of 4 to 20 vehicles per hour are expected east and west on NH Route 102. These increases represent, on average, approximately 1 additional vehicle every 3 to 15 minutes during the weekday AM and weekday PM peak hours.

In light of the information provided in this letter, it is expected that the proposed redevelopment project will result in minimal vehicular impacts. Should you have any questions, or require additional information, please contact me.

Sincerely,

GREENMAN – PEDERSEN, INC.



Heather L. Monticup, P.E.
Project Manager

Attachment(s)

TRAFFIC IMPACT ASSESSMENT

Proposed Commercial Building – Hudson, New Hampshire

ATTACHMENTS

TRIP-GENERATION WORKSHEETS



Institute of Transportation Engineers (ITE)
Land Use Code (LUC) 710 - General Office Building

Average Vehicle Trips Ends vs: 1,000 Sq. Feet Gross Floor Area
Independent Variable (X): 25.000

AVERAGE WEEKDAY DAILY

$$T = 11.03 * (X)$$

$$T = 11.03 * 25.000$$

$$T = 275.75$$

$$T = 276 \text{ vehicle trips}$$

with 50% (138 vph) entering and 50% (138 vph) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 1.56 * (X)$$

$$T = 1.56 * 25.000$$

$$T = 39.00$$

$$T = 39 \text{ vehicle trips}$$

with 88% (34 vph) entering and 12% (5 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 1.49 * (X)$$

$$T = 1.49 * 25.000$$

$$T = 37.25$$

$$T = 37 \text{ vehicle trips}$$

with 17% (6 vph) entering and 83% (31 vph) exiting.

Institute of Transportation Engineers (ITE)
Land Use Code (LUC) 151 - Mini-Warehouse

Average Vehicle Trips Ends vs: 1,000 Sq. Feet Gross Floor Area
Independent Variable (X): 20,000

AVERAGE WEEKDAY DAILY

$$T = 2.50 * (X)$$

$$T = 2.50 * 20$$

$$T = 50.00$$

T = 50 vehicle trips

with 50% (25 vph) entering and 50% (25 vph) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 0.14 * (X)$$

$$T = 0.14 * 20$$

$$T = 2.80$$

T = 3 vehicle trips

with 55% (2 vph) entering and 45% (1 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 0.26 * (X)$$

$$T = 0.26 * 20$$

$$T = 5.20$$

T = 5 vehicle trips

with 50% (3 vph) entering and 50% (2 vph) exiting.

Institute of Transportation Engineers (ITE)
Land Use Code (LUC) 710 - General Office Building

Average Vehicle Trips Ends vs: 1,000 Sq. Feet Gross Floor Area
Independent Variable (X): 5.000

AVERAGE WEEKDAY DAILY

$$T = 11.03 * (X)$$

$$T = 11.03 * 5.000$$

$$T = 55.15$$

$$T = 56 \text{ vehicle trips}$$

with 50% (28 vph) entering and 50% (28 vph) exiting.

WEEKDAY MORNING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 1.56 * (X)$$

$$T = 1.56 * 5.000$$

$$T = 7.80$$

$$T = 8 \text{ vehicle trips}$$

with 88% (7 vph) entering and 12% (1 vph) exiting.

WEEKDAY EVENING PEAK HOUR OF ADJACENT STREET TRAFFIC

$$T = 1.49 * (X)$$

$$T = 1.49 * 5.000$$

$$T = 7.45$$

$$T = 7 \text{ vehicle trips}$$

with 17% (1 vph) entering and 83% (6 vph) exiting.

"E"

PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE

Date of Application: 06/12/13 Tax Map # 101 Lot # 27

Name of Project: 4 Candy Lane Site Plan

Zoning District: B General SP# 03-13
(For Town Use) (For Town Use)

ZBA Action: _____

PROPERTY OWNER:

DEVELOPER:

Name: Nottingham Square Corp. Sousa Realty & Development

Address: 46 Lowell Road

46 Lowell Road

Address: Hudson, NH 03051

Hudson, NH 03051

Telephone # 603-880-7799

603-880-7799

Fax # _____

Email: _____

msousajr13@yahoo.com

PROJECT ENGINEER

SURVEYOR

Name: Jeffrey Merritt

Anthony Basso

Address: 10 Commerce Park No., 3

10 Commerce Park No., 3

Address: Bedford, NH 03110

Bedford, NH 03110

Telephone # 603-627-2881

603-627-2881

Fax # 603-627-2915

603-627-2915

Email: jmerritt@keachnordstrom.com abasso@keachnordstrom.com

PURPOSE OF PLAN:

Remove the existing paved parking area and construct a 25,000 square foot commercial building and associated site improvements.

For Town Use

Plan Routing Date: 6-25-13 Sub/Site Date: 7-9-13 @ 10:00 Am

I have no comments I have comments (attach to form)

WAT Title: Zoning Admin Date: 6/25/13
(Initials)

Meets ZONING REQUIREMENTS

DEPT:

Zoning Engineering Assessor Police Fire Planning
 Consultant Highway Department

Fees Paid: _____



PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE

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Address: 46 Lowell Road 46 Lowell Road

Address: Hudson, NH 03051 Hudson, NH 03051

Telephone # 603-880-7799 603-880-7799

Fax # _____

Email: _____ msousajr13@yahoo.com

PROJECT ENGINEER

SURVEYOR

Name: Jeffrey Merritt Anthony Basso

Address: 10 Commerce Park No., 3 10 Commerce Park No., 3

Address: Bedford, NH 03110 Bedford, NH 03110

Telephone # 603-627-2881 603-627-2881

Fax # 603-627-2915 603-627-2915

Email: jmerritt@keachnordstrom.com abasso@keachnordstrom.com

PURPOSE OF PLAN:

Remove the existing paved parking area and construct a 25,000 square foot commercial building and associated site improvements.

For Town Use

Plan Routing Date: 6-25-13 Sub/Site Date: 7-9-13 @ 10:00 AM

I have no comments I have comments (attach to form)

RM Title: ROAD AGENT Date: 7/11/13
(Initials)

DEPT:

Zoning Engineering Assessor Police Fire Planning
 Consultant Highway Department

Fees Paid: _____

7/3/13 called J. Merritt
re: 101 17g



HUDSON FIRE DEPARTMENT

Deputy Fire Chief

John O'Brien



July 8,2013

To: John Cashell
Town Planner
Town of Hudson N.H.

From: Deputy Fire Chief John J. O'Brien
Town of Hudson Fire Dept.
39 Ferry St.
Hudson N.H. 03051

Subj: Site Plan Review 4 Candy Lane Tax Map 101 Lot # 27

After a review of the site plan prepared by Keach-Nordstrom Associates for the above referenced Address the following are the concerns of the Hudson Fire Dept.

- A) Site access. NFPA 1141 requires access roads to have **UNOBSTRUCTED** access of not less than 20 feet. Please pay particular attention to this during the design phase.
Weather and parked vehicles can reduce this clearance considerably.
- B) Water Supply . This proposed building of 25,000 square feet is required to have a full NFPA 13 Sprinkler system installed per The International Building Code Section 903 and NFPA 1. Both documents adopted by the State of New Hampshire . I see no provisions for water supply in the site plane documents.
I call your attention to NFPA 1 Annex H Fire Flow Requirements for Buildings Table H.5.1 Outlines the minimum required fire flow required.

No other site plan issues or concerns

If I can be of any further assistance feel free to call or email jobrien@hudsonnh.gov

John J. O'Brien
Deputy Fire Chief



PRELIMINARY & FINAL SITE PLAN APPLICATION
FOR PLAN REVIEW (Also for Wireless)
TOWN OF HUDSON, NEW HAMPSHIRE

Date of Application: 06/12/13 Tax Map # 101 Lot # 27

Name of Project: 4 Candy Lane Site Plan

Zoning District: B General SP# 03-13
(For Town Use) (For Town Use)

ZBA Action: _____

PROPERTY OWNER:

DEVELOPER:

Name: Nottingham Square Corp. Sousa Realty & Development

Address: 46 Lowell Road 46 Lowell Road

Address: Hudson, NH 03051 Hudson, NH 03051

Telephone # 603-880-7799 603-880-7799

Fax # _____

Email: _____ msousajr13@yahoo.com

PROJECT ENGINEER

SURVEYOR

Name: Jeffrey Merritt Anthony Basso

Address: 10 Commerce Park No., 3 10 Commerce Park No., 3

Address: Bedford, NH 03110 Bedford, NH 03110

Telephone # 603-627-2881 603-627-2881

Fax # 603-627-2915 603-627-2915

Email: jmerritt@keachnordstrom.com abasso@keachnordstrom.com

PURPOSE OF PLAN:

Remove the existing paved parking area and construct a 25,000 square foot commercial building and associated site improvements.

For Town Use

Plan Routing Date: 6-25-13 Sub/Site Date: 7-9-13 @ 10:00 AM

I have no comments I have comments (attach to form)

(Initials) _____ Title: Asst. Assessor Date: 6-25-13

DEPT:

_____ Zoning _____ Engineering _____ Assessor _____ Police _____ Fire _____ Planning
_____ Consultant _____ Highway Department

Fees Paid: _____

None of these properties are in an ERZ zone.

“F”

CAP FEE WORKSHEET

4 Candy Lane Contractor's Building

Date: 07/24/13 **Sector #:** 2 **Map/Lot:** 101/027

Project Name: 4 Candy Lane

Proposed ITE Use #1: General Industry

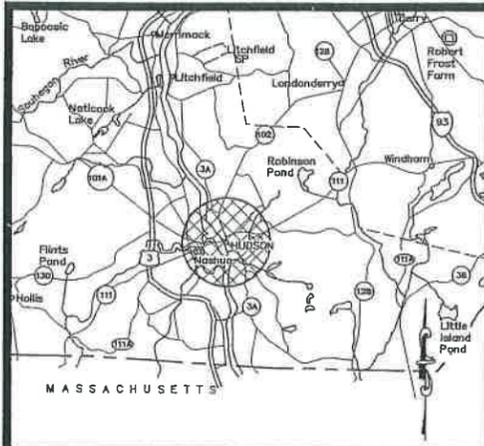
Proposed Building Area (square footage): 25,000 S.F. X 0.84 sf X 55%, because the previous site use included 45% of the total P.M. Peak Hour Traffic associated with the proposed General Industry Use.

CAP FEES:

1.

(2070-090)	Route 3A:	<u>\$2,887.50</u>
(2070-091)	Route 102:	<u>\$5,912.50</u>
(2070-086)	Route 111:	<u>\$2,750.00</u>

Total CAP Fee: \$11,550.00



VICINITY PLAN
NOT TO SCALE



VICINITY MAP
SCALE: 1"=1,000'

NON-RESIDENTIAL SITE PLAN

4 CANDY LANE

MAP 101; LOT 27

CANDY LANE AND REBEL ROAD

HUDSON, NEW HAMPSHIRE



OWNER/APPLICANT:
 NOTTINGHAM SQUARE CORPORATION
 46 LOWELL ROAD
 HUDSON, NEW HAMPSHIRE 03051

PREPARED BY:
 KEACH-NORDSTROM ASSOCIATES, INC.
 10 COMMERCE PARK NORTH, SUITE 3B
 BEDFORD, NEW HAMPSHIRE 03110
 (603) 627-2881

<u>SHEET TITLE</u>	<u>SHEET No.</u>
MASTER PLAN	1
EXISTING CONDITIONS PLAN	2
REMOVALS/DEMOLITION PLAN	3
NON-RESIDENTIAL SITE LAYOUT PLAN	4
GRADING, DRAINAGE, AND UTILITY PLAN	5
EROSION CONTROL PLAN	6
SEPTIC SYSTEM DESIGN PLAN	7
SEPTIC SYSTEM DESIGN DETAILS	8
LANDSCAPE PLAN	9
LIGHTING PLAN	10
DRAINAGE PROFILES	11
CONSTRUCTION DETAILS	12 - 17



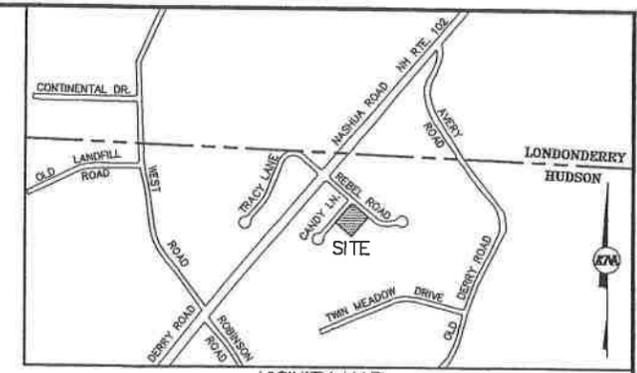
KMA
 KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

MAY 1, 2013
 LAST REVISED: JULY 12, 2013
 PROJECT NO. 13-0214-1

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL	APPROVED BY THE HUDSON, NH PLANNING BOARD DATE OF MEETING: _____ SIGNATURE _____ DATE _____ SIGNATURE _____ DATE _____ <small>SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.</small>
--	--

PLAN REFERENCES:

- "SUBDIVISION PLAN: MAP 42 LOT 7, LEE J. ALLARD ET. UX., N.H. ROUTE 102, HUDSON & LONDONDERRY N.H.," SCALE: 1"=100', DATED: MARCH 1984, LAST REVISED 7/18/84, PREPARED BY: GEORGE F. KELLER INC. H.C.R.D. PLAN NO. 18102.
- "TAX MAP 101 LOT 30, AS-BUILT SITE PLAN, LOCATED AT: CANDY LANE, PREPARED FOR AND LAND OF: MARIO & DENYSE PLANTE, 9 OLD DERRY ROAD, HUDSON, NEW HAMPSHIRE," SCALE: 1"=30', DATED: OCTOBER 18, 2004, PREPARED BY: BEDFORD DESIGN CONSULTANTS. H.C.R.D. PLAN NO. 33636.



MAP 101; LOT 32
MICHAEL R. & DAVID B. GENEST
32 GUILLEMETTE STREET
SANFORD, ME 04073
BK. 5616; PG. 1772
ZONE: BUSINESS (B) &
102-ROBINSON ROAD-WEST
ROAD ECONOMIC REVITALIZATION
ZONE OVERLAY DISTRICT

MAP 101; LOT 30
MARIO & DENYSE PLANTE, TRUSTEES
9 OLD DERRY ROAD
HUDSON, NH 03051
BK. 7187; PG. 1210
ZONE: BUSINESS (B) & 102-ROBINSON
ROAD-WEST ROAD ECONOMIC REVITALIZATION
ZONE OVERLAY DISTRICT

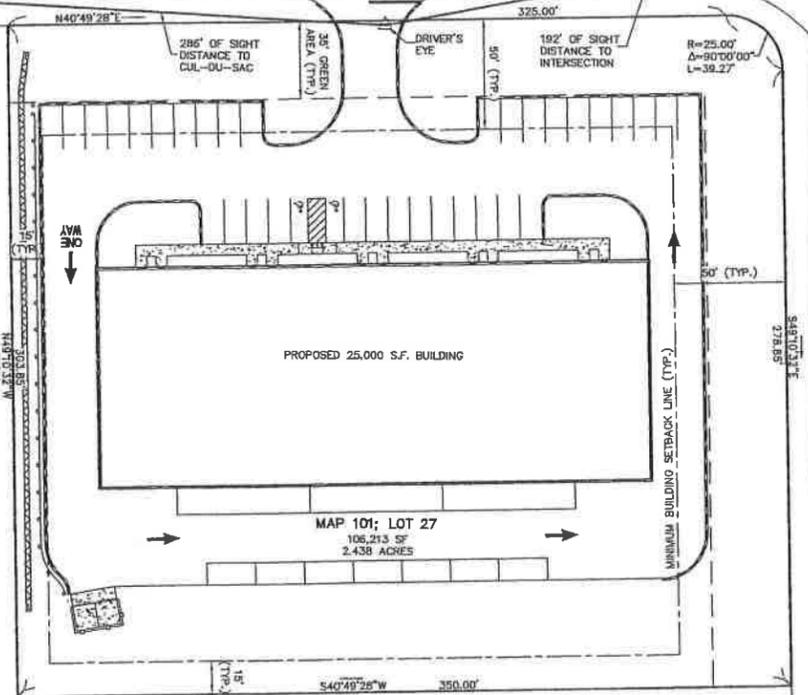
MAP 101; LOT 20
SCOTT HEALY
26 LAURA AVENUE
PEMBROKE, NH 02359
BK. 3377; PG. 0883
ZONE: BUSINESS (B) &
102-ROBINSON ROAD-WEST
ROAD ECONOMIC REVITALIZATION
ZONE OVERLAY DISTRICT

MAP 101; LOT 21
SYNTECH MICROWAVE, INC.
8 REBEL ROAD
HUDSON, NH 03051
BK. 3377; PG. 0883
ZONE: BUSINESS (B) &
102-ROBINSON ROAD-WEST
ROAD ECONOMIC REVITALIZATION
ZONE OVERLAY DISTRICT

MAP 101; LOT 28
MICHAEL R. & DAVID B. GENEST
P.O. BOX 151
SANFORD, ME 04073
BK. 5176; PG. 1655
ZONE: BUSINESS (B) &
102-ROBINSON ROAD-WEST
ROAD ECONOMIC REVITALIZATION
ZONE OVERLAY DISTRICT

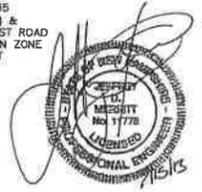
MAP 101; LOT 26
NOTTINGHAM SQUARE CORP.
46 LOWELL ROAD
HUDSON, NH 03051
BK. 8436; PG. 2012
ZONE: BUSINESS (B) &
102-ROBINSON ROAD-WEST ROAD
ECONOMIC REVITALIZATION ZONE
OVERLAY DISTRICT

MAP 101; LOT 22
BENJAMIN F. &
CHARLES M. ELLIS
10 REBEL ROAD
HUDSON, NH 03051
BK. 5282; PG. 1355
ZONE: BUSINESS (B) &
102-ROBINSON ROAD-WEST ROAD
ECONOMIC REVITALIZATION ZONE
OVERLAY DISTRICT



NOTES:

- THE PURPOSE OF THIS PLAN IS TO DEPICT THE LAYOUT OF A PROPOSED 25,000 SF BUILDING AND ASSOCIATED SITE IMPROVEMENTS TO TAX MAP 101; LOT 27.
- TOTAL SITE AREA: 106,213 SF, OR 2.438 ACRES.
- SUBJECT PARCEL IS LOCATED IN THE BUSINESS (B) ZONING DISTRICT AND IS SUBJECT TO THE FOLLOWING DIMENSIONAL REGULATIONS:
 - LOT AREA: 30,000 SF (WITH WATER AND SEWER)
 - LOT FRONTAGE: 43,580 SF (WITHOUT WATER OR SEWER)
 - MINIMUM BUILDING SETBACKS:
 - FRONT: 50 FT
 - SIDE: 15 FT
 - REAR: 15 FT
- MAP 101; LOT 27 INDICATES TOWN OF HUDSON TAX ASSESSORS MAP AND LOT NUMBER.
- SITE IS SERVICED BY PRIVATE ON-SITE SEPTIC AND WELL.
- PARKING:
 - REQUIRED: 1 SPACE/600 SF REQUIRED
 - PROVIDED: 25,000 SF/600 = 41.6 = 42 SPACES
 - 42 SPACES (INCLUDES 2 HANDICAP SPACES)
- LOADING:
 - REQUIRED: 1 SPACE/FIRST 5,000 SF-1 SPACE FOR EACH ADDITIONAL 10,000 SF (25,000 SF) = 1 + 2 = 3 SPACES REQUIRED
 - PROVIDED: 3 SPACES PROPOSED
- OPEN SPACE:
 - REQUIRED: 40%
 - PROVIDED: 40.7%
- SITE LIGHTING SHALL BE AS SHOWN ON THE PLAN, DIRECTED ONTO SITE, AND SHALL CONFORM WITH ALL APPLICABLE TOWN OF HUDSON ZONING REGULATIONS.
- ALL SIGNS ARE SUBJECT TO APPROVAL BY THE HUDSON PLANNING BOARD PRIOR TO INSTALLATION.
- SITE IMPROVEMENTS DEPICTED ON THE PLAN SHALL CONFORM WITH TITLE II OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSION AND GRADE.
- IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURE OR USE SHOWN ON THIS SITE PLAN IN ANYWAY WHATSOEVER, OR CONVERT OR ALTER ANY STRUCTURE OR USE SHOWN ON THIS SITE PLAN, OR CHANGE THE ABOVE USE INDICATED ON THE PLAN WITHOUT RECEIVING APPROVAL FROM THE TOWN OF HUDSON PLANNING BOARD.
- TRASH PICK-UP SHALL NOT OCCUR EARLIER THAN 7:00 AM NOR LATER THAN 7:00 PM, MONDAY THROUGH FRIDAY ONLY.
- EXTERIOR CONSTRUCTION ACTIVITIES ON THE SITE SHALL BE LIMITED TO BETWEEN 7:00 AM AND 7:00 PM MONDAY THROUGH SATURDAY. NO CONSTRUCTION ACTIVITIES SHALL OCCUR ON SUNDAYS.
- PRESENT OWNER OF RECORD: NOTTINGHAM SQUARE CORPORATION, 46 LOWELL ROAD, HUDSON, NH 03051, H.C.R.D. BK. 8436; PG. 1363
- EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE TOWN OF HUDSON, NEW HAMPSHIRE, HILLSBOROUGH COUNTY, COMMUNITY PANEL NUMBER 3301100000, PANEL NUMBER 508 OF 701, EFFECTIVE DATE: SEPTEMBER 25, 2009 INDICATES THAT THE SUBJECT PREMISES IS NOT LOCATED WITHIN A FLOOD HAZARD AREA.
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED BY THIS OFFICE IN APRIL 2013. HORIZONTAL DATUM IS NAD 83. VERTICAL DATUM IS MVD 1929. BOTH DATUMS WERE ESTABLISHED USING TRIMBLE KINEMATIC GPS.
- NO JURISDICTIONAL WETLANDS ARE PRESENT ON-SITE.
- THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. REACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
- WAIVERS REQUESTED:
 - HTC 278-8(C) - NOISE STUDY
 - HTC 278-8(D) - FISCAL/ENVIRONMENTAL IMPACT STUDY
- PLOWED SNOW FROM THE FACILITIES, DRIVEWAY, PARKING LOTS, AND SIDEWALK SHALL BE STORED IN THE DESIGNATED AREAS SHOWN IN THIS PLAN SET. WHEN THE SNOW STORAGE AREAS ARE AT CAPACITY, SUBSEQUENT SNOW SHALL BE HAULED OFF-SITE AND DISPOSED OF IN AN ENVIRONMENTALLY SOUND FASHION AND IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
- IF LOT DEVELOPMENT INVOLVES BLASTING AND/OR RAMMING OF BEDROCK MATERIALS, SAID ACTIVITIES SHALL BE LIMITED TO THE HOURS BETWEEN 7:00 AM AND 5:00 PM MONDAY THROUGH FRIDAY ONLY. SAID BLASTING/RAMMING ACTIVITIES SHALL BE PROHIBITED ON WEEKENDS.
- ON-SITE DRAINAGE SYSTEM SHALL BE CONSTRUCTED AND MAINTAINED IN COMPLIANCE WITH NHDES REQUIREMENTS FOR SUCH SYSTEMS.
- THE APPLICANT'S ENGINEER AND/OR CONTRACTOR SHALL CONTACT THE TOWN OF HUDSON TO SCHEDULE A PRECONSTRUCTION MEETING, WHICH WILL BE HELD WITH STAFF PRIOR TO STARTING CONSTRUCTION.
- ALL STIPULATIONS OF APPROVAL SHALL BE INCORPORATED INTO THE DEVELOPMENT AGREEMENT, WHICH SHALL BE RECORDED AT THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS TOGETHER WITH THE SITE PLAN OF RECORD.
- THIS APPROVAL SHALL BE SUBJECT TO FINAL ENGINEERING REVIEW, INCLUDING APPROVAL OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).



