



## STAFF ANALYSIS

Date: February 24, 2020  
To: Planning Board  
From: Trey Akers, Senior Planner  
Re: Davidson Farms Master Plan [Rural Planning Area]

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## 1. INTRODUCTION

### APPLICANT INFO

- **Owners:** Davidson Farms Holdings LLC
- **Developer:** Jason Shott
- **Project Team:** Dewberry Engineers, Inc. (Adam Hayes)
- **Location:** East Rocky River Rd. (Unaddressed) and 19525 Kistler Farm Rd. (Parcel IDs