Major Subdivision Application

(Preliminary Plan)

Narrative attachment to the required Application Form

121 and 130 Grand Alexander Court Subdivisions

4/26/2022

John and Leslie Mackowiak (applicants and owners)

Stormwater Impact Statement

The Stormwater Impact Statement for these lots was submitted and approved in 2008 with the ZCP review of Aquabella. Under that approved plan on page 19 in Table 7, the impervious surface area capacity was allocated to the 4 lots as shown below.

Table 7: Aquabella Impervious Surfaces Budget. Treated surfaces drain to Bioretention area or Infiltration Basin

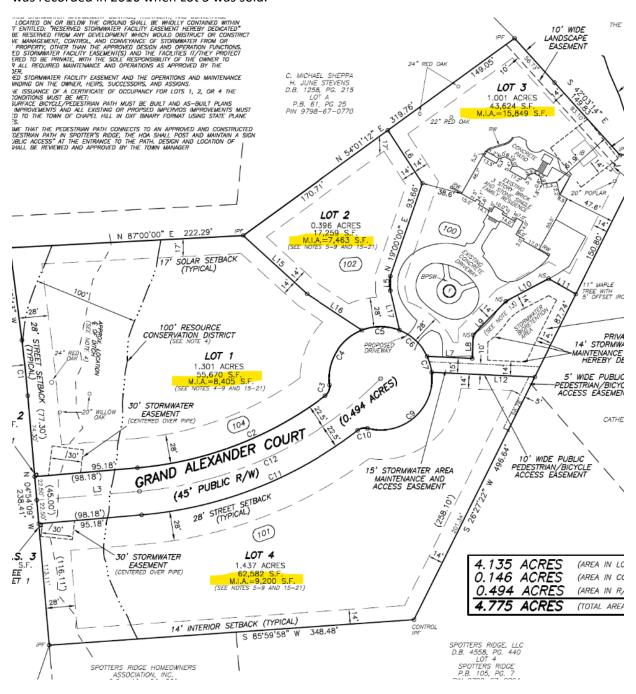
| | | Treated ¹ | | Untreated ² | | | total | | | |
|--------------------|------------|----------------------|-----------|------------------------|------|-----------|--------------------|-------|-----------|--|
| | allocation | used | available | allocation | used | available | allocation | used | available | |
| ROW | 12020 | 12020 | 0 | 6178 | 6178 | 0 | 18198 | 18198 | 0 | |
| Lot 1 | 0 | 0 | 0 | 8405 | 0 | 8405 | 8405 | 0 | 8405 | |
| Lot 2 | 761 | 0 | 761 | 6702 | 0 | 6702 | 7463 | 0 | 7463 | |
| Lot 3 | 15849 | 15466 | 383 | 0 | 0 | 0 | 15849 | 15466 | 383 | |
| Lot 4 ³ | 4200 | 0 | 4200 | 5000 | 0 | 5000 | 9200 | 0 | 9200 | |
| HOA reserve | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total | 32830 | 27486 | 5344 | 26285 | 6178 | 20107 | 59115 | 33664 | 25451 | |
| | | | | | | | | | | |
| Maximum | 32830 | | | 26285 | | | <mark>59115</mark> | | | |

¹ The maximum amount of treated impervious area which can be built on this site under this stormwater management plan is $32,830 \text{ sf}^2$.

² The maximum amount of untreated impervious area which can be built on this site under this stormwater management plan based on the pre-development state is 26,285 sf².

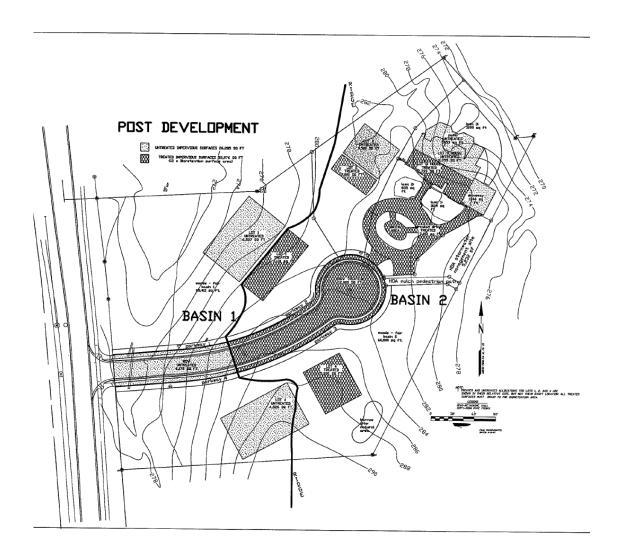
^{3 100%} of Lot 4 untreated allocation drains to basin 1, the remainder drains to basin 2.