NOTES (CONTINUED):

- A COST ALLOCATION PROCEDURE (CAP) AMOUNT OF \$10,000 SHALL BE PAID PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, AS PROVIDED IN THE 2012 CAP FEE MATRIX.
- ALL IMPROVEMENTS SHOWN ON THE SITE PLAN-OF-RECORD, INCLUDING NOTES 1-31, SHALL BE COMPLETED IN THEIR ENTIRETY AND AT THE EXPENSE OF THE APPLICANT OR HIS ASSIGNS.
- THE TOWN OF HUDSON SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY FIND IT NECESSARY.
- THIS PROJECT REQUIRES AN NHDES INDIVIDUAL SUBSURFACE DISPOSAL SYSTEM PERMIT. SAID PERMIT IS PENDING REVIEW BY NHDES.
- THE PROPOSED BUILDING WILL HAVE AN NFPA APPROVED FIRE SPRINKLER SYSTEM.

THIS PLAN AND THE SURVEY UPON WHICH IT IS BASED WAS MADE ON THE GROUND UNDER MY DIRECTION AND SUPERVISION IN APRIL 2013 IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE STATE OF NEW HAMPSHIRE AND THE CITY/TOWN WITHIN WHICH IT IS LOCATED WITH A TRAVERSE ERROR OF CLOSURE BETTER THAN 1 PART IN 10,000. THE SURVEY PERFORMED IS CLASSIFIED AS AN URBAN STANDARD SURVEY, (CATEGORY 1, CONDITION 1) AS DEFINED IN THE NEW HAMPSHIRE LAND SURVEYORS ASSOCIATION ETHICS AND STANDARDS.



**MASTER PLAN
4 CANDY LANE**

**MAP 101; LOT 27
CANDY LANE AND REBEL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY**

OWNER OF RECORD:
NOTTINGHAM SQUARE CORP.
46 LOWELL ROAD
HUDSON, NH 03051
HCOD BK. 8436; PG. 1363

APPLICANT:
NOTTINGHAM SQUARE CORP.
46 LOWELL ROAD
HUDSON, NH 03051

KMA REACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	07/12/13	REVISED PER OLD COMMENTS	JDM

DATE: MAY 1, 2013 SCALE: 1" = 40'
PROJECT NO: 13-0214-1 SHEET 1 OF 17

LEGEND

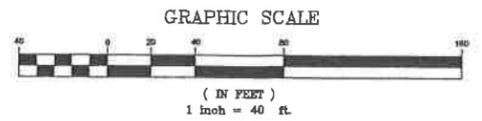
- CONCRETE BOUND FOUND
- ABUTTER LINE
- PROPERTY LINE
- CHAIN LINK FENCE
- GUARDRAIL
- EXISTING EDGE OF PAVEMENT
- BUILDING SETBACK
- GREEN AREA
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BITUMINOUS CURB
- PROPOSED RETAINING WALL
- PROPOSED GUARDRAIL

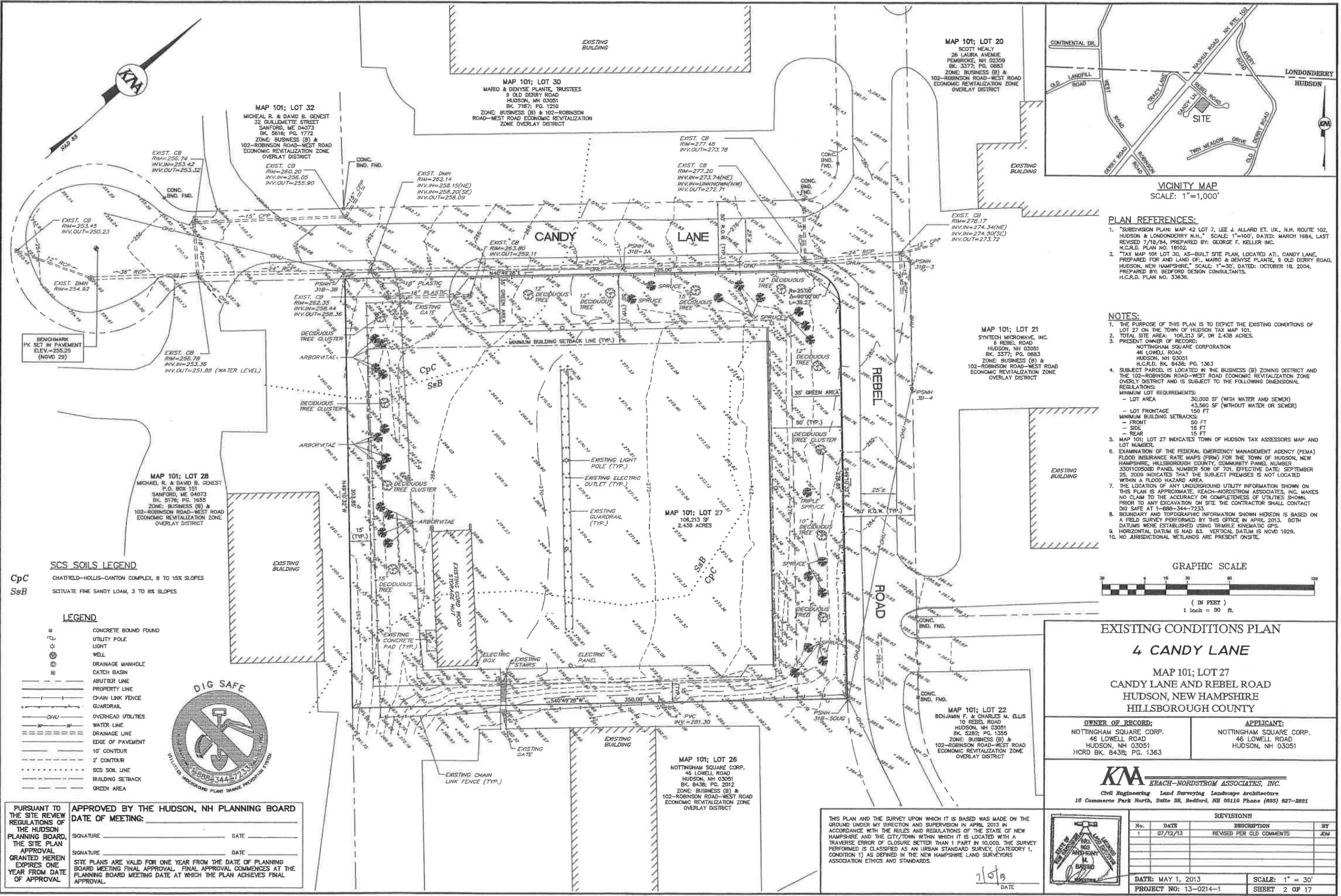


PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL

APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____
SIGNATURE: _____ DATE: _____
SIGNATURE: _____ DATE: _____
SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

OWNER OF MAP 101; LOT 27
SIGNATURE: _____
DATE: _____

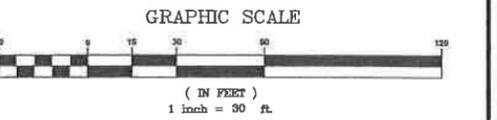




VICINITY MAP
SCALE: 1"=1,000'

- PLAN REFERENCES:**
- "SUBDIVISION PLAN: MAP 42 LOT 7, LEE J. ALLARD ET. UX., N.H. ROUTE 102, HUDSON & LONDONDERRY N.H.," SCALE: 1"=100', DATED: MARCH 1984, LAST REVISED 7/18/84, PREPARED BY: GEORGE F. KELLER INC. H.C.R.D. PLAN NO. 18102.
 - "TAX MAP 101 LOT 30, AS-BUILT SITE PLAN, LOCATED AT: CANDY LANE, PREPARED FOR AND LAND OF: MARIO & DENYSE PLANTE, 9 OLD DERRY ROAD, HUDSON, NEW HAMPSHIRE," SCALE: 1"=30', DATED: OCTOBER 16, 2004, PREPARED BY: BEDFORD DESIGN CONSULTANTS. H.C.R.D. PLAN NO. 33636.

- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS OF LOT 27 ON THE TOWN OF HUDSON TAX MAP 101.
 - TOTAL SITE AREA: 106,213 SF, OR 2.438 ACRES.
 - PRESENT OWNER OF RECORD: NOTTINGHAM SQUARE CORPORATION, 46 LOWELL ROAD, HUDSON, NH 03051, H.C.R.D. BK. 8436; PG. 1363.
 - SUBJECT PARCEL IS LOCATED IN THE BUSINESS (B) ZONING DISTRICT AND THE 102-ROBINSON ROAD-WEST ROAD ECONOMIC REVITALIZATION ZONE OVERLY DISTRICT AND IS SUBJECT TO THE FOLLOWING DIMENSIONAL REGULATIONS:
MINIMUM LOT REQUIREMENTS:
- LOT AREA: 30,000 SF (WITH WATER AND SEWER)
- LOT FRONTAGE: 150 FT
- MINIMUM BUILDING SETBACKS:
- FRONT: 50 FT
- SIDE: 15 FT
- REAR: 15 FT
 - MAP 101; LOT 27 INDICATES TOWN OF HUDSON TAX ASSESSORS MAP AND LOT NUMBER.
 - EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE TOWN OF HUDSON, NEW HAMPSHIRE, HILLSBOROUGH COUNTY, COMMUNITY PANEL NUMBER 3301C050SD PANEL NUMBER 508 OF 701, EFFECTIVE DATE: SEPTEMBER 25, 2009 INDICATES THAT THE SUBJECT PREMISES IS NOT LOCATED WITHIN A FLOOD HAZARD AREA.
 - THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
 - BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED BY THIS OFFICE IN APRIL 2013. BOTH DATUMS WERE ESTABLISHED USING TRIMBLE KINEMATIC GPS.
 - HORIZONTAL DATUM IS NAD 83. VERTICAL DATUM IS NGVD 1929.
 - NO JURISDICTIONAL WETLANDS ARE PRESENT ON SITE.



EXISTING CONDITIONS PLAN
4 CANDY LANE
MAP 101; LOT 27
CANDY LANE AND REBEL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD: NOTTINGHAM SQUARE CORP., 46 LOWELL ROAD, HUDSON, NH 03051, HCRD BK. 8436; PG. 1363.

APPLICANT: NOTTINGHAM SQUARE CORP., 46 LOWELL ROAD, HUDSON, NH 03051.

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 38, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	07/12/13	REVISED PER CLD COMMENTS	JDM

DATE: MAY 1, 2013 SCALE: 1" = 30'
PROJECT NO: 13-0214-1 SHEET 2 OF 17

SCS SOILS LEGEND
CpC CHATFIELD-HOLLIS-CANTON COMPLEX, 8 TO 15% SLOPES
SsB SCITUATE FINE SANDY LOAM, 3 TO 8% SLOPES

- LEGEND**
- CONCRETE BOUND FOUND
 - UTILITY POLE
 - LIGHT
 - WELL
 - DRAINAGE MANHOLE
 - CATCH BASIN
 - ABUTTER LINE
 - PROPERTY LINE
 - CHAIN LINK FENCE
 - GUARDRAIL
 - CHU OVERHEAD UTILITIES
 - WATER LINE
 - DRAINAGE LINE
 - EDGE OF PAVEMENT
 - 10' CONTOUR
 - 2' CONTOUR
 - SCS SOIL LINE
 - BUILDING SETBACK
 - GREEN AREA



PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____

SIGNATURE _____ DATE _____

SIGNATURE _____ DATE _____

SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

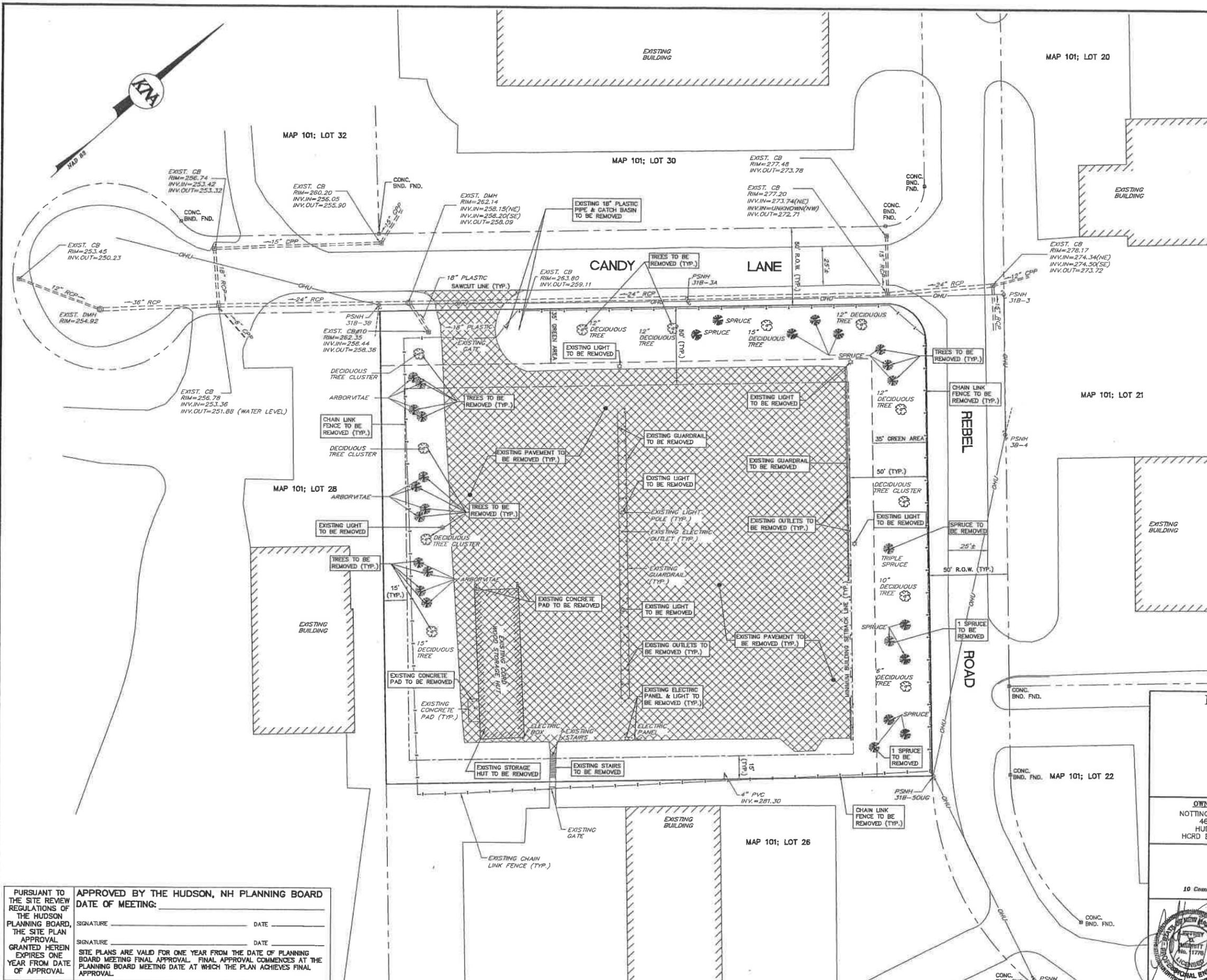
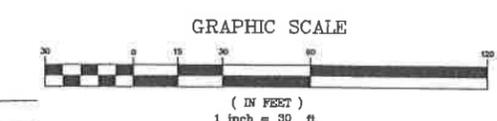
THIS PLAN AND THE SURVEY UPON WHICH IT IS BASED WAS MADE ON THE GROUND UNDER MY DIRECTION AND SUPERVISION IN APRIL 2013 IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE STATE OF NEW HAMPSHIRE AND THE CITY/TOWN WITHIN WHICH IT IS LOCATED WITH A TRAVERSE ERROR OF CLOSURE BETTER THAN 1 PART IN 10,000. THE SURVEY PERFORMED IS CLASSIFIED AS AN URBAN STANDARD SURVEY, (CATEGORY 1, CONDITION 1) AS DEFINED IN THE NEW HAMPSHIRE LAND SURVEYORS ASSOCIATION ETHICS AND STANDARDS.

7/5/13
DATE

- GENERAL NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING FEATURES ON SITE TO BE REMOVED, SALVAGED, OR REPLACED.
 2. ITEMS TO BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH THE TOWN OF HUDSON REQUIREMENTS, UNLESS OTHERWISE SHOWN HEREIN OR DIRECTED BY OWNER.
 3. ALL EXISTING PAVEMENT AND GRAVEL WITHIN THE CROSS HATCHED AREA IS TO BE REMOVED DURING THE DEMOLITION PHASE OF THE PROJECT. EXCESS MATERIAL FROM THESE AREAS SHALL BE APPROPRIATELY DISPOSED OF OFFSITE.
 4. THE CONTRACTOR SHALL CONTROL ALL DUST GENERATED DURING THE REMOVAL PHASE AND CONSTRUCTION PHASE SO THAT NO DUST LEAVES THE SITE.
 5. ANY MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE RESET BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR AT THE SITE CONTRACTORS EXPENSE.



- LEGEND**
- ☐ CONCRETE BOUND FOUND
 - ⊙ UTILITY POLE
 - ⊙ LIGHT
 - ⊙ WELL
 - ⊙ DRAINAGE MANHOLE
 - ⊙ CATCH BASIN
 - ⊙ ABUTTER LINE
 - ⊙ PROPERTY LINE
 - ⊙ CHAIN LINK FENCE
 - ⊙ GUARDRAIL
 - ⊙ OVERHEAD UTILITIES
 - ⊙ WATER LINE
 - ⊙ DRAINAGE LINE
 - ⊙ EXISTING EDGE OF PAVEMENT
 - ⊙ BUILDING SETBACK
 - ⊙ GREEN AREA
 - ⊙ SAWCUT LINE
 - ⊙ PAVEMENT & GRAVEL TO BE REMOVED



REMOVALS/DEMOLITION PLAN
4 CANDY LANE
MAP 101; LOT 27
CANDY LANE AND REBEL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD: NOTTINGHAM SQUARE CORP. 46 LOWELL ROAD HUDSON, NH 03051 HCRD BK. 8438; PG. 1363	APPLICANT: NOTTINGHAM SQUARE CORP. 46 LOWELL ROAD HUDSON, NH 03051
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KM
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	07/12/13	DATE ONLY	JOM

DATE: MAY 1, 2013 SCALE: 1" = 30'
PROJECT NO: 13-0214-1 SHEET 3 OF 17

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL.

