GRAZ Engineering, L.L.C.

323 West Lake Road • Fitzwilliam, NH 03447 • Telephone (603) 585-6959 • Fax (603) 585-6960

Transmittal

| To: Company Address: City/State | r: Town 3 Wa | ning Board 1 of Leicester 1 shburn Square ster, MA 01524 | Subject: Date: Trans | Oak Bluff Lane Definitive Plan Application November 28, 2018 mitted: IMail IFax I Hand | | |
|--|----------------------------|---|----------------------------|---|--|--|
| | 2 2 2 | For Your Approval For Your Review For Your Signature For Your Information For Your Files | | Which You requested Approved Approved As Noted Revise And Resubmit Not Approved | | |
| $\frac{2}{2}$ | copies copies | Form C, Application for Approval of Definitive Subdivision PlanForm D, Designer's CertificateCertified Abutter's Lists from Leicester & SpencerOak Bluff Lane Definitive Subdivision Plan dated 11/27/2018 (Full Size Plans)Oak Bluff Lane Definitive Subdivision Plan dated 11/27/2018 (11" x 17" Plans) | | | | |
| $\frac{\frac{2}{2}}{11}$ | copies copies copies | | | | | |
| <u>13</u> 13 | copies copies | Project Narrative Letter dated 11/27/2018 Waiver Request Letter dated 11/27/2018 | | | | |
| 3 1 | copies CD | Hydrology & Stormwater Report dated 11/27/2018PDF Digital Copy of Submittal Materials | | | | |
| <u>1</u> <u>1</u> | check check | Application Fee Check for \$ 1,105.00Project Review Fee Check for \$ 3,182.50 | | | | |

Comments: Enclosed is the Form C, Definitive Subdivision Plan for Oak Bluff Lane submittal for Matt Schold (Central Land Development Corp.) for the property off from Baldwin Street and depicted on Assessors Map 48 as Parcels A1-0 & A1.1-0.

 The fee breakdown for the filing checks is as follows: Application Fee:
 $\$1,050.00 + (6-5) \times \55.00 \$1,105.00

 Review Fee:
 $\$6,300.00 - \$3,117.50^*$ \$3,182.50

*Remaining balance on account from Preliminary Plan review per Town Planner.

Should you have any questions or require any additional information, please call my cell at 508-769-9084.

Respectfully yours, GRAZ Engineering, L.L.C.

Brian MacEwen, P.L.S., E.I.T. Project Manager

cc: Matt Schold, Applicant/Owner

FORM C. APPLICATION FOR APPROVAL OF DEFINITIVE SUBDIVISION PLAN

Date: <u>November 27, 2018</u>

To the Planning Board of the Town of Leicester:

The undersigned, being the applicant as defined under MGL Chapter 41, Section 81L, for approval of a proposed subdivision shown on a plan entitled : ______Oak Bluff Lane Definitive Subdivision, Leicester, MA and dated November 27, 2018 _____, located __off Baldwin Street ______, showing ______6 ____lots on _____14.7 _____total acres. Said applicant hereby submits said plan as a Definitive Subdivision Plan in accordance with the Rules and Regulations of the Leicester Planning Board and makes application to the Board for approval of said plan.

The owner's title to the land included within the proposed subdivision, is derived under deed from <u>LBJ Lake, LLC</u>, dated <u>November 2, 2017</u>, and recorded in Worcester District Registry of Deeds, Book <u>57984</u>, Page <u>100</u>, or under Certificate of Title No. _____, registered in Worcester Land Registry District, Book _____, Page

Assessors Map & Parcel # Map 48, Parcels A1-0 & A1.1-0

Check one of the following (and fill in where appropriate):

A preliminary plan of the proposed subdivision has not been submitted to the Board.