This 2008 document agrees with the Maximum Impervious Area (MIA) shown on the below plat which was recorded in 2016 when Lot 3 was sold.



The MIA from Lots 1, 2 and 4 of 8405, 7463 and 9200 totals 25,068. When this is allocated equally between the 9 subdivided lots, each will receive on average 2,785.333 SF of MIA without any additional BMP construction.

Given the ridge that divides the lots into basin 1 and basin 2, runoff from some future lots does not flow to the existing bioretention area. The available 4961 of <u>treated</u> SF will be allocated to the lots that can easily direct runoff to the bioretention area with gravity flows. The remaining <u>untreated</u> SF is allocated to the remaining lots so that each lot is allocated 2785 or 2786 SF until all the 25,068 MIA SF are allocated.



If the owner of any lot wishes to build additional SF of impervious area, they will need to follow the town regulations for treating that stormwater which will be in effect when they apply for a building permit.

The SF allocation to the ROW and Lot 3 does not change.

No other changes to the Aquabella Stormwater Impact Statement are proposed as part of this subdivision application. If this plan for impervious SF allocation is accepted, an updated inspection report showing compliance with the current or a future planting plan will be submitted.

REVISED Table 7: Aquabella Impervious Surfaces Budget. Treated surfaces drain to Bioretention area or Infiltration Basin

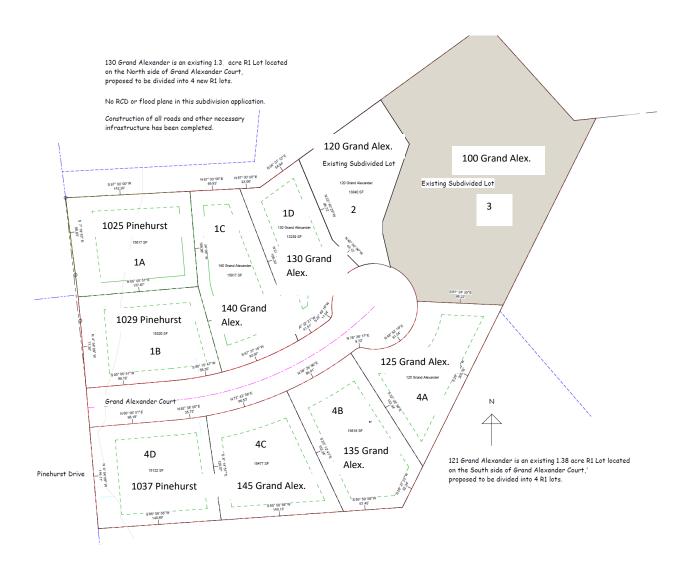
| ORIGINAL | | Treated ¹ | | | Untreated ² | | | total | | |
|----------------|-------------------------|----------------------|-------|-----------|------------------------|------|-----------|------------|-------|-----------|
| | address | allocation | used | available | allocation | used | available | allocation | used | available |
| ROW | | 12020 | 12020 | 0 | 6178 | 6178 | 0 | 18198 | 18198 | 0 |
| Lot 1 | 130 Grand Alexander Ct. | 0 | 0 | 0 | 8405 | 0 | 8405 | 8405 | 0 | 8405 |
| Lot 2 | 120 Grand Alexander Ct. | 761 | 0 | 761 | 6702 | 0 | 6702 | 7463 | 0 | 7463 |
| Lot 3 | 100 Grand Alexander Ct. | 15849 | 15466 | 383 | 0 | 0 | 0 | 15849 | 15466 | 383 |
| Lot 4 | 121 Grand Alexander Ct. | 4200 | 0 | 4200 | 5000 | 0 | 5000 | 9200 | 0 | 9200 |
| HOA reserve | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | | 32830 | 27486 | 5344 | 26285 | 6178 | 20107 | 59115 | 33664 | 25451 |
| Maximum | | 32830 | | | 26285 | | | 59115 | | |
| REVISED | | allocation | used | available | allocation | used | available | allocation | used | available |
| ROW | | 12020 | 12020 | 0 | 6178 | 6178 | 0 | 18198 | 18198 | 0 |
| Lot 1A | 1025 Pinehurst Dr | 0 | 0 | 0 | 2785 | 0 | 2785 | 2785 | 0 | 2785 |
| Lot 1B | 1029 Pinehurst Dr | 0 | 0 | 0 | 2785 | | 2785 | 2785 | 0 | 2785 |
| Lot 1C | 140 Grand Alexander Ct. | 0 | 0 | 0 | 2785 | | 2785 | 2785 | 0 | 2785 |
| Lot 1D | 130 Grand Alexander Ct | 600 | 0 | 600 | 2186 | | 2186 | 2786 | 0 | 2786 |
| Lot 2 | 120 Grand Alexander Ct | 600 | 0 | 600 | 2185 | 0 | 2185 | 2785 | 0 | 2785 |
| Lot 3 | 100 Grand Alexander Ct | 15849 | 15466 | 383 | 0 | 0 | 0 | 15849 | 15466 | 383 |
| Lot 4A | 125 Grand Alexander Ct | 2761 | 0 | 2761 | 25 | 0 | 25 | 2786 | 0 | 2786 |
| Lot 4B | 135 Grand Alexander Ct. | 1000 | 0 | 1000 | 1786 | | 1786 | 2786 | 0 | 2786 |
| Lot 4C | 145 Grand Alexander Ct | 0 | 0 | 0 | 2785 | | 2785 | 2785 | 0 | 2785 |
| Lot 4D | 1037 Pinehurst Dr. | 0 | 0 | 0 | 2785 | | 2785 | 2785 | 0 | 2785 |
| HOA reserve | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Net Change | | 0 | | | 0 | | | 0 | | |
| Maximum | | 32830 | | | 26285 | | | 59115 | | |