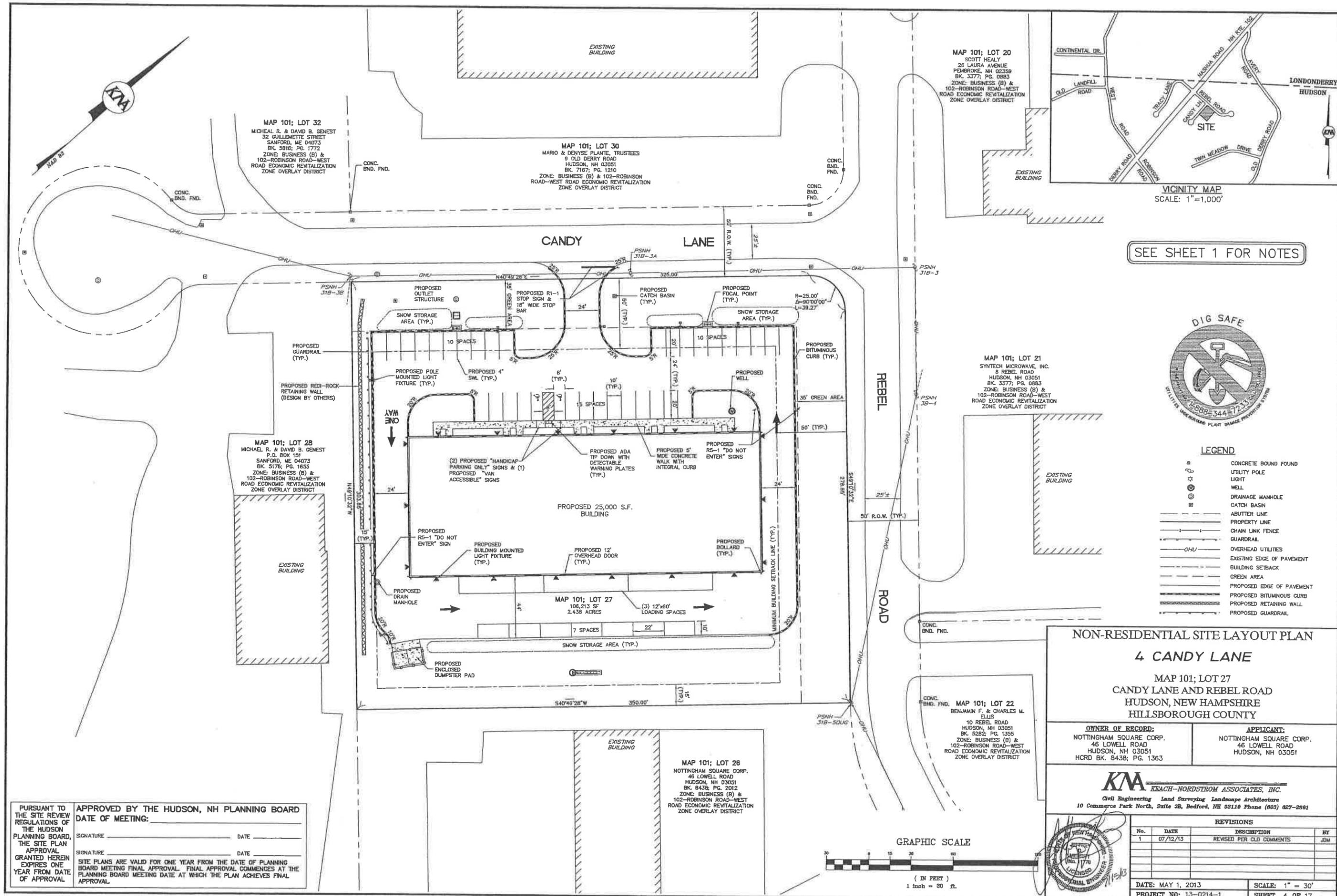
APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____

SIGNATURE _____ DATE _____

SIGNATURE _____ DATE _____

SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

P:\Projects\130214\130214.dwg (130214) SITE PLAN REV. 1.dwg 7/15/2013 10:27:10 AM, mt



SEE SHEET 1 FOR NOTES



LEGEND

- ⊙ CONCRETE BOUND FOUND
- ⊙ UTILITY POLE
- ⊙ LIGHT
- ⊙ WELL
- ⊙ DRAINAGE MANHOLE
- ⊙ CATCH BASIN
- ⊙ ABUTTER LINE
- ⊙ PROPERTY LINE
- ⊙ CHAIN LINK FENCE
- ⊙ GUARDRAIL
- OHU OVERHEAD UTILITIES
- EXISTING EDGE OF PAVEMENT
- BUILDING SETBACK
- GREEN AREA
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BITUMINOUS CURB
- PROPOSED RETAINING WALL
- PROPOSED GUARDRAIL

NON-RESIDENTIAL SITE LAYOUT PLAN

4 CANDY LANE

MAP 101; LOT 27
CANDY LANE AND REBEL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

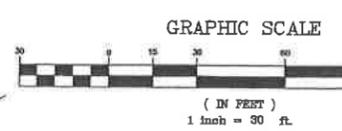
OWNER OF RECORD: NOTTINGHAM SQUARE CORP.
46 LOWELL ROAD
HUDSON, NH 03051
HCRD BK. 8438; PG. 1363

APPLICANT: NOTTINGHAM SQUARE CORP.
46 LOWELL ROAD
HUDSON, NH 03051

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	07/12/13	REVISED PER OLD COMMENTS	JDM

DATE: MAY 1, 2013 SCALE: 1" = 30'
PROJECT NO: 13-0214-1 SHEET 4 OF 17



PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____

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SIGNATURE _____ DATE _____

SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

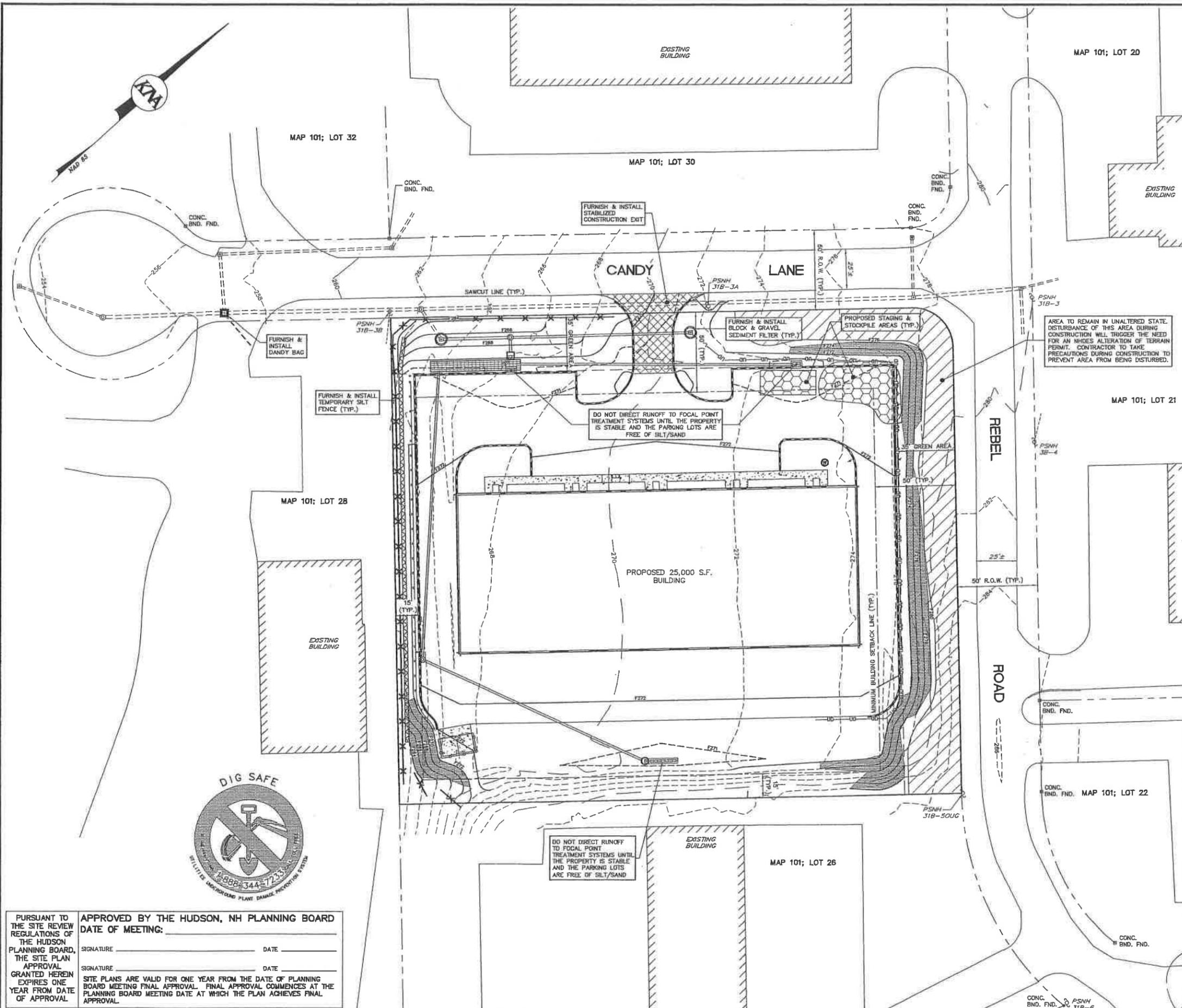
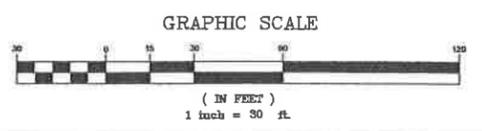
P:\projects\130214\130214.dwg (130214) - STP\PLAN\REV1.dwg 7/13/2013 3:06:27 PM

- EROSION CONTROL NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE REQUIRED ONSITE TEMPORARY CONSTRUCTION EROSION CONTROL MEASURES AS WELL AS THE PERMANENT EROSION CONTROL MEASURES.
 2. ALL MEASURES IN THE PLAN SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" AS PUBLISHED AND AMENDED BY THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES.
 3. WHENEVER PRACTICAL NATURAL VEGETATION SHALL BE RETAINED, PROTECTED OR SUPPLEMENTED. THE STRIPPING OF VEGETATION SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION.
 4. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
 5. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 30 DAYS SHALL BE STABILIZED.
 6. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
 7. OFFSITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED NON-EROSIVELY THROUGH THE PROJECT AREA. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED.
 8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
 9. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS UNLESS CONDITIONS DICTATE OTHERWISE.
 10. THE TOWN OF HUDSON SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY FIND IT NECESSARY.

LOAM & SEED ALL DISTURBED AREAS (TYP.)

EROSION & SEDIMENT CONTROL LEGEND

- TEMPORARY BLOCK AND GRAVEL SEDIMENT BARRIERS AT ALL CATCH BASINS
- DANDY BAG
- SILT FENCE
- STABILIZED CONSTRUCTION EXIT
- STAGING AND STOCKPILE AREA
- EROSION CONTROL BLANKETS
- NON DISTURBANCE AREA



EROSION CONTROL PLAN
4 CANDY LANE
 MAP 101; LOT 27
 CANDY LANE AND REBEL ROAD
 HUDSON, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER OF RECORD: NOTTINGHAM SQUARE CORP. 45 LOWELL ROAD HUDSON, NH 03051 HCRO BK. 8438; PG. 1363	APPLICANT: NOTTINGHAM SQUARE CORP. 45 LOWELL ROAD HUDSON, NH 03051
---	--

K/A KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	07/12/13	REVISED PER OLD COMMENTS	JDM

DATE: MAY 1, 2013 SCALE: 1" = 30'
 PROJECT NO: 13-0214-1 SHEET 6 OF 17

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL

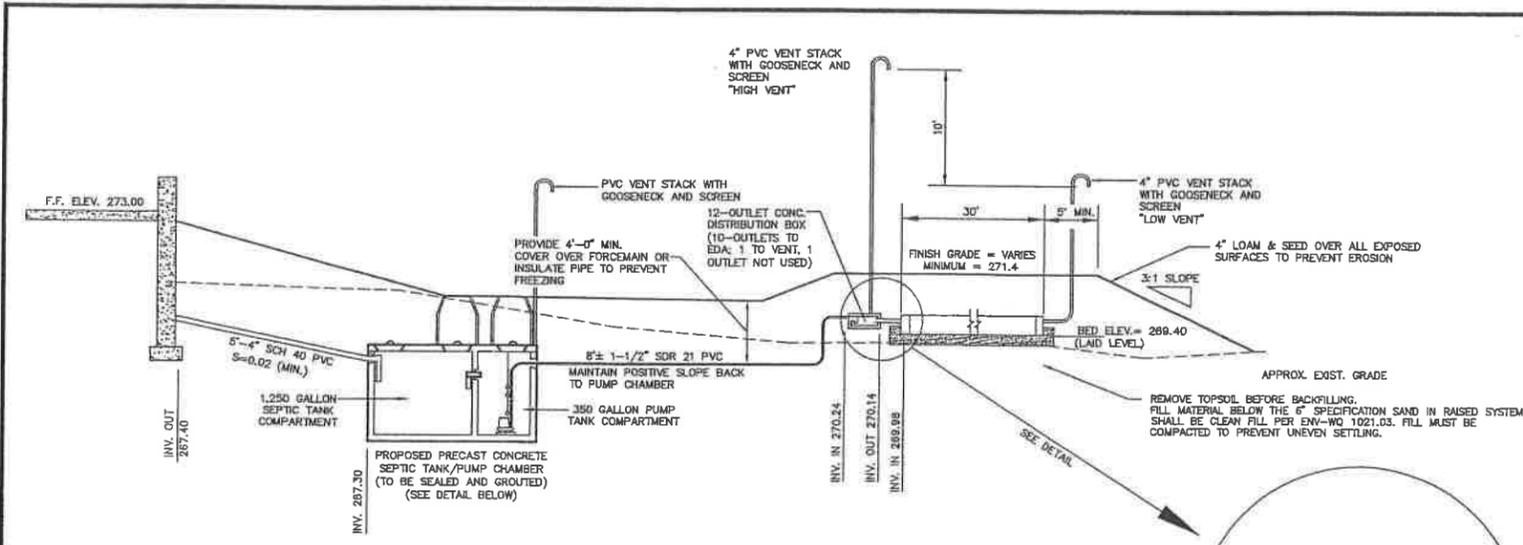
APPROVED BY THE HUDSON, NH PLANNING BOARD
 DATE OF MEETING: _____

SIGNATURE _____ DATE _____

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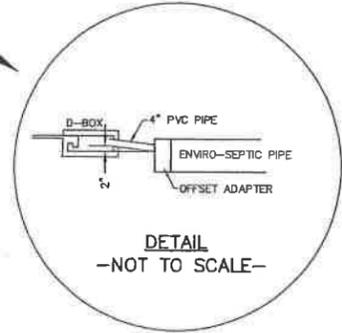
SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.



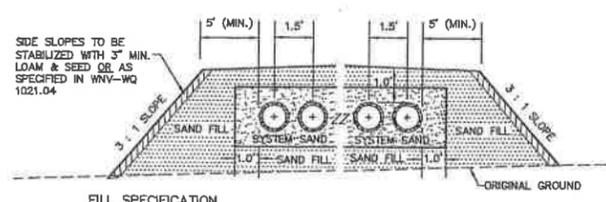


TYPICAL SECTION OF PROPOSED SANITARY SYSTEM
-NOT TO SCALE-

- NOTE:**
1. SEPTIC TANK/PUMP CHAMBER AND DISTRIBUTION BOX TO BE SUPPLIED BY SHEA CONCRETE PRODUCTS OR EQUAL.
 2. ENVIRO-SEPTIC COMPONENTS TO BE SUPPLIED BY PRESSBY ENVIRONMENTAL, INC. (1-800-473-5298) OR EQUAL.
 3. ENVIRO-SEPTIC LEACHING SYSTEM TO BE INSTALLED IN STRICT ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE INSTALLATION MANUAL FOR NEW HAMPSHIRE, ALSO AVAILABLE FROM PRESSBY ENVIRONMENTAL.

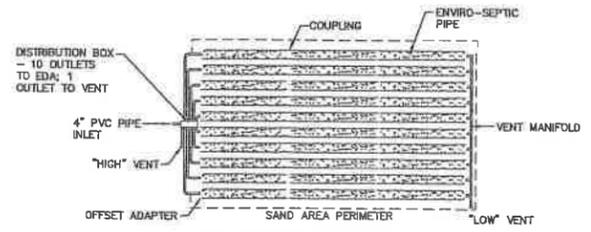


DETAIL
-NOT TO SCALE-



FILL SPECIFICATION
SYSTEM SAND TO BE 5" MINIMUM OF MEDIUM TO COARSE GRAVELLY SAND WITH AN EFFECTIVE PARTICLE SIZE OF 0.25 MM TO 2.00 MM, WITH NO GREATER THAN 2% PASSING A #200 SIEVE AND NO PARTICLES LARGER THAN 3/4" AROUND THE CIRCUMFERENCE OF THE ENVIRO-SEPTIC PIPE (SEE THE LATEST EDITION OF THE "ENVIRO-SEPTIC AND SIMPLE SEPTIC LEACHING SYSTEM DESIGN AND INSTALLATION MANUAL" FOR DETAILED SAND AND FILL REQUIREMENTS. ALL OTHER FILL USED IN RAISED SYSTEMS SHALL BE CLEAN BANK RUN SAND, FREE FROM TOPSOIL, HUMUS, DRESSING, DEBRIS, OR STONES LARGER THAN 6" IN ANY DIMENSION IN ACCORDANCE WITH ENV-WQ 1021.03

TYPICAL "ENVIRO-SEPTIC" CROSS SECTION
-NOT TO SCALE-



NOTE: EFFLUENT DISPOSAL AREA SHOWN IS A "DISTRIBUTION BOX SYSTEM" AS DEPICTED IN THE NEW HAMPSHIRE ENVIRO-SEPTIC DESIGN AND INSTALLATION MANUAL (2003 EDITION).

EDA PLAN DETAIL
SCALE: 1" = 10'

TEST PIT#2
PERC TEST @ 22"
PERC RATE: 12 MIN/INCH
DATE: 5/28/2013
IMPERVIOUS LAYER: NONE TO 72"
WATER ENCOUNTERED: NONE

0"	BLOCKY, FRIABLE, 2.5Y 5/4, CLAYEY LOAMY FILL, MANY STONES, 25%+ COBBLES
20"	BLOCKY, FRIABLE, 2.5Y 6/3, CLAYEY SAND, COMMON DISTINCT FE CONC. (MOTTLES) AT 24"
52"	BLOCKY, FRIABLE, 2.5Y 7/4, CLAYEY SAND, WET, COMMON DISTINCT FE CONC. (MOTTLES) THROUGHOUT
72" BOTTOM OF HOLE, NO LEDGE	

DESIGN CRITERIA

PROPOSED USE: 25,000 S.F. COMMERCIAL BUILDING, NO CAFETERIA OR SHOWERS AND A MAXIMUM OF 24 EMPLOYEES
Q=24 x 20 GPD = 480 GPD

PERCOLATION RATE: 12 MIN/INCH @ TP#2

REQUIRED LEACHING AREA LEACHING AREA PROVIDED (USING ENVIRO-SEPTIC LEACHING PIPE)
480 GPD @ 60 LF/100 GPD = 288 LF

LEACHING AREA PROVIDED
300 LF (10 ROWS @ 30 LF EACH)

SEPTIC TANK CAPACITY REQUIRED
1,250 GALLONS PER ENV-WQ 1010

SEPTIC TANK CAPACITY PROVIDED
1-1,250 GALLON PRECAST CONCRETE SEPTIC TANK; 1ST COMPARTMENT OF A TWO COMPARTMENT TANK

DESIGN INTENT

BOTTOM OF EFFLUENT DISPOSAL AREA TO BE SET NO LOWER THAN 12" ABOVE THE HIGHEST EXISTING GRADE (EL. 268.4 AS DEPICTED ON THE PLAN) IN ORDER TO MAINTAIN A 36-INCH SEPARATION FROM THE E.S.H.W.T AND IMPERMEABLE SUBSTRATUM WHEN USING AN ENVIRO-SEPTIC WASTEWATER TREATMENT SYSTEM.