- A preliminary plan of the proposed subdivision, to which the accompanying plan conforms, was approved by the Board on _____.
- A preliminary plan of the proposed subdivision was approved by the Board on <u>March 27, 2018</u>, with modifications, which modifications have been incorporated in the accompanying plan.
- \Box A preliminary plan of the proposed subdivision was disapproved by the Board on

| | Applicant Information | Owner Information* (if not the Applicant) | | |
|------------|-----------------------|--|--------------------------------|--|
| Name: | Matt Schold | Name: | Central Land Development Corp. | |
| Signature: | | Signature: | | |
| Address: | 77 Chickering Road | Address: | 31 Whitewood Road | |
| | Spencer, MA 01562 | Milford, MA 01757 | | |
| | | | | |
| Phone #: | 508-612-8777 (Mobile) | Phone #: | 508-612-8777 (Mobile) | |

Received by the Planning Board

*If there is more than one owner, all must sign.

FORM D. DESIGNER'S CERTIFICATE

Date: November 27, 2018

To the Planning Board of the Town of Leicester:

I hereby certify that the accompanying plan, entitled <u>Oak Bluff Lane Definitive Subdivision</u>, <u>Leicester</u>, MA

and dated <u>November 27, 2018</u>, is true and correct to the accuracy required by the Rules and Regulations of the Leicester Planning Board, and that all pertinent data are shown.



Brian C. MacEwen Registered Land Surveyor

Registration No. <u>37736</u>

Paul F. Grasewicz Registered Professional Engineer

Registration No. 35306

323 West Lake Road • Fitzwilliam, NH 03447 • Telephone (603) 585-6959 • Fax (603) 585-6960

GRAZ Engineering, L.L.C.

November 27, 2018

Planning Board Town of Leicester 3 Washburn Square Leicester, MA 01524

Subject: Project Narrative Oak Bluff Lane Definitive Subdivision Plan

Dear Board Members:

Project Overview

In accordance with the Town Leicester Zoning Bylaws and the Planning Board's Subdivision Rules and Regulations, Central Land Development Corp. (Applicant & Owner) proposes a six (6) lot subdivision of the land located off from Baldwin Street and along the existing private way currently known as Oak Bluff Lane, Leicester, Massachusetts. The approximate 14.7 acre site is currently depicted as Parcels A1-0 & A1.1-0 on Assessors Map 48 and currently with addresses of Baldwin Street and 216 Baldwin Street respectively.

Existing Site Conditions

The existing property is a ± 14.7 acre undeveloped woodland currently divided by a private way known as Oak Bluff Lane located on the northerly side of Baldwin Street. In particular the project site is comprised of the land located between the northerly sideline of Baldwin Street and the southwesterly edge of the graveled travelled way of Oak Bluff Lane. This parcel currently has an address of 216 Baldwin Street and is depicted as Parcel A1.1-0 on Assessor's Map 48. The other portion of the land to be developed is located to the north of the edge of the travelled way of Oak Bluff Lane and is depicted as Parcel A1-0 on Assessor's Map 48.

The project site is a portion of the land recorded in the Worcester District Registry of Deeds (WDRD) in Book 57984, Page 100. The major westerly boundary for the project is the Leicester-Spencer town line. A portion of the most northwesterly proposed lot lies in the Town of Spencer, being bounded on the west by a private way now known as Sycamore Avenue located in Spencer and easterly by the town line. The majority of the project site is located in Leicester and currently is zoned as Suburban/Agriculture (SA). The site consists of a mix of Oak, Maple, and Pine trees along with various mixed hard and soft woods as well as mountain laurel.

The southerly boundary along the northerly sideline of Baldwin Street is a Bordering Vegetated Wetlands (BVW). The site generally slopes uphill from the northerly sideline of Baldwin Street to a location near the central part of the site located to the northerly side of the Oak Bluff Lane travelled way before the topography descends to a fairly large BVW at the back (northerly property line) of the site.

Major portions of the proposed work for the roadway and site development are within the 100-foot buffer zone of these wetlands. Therefore the project is under the under the jurisdiction of the MADEP Wetlands Protection Act and the Leicester Conservation Commission local wetlands regulations. A Notice of Intent for the project will be submitted separately.