Plan Sets

No additional construction of infrastructure is proposed as part of this Major Subdivision Application. Therefore, no construction plan sets are being submitted. The construction plans for Grand Alexander Court and the associated infrastructure were submitted and approved as part of the Aquabella process from 2006-2010.

Separate from this subdivision application, a ZCP application will be submitted to extend the RCP (reinforced concrete pipe) which currently exists under Grand Alexander court.

The Preliminary Plan for subdividing the 1.3 and 1.4 acre lots is shown below. Each future lot will meet the dimensional requirements in the LUMO.



Major Subdivision Application

Project Name: Grand Alexander Subdivisions

Description: Subdivide a pair of vacant lots at 121 and 130 Grand Alexander Court (1.3 and 1.4 acres each) into 8 total lots, approximately 0.34 acres each. Inclusionary zooming Payment in lieu will be paid.

The subdivision will comply with all aspects of the LUMO. No variances are being requested.

Owners: John and Leslie Mackowiak, who previously lived in Chapel Hill for 15 years. They now live in Cedar Point NC. No developer or designer is involved with this application.

John.Mackowiak@gmail.com

919-619-3838

PIN: 9798670429 and 9798671340

Area Map

a) **Project Name:** Grand Alexander Subdivisions

Applicants and Owners: John and Leslie Mackowiak,

John.Mackowiak@gmail.com

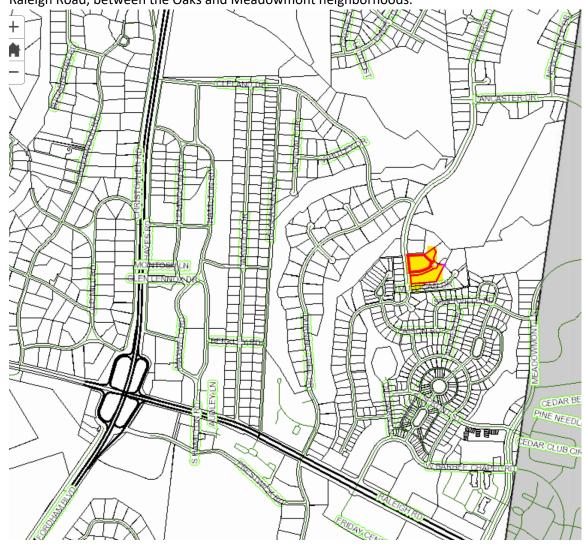
919-619-3838

Location: 121 and 130 Grand Alexander Court