OPERATING REQUIREMENTS

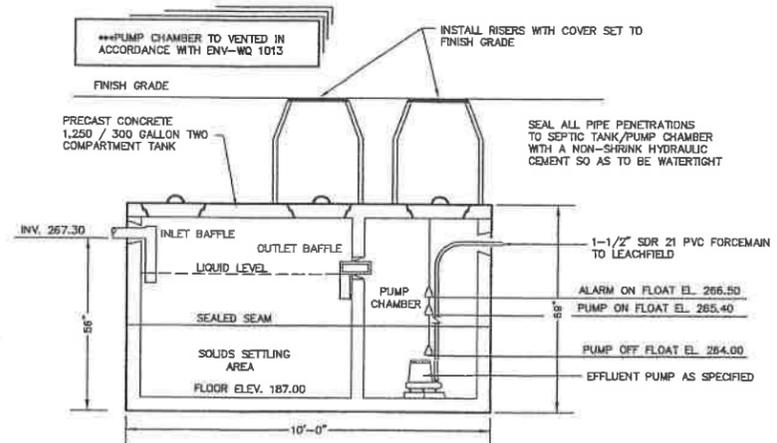
THE SEPTIC TANK SHALL BE INSPECTED FOR ACCUMULATION OF SLUDGE AND SURFACE SCUM AT LEAST ONCE EVERY YEAR. WHEN THE COMBINED THICKNESS OF THE SLUDGE AND SURFACE SCUM EQUALS 1/3 OR MORE OF TANK DEPTH, THE TANK SHALL BE PUMPED BY A LICENSED SEPTIC HAULER.

TO PREVENT OBSTRUCTION OF THE DISTRIBUTION LINES AND LEACH FIELD, GREASE AND SLURRY WASTES SHALL NOT BE FLUSHED OR INTRODUCED INTO THE SEPTIC SYSTEM.

TOXIC OR HAZARDOUS MATERIALS SHALL NOT BE INTRODUCED INTO THE SEPTIC SYSTEM.

TO PREVENT DAMAGE TO THE DISTRIBUTION LINES AND LEACH FIELD, VEHICLES, LIVESTOCK AND ANY OTHER HEAVY OBJECTS SHALL NOT BE ALLOWED ON THE LEACH FIELD UNLESS IT IS DESIGNED TO MEET H-20 LOADING.

IF WET AREAS APPEAR ON THE GROUND SURFACE OR IF ODORS OCCUR, THE SYSTEM SHALL BE INSPECTED FOR THE SOURCE OF THE PROBLEM, AND ACTION SHALL BE TAKEN TO CORRECT THE PROBLEM(S).



SEPTIC TANK/PUMP CHAMBER DETAIL
-NOT TO SCALE-

PUMP DESIGN INFORMATION

4 DOSES PER DAY OR 120 GAL./DOSE
ELEVATION HEAD = 6.24'
FRICTION HEAD = 3.8' @ 41 GPM
TOTAL DYNAMIC HEAD = 10.04'
DISCHARGE VELOCITY = 5.8 FPS
PUMP TIME PER DOSE = 2.93 MIN./DOSE

PUMP SPECIFICATIONS

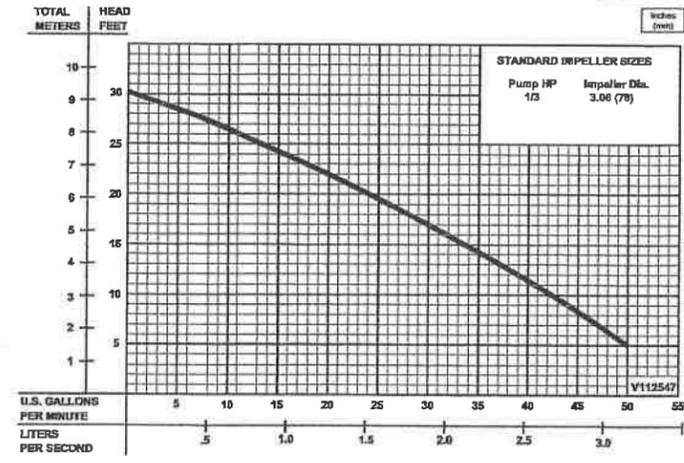
PUMP TO BE (1) BARNES SP33 EFFLUENT PUMP WITH A 1/3 HP MOTOR WHICH OPERATES ON A 120 VOLT SINGLE PHASE POWER SUPPLY AND IS CAPABLE OF PUMPING AT 41 GPM. PROVIDE COMPATIBLE AUTOMATIC LEVEL CONTROL FLOATS, INTERIOR MOUNTED CONTROL PANEL WITH MANUAL OVERRIDE AND AN AUDIBLE ALARM SYSTEM WITH FLOAT, FLOATS AND PUMP WIRING TO BE ATTACHED TO THE JUNCTION BOX IN SUCH A FASHION AS TO FACILITATE PUMP AND/OR FLOAT MAINTENANCE WITHOUT THE NEED FOR PERSONNEL TO ENTER THE PUMP CHAMBER. SEPARATE ELECTRONIC CIRCUITS SHALL BE PROVIDED FOR PUMP AND ALARM SYSTEM. ALL WIRING TO BE IN ACCORDANCE WITH LOCAL ELECTRICAL CODES. ALARM TO BE INSTALLED IN AN AREA EASILY VISIBLE BY THE OWNER.

PERFORMANCE CURVE

Series SP33
Performance Curve
1/3HP, 3450RPM, 60Hz

BARNES
www.cranepumps.com

Submersible Effluent Pumps



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SEPTIC SYSTEM DESIGN DETAILS

4 CANDY LANE
MAP 101; LOT 27
CANDY LANE AND REBEL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD: NOTTINGHAM SQUARE CORP. 46 LOWELL ROAD HUDSON, NH 03051 HCRD BK. 8438; PG. 1363	APPLICANT: NOTTINGHAM SQUARE CORP. 46 LOWELL ROAD HUDSON, NH 03051
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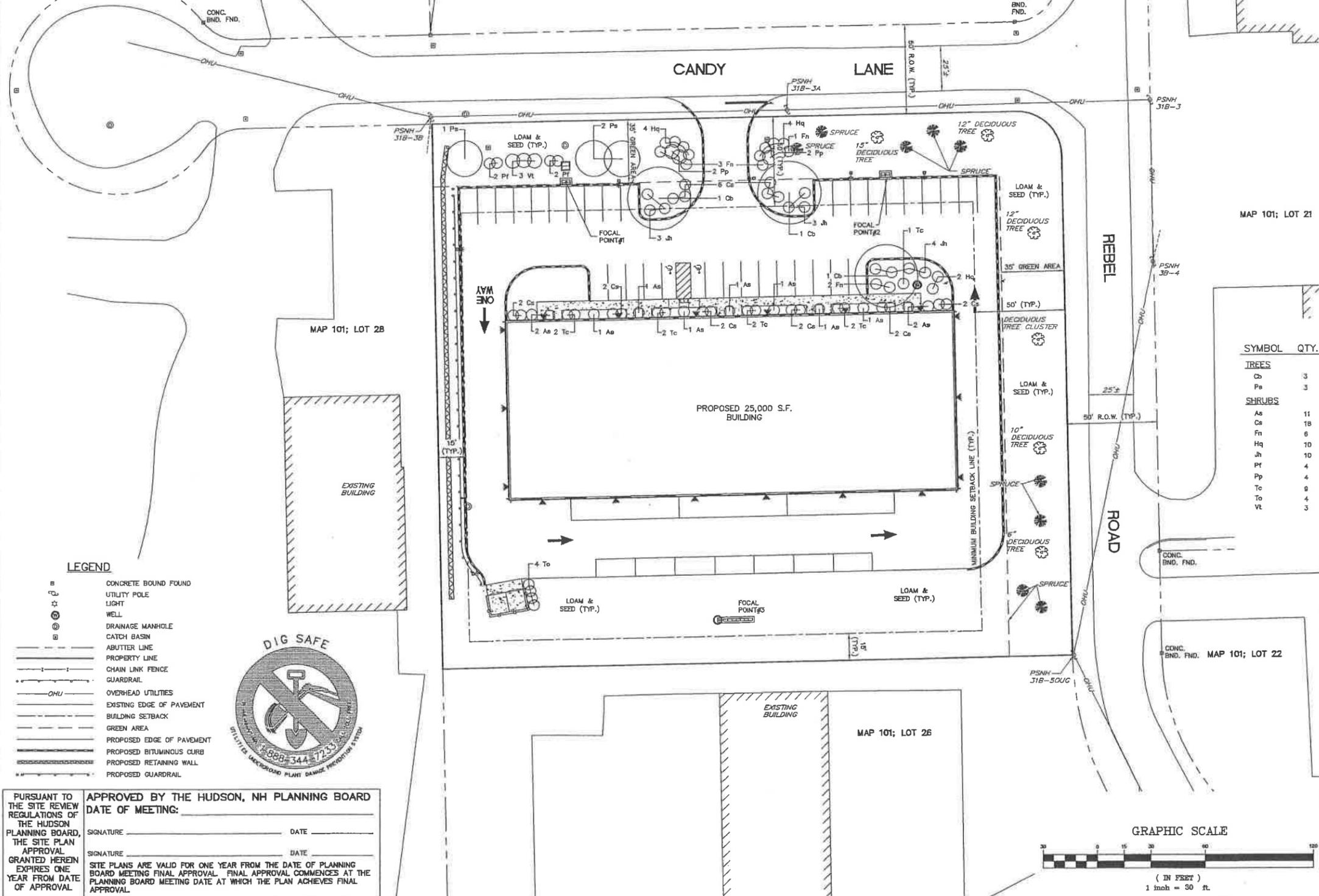
DATE: MAY 1, 2013
PROJECT NO: 13-0214-1
SCALE: AS SHOWN
SHEET 8 OF 17

NOTES FOR PLANTING FOCAL POINT SYSTEMS #1 & #2:

- FOR THE PLANTING OF THE FOCAL POINT SYSTEMS #1 & #2, THE CONTRACTOR SHALL CHOOSE A MINIMUM OF 2 DIFFERENT SPECIES FROM THE FOLLOWING LIST:
SMOOTH ASTER (ASTER LAEVIS)
PANICUM VIRGATUM 'SHENANDOAH' (SHENANDOAH SWITCH GRASS)
BOLTON'S ASTER (BOLTONIA ASTEROIDES)
EUPATORIUM 'LITTLE JOE' (LITTLE JOE JOE PLYE WEED)
EUPATORIUM RUGOSUM (WHITE SHAKEROOT)
CHASMANTHIUM LATIFOLIUM (NORTHERN SEA OATS)
HIBISCUS MOSCHUETOS (CRISONEYED RESEMBLOW)
- TO ACHIEVE A DESIRABLE DENSITY OF COVER, EACH FOCAL POINT SYSTEM SHALL BE PLANTED WITH NO LESS THAN 8 PLANTS EACH.

NOTES FOR PLANTING FOCAL POINT SYSTEM #3:

- FOR THE PLANTING OF THE FOCAL POINT SYSTEM #3, THE CONTRACTOR SHALL CHOOSE A MINIMUM OF 3 DIFFERENT SPECIES FROM THE FOLLOWING LIST:
SMOOTH ASTER (ASTER LAEVIS)
PANICUM VIRGATUM 'SHENANDOAH' (SHENANDOAH SWITCH GRASS)
BOLTON'S ASTER (BOLTONIA ASTEROIDES)
EUPATORIUM 'LITTLE JOE' (LITTLE JOE JOE PLYE WEED)
EUPATORIUM RUGOSUM (WHITE SHAKEROOT)
CHASMANTHIUM LATIFOLIUM (NORTHERN SEA OATS)
HIBISCUS MOSCHUETOS (CRISONEYED RESEMBLOW)
- TO ACHIEVE A DESIRABLE DENSITY OF COVER, FOCAL POINT SYSTEM #3 SHALL BE PLANTED WITH NO LESS THAN 20 PLANTS.



- LANDSCAPE NOTES:**
- ALL PLANT MATERIALS USED SHALL BE NURSERY STOCK AND SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF INSTALLATION. ANY MATERIAL WHICH DIES OR DOES NOT SHOW HEALTHY APPEARANCE WITHIN THIS TIME SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, WITH SAME WARRANTY REQUIREMENTS AS THE ORIGINAL. WARRANTIES TYPICALLY DO NOT COVER LOSS DUE TO INSECT INFESTATION OR MECHANICAL DAMAGE (I.E. SNOW STORAGE).
 - IF THE SOIL CONDITIONS ARE EXTREMELY SANDY, ALL TREES SHALL HAVE A 6" LAYER OF COMPACTED TOPSOIL PLACED IN THE BASE OF THE PLANT PIT AS A MOISTURE RETENTION LAYER. THE PLANT PIT SIDEWALLS SHALL BE OVER EXCAVATED BY AN ADDITIONAL 12" BEYOND THE NORMAL OUTSIDE RADIUS OF THE HOLE. A TOPSOIL MIXTURE SHALL BE USED TO BACKFILL THE HOLE AS FOLLOWS: ORGANIC TOPSOIL, AMENDED WITH 10% WOOD ASH, 10% MANURE, 30% COMPOST AND A GRANULAR HYDROGEL TO ABSORB AND RETAIN WATER.
 - PLANTING BEDS AND SAUCERS SHALL RECEIVE A 4" MINIMUM THICKNESS OF PINE/HEMLOCK BARK MULCH OVER A 5 OZ. POLYPROPYLENE WEED CONTROL FABRIC.
 - PAVEMENT AND ROAD BASE MATERIAL ENCOUNTERED IN ANY LAWN OR PLANTING BED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SUITABLE AMENDED SOIL INSTALLED AS SPECIFIED ABOVE.

LANDSCAPE CALCULATIONS

REQUIRED PARKING LOT INTERIOR LANDSCAPE AREA	19,178 SF
PROPOSED PARKING AREA PAVED:	19,178 SF
10% REQUIRED LANDSCAPE AREA:	1,918 SF
PROVIDED LANDSCAPE AREA:	3,072 SF

REQUIRED PARKING LOT SHADE TREES AND SHRUBS

PROPOSED PAVED AREA:	19,178 SF
SHADE TREES REQUIRED (19,178/1,600):	12 TREES REQUIRED
SHADE TREES PROVIDED:	13 TREES PROPOSED
(6 PROPOSED & 7 EXISTING)	
SHRUBS REQUIRED (19,178/200):	96 SHRUBS OR
(OR 1.5 x 42 PROP. PARKING SPACES)	67 SHRUBS REQUIRED
SHRUBS PROVIDED:	79 SHRUBS PROPOSED



PLANT LIST

SYMBOL	QTY.	BOTANICAL NAME	COMMON NAME	SIZE
TREES				
Cb	3	CARPINUS BETULUS	EUROPEAN HORNBEAM	2"-2.5" CAL
Pa	3	PICEA GLAUCA	WHITE SPRUCE	6-7' B&B
SHRUBS				
As	11	AZALEA 'STEWARTSTONIAN'	STEWARTSTONIAN AZALEA	18-24"
Cs	18	CORNUS SERICEA 'ALLEMANS COMPACTA'	ALLEMANS COMPACT RED-OSIER DOGWOOD	15-18"
Fh	6	FORSYTHIA 'N.H. GOLD'	NEW HAMPSHIRE GOLD FORSYTHIA	18-24"
Hq	10	HYDRANGEA QUERCIFOLIA 'RUBY SLIPPERS'	RUBY SLIPPERS OAKLEAF HYDRANGEA	18-24"
Jh	10	JUNIPERUS H. 'PLUMOSA COMPACTA'	YOUNGSTOWN JUNIPER	18-24"
Pf	4	PIERIS FLORIBUNDA	MOUNTAIN ANDROMEDA	2-3' B&B
Pp	4	PICEA PUNGENS 'BABY BLUE EYES'	BABY BLUE EYES SPRUCE	3-4' B&B
Tc	9	TAXUS CUSPIDATA 'DWARF BRIGHT GOLD'	DWARF BRIGHT GOLD YEW	18-24" B&B
To	4	THUJA OCCIDENTALIS 'HOLMSTRUP'	HOLMSTRUP ARBORVITAE	3-3.5' B&B
Vt	3	VIBURNUM TRILOBUM	AMERICAN CRANBERRY VIBURNUM	3-4' B&B

LEGEND

- CONCRETE BOUND FOUND
- UTILITY POLE
- LIGHT
- WELL
- DRAINAGE MANHOLE
- CATCH BASIN
- ABUTTER LINE
- PROPERTY LINE
- CHAIN LINK FENCE
- GUARDRAIL
- OHU OVERHEAD UTILITIES
- EXISTING EDGE OF PAVEMENT
- BUILDING SETBACK
- GREEN AREA
- PROPOSED EDGE OF PAVEMENT
- PROPOSED BITUMINOUS CURB
- PROPOSED RETAINING WALL
- PROPOSED GUARDRAIL



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**LANDSCAPE PLAN
4 CANDY LANE**

MAP 101; LOT 27
CANDY LANE AND REBEL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD:
NOTTINGHAM SQUARE CORP.
46 LOWELL ROAD
HUDSON, NH 03051
HCRD BK. B438; PG. 1363

APPLICANT:
NOTTINGHAM SQUARE CORP.
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HUDSON, NH 03051

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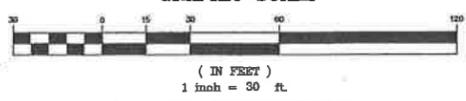


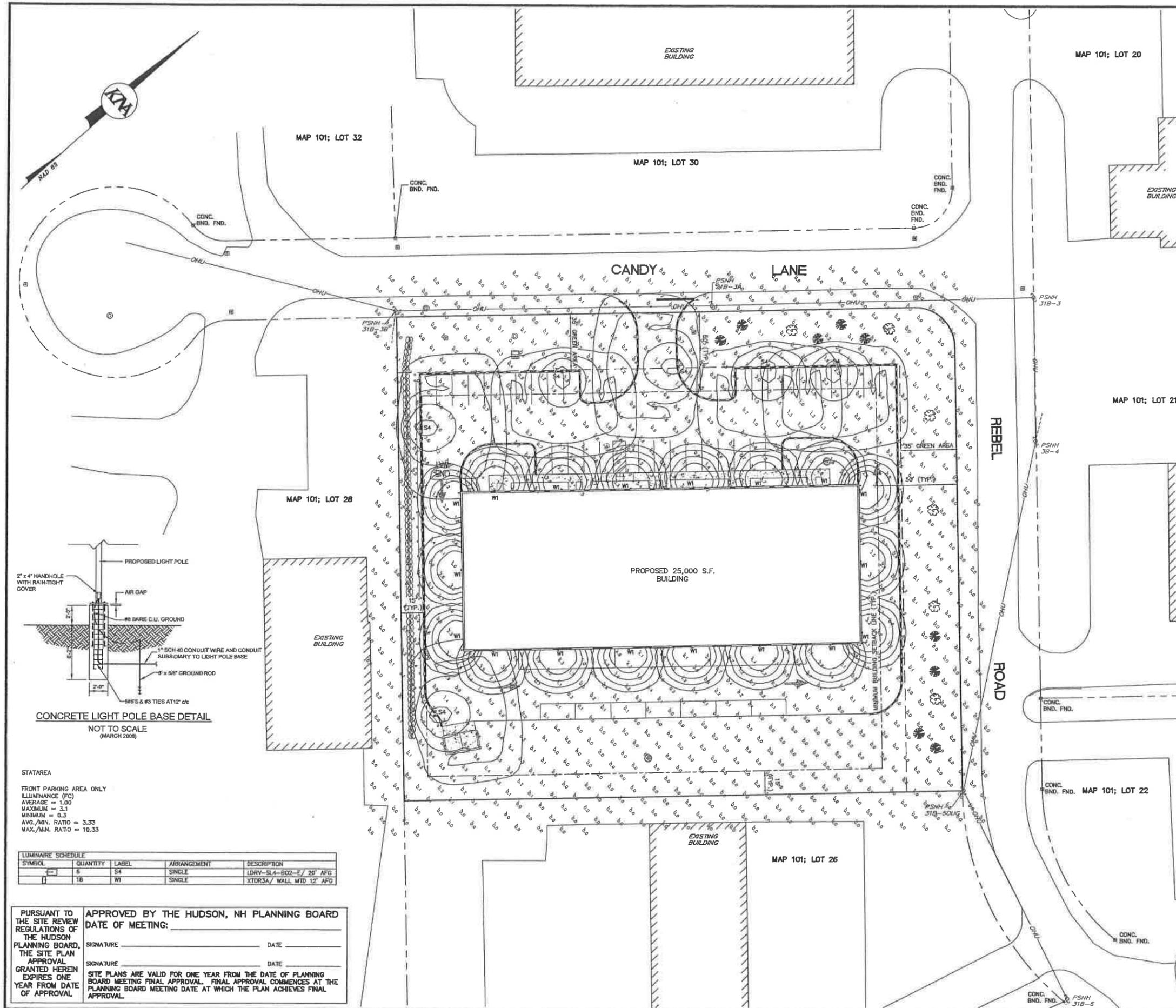
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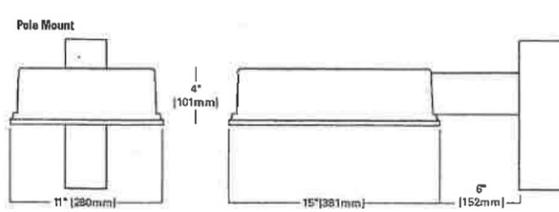
DATE: MAY 1, 2013 SCALE: 1" = 30'
PROJECT NO: 13-0214-1 SHEET 9 OF 17

GRAPHIC SCALE

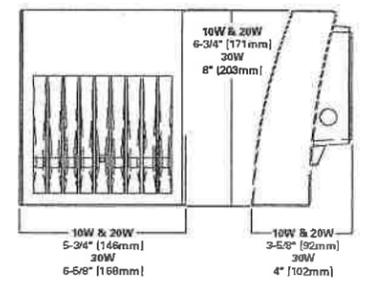




CONSTRUCTION NOTES:
 1. SEE ELECTRICAL PLANS BY OTHERS FOR ADDITIONAL INFORMATION REGARDING LIGHT INSTALLATION AND WIRING REQUIREMENTS.