Proposed Site Conditions

The proposed site will be provided with private septic systems & domestic water wells with overhead electrical and communication services from the existing public utilities located in Baldwin Street. In addition to those utilities a proposed stormwater management system has been designed to conform to the Massachusetts DEP Stormwater Management Standards that have been incorporated in the Wetlands Protection Act Regulations. The existing graveled travelled way currently known as Oak Bluff Lane shall be laid out and developed into a dead-end cul-de-sac (± 950 ') right-of-way and roadway that shall meet the minimum requirements for acceptance as a public way upon completion.

The majority of the back land (± 6 acres) of the five (5) proposed lots located to the north of proposed Oak Bluff Lane shall remain as wooded upland and the existing wetland area. The proposed ground cover for the majority of the proposed developed site will be residential lawns with the remainder being the proposed dwellings, driveways, roadways, and stormwater management facilities. Approximately 7.2 acres of the site will be developed under this scenario.

The proposed site has been designed to balance stormwater releases and utilize stormwater management practices to treat runoff, thereby minimizing environmental impact. Several techniques were utilized from the Massachusetts Department of Environmental Protections' (DEP) revised Stormwater Management handbooks to help maintain and provide better water quality, minimize runoff, and to provide groundwater recharge. These techniques include hooded deep sump catch basins, drainage channels, sediment fore bays, and detention/infiltration basins with rip-rapped outlet aprons.

I trust that this information will assist the Planning Board in their review of the Applicant's Definitive Subdivision Application submittal. Should you require further information, please contact us as soon as possible.

Respectfully yours, GRAZ Engineering, L.L.C.

Brian MacEwen, P.L.S., E.I.T. Project Manager

Paul Grasewicz, P.E./P.L.S.

BCM/PFG/bcm

cc: Matt Schold, Central Land Development Corp. Paul Grasewicz, GRAZ Engineering, LLC **GRAZ Engineering, L.L.C.** 323 West Lake Road • Fitzwilliam, NH 03447 • Telephone (603) 585-6959 • Fax (603) 585-6960

November 27, 2018

Leicester Planning Board 3 Washburn Square Leicester, MA 01524

Subject: Waiver Requests Oak Bluff Lane Definitive Subdivision

Dear Board Members:

On behalf of Central Land Development Corp. (Owner & Applicant), GRAZ Engineering, L.L.C. (GRAZ) requests the following waivers from the Leicester Subdivision Regulations adopted on September 19, 1995 as amended through September 20, 2006. Please note that the Applicant shall request that the proposed subdivision road be accepted as a public way upon completion.

Section V, A.Streets, 1.Location & Alignment, (f):

Minimum centerline radii of curved streets shall be 200 feet.

To allow a minimum centerline radius of less than 200-feet at two locations along the proposed alignment.

The Applicant requests a waiver to the 200-foot minimum centerline radius for two (2) locations along the proposed roadway alignment to allow the proposed alignment to substantially follow the existing graveled way and to minimize the wetland and site grading impacts.

The first location is for the intersection of the proposed roadway with Baldwin Street. By allowing a centerline radius of 100-feet at this location, the Applicant can provide for an intersection angle that is in compliance with the Regulations as well as minimize the alignment and grading impacts to the wetland buffer located to the northerly side of the proposed roadway.

The second location is approximately midway along the alignment. By allowing a centerline radius of 170-feet at this location, the proposed alignment will substantially follow the existing graveled way thereby minimizing site grading disturbance and impacts.

Section V, A.Streets, 2.Width, (a) & Section VI, A.2:

Minimum width of travelled way shall be 28-feet.

To allow a travelled way width of 24-feet.

The Applicant requests a waiver to the 28-foot minimum travelled way width to minimize site disturbance and the amount of impervious pavement.

By allowing a travelled way width of 24-feet the amount of impervious pavement can be reduced, thereby minimizing the amount site disturbance required for the proposed roadway and drainage infrastructure without compromising safe vehicular movements.

Section V, A.Streets, 4.Dead End Streets, (a):

Maximum length of dead end streets shall not exceed 500-feet.

To allow a dead end cul-de-sac length of ±950-feet.