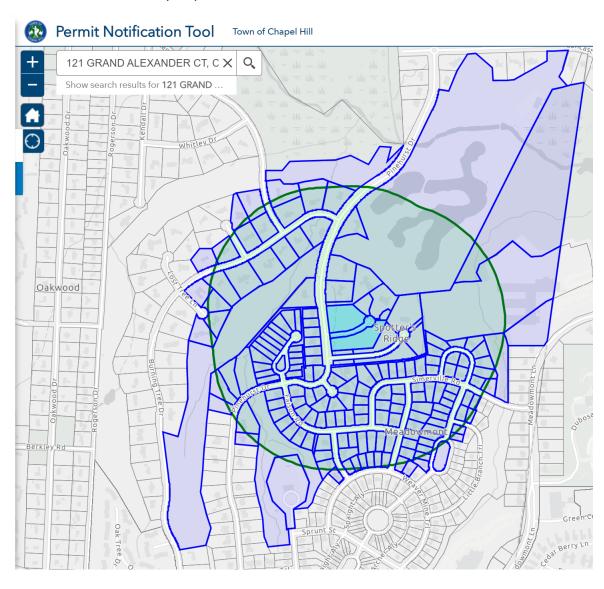
PIN: 9798670429 and 9798671340

- b) No dedicated open space, Park and Recreation Payment-in-lieu.
- c) Overlay districts: only Lake Jordan Watershed Protection District.
- d) Property Lines and roads shown below.

e) Map shows location of Grand Alexander Subdivisions (in yellow) relative to Fordham Blvd. and Raleigh Road, between the Oaks and Meadowmont neighborhoods.

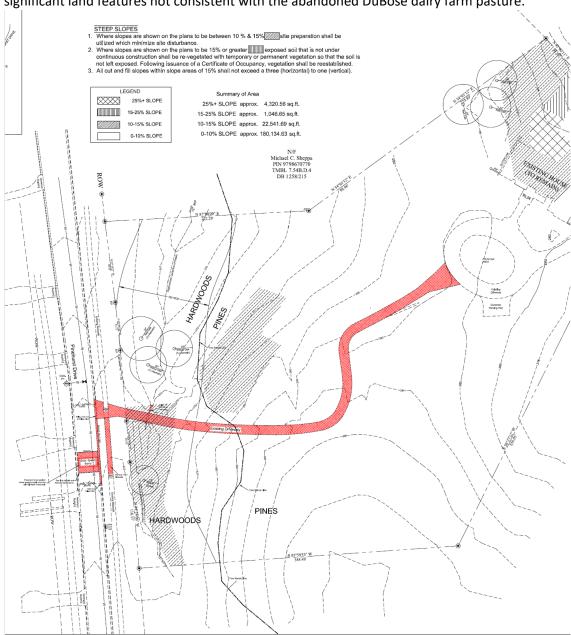


f) 1000' notification boundary map

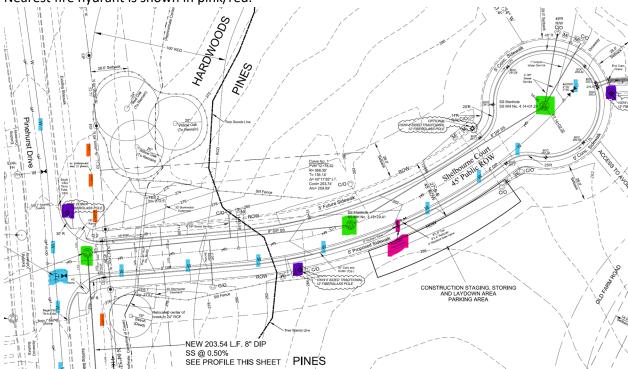


Existing Conditions Plan:

a) This plan page from the Aquabella subdivision shows the slopes that were present when Aquabella was proposed and approved. The only significant change that occurred was a) the removal of the original gravel driveway shown in red and the removal of trees in the Grand Alexander Court right-of-way and b) the construction of the Grand Alexander Ct. and associated infrastructure. Most of the property has a relatively flat slope of 0-10% grade. Soils are typical of the area, specifically a Williamstown-Rainsville silt loam, on the county GIS map, which is a well-draining deep soil. There are no environmental constraints preventing single family home use. The existing vegetation is primarily new growth pine, consistent with its history as the Meadowmont dairy farm pasture many decades ago. Some hardwoods exist as shown on the existing conditions map below. There are no other significant land features not consistent with the abandoned DuBose dairy farm pasture.