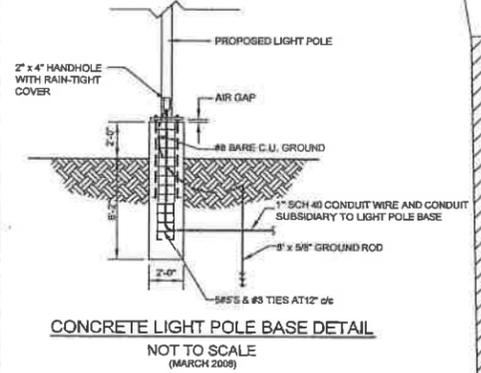
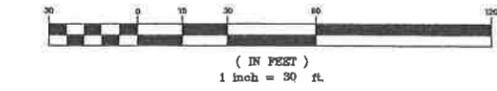
RIDGEVIEW LED AREA ROADWAY LUMINAIRE
 NOT TO SCALE



LUMARK CROSSTOUR LED WALL PACK
 NOT TO SCALE



GRAPHIC SCALE



CONCRETE LIGHT POLE BASE DETAIL
 NOT TO SCALE
 (MARCH 2009)

STATAREA
 FRONT PARKING AREA ONLY
 ILLUMINANCE (FC)
 AVERAGE = 1.00
 MAXIMUM = 3.1
 MINIMUM = 0.3
 AVG./MIN. RATIO = 3.33
 MAX./MIN. RATIO = 10.33

LUMINAIRE SCHEDULE	SYMBOL	QUANTITY	LABEL	ARRANGEMENT	DESCRIPTION
	[Symbol]	6	S4	SINGLE	LDRV-SL4-B02-E/ 20' AFG
	[Symbol]	18	W1	SINGLE	XTDR3A/ WALL MTD 12' AFG

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IN ASSOCIATION WITH: **CHARRON INCORPORATED**
 P.O. BOX 4550
 MANCHESTER, NH 03108
 (603) 659-9527
 FAX (603) 624-0764

LIGHTING PLAN
4 CANDY LANE
 MAP 101; LOT 27
 CANDY LANE AND REBEL ROAD
 HUDSON, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER OF RECORD: NOTTINGHAM SQUARE CORP.
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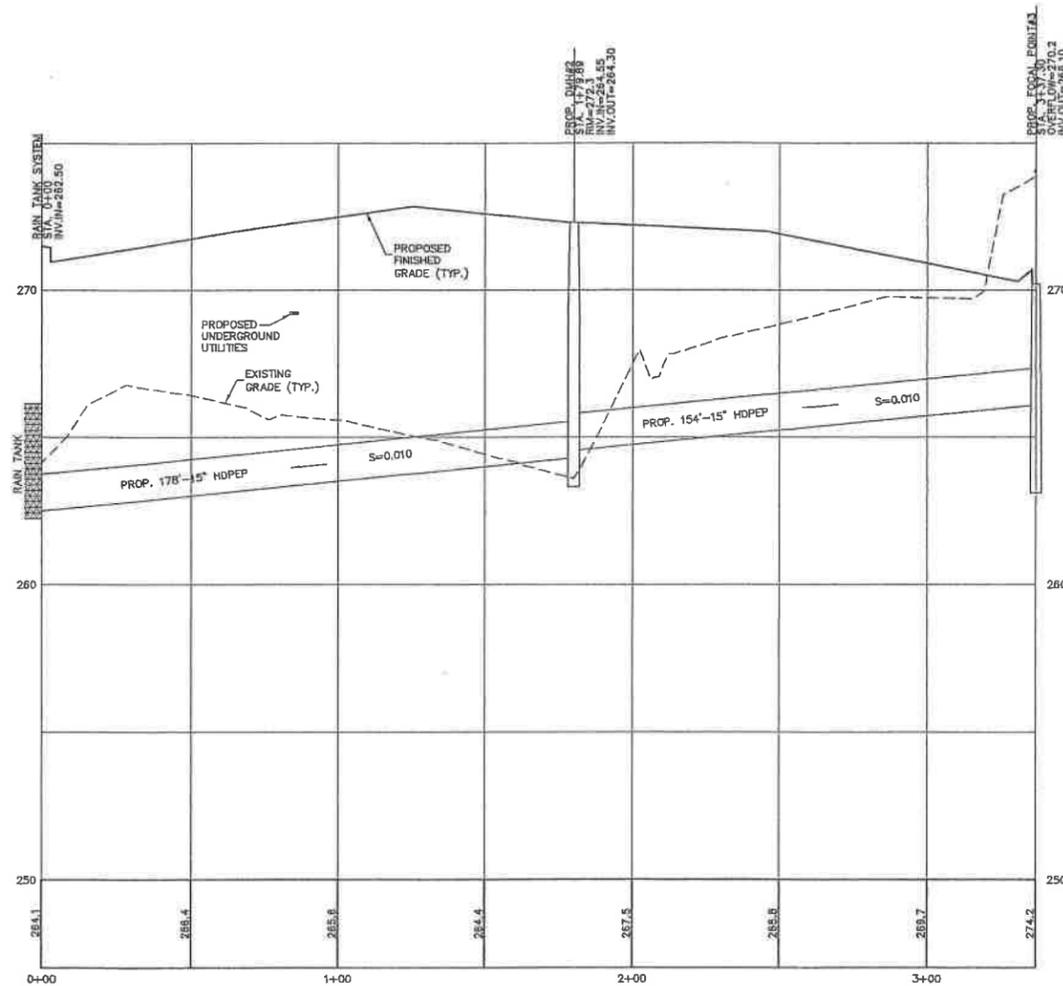
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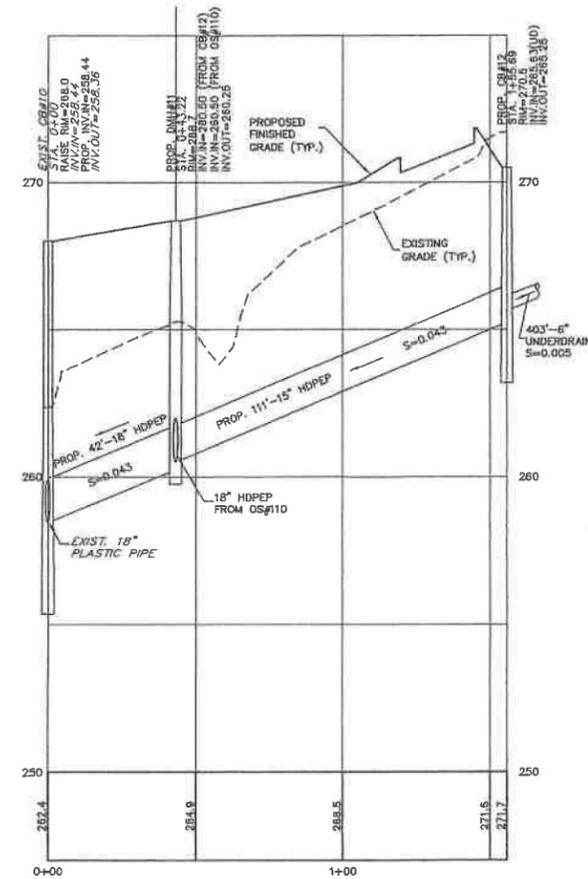
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DRAIN PROFILES
RAIN TANK SYSTEM TO FOCAL POINT #3
 SCALE: 1" = 30'(HORIZ.)
 1" = 3'(VERT.)



DRAIN PROFILES
EXIST. CB#10 TO PROP. CB#12
 SCALE: 1" = 30'(HORIZ.)
 1" = 3'(VERT.)



DRAINAGE PROFILES
4 CANDY LANE
 MAP 101; LOT 27
 CANDY LANE AND REBEL ROAD
 HUDSON, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

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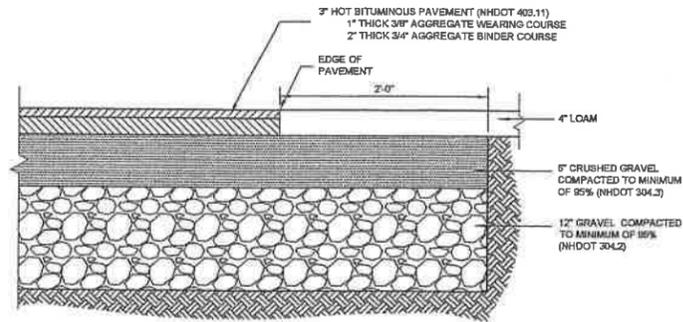
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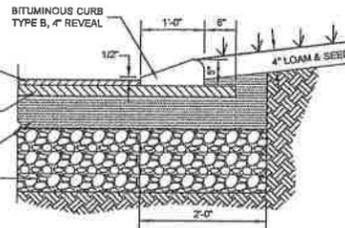
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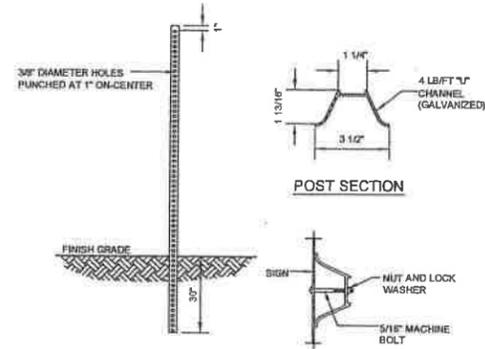
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DRIVEWAY AND PARKING LOT SECTION
NOT TO SCALE
(MARCH 2008)



BITUMINOUS CURB TYPE B DETAIL
NOT TO SCALE
(MARCH 2008)



POST

STEEL SIGN POST DETAIL
NOT TO SCALE
(MARCH 2008)



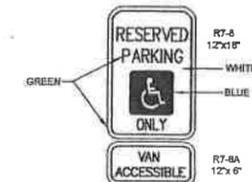
STOP SIGN DETAIL
NOT TO SCALE
(MARCH 2008)



HANDICAP PARKING SIGN DETAIL
NOT TO SCALE
(MARCH 2008)



TRAFFIC SIGN NOTES:
1. ALL TRAFFIC SIGN FACES AND SHAPES SHALL CONFORM WITH THE MUTCD.
2. ALL SIGN POST MOUNTS SHALL CONFORM WITH THE AASHTO AND NHDOT SPECIFICATIONS.

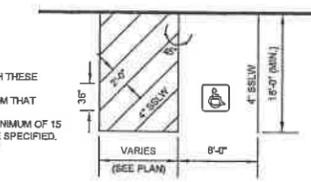


VAN ACCESSIBLE HANDICAP PARKING SIGN DETAIL
NOT TO SCALE
(MARCH 2008)

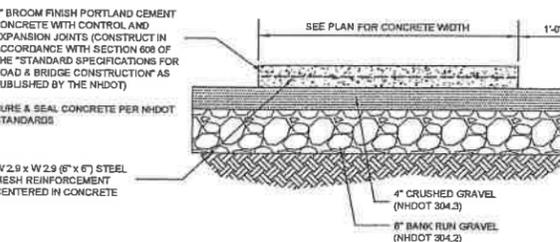
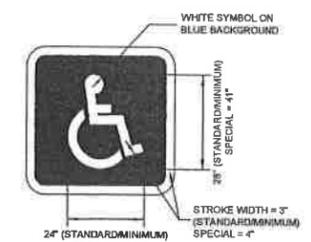


STOP BAR

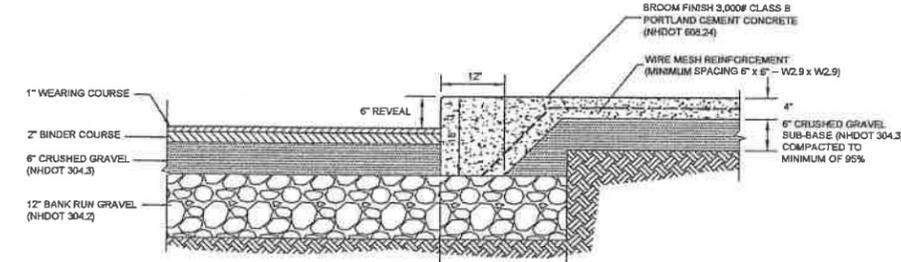
- STRIPING NOTES:**
- ALL PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THESE STANDARDS AND THE CURRENT EDITION OF MUTCD.
 - WIDTH OF LINES SHALL VARY NO MORE THAN 1/4 INCH FROM THAT SPECIFIED.
 - THE WET FILM THICKNESS OF A PAINTED LINE SHALL BE A MINIMUM OF 15 MILS THROUGHOUT THE ENTIRE WIDTH AND LENGTH OF LINE SPECIFIED. OVERSPRAY SHALL BE KEPT TO AN ABSOLUTE MINIMUM.



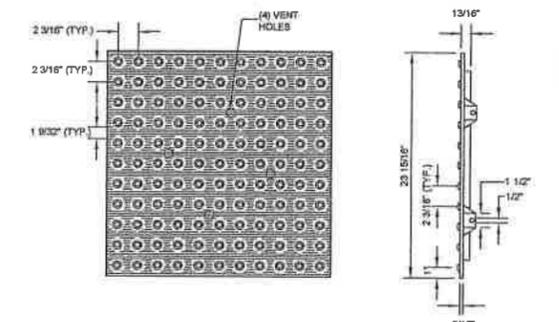
HANDICAP STRIPING DETAIL
NOT TO SCALE
(MARCH 2012)



CONCRETE WALK DETAIL
NOT TO SCALE
(MARCH 2008)

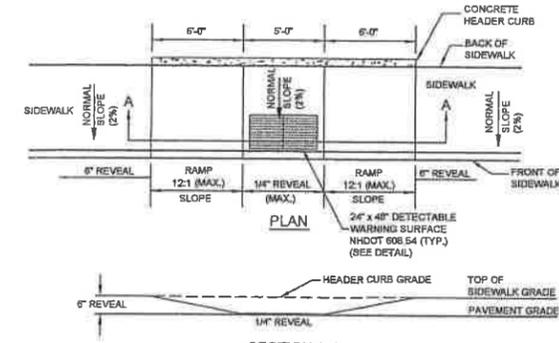


INTEGRAL CURB AND WALK DETAIL
NOT TO SCALE
(MARCH 2008)



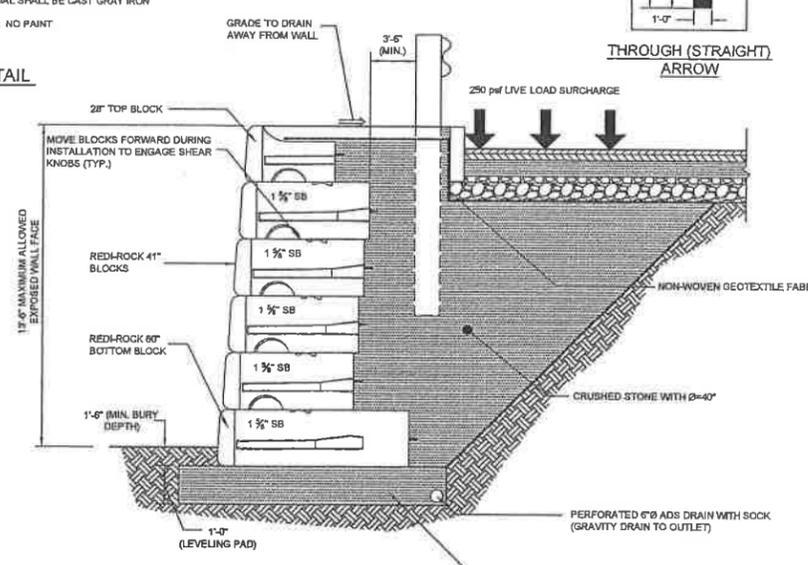
24\"/>

- NOTES:**
- DETECTABLE WARNING PLATE SHALL BE NEEHAH FOUNDRY OR APPROVED EQUAL.
 - THE PLATE MUST COMPLY WITH ADAAG (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES) AND ARCHITECTURAL BARRIER ACT GUIDELINES.
 - MATERIAL SHALL BE CAST GRAY IRON.
 - FINISH: NO PAINT.



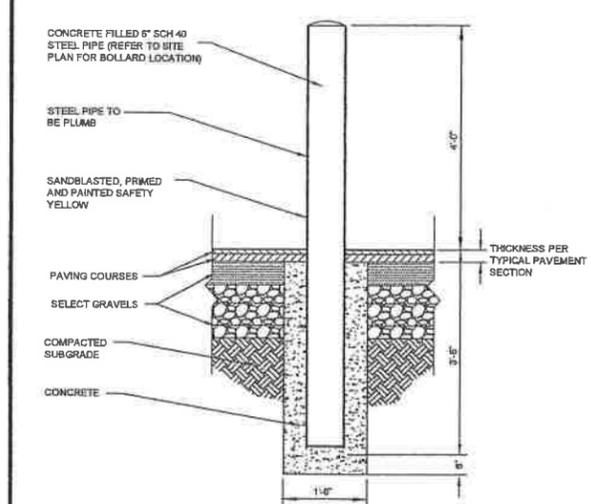
SIDEWALK RAMP WITH DETECTABLE WARNING SURFACE
NOT TO SCALE
(JUNE 2012)

- NOTES:**
- TEXTURED WALK SURFACE TO CONSIST OF CAST TRUNCATED DOMES SUPPLIED BY THE NEEHAH FOUNDRY COMPANY, OR APPROVED EQUAL.
 - A BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP SHALL BE USED ON PORTLAND CEMENT CONCRETE RAMPS.
 - MAINTAIN THE NORMAL PAVEMENT PROFILE THROUGHOUT THE RAMP AREA.
 - MAINTAIN A MAXIMUM 1/4\"/>



REDI-ROCK RETAINING WALL SECTION
NOT TO SCALE

- NOTES:**
- PRIOR TO THE CONSTRUCTION OF THIS RETAINING WALL, A STRUCTURAL ENGINEER SHALL PREPARE A FINAL DESIGN USING THE ACTUAL CONDITIONS FOUND AT THE SITE.
 - THIS DETAIL IS SCHEMATIC ONLY AND IS BASED ON A NATIVE SOIL THAT IS SILTY SAND, CLAYEY SAND WITH AN INTERNAL FRICTION ANGLE OF 28°.
 - ALL REDI-ROCK SPECIFICATIONS SHALL BE FOLLOWED.
 - REDI-ROCK RETAINING WALL MAY BE SUBSTITUTED FOR AN EQUAL RETAINING WALL PRODUCT/SYSTEM. APPROVAL FROM STRUCTURAL ENGINEER IS REQUIRED.



BOLLARD DETAIL
NOT TO SCALE
(MARCH 2008)

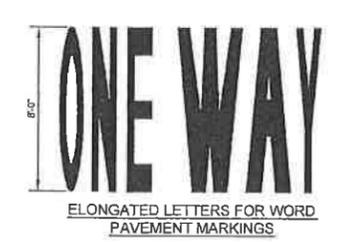
PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____

SIGNATURE _____ DATE _____

SIGNATURE _____ DATE _____

SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.