The Applicant requests that a dead end cul-de-sac length of ± 950 -feet be allowed due to the local conditions for this site. In particular, although the proposed roadway and dead end cul-de-sac shall be completely located within the Town of Leicester, an existing private way located in Spencer shall continue as an extension of this proposed roadway which connects to other private ways that provide another means of ingress and egress from the public way of Clark Road, Spencer (Baldwin Street, Leicester).

As background, we offer the following: the issue of limiting dead end cul-de-sac length is associated with the number of dwelling units served by the roadway and general public safety (i.e. ingress/egress with emergency apparatus). The Institute of Transportation Engineers (ITE) suggests in general a maximum limit of 25 dwelling units and 750-1000 feet for cul-de-sac in low-density developments. ITE more specifically suggests that the average daily trips/day (ADT) for dead end cul-de-sacs be limited to a maximum of 200. Studies indicate that the average dwelling produces 10 trips/day. Thus, the proposed four (4) dwellings accessing from the proposed section of the roadway along with the estimated ten (10) dwellings accessing from Lake Avenue, Windbrook Drive, & Sycamore Avenue in Spencer generate approximately 140 trips/day. Therefore, both the number of dwelling units (14) and the anticipated average daily trips/day (140) are less than the recommended ITE maximums of 25 and 200 ADT respectively.

In addition, since there is a second means for ingress and egress to the terminus of the proposed cul-desac from the private ways located in Spencer the proposed roadway system provides sufficient means for access throughout the developed area for emergency vehicles.

Granting this waiver would not be inconsistent with the regulations as the proposed dead end street length is acceptable under standard engineering practice for the predicted traffic volume to be generated by the new and existing dwellings anticipated to use this proposed roadway.

Section V, C.Drainage, 4.Water Velocities:

Water velocities shall be between 2-10 feet per second.

To allow a water velocity of 15 feet per second on the drainage line between DMH-5 & DMH-6.

The Applicant requests a larger storm water velocity be allowed on this drainage pipe run since it is not within a proposed public right-of-way and due to the existing topography (10-15%). In addition, DMH-6 has been designed with a larger drop across the manhole to help dissipate the velocity prior to the storm water discharge into the sediment forebay at that location.

Section V, C.Drainage, 4.Minimum Drainage Pipe Cover:

Minimum drainage pipe cover required shall be 36 invches.

To allow a minimum cover for Class IV reinforced concrete pipe of 12-inches at the right-of-way line and to allow a minimum cover of 30-inches for the double wall HDPE ADS N-12 drain lines proposed for the majority of the site drainage.

The Applicant requests a the reduction of the minimum covers noted above to accommodate proposed storm drainage system configuration, noting that the manufacturers specifications indicate that the proposed cover adequate for the performance of their respective products.

Section VI, B.Storm Drainage Systems, 1.(a).Reinforced Concrete Pipe:

All Piping shall be concrete.

To allow for the use of double walled smooth interior HDPE ADS N-12 or approved equal.

The Applicant requests that double walled smooth interior HDPE ADS N-12 or approved equal be allowed as an alternative to reinforced concrete pipe (RCP) except at the culvert crossing near the beginning of the proposed roadway which has been specified as Class IV RCP accordingly.

Section VI, E.Underground Wiring and Lighting, (1):

All wiring, cables and other appurtenances of electric power, and telephone shall be placed underground within the limits of the street right-of-way.

To allow all of these utilities to be installed above ground.

The Applicant requests that above noted utilities be allowed to be installed as overhead so as to be consistent with existing utilities currently in place on the existing adjacent public and private ways.

Section VI, E.Street Lighting, (3):

All wiring, cables and other appurtenances of electric power, and telephone shall be placed underground within the limits of the street right-of-way.

To not require any street lighting to be installed.

Section VI, G.Sidwalks, 4.Cross-Section, (1-3):

Sidewalks shall be installed on both sides of the roadways.

To not require any sidewalks to be installed.