- b) There are no existing structures on the 2 lots being subdivided. The lots have always been vacant.
- c) Property lines are shown. Right of Way is shown.
- d) Sewer manholes are marked in Green. Path of the water supply line is marked in blue. Street lights are marked in purple. When the ROW was deeded to the town, easements were given to the various utilities in the ROW.
- e) Nearest fire hydrant is shown in pink/red.



f) Nearest bus stops are in Meadowmont and on 54, about a mile away.



- g) 2-foot contour maps are shown in the maps above.
- h) An ephemeral drainageway runs roughly parallel to Pinehurst through both of the large lots being subdivided. This drains a watershed of approximately 5 acres, the majority of this area is in Meadowmont. The recent stream determination of an ephemeral drainageway was conducted by town staff in 2021, and verified by the NS State Professor who helped develop the stream determination tool.

Detailed Site Plan

a) No specific known buildings are proposed with this application. Future lot purchasers will select or design their own home.

- b) Adjacent land uses are R1, single family residential. Across Pinehurst the lots are smaller than R1, because they are part of the Meadowmont planned development.
- c) Parking will be typical of R1 neighborhoods, on street or in driveways and garages.
- d) Existing fire hydrant is shown in the plan above in pink/red.
- e) Vehicle entrances to the lots will be proposed as houses are designed and building permits are requested.
- f) No additional new streets are proposed. Grand Alexander Ct. was built to TOCH design standards.
- g) Pavement and curb as built to TOCH design standards.
- h) Sidewalk along Grand Alexander Court was built according to TOCH design standards.
- i) No transit improvements are required or proposed.
- j) No landscape buffers are required or proposed
- k) In lieu of providing recreation space, we were required to make a payment in lieu of \$141,708.97 for the 4 lots in Aquabella.

MISCELLANEOUS PAYMENT RECPT#: 554988 TOWN OF CHAPEL HILL 405 MARTIN LUTHER KING JR BLVD CHAPEL HILL NC 27514

DATE: 09/07/16 TIME: 11:33 CLERK: swarther DEPT: CUSTOMER#: 477

PLANNING DEPARTMENT REVENUES

PARCEL:

CHG: RIL REV IN LIEU REC 141708.97

REVENUE:

1 10049 48615 141708.97 REV IN LIEU - REC & OPEN SPACE

REF1: 08-0126 REF2:

CASH:

01000 10003 141708.97

CENTRAL DEP CASH - S

AMOUNT PAID: 141708.97

PAID BY: JOHN I MACKOWIACK

CHECKNT METH:

1122

REFERENCE:

AMT TENDERED: 141708.97 AMT APPLIED: 141708.97 CHANGE: .00

- I) No dumpster locations are allowed, required or proposed.
- m) No construction is needed to divide these lots, so no plans for construction are proposed.
- n) No new roads are proposed, so no new sight distances are reported.

- o) Street lights and other utilities are shown in the plan above.
- p) No easements exist on the 2 lots being subdivided.
- q) No clearing or construction is part of this application. When building permits for houses are obtained, the clearing plans will be submitted.
- r) No additional traffic calming is required or proposed for this subdivision.

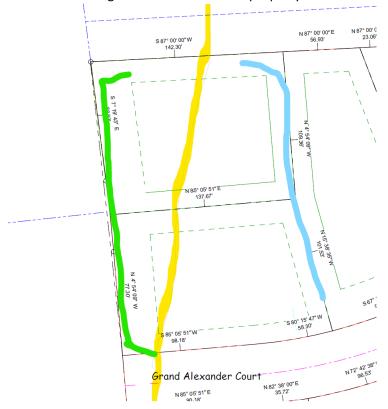
Stormwater Management Plan

a) Topography from GIS is shown below.



- b) Existing drainage conditions are shown above.
- c) A stream determination done in 2021 found no RCD (no ephemeral or intermittent stream) on these lots.