ELONGATED LETTERS FOR WORD PAVEMENT MARKINGS

CONSTRUCTION DETAILS
4 CANDY LANE
MAP 101; LOT 27
CANDY LANE AND REBEL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

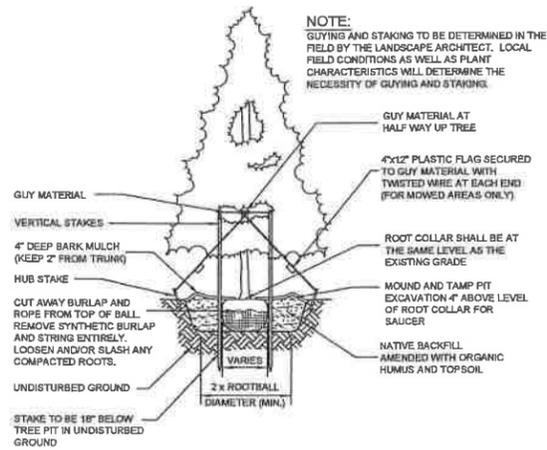
OWNER OF RECORD:
NOTTINGHAM SQUARE CORP.
46 LOWELL ROAD
HUDSON, NH 03051
HCRD BK. 8438; PG. 1363

APPLICANT:
NOTTINGHAM SQUARE CORP.
46 LOWELL ROAD
HUDSON, NH 03051

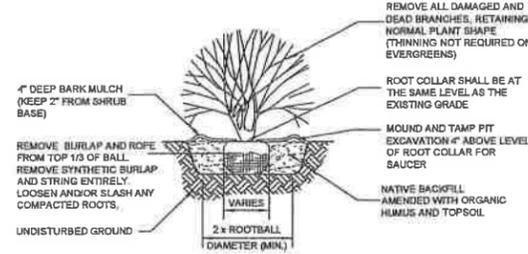
KM KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	07/12/13	REVISED PER CLD COMMENTS	JDM

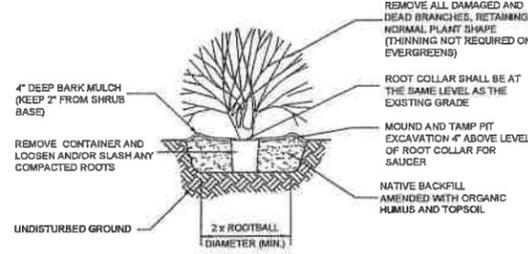
DATE: MAY 1, 2013
PROJECT NO: 13-0214-1
SCALE: AS SHOWN
SHEET 12 OF 17



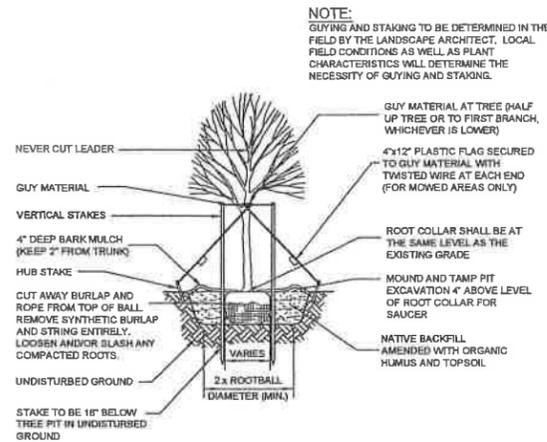
EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



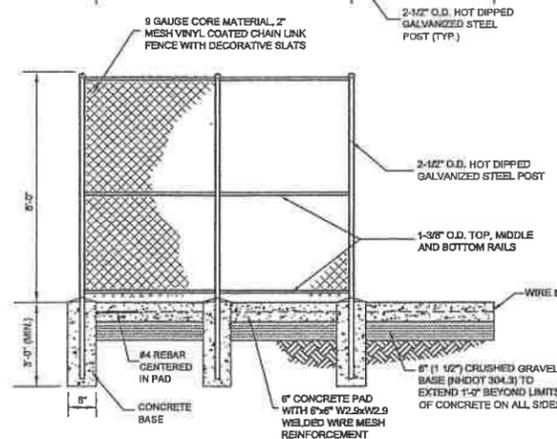
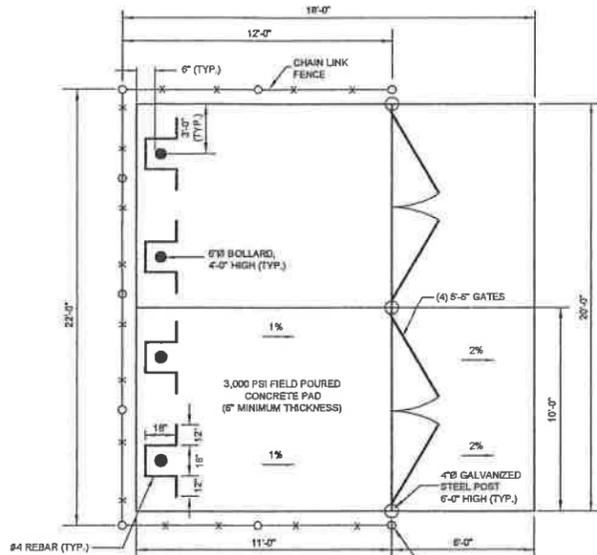
BALLED & BURLAP SHRUB PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



CONTAINER SHRUB PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE
(JANUARY 2012)



CHAIN LINK TRASH ENCLOSURE DETAIL
NOT TO SCALE
(MARCH 2008)

TURF ESTABLISHMENT SCHEDULE

PURPOSE:
TO ESTABLISH AND MAINTAIN PERMANENT AND TEMPORARY TURF AREAS, RESTORE GROWTH TO EXISTING TURF AREAS DISTURBED DURING CONSTRUCTION AND CONTROL SOIL EROSION.

PREPARATION AND EXECUTION:

1. RAKE THE SUBGRADE OF ALL AREAS TO BE LOAMED AND SEEDED TO REMOVE RUBBISH, STICKS, ROOTS AND STONES LARGER THAN 1 INCH.
2. PLACE LOAM OVER AREAS TO BE SEEDED AND SPREAD.
3. FINE GRADE SURFACE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A UNIFORM SURFACE ACCORDING TO THE FINISH GRADES INDICATED; TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED. NO LOAM SHALL BE SPREAD IF THE SUBGRADE IS EXCESSIVELY WET OR FROZEN.
4. APPLY LIME EVENLY OVER LOAM SURFACE AND THOROUGHLY INCORPORATE LIME INTO THE LOAM BY HEAVY RAKING TO AT LEAST ONE-HALF THE DEPTH OF THE LOAM.
5. APPLY FERTILIZER AND MIX WITH THE UPPER 2 INCHES OF LOAM.
6. DETERMINE APPROPRIATE MIXTURE FOR AREA TO BE SEEDED BASED ON EXAMINATION OF PROJECT PLANS. UNIFORMLY SPREAD THE SEED BY BROADCASTING OR HYDROSEEDING. IF BROADCASTING, LIGHTLY RAKE INTO THE PREPARED SURFACE AND ROLL. IF HYDROSEEDING, USE 4 TIMES THE RECOMMENDED RATE OF INOCULANT. AFTER SEED IS SPREAD, WATER THOROUGHLY WITH A FINE SPRAY.
7. SEEDING FOR PERMANENT COVER SHALL OCCUR BETWEEN SEPTEMBER 15 AND OCTOBER 15 AND BETWEEN APRIL 15 AND JUNE 15. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER, WHEN THE GROUND IS FROZEN OR EXCESSIVELY WET OR OTHERWISE UNTILABLE.
8. WITHIN 24 HOURS AFTER SEEDING OPERATION, UNIFORMLY MULCH THE AREA WITH HAY. ANCHOR MULCH ON ALL SLOPES EXCEEDING 3 : 1 USING MULCH NETTING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER.
9. PROTECT AND PREVENT AGAINST WASHOUTS. ANY WASHOUTS WHICH OCCUR SHALL BE PROMPTLY REGRADED AND RESEED.
10. WHEN IT IS IMPRACTICAL TO ESTABLISH PERMANENT GROWTH ON DISTURBED EARTH BY SEEDING, A TEMPORARY SEED MIXTURE SHALL BE USED. WHEN TEMPORARY SEEDING CANNOT ESTABLISH VISIBLE GROWTH, THE DISTURBED AREA SHALL BE COVERED WITH SIX INCHES OF MULCH FOR THE WINTER.

MAINTENANCE:
ALL SEEDED AREAS SHALL BE KEPT WATERED AND IN GOOD CONDITION. RESEED AS NECESSARY TO ESTABLISH HEALTHY UNIFORM GROWTH OVER THE ENTIRE SEEDED AREA. MAINTAIN SEEDED AREAS IN AN APPROVED CONDITION UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE REPAIRS FOR DAMAGE CAUSED BY EROSION.

APPLICATION RATES:

1. LOAM SHALL BE APPLIED AT A MINIMUM COMPACTED THICKNESS OF 4 INCHES.
2. LIME SHALL BE APPLIED AT A RATE OF 75 TO 100 POUNDS PER 1,000 S.F.
3. FERTILIZER SHALL BE APPLIED AT A RATE OF 30 POUNDS PER 1,000 S.F.
4. SEED MIXTURE FOR LAWN AREAS SHALL BE APPLIED AT A RATE OF AT LEAST 80 POUNDS PER ACRE OR 2 POUNDS PER 1,000 S.F.
5. TEMPORARY SEED MIXTURE SHALL BE APPLIED AT A RATE OF 2 POUNDS PER 1,000 S.F.
6. SEED MIXTURE FOR SLOPE AREAS SHALL BE APPLIED AT A RATE OF 80 POUNDS PER ACRE OR 2 POUNDS PER 1,000 S.F.
7. SEED MIXTURE FOR STORMWATER MANAGEMENT AREAS SHALL BE APPLIED AT A RATE OF 70 POUNDS PER ACRE OR 1.5 POUNDS PER 1,000 S.F.
8. MULCH SHALL BE APPLIED AT A RATE OF 90 POUNDS PER 1,000 S.F.

MATERIALS:

1. LOAM USED FOR TOPSOIL SHALL BE FRIABLE, FERTILE, NATURAL FREE-DRAINING LOAM, FREE OF ROOTS, GRASS, STICKS, WEEDS, CLAY, SOIL LUMPS, DEBRIS AND STONES LARGER THAN 1 INCH IN ANY DIMENSION. SOIL SHALL NOT BE EXCESSIVELY ACID OR ALKALINE AND CONTAIN NO TOXIC MATERIALS.
2. LIME SHALL BE GROUND LIMESTONE CONTAINING NO LESS THAN 85% CALCIUM AND MAGNESIUM CARBONATES.
3. FERTILIZER SHALL BE 10-20-20 COMMERCIAL GRADE.
4. SEED MIXTURE FOR LAWN AREAS SHALL BE 99% PURE LIVE SEED AND CONSIST OF THE FOLLOWING:
25% CREEPING RED FESCUE
25% KENTUCKY BLUEGRASS
25% REDTOP
25% MANHATTAN PERENNIAL RYEGRASS
5. TEMPORARY SEEDING MIXTURE SHALL BE AN APPROVED CONSERVATION MIX OR CONSIST OF THE FOLLOWING:
15% BLACKWELL OR SHELTER SWITCHGRASS
30% NAJRA OR KAW BIG BLUESTEM
30% CAMPER OR BLAZE LITTLESTEM
15% NE-27 OR BLAZE SAND LOVEGRASS
10% WING BIRDSFOOT TREFLOL
6. SEED MIXTURE FOR SLOPE AREAS SHALL BE 99% PURE LIVE SEED AND SHALL CONSIST OF THE FOLLOWING:
30% CREEPING RED FESCUE
40% PERENNIAL RYE GRASS
15% REDTOP
15% BIRDSFOOT TREFLOL
*IN ADDITION TO THE MIX SPECIFIED ABOVE, CROWN VETCH SHALL BE USED ON ALL SLOPES STEEPER THAN 3 : 1. CROWN VETCH SHALL BE APPLIED AT A RATE OF 10 POUNDS PER ACRE AND INOCULUM SPECIFIC TO CROWN VETCH MUST BE USED.
7. SEED MIXTURE FOR STORMWATER MANAGEMENT AREAS, INCLUDING DETENTION BASINS AND VEGETATED TREATMENT SWALES SHALL CONSIST OF THE FOLLOWING:
25% CREEPING RED FESCUE
15% SWITCH GRASS
15% FOX SEDGE
15% CREEPING BENTGRASS
10% FLATUA
20% WILDFLOWER VARIETY
8. HAY USED FOR MULCH SHALL CONSIST OF MOWED AND PROPERLY CURED GRASS OR LEGUME MOWINGS, FREE FROM WEEDS, TWIGS, DEBRIS OR OTHER DELETERIOUS MATERIAL AND ROT OR MOLD.

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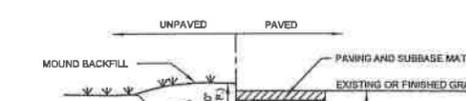
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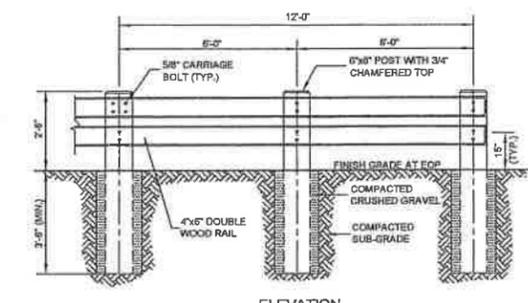
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6. DETERMINE APPROPRIATE MIXTURE FOR AREA TO BE SEEDED BASED ON EXAMINATION OF PROJECT PLANS. UNIFORMLY SPREAD THE SEED BY BROADCASTING OR HYDROSEEDING. IF BROADCASTING, LIGHTLY RAKE INTO THE PREPARED SURFACE AND ROLL. IF HYDROSEEDING, USE 4 TIMES THE RECOMMENDED RATE OF INOCULANT. AFTER SEED IS SPREAD, WATER THOROUGHLY WITH A FINE SPRAY.
7. SEEDING FOR PERMANENT COVER SHALL OCCUR BETWEEN SEPTEMBER 15 AND OCTOBER 15 AND BETWEEN APRIL 15 AND JUNE 15. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER, WHEN THE GROUND IS FROZEN OR EXCESSIVELY WET OR OTHERWISE UNTILABLE.
8. WITHIN 24 HOURS AFTER SEEDING OPERATION, UNIFORMLY MULCH THE AREA WITH HAY. ANCHOR MULCH ON ALL SLOPES EXCEEDING 3 : 1 USING MULCH NETTING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER.
9. PROTECT AND PREVENT AGAINST WASHOUTS. ANY WASHOUTS WHICH OCCUR SHALL BE PROMPTLY REGRADED AND RESEED.
10. WHEN IT IS IMPRACTICAL TO ESTABLISH PERMANENT GROWTH ON DISTURBED EARTH BY SEEDING, A TEMPORARY SEED MIXTURE SHALL BE USED. WHEN TEMPORARY SEEDING CANNOT ESTABLISH VISIBLE GROWTH, THE DISTURBED AREA SHALL BE COVERED WITH SIX INCHES OF MULCH FOR THE WINTER.

1. RAKE THE SUBGRADE OF ALL AREAS TO BE LOAMED AND SEEDED TO REMOVE RUBBISH, STICKS, ROOTS AND STONES LARGER THAN 1 INCH.
2. PLACE LOAM OVER AREAS TO BE SEEDED AND SPREAD.
3. FINE GRADE SURFACE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A UNIFORM SURFACE ACCORDING TO THE FINISH GRADES INDICATED; TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED. NO LOAM SHALL BE SPREAD IF THE SUBGRADE IS EXCESSIVELY WET OR FROZEN.
4. APPLY LIME EVENLY OVER LOAM SURFACE AND THOROUGHLY INCORPORATE LIME INTO THE LOAM BY HEAVY RAKING TO AT LEAST ONE-HALF THE DEPTH OF THE LOAM.
5. APPLY FERTILIZER AND MIX WITH THE UPPER 2 INCHES OF LOAM.
6. DETERMINE APPROPRIATE MIXTURE FOR AREA TO BE SEEDED BASED ON EXAMINATION OF PROJECT PLANS. UNIFORMLY SPREAD THE SEED BY BROADCASTING OR HYDROSEEDING. IF BROADCASTING, LIGHTLY RAKE INTO THE PREPARED SURFACE AND ROLL. IF HYDROSEEDING, USE 4 TIMES THE RECOMMENDED RATE OF INOCULANT. AFTER SEED IS SPREAD, WATER THOROUGHLY WITH A FINE SPRAY.
7. SEEDING FOR PERMANENT COVER SHALL OCCUR BETWEEN SEPTEMBER 15 AND OCTOBER 15 AND BETWEEN APRIL 15 AND JUNE 15. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER, WHEN THE GROUND IS FROZEN OR EXCESSIVELY WET OR OTHERWISE UNTILABLE.
8. WITHIN 24 HOURS AFTER SEEDING OPERATION, UNIFORMLY MULCH THE AREA WITH HAY. ANCHOR MULCH ON ALL SLOPES EXCEEDING 3 : 1 USING MULCH NETTING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER.
9. PROTECT AND PREVENT AGAINST WASHOUTS. ANY WASHOUTS WHICH OCCUR SHALL BE PROMPTLY REGRADED AND RESEED.
10. WHEN IT IS IMPRACTICAL TO ESTABLISH PERMANENT GROWTH ON DISTURBED EARTH BY SEEDING, A TEMPORARY SEED MIXTURE SHALL BE USED. WHEN TEMPORARY SEEDING CANNOT ESTABLISH VISIBLE GROWTH, THE DISTURBED AREA SHALL BE COVERED WITH SIX INCHES OF MULCH FOR THE WINTER.



UTILITY TRENCH DETAIL
NOT TO SCALE
(MARCH 2008)



- NOTES:**
1. ALL TIMBERS SHALL BE PRESSURE TREATED.
 2. PAY LIMIT = PER LINEAR FOOT INCLUDING END SECTION.
 3. ALL HARDWARE SHALL BE HOT DIPPED GALVANIZED.

WOOD BEAM GUARDRAIL
NOT TO SCALE
(AUGUST 2011)

CONSTRUCTION DETAILS
4 CANDY LANE
MAP 101; LOT 27
CANDY LANE AND REBEL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

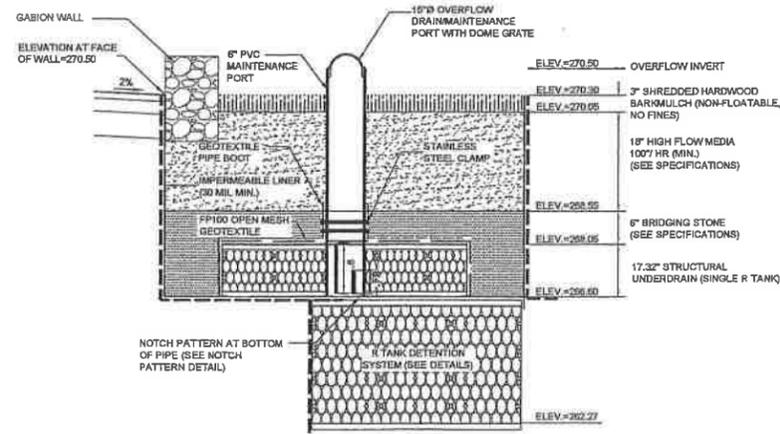
OWNER OF RECORD:
NOTTINGHAM SQUARE CORP.
45 LOWELL ROAD
HUDSON, NH 03051
HCRD BK. 8438; PG. 1363

APPLICANT:
NOTTINGHAM SQUARE CORP.
45 LOWELL ROAD
HUDSON, NH 03051

KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3R, Bedford, NH 03110 Phone (603) 627-2881

REVIEWS			
No.	DATE	DESCRIPTION	BY
1	07/12/13	DATE ONLY	JDM

DATE: MAY 1, 2013
PROJECT NO: 13-0214-1
SCALE: AS SHOWN
SHEET 13 OF 17



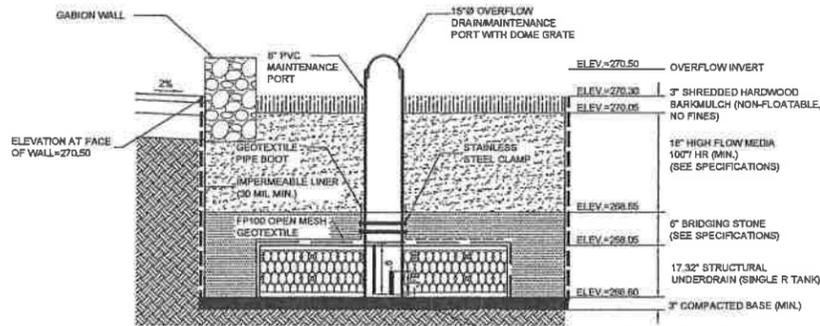
FOCALPOINT HP CONSTRUCTION GUIDE	
A	FOCALPOINT LENGTH
B	# UNDERDRAIN LONG
C	FOCALPOINT WIDTH
D	# UNDERDRAIN WIDE
SQUARE FOOT AREA	

NOTE:
1. INSTALL ONE INSPECTION / MAINTENANCE PORT IN BED.



PIPE NOTCH PATTERN DETAIL

FOCALPOINT #1 DETAILED CROSS SECTION
NOT TO SCALE



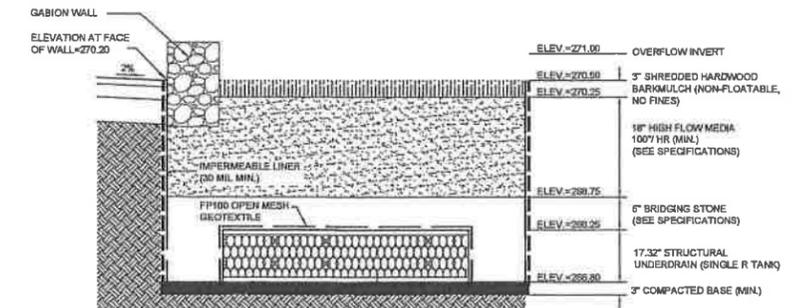
FOCALPOINT HP CONSTRUCTION GUIDE	
A	FOCALPOINT LENGTH
B	# UNDERDRAIN LONG
C	FOCALPOINT WIDTH
D	# UNDERDRAIN WIDE
SQUARE FOOT AREA	

NOTE:
1. INSTALL ONE INSPECTION / MAINTENANCE PORT IN BED.



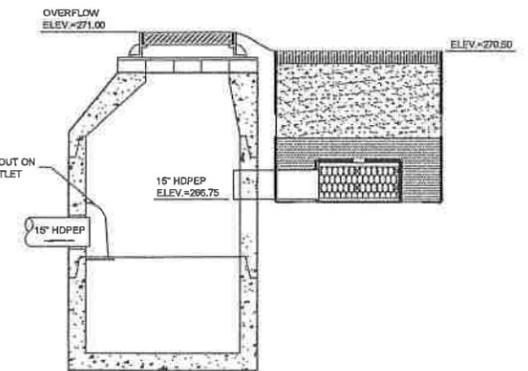
PIPE NOTCH PATTERN DETAIL

FOCALPOINT #2 DETAILED CROSS SECTION
NOT TO SCALE

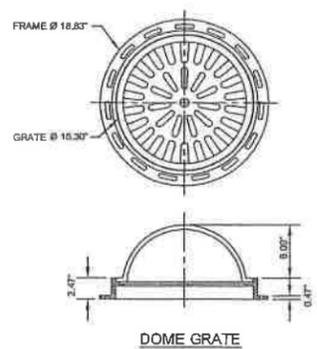


FOCALPOINT HP CONSTRUCTION GUIDE	
A	FOCALPOINT LENGTH
B	# UNDERDRAIN LONG
C	FOCALPOINT WIDTH
D	# UNDERDRAIN WIDE
SQUARE FOOT AREA	

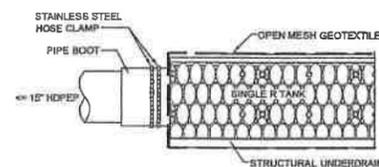
NOTE:
1. INSTALL ONE INSPECTION / MAINTENANCE PORT IN BED.



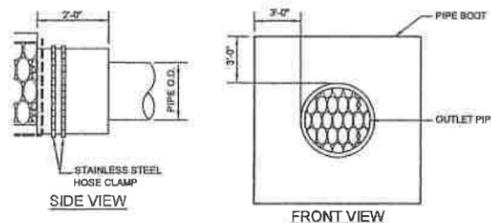
FOCALPOINT #3 DETAILED CROSS SECTION
NOT TO SCALE



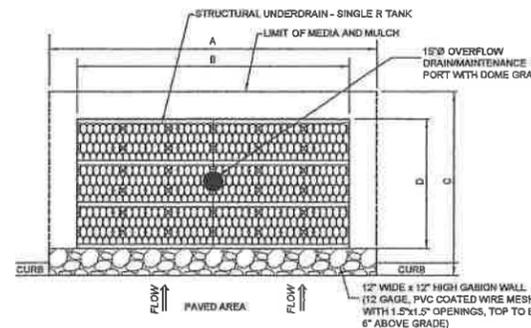
NYLOPLAST 15\"/>



OUTLET PIPE CONNECTION
NOT TO SCALE



PIPE BOOT DETAIL
NOT TO SCALE



TYPICAL FOCALPOINT PLAN VIEW
NOT TO SCALE

FOCALPOINT HP PERFORMANCE SPECIFICATION:

HIGH PERFORMANCE MEDIA:
HIGH PERFORMANCE MEDIA MUST MEET A MINIMUM OF 100\"/>

HIGH PERFORMANCE STRUCTURAL UNDERDRAIN:
MUST HAVE A MINIMUM OF 19 SQUARE INCHES OF ORIFICE OPENING PER SQUARE FOOT. MUST MEET H2O LOADING REQUIREMENTS. MUST BE MODULAR IN NATURE AND ASSEMBLED ON SITE. MUST HAVE MINIMUM 90% INTERIOR VOID SPACE.

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____

SIGNATURE _____ DATE _____

SIGNATURE _____ DATE _____

SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

CONSTRUCTION DETAILS

4 CANDY LANE

MAP 101; LOT 27
CANDY LANE AND REBEL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

<p>OWNER OF RECORD: NOTTINGHAM SQUARE CORP. 45 LOWELL ROAD HUDSON, NH 03051 HCRD BK. 8438; PG. 1363</p>	<p>APPLICANT: NOTTINGHAM SQUARE CORP. 46 LOWELL ROAD HUDSON, NH 03051</p>
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KM KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

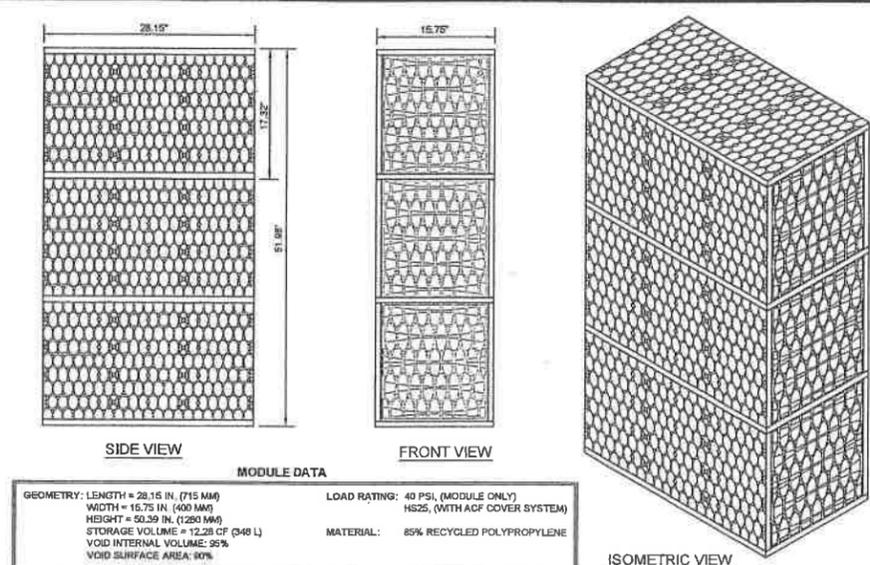
REVISIONS			
No.	DATE	DESCRIPTION	BY
1	07/12/13	DATE ONLY	JEM

DATE: MAY 1, 2013

SCALE: AS SHOWN

PROJECT NO: 13-0214-1

SHEET 14 OF 17

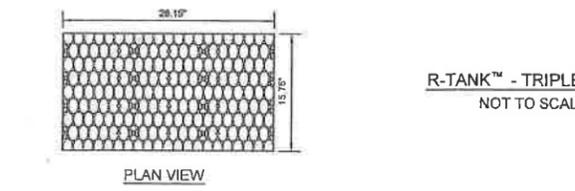


MODULE DATA

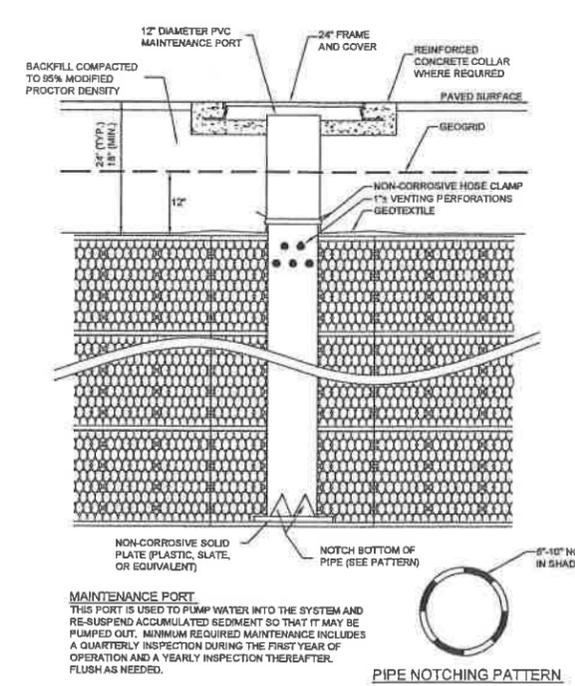
GEOMETRY: LENGTH = 28.15 IN. (715 MM)
 WIDTH = 15.75 IN. (400 MM)
 HEIGHT = 50.39 IN. (1280 MM)
 STORAGE VOLUME = 12.28 CF (348 L)
 VOID INTERNAL VOLUME: 95%
 VOID SURFACE AREA: 90%

LOAD RATING: 40 PSI, (MODULE ONLY)
 H225, (WITH ACF COVER SYSTEM)

MATERIAL: 85% RECYCLED POLYPROPYLENE



R-TANK™ - TRIPLE MODULE
NOT TO SCALE



R-TANK™ - TYPICAL MAINTENANCE PORT
NOT TO SCALE

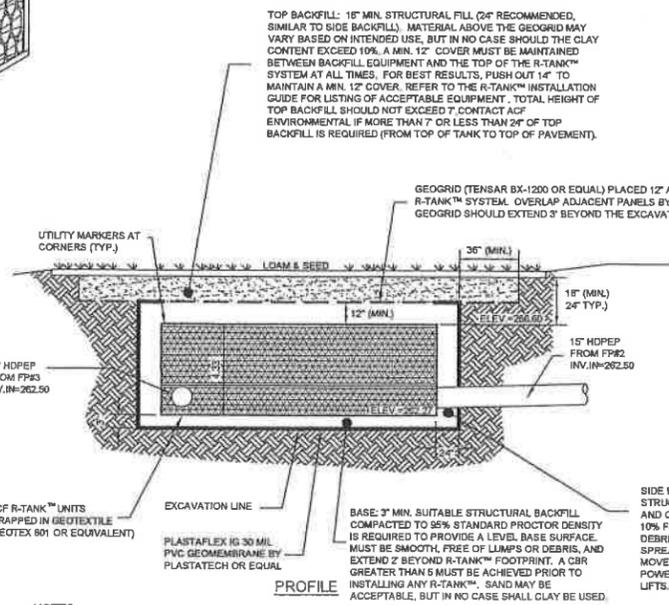
PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD
 DATE OF MEETING: _____

SIGNATURE _____ DATE _____

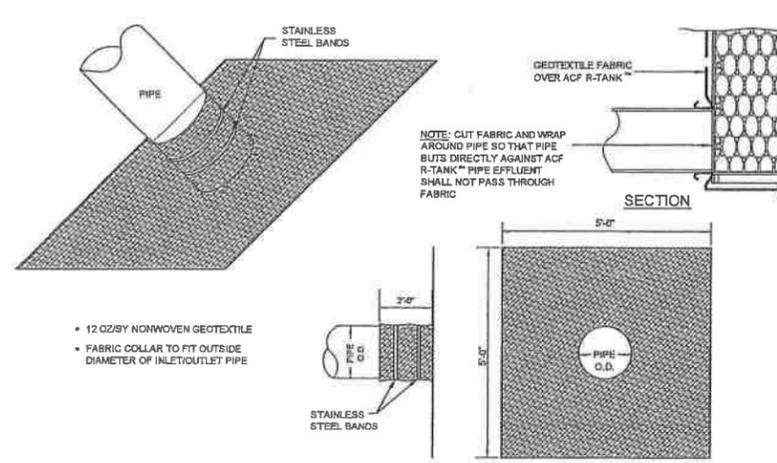
SIGNATURE _____ DATE _____

SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

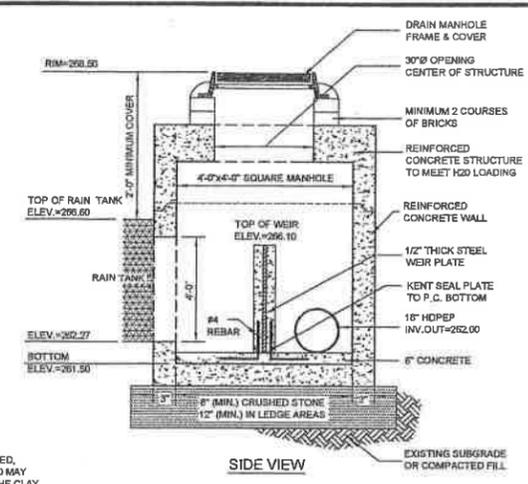


R-TANK™ - H2O LOADS
NOT TO SCALE

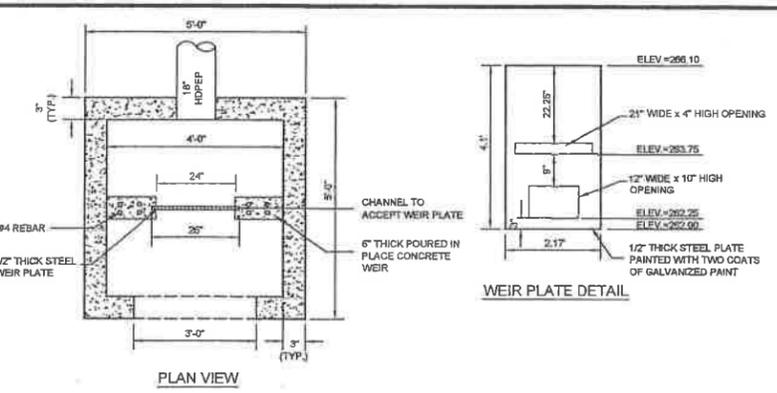
- NOTES:**
- THIS SYSTEM SHALL BE CONSTRUCTED WITH ONE LAYER OF TRIPLE MODULE R-TANK™ UNITS, OR APPROVED EQUAL.
 - FOR COMPLETE MODULE DATA, SEE APPROPRIATE ACF R-TANK™ SHEET (MINI MODULE, SINGLE MODULE, DOUBLE MODULE, TRIPLE MODULE, QUAD MODULE, OR PENTA MODULE).
 - GEOGRID SHALL CONSIST OF A BIAXIAL GRID WITH A MINIMUM TENSILE STRENGTH OF 410 LB/FT AT 2% STRAIN IN ANY DIRECTION (I.E. BK 1200 OR EQUIVALENT).
 - INSTALLATION MUST COMPLY WITH "R-TANK™ UNDERGROUND STORMWATER MANAGEMENT SYSTEM INSTALLATION" MANUAL BY ACF ENVIRONMENTAL, ACF ENVIRONMENTAL.COM, 1-800-448-3836.
 - A REPRESENTATIVE OF ACF ENVIRONMENTAL MUST BE ON-SITE DURING THE CONSTRUCTION OF THE ENTIRE SYSTEM. THIS SERVICE IS PROVIDED AT NO CHARGE BY ACF ENVIRONMENTAL.



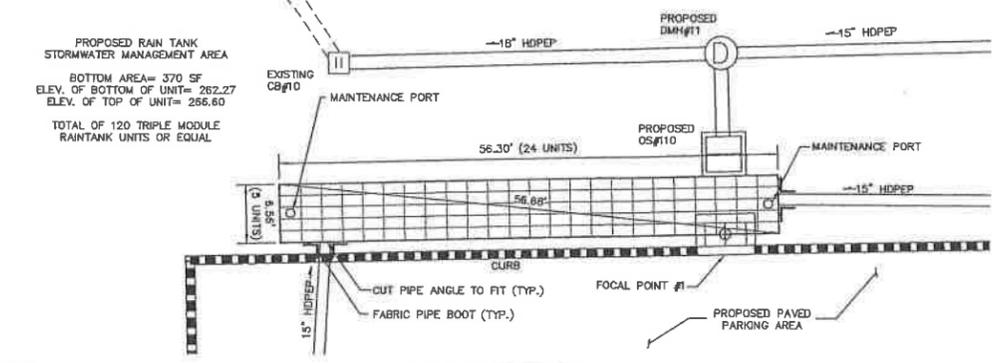
FABRIC PIPE BOOT FOR R-TANK™
NOT TO SCALE



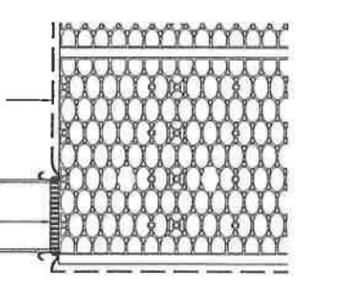
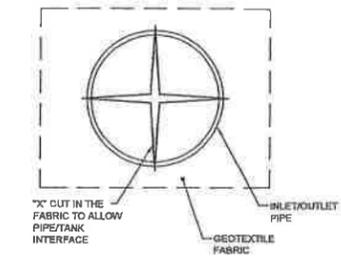
SIDE VIEW



OUTLET CONTROL STRUCTURE (OS#110) DETAIL
NOT TO SCALE



R-TANK™ - DETENTION POND DETAIL
SCALE: 1" = 10'



R-TANK™ - TYPICAL INLET/OUTLET DETAIL
NOT TO SCALE

CONSTRUCTION DETAILS

4 CANDY LANE

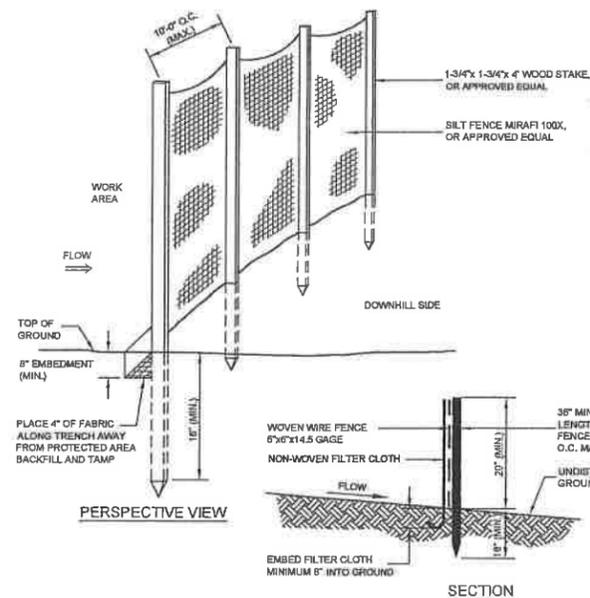
MAP 101; LOT 27
 CANDY LANE AND REBEL ROAD
 HUDSON, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER OF RECORD: NOTTINGHAM SQUARE CORP. 46 LOWELL ROAD HUDSON, NH 03051 HCRD BK. 843B; PG. 1363	APPLICANT: NOTTINGHAM SQUARE CORP. 46 LOWELL ROAD HUDSON, NH 03051
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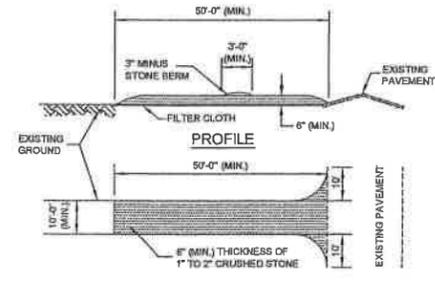
KMA KEACH-NORDSTROM ASSOCIATES, INC.
 Civil/Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2801

No.	DATE	DESCRIPTION	BY
1	07/12/13	REVISED PER CLD COMMENTS	JDM

DATE: MAY 1, 2013
 PROJECT NO: 13-0214-1
 SCALE: AS SHOWN
 SHEET 15 OF 17



SILT FENCE DETAIL
NOT TO SCALE
(MARCH 2008)



STABILIZED CONSTRUCTION EXIT DETAIL
NOT TO SCALE
(MARCH 2008)

MAINTENANCE:
MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE CRUSHED STONE AND THE EFFECTIVENESS OF THE CRUSHED STONE PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOPDRESSED WITH NEW CRUSHED STONE OR COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.
IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

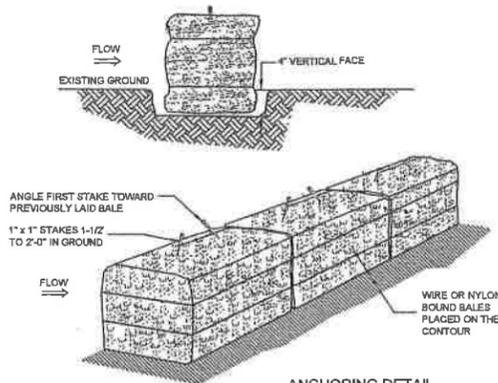
- CONSTRUCTION SPECIFICATIONS:**
- STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE OR RECYCLED CONCRETE EQUIVALENT.
 - THE LENGTH OF THE STABILIZED EXIT SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
 - THE THICKNESS OF THE STONE FOR THE STABILIZED EXIT SHALL NOT BE LESS THAN 8 INCHES.
 - THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE AREA WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
 - GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
 - ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A BERM WITH 6:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
 - THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
 - WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

CONSTRUCTION SPECIFICATIONS:

- THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
- THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
- WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE OR STAPLES WHERE NOTED OR AS DIRECTED BY DESIGN ENGINEER.
- FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MIDDLE AND BOTTOM.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
- FENCE POSTS SHALL BE A MINIMUM OF 28 INCHES LONG AND DRIVEN A MINIMUM OF 16 INCHES INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

MAINTENANCE:

- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.