As set forth in the Preliminary Plan approval, a sidewalk on one side of the roadway would be required only if the school buses were not going to provide service up the roadway to the proposed cul-de-sac for a turnaround maneuver. The Applicant has obtained a letter (attached herewith) from AA Transportation Co., Inc., (school bus company) indicating that they would appreciate a the safer location at the end of the proposed Oak Bluff Lane cul-de-sac for reversing direction near the town line in lieu of the current location at the intersection of Salminen Drive and Baldwin Street.

Therefore, the Applicant requests that no sidewalks be installed on the proposed Oak Bluff Lane. This would be consistent with the local private and public way conditions and would also minimize the amount of impervious and thereby reduce the size of the drainage infrastructure.

Section VI, L.Street Trees:

Street trees shall be installed on both sides of the roadway within the right-of-way.

To not require any street tree plantings.

This would be consistent with the local private and public way conditions near this location.

GRAZ Engineering, LLC Oak Bluff Lane Definitive Subdivision Plan Waiver Requests November 27, 2018 Page 4 of 4

I trust that this information will assist the Planning Board in their review and approval of the Applicant's Preliminary Plan submission. Should you require further information, please contact us as soon as possible.

Respectfully yours, GRAZ Engineering, L.L.C.

in CM

Brian MacEwen, P.L.S., E.I.T. Project Manager

Paul Grasewicz, P.E., P.L.S.

BCM/PFG/bcm

cc: Matt Schold, Central Land Development Corp. Paul Grasewicz, GRAZ Engineering, LLC



AA Transportation Co., Inc. 100 S Main St Leicester, Massachusetts 01524

Date: July 20, 2018

Re: Oak Bluff Lane - Leicester

To whom it may concern,

Mr. Matt Schold- Central Land Development Corporation has reached out to AA Transportation Co. Inc., for possible use of Oak Bluff Lane which would be a public road and maintained by the town as a school bus turnaround for the upcoming 2018-2019 school year.

Presently the routes scheduled for pick up and drop off of students in that area are utilizing Salminen Dr to complete the turnaround procedure, this has been the only option available to date and hasn't been the best location due to the fast traffic flow.

The offer of using the Oak Bluff Lane cul-de-sac to re-route the school bus routes comes with much appreciation on behalf of AA Transportation Co. Inc., - Leicester Division. It will be greatly appreciated by all to have a safe location to complete the reversing technique that is needed.

Please do not hesitate to reach out to me with any questions or concerns at your earliest availability. 508 892-5424.

Sincerely

Donna Sutter Leicester Manager AA Transportation Co. Inc.

1 | Page

GRAZ Engineering, L.L.C.

323 West Lake Road • Fitzwilliam, NH 03447 • Telephone (603) 585-6959 • Fax (603) 585-6960

November 28, 2018

Town Clerk Town of Leicester 3 Washburn Square Leicester, MA 01524

Subject: Definitive Subdivision Plan Submittal Notification for Oak Bluff Lane (off Baldwin Street) Assessors Map 48, Parcels A1-0 & A1.1-0

To the Town Clerk:

Project Overview

In accordance with the Massachusetts Subdivision Control Law, Chapter 41, Section 81T and the Town of Leicester Subdivision Rules and Regulations, Section III, B.1.h, this letter shall serve as notice that on November 28, 2018, GRAZ Engineering, LLC submitted a Definitive Subdivision plan entitled "Oak Bluff Lane" with the Leicester Planning Board to subdivide land located off Baldwin Street on behalf of Central Land Development Corp. with a business address of 31 Whitewood Lane, Milford, MA 01757 (Owner). The land is depicted on Assessors' Map 48 as Parcels A1-0 & A1.1-0 with street addresses of Baldwin Street and 216 Baldwin Street respectively. The land is a portion of the land described in the Worcester District Registry of Deeds Plan Book 57984, Page 100. The submitted plan proposes the development of a public right-of-way and six (6) lots with their legal frontages to be on the proposed roadway to be named Oak Bluff Lane.

Should you require further information, please contact us as soon as possible.

Respectfully yours, GRAZ Engineering, L.L.C.

Brian MacEwen, P.L.S. Project Manager

BCM/bcm

cc: Matt Schold, Central Land Development Corp.