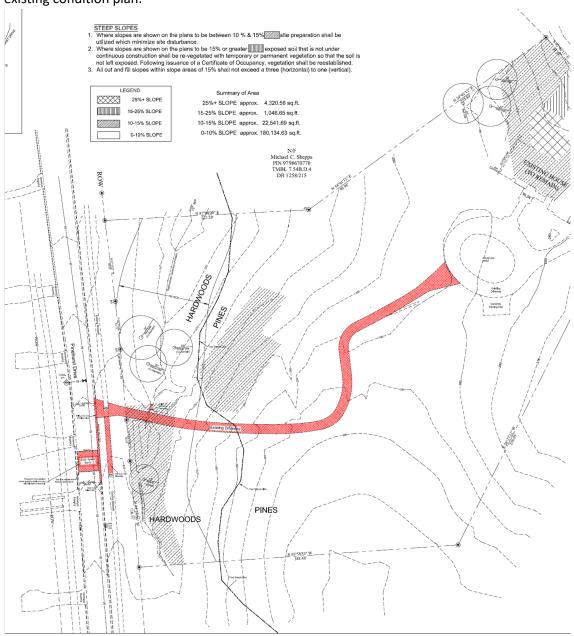
d) Currently an ephemeral drainageway passes through the building envelope of two lots (yellow line). As specified in the LUMO, a ZCP (zoning compliance permit) will be requested to propose directing the ephemeral drainage away from the building envelopes along the proposed green line. When houses are built, building code requires drainage to flow away from the foundations. This in effect will result in a newly formed ephemeral drainageway between the houses somewhere along the blue line near the property lines.



- e) The conveyance for moving this ephemeral drainageway will be the focus of the ZCP.
- f) Roof drains will be specified in the various building permits if and when houses are built.
- g) An easement will be proposed in the ZCP for redirecting the ephemeral flow away from the building footprints.
- h) BMPs will be proposed with each building permit if required.
- i) No planting or stabilization is required or proposed for the subdivision of these 2 lots.

Landscape Protection Plan

- a) The exact location of any future single-family homes is not known, so the location of rare, specimen and significant trees within 50' of a construction area cannot be predicted. This reporting requirement will be met when each building permit is requested.
- b) A rare tree includes hardwoods with a trunk diameter of 24" or more. A specimen tree includes hardwoods with a diameter of 12" or more. A significant tree stand is an area of 5000 or more SF where most of the canopy comes from rare trees. The location of the rare and specimen trees and the significant tree stand near the 24' red oak is shown below in the Aquabella existing condition plan.



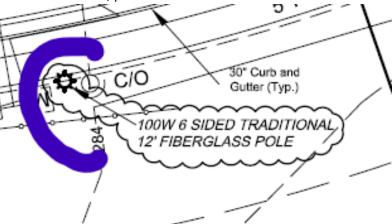
c) Information requested in sections c-k of the Landscape Protection Plan will be submitted as required with each future single family building permit. There is no building or construction being proposed with this major subdivision application.

Traffic Plans

- a) No additional traffic calming is proposed for subdividing these two lots.
- b) No new signs or pavement marking are proposed associated with this subdivision application. Once OWASA assumes responsibility for the water utilities, the final lift of asphalt will be completed to town standards, the street name sign will be replaced removing the private designation, and the speed table in Pinehurst will be removed as required under the Aquabella agreement.
- c) No Traffic Signal is proposed.

Street Light Plan/Streetscape Plan

- a) No additional street lighting is required or proposed.
- b) Location of three existing premium street lights are shown above in purple in the Existing Conditions Section, parts d and e..



- c) The premium street lights that were installed in 2010 were 100W 6 sided traditional on a 12' fiberglass pole.
- d) No other improvements are required or proposed in the ROW.
- e) Downtown detail does not apply.
- f) Street and sidewalks were built in 2010, as shown above in the Existing Conditions Section, part e.

Planting Plan

- a) No buffer is required or proposed.
- b) No off-site buffer is required or proposed.

Steep Slopes Plan

a) As shown in the Existing Conditions Plan (above) for Aquabella, approximately 10% of the 118,252 SF in these 2 lots are in the 10-15% slope range. The remainder of the SF are in the 0-10% slope range.

b) No disturbance is proposed with this major subdivision application. Individual building permits on each lot will specify the disturbance expected for the construction of each single-family home.

Grading and Erosion Control Plan

- a) Topography is shown in the maps above.
- b) No disturbance is proposed with this major subdivision application. Individual building permits on each lot will specify the disturbance expected for the construction of each single-family home.
- c) No off-site drainage facilities are proposed.
- d) 100% of these vacant lots are pervious surfaces today. When building permits are obtained, each permit will specify the impervious surface area.

Solid Waste Plan

a) Each single-family home will handle solid waste as allowed by TOCH Solid Waste Services policies and guidelines.

Construction Management Plan

- a) N/A. Subdivision of lots does not require a construction trailer.
- b) N/A. Subdivision of lots does not require construction personnel and equipment parking.
- c) N/A. Subdivision of lots does not require staging or storage of materials.
- d) N/A. Subdivision of lots does not require emergency vehicle access.
- e) N/A. Subdivision of lots does not require delivery truck routing.