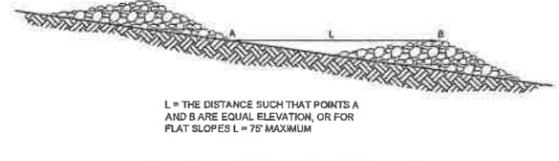
ANCHORING DETAIL

CONSTRUCTION SPECIFICATIONS:

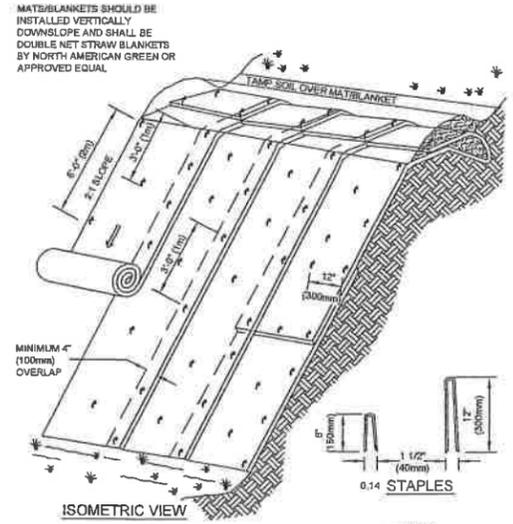
- BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
- INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
- BALES SHOULD BE FREE FROM ANY PLANT MATERIAL FOUND ON THE NEW HAMPSHIRE INVASIVE SPECIES LIST.

STRAW BALE BARRIER

NOT TO SCALE
(JULY 2010)

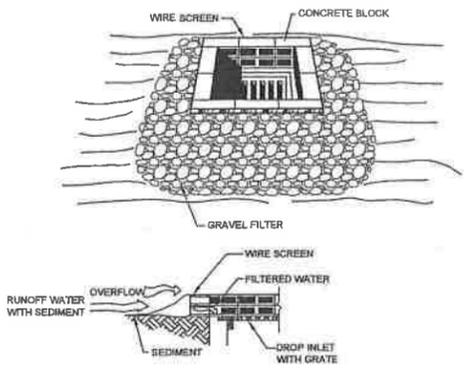


STONE CHECK DAM SPACING DETAIL
NOT TO SCALE
(MARCH 2008)



- NOTES:**
- SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
 - APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
 - LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

EROSION CONTROL BLANKETS - SLOPE INSTALLATION
NOT TO SCALE
(AUGUST 2011)

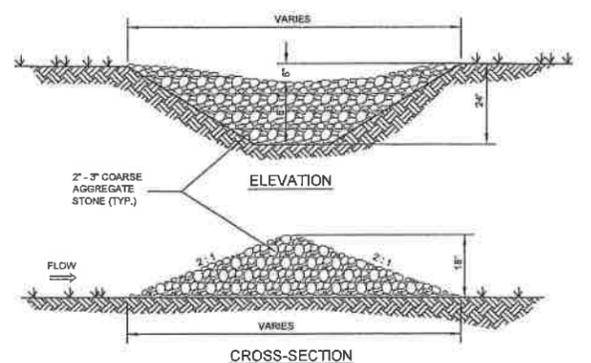


NOTES:

- CONCRETE BLOCKS SHOULD BE PLACED LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET. THE ENDS OF EACH BLOCK SHOULD BE ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED DEPENDING ON THE DESIGN BY STACKING VARIOUS COMBINATIONS OF DIFFERENT SIZED BLOCKS. THE BARRIER SHOULD BE A MINIMUM OF 12 INCHES HIGH AND A MAXIMUM OF 24 INCHES HIGH.
- HARDWARE CLOTH OR WIRE MESH SHOULD BE PLACED OVER OPENINGS OF THE CONCRETE BLOCKS AND EXTENDED AT LEAST 12 INCHES AROUND THE OPENING TO PREVENT AGGREGATE FROM BEING TRANSPORTED THROUGH THE OPENINGS IN THE BLOCK.
- SEWER STONE OR OTHER CLEAN COARSE AGGREGATE SHOULD BE PLACED AGAINST THE BLOCK TO THE TOP OF THE BARRIER.

BLOCK & GRAVEL DROP INLET SEDIMENT FILTER

NOT TO SCALE
(MARCH 2008)



STONE CHECK DAM DETAIL
NOT TO SCALE
(MARCH 2008)

WINTER CONSTRUCTION NOTES:

- ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE. SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3 OR, IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON, BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

CONSTRUCTION SEQUENCE

- FIRST CUT AND CLEAR TREES AND BRUSH ONLY WITHIN DESIGNATED LIMITS OF CLEARING AS NECESSARY TO FACILITATE PROPOSED CONSTRUCTION. ALL TREES, BRANCHES AND OTHER VEGETATIVE MATERIALS SHALL BE PROPERLY DISPOSED BY THE CONTRACTOR. THIS PROJECT IS MANAGED TO MEET THE REQUIREMENTS AND INTENT OF RSA 400:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- PRIOR TO COMMENCEMENT OF ANY EARTH-MOVING OPERATIONS, ALL APPLICABLE TEMPORARY EROSION CONTROL MEASURES, INCLUDING SPECIFIED PERIMETER SILTATION FENCING AND STABILIZED CONSTRUCTION EXIT SHALL BE IN PLACE AS SHOWN ON THE PROJECT PLANS.
- COMPLETE GRUBBING OPERATIONS. ALL STUMPS AND SIMILAR ORGANIC DEBRIS SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR. NATIVE ORGANIC SOIL MATERIALS SUITABLE FOR USE AS TOPSOIL SHALL BE STOCKPILED WITHIN AREAS OUT OF THE WAY OF OTHER CONSTRUCTIONS ACTIVITIES AND DRAINAGE FLOW. STOCKPILES SHALL BE TEMPORARILY SEEDDED WITH WINTER RYE AND BE SURROUNDED WITH HAY BALES AND/OR FABRIC SILTATION FENCE IN ORDER TO PREVENT LOSS DUE TO EROSION.
- BEGIN EARTHMOVING OPERATIONS, COMMENCING WITH WORK NEEDED TO BALANCE SITE AND FACILITATE BUILDING FOUNDATION AND RETAINING WALL CONSTRUCTION. PERMANENT DOWNSLOPE WORK SHALL BE PROTECTED FROM UPGRADIENT STORMWATER FLOW BY THE CONSTRUCTION OF TEMPORARY EARTHEN DIKES OR EXCAVATED SWALES.
- ONCE BUILDING FOUNDATION WORK IS UNDERWAY, CONTINUE EARTHMOVING OPERATIONS UNTIL DESIGN SUBGRADE IS ACHIEVED.
- INSTALL DRAINAGE SYSTEMS AND OTHER UTILITIES WORKING FROM LOW TO HIGH. INCOMPLETE WORK SHALL BE PROTECTED FROM SILTATION BY THE USE OF SILTATION BARRIERS AROUND SWALES UNTIL THE SITE HAS BECOME FULLY STABILIZED.
- PLACE GRAVEL AND CRUSHED GRAVEL OVER PROPOSED DRIVEWAY, WALKS AND PARKING AREAS AND COMPACT IN SPECIFIED LIFT THICKNESS.
- COMPLETE EXCAVATION STABILIZATION GRADING ACTIVITIES. WHEN COMPLETE, IMMEDIATELY BEGIN TOPSOILING PROPOSED TURF AREAS USING STOCKPILED LOAM SUPPLEMENTED WITH BORROW LOAM, IF NECESSARY, TO LEAVE A THICKNESS OF 4 INCHES OF FRIABLE LOAM.
- FINE GRADE ALL FUTURE TURF AREAS AND HYDROSEED WITH THE SPECIFIED SEED MIXTURE IMMEDIATELY AFTER FINE GRADING IS COMPLETED. ALL AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
- INSTALL THE BINDER COURSE OF PAVEMENT OVER ALL DESIGNATED AREAS.
- CONTINUE TO MONITOR AND RECTIFY MINOR SITE AND SLOPE EROSION UNTIL ENTIRE SITE APPEARS TO BE COMPLETELY STABILIZED AND VEGETATED WITH A HEALTHY STAND OF TURF OR GROUND COVER. MAINTAIN SPECIFIED SILTATION/EROSION CONTROL MEASURES THROUGHOUT THE WINTER.
- INSTALL THE SPECIFIED WEARING COURSE OF PAVEMENT OVER THE BINDER COURSE.
- COMPLETE INSTALLATION OF LANDSCAPING, SIGNAGE AND OTHER SITE AMENITIES.

EROSION CONTROL NOTES

- EXPOSED EARTHWORK SHALL BE CONFINED TO AS LIMITED AN AREA AS IS PRACTICAL AT ANY GIVEN TIME THROUGHOUT THE CONSTRUCTION SEQUENCE. AT NO TIME SHALL MORE THAN FIVE (5) ACRES OF SITE AREA BE IN AN UNSTABLE CONDITION. NO GIVEN AREA OF THE SITE SHALL BE LEFT IN AN UNSTABILIZED CONDITION FOR A PERIOD OF TIME EXCEEDING FORTY-FIVE (45) CALENDAR DAYS.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PROJECT PLANS. IN ADDITION, SIMILAR MEASURES SHALL BE INSTALLED WHERE AND WHEN THE FIELD CONDITION, OR FIELD OPERATION OF THE INDIVIDUAL SITE CONTRACTOR, MAY WARRANT. ALL TEMPORARY EROSION CONTROL MEASURES USED SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER 0.25" OF RAINFALL OR MORE. THEY SHALL BE CLEANED AND MAINTAINED AND OTHERWISE KEPT IN AN EFFECTIVE OPERATING MANNER THROUGHOUT THE CONSTRUCTION PERIOD.
- ALL DISTURBED AREAS DESIGNATED TO BE TURF SHALL RECEIVE A MINIMUM APPLICATION OF 4 INCHES OF LOAM (COMPACTED THICKNESS), PRIOR TO FINAL SEEDING AND MULCHING.
- ALL SWALES AND DITCHLINES SHALL BE PERIODICALLY CLEANED OF DEPOSITED SEDIMENT SO AS TO MAINTAIN AN EFFECTIVE GRADE AND CROSS SECTION. ALL SWALES AND DITCHLINES SHALL BE FULLY STABILIZED PRIOR TO HAVING STORMWATER DIRECTED TOWARDS THEM.
- IN THE EVENT THAT, DURING CONSTRUCTION OF ANY PORTION OF THIS PROJECT, A WINTER SHUTDOWN IS NECESSARY, THE CONTRACTOR SHALL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEET FLOW ACROSS FROZEN SURFACES.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - A BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- DUST SHALL BE CONTROLLED BY THE USE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD, IN ACCORDANCE WITH ENV-A 1000.
- IN NO WAY ARE THOSE TEMPORARY EROSION CONTROL MEASURES INDICATED ON THESE PLANS TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGEMENT IN INSTALLING SUPPLEMENTARY EROSION CONTROL MEASURES WHERE AND WHEN SPECIFIC SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGIES MAY WARRANT.
- AREAS HAVING FINISH GRADE SLOPES OF 3:1 OR STEEPER, SHALL BE STABILIZED WITH JUTE MATTING WHEN AND IF FIELD CONDITIONS WARRANT, OR IF SO ORDERED. JUTE MATTING INSTALLED TO CONFORM WITH THE RECOMMENDED BEST MANAGEMENT PRACTICE OUTLINED IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION".
- ALL DETENTION PONDS AND TREATMENT SWALES SHALL BE CONSTRUCTED PRIOR TO ANY EARTH MOVING ACTIVITIES THAT WILL INFLUENCE STORMWATER RUNOFF.
- ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- ALL CUT AND FILL SLOPES SHALL BE SEEDDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

CONSTRUCTION DETAILS
4 CANDY LANE
MAP 101; LOT 27
CANDY LANE AND REBEL ROAD
HUDSON, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER OF RECORD: NOTTINGHAM SQUARE CORP. 46 LOWELL ROAD HUDSON, NH 03051 HCRD BK. 843B; PG. 1363	APPLICANT: NOTTINGHAM SQUARE CORP. 46 LOWELL ROAD HUDSON, NH 03051
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KMA REACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3E, Bedford, NH 05110 Phone (603) 627-2891

REVISIONS			
No.	DATE	DESCRIPTION	BY
1	07/12/13	DATE ONLY	JDM

DATE: MAY 1, 2013 SCALE: AS SHOWN
PROJECT NO: 13-0214-1 SHEET 17 OF 17

PURSUANT TO THE SITE REVIEW REGULATIONS OF THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES ONE YEAR FROM DATE OF APPROVAL

APPROVED BY THE HUDSON, NH PLANNING BOARD
DATE OF MEETING: _____

SIGNATURE _____ DATE _____
SIGNATURE _____ DATE _____

SITE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN ACHIEVES FINAL APPROVAL.

Packet: 07/24/13

**Moose Hill/Bush Hill (a.k.a. Jarry Subdivision)
Request for Surety Establishment**

STAFF REPORT

July 24, 2013

SITE: Moose Hill Rd. – Bush Hill Rd.

ZONING: G1

PURPOSE OF PETITION: To establish the initial surety for the Moose Hill Rd./ Bush Hill Rd. Subdivision (a.k.a. Jarry Subdivision), per the written recommendation of the Town Eng., Patrick Colburn, P.E., dated July 09, 2013. Please see Mr. Colburn's attached recommendation, together with the Road Guarantee Estimate Form.

RECOMMENDATION: Per the written recommendation of Town Eng., Patrick Colburn, P.E., the board should vote to establish the surety for this subdivision to the recommended amount of \$322,611.95.

DRAFT MOTION:

I move to establish a surety in the amount of \$322,611.95 for the Moose Hill Rd./ Bush Hill Rd. Subdivision, in accordance with the written recommendation of the Town Eng., Patrick Colburn, P.E., (see recommendation in file, memo dated July 09, 2013). Note: said surety shall be established in the form of a Hampton-style letter of credit or cash deposit held by the Town.

Motion by: _____ Second: _____ Carried/Failed: _____



TOWN OF HUDSON

Engineering Department



12 School Street • Hudson, New Hampshire 03051 • Tel: 603-886-6008 • Fax: 603-816-1291

INTEROFFICE MEMORANDUM



TO: John Cashell, Town Engineer

FROM: Patrick Colburn, Town Engineer 

DATE: July 09, 2013

RE: Road Guarantee Estimate Form
Moose Hill/Bush Hill Road

The Engineering Department has reviewed the attached Road Guarantee Estimate Form prepared by Anthony Basso, LLS from Keach-Nordstrom-Associates, Inc. for the subject project. We find that the bond amount is appropriate to cover the remaining work items for completion of the subdivision project. You will note that we asked the consultant to add a line item to cover the cost of the proposed water cisterns. The price per gallon in the bond estimate is based on a phone conversation on this date with the supplier of the precast structures.

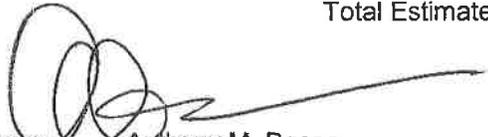
Should you have any questions or require further information, please do not hesitate to contact me.

Subdivision Name: Jarry Subdivision

					Total	Bond Remaining	Date
Sanitary Sewer Size							
6" PVC Service Connection	_____	L.F.	@ \$	20.00 =	_____	_____	_____
8" PVC							
0' - 12' Depth	_____	L.F.	@ \$	50.00 =	_____	_____	_____
12' - 18' Depth	_____	L.F.	@ \$	75.00 =	_____	_____	_____
10" PVC	_____	L.F.	@ \$	75.00	_____	_____	_____
Other	_____	L.F.	@		_____	_____	_____
Sanitary Sewer Manholes 4' dia.	_____	V.F.	@ \$	300.00 =	_____	_____	_____
Sanitary Sewer Manholes 5' dia.	_____	V.F.	@ \$	325.00 =	_____	_____	_____
Service Cleanout	_____	EA.	@ \$	110.00 =	_____	_____	_____
Water Main Size (valves included)							
4" DIP Class 52	_____	L.F.	@ \$	53.00 =	_____	_____	_____
6" DIP Class 52	_____	L.F.	@ \$	40.00 =	_____	_____	_____
8" DIP Class 52	_____	L.F.	@ \$	47.00 =	_____	_____	_____
10" DIP Class 52	_____	L.F.	@ \$	52.00 =	_____	_____	_____
12" DIP Class 52	_____	L.F.	@ \$	55.00 =	_____	_____	_____
T/S&V	_____	L.F.	@	\$3,500.00 =	_____	_____	_____
Hydrants		EA	@ \$	3,000.00 =	_____	_____	_____
1" Copper Service (stops included)		EA.	@ \$	400.00 =	_____	_____	_____
Bank Run Gravel		C.Y.	@ \$	14.00 =	_____	_____	_____
Crushed Bank Run Gravel		C.Y.	@ \$	18.00 =	_____	_____	_____
Sand Cushion	_____	C.Y.	@	\$12.00 =	_____	_____	_____
Hot Bituminous Pavement 28' width							
2 1/2" Base Course Type C		TONS	@ \$	85.00 =	_____	_____	_____
1 1/2" Wearing Course Type F	564	TONS	@ \$	85.00 =	\$ 47,940.00	_____	_____
Other	_____		@		=	_____	_____
Tack Coat	6605	S.Y.	@ \$	0.20 =	\$ 1,321.00	_____	_____
Curbing							
Granite	2726	L.F.	@ \$	22.00 =	\$ 59,972.00	_____	_____
Cape Cod	_____	L.F.	@ \$	6.00 =	_____	_____	_____
Sidewalks							
5' Wide bituminous	661	S.Y.	@ \$	30.00 =	\$ 19,830.00	_____	_____
Loam and Seed							
Easement areas		L.F.	@ \$	6.00 =	_____	_____	_____
R.O.W. areas	2500	L.F.	@ \$	5.00 =	\$ 12,500.00	_____	_____

Subdivision Name: Jarry Subdivision

					Total	Bond Remaining	Date
Bounds and Pins							
Property Pins	37 EA.	@	\$ 175.00 =	\$	6,475.00	_____	_____
Road Bounds	23 EA.	@	\$ 325.00 =	\$	7,475.00	_____	_____
Stop Signs	1 EA.	@	\$ 75.00 =	\$	75.00	_____	_____
Street Signs	8 EA.	@	\$ 85.00 =	\$	680.00	_____	_____
As-Built Plans	2200 L.F.	@	\$ 4.00 =	\$	8,800.00	_____	_____
Landscaping							
Trees	36 EA.	@	\$ 375.00 =	\$	13,500.00	_____	_____
Bushes	_____ EA.	@	\$ 200.00 =		_____	_____	_____
Guard Rails	_____ L.F.	@	\$ 50.00 =		_____	_____	_____
Utility Trench (Elec/Tel/TV)	_____ L.F.	@	\$35.00 =		_____	_____	_____
Other required improvements (itemize on separate sheet)	40,000 GAL	@	\$2.00 =		\$80,000.00	_____	_____
Subtotal:					\$ 259,543.00	_____	_____
3% Mobilization					\$ 7,786.29	_____	_____
Engineering & Contingencies (10% subtotal):					\$ 25,954.30	_____	_____
					\$ 293,283.59	_____	_____
10% Maintenance Level:					\$ 29,328.36	_____	_____
Total Estimate:					\$ 322,611.95	_____	_____


 Prepares Name: Anthony M. Basso

6/28/2013

MEETING AGENDA – July 25, 2013

The Hudson Zoning Board of Adjustment will hold a meeting on Thursday July 25, 2013, in the Community Development Conference Room in the basement of Hudson Town Hall (please enter by ramp entrance at right side). The public hearings for applications will begin at 7:30 PM, with the applications normally being heard in the order listed below.

SUITABLE ACCOMMODATIONS FOR THE SENSORY IMPAIRED WILL BE PROVIDED UPON ADEQUATE ADVANCE NOTICE BY CALLING 886-6005 OR TDD 886-6011.

The following items before the Board will be considered:

I. PUBLIC HEARINGS OF SCHEDULED APPLICATIONS BEFORE THE BOARD

1. Case 186-012-000 (7/25/13): David Segatto, (new owner) 1 Gates Lane, Hudson, requests continued use of an approved Accessory Living Unit (ALU) located at 1 Gates Lane, Hudson, [Map 186, Lot 12; Zoning G, HZO Article XIII A, Section 334-73.3, Accessory Living Unit.]

II. REVIEW OF MINUTES

III. OTHER

1. Discussion of Any Town/State Activity Of Interest To The Board

William A. Oleksak, Zoning Administrator

Posted: Town Hall, Library, and Post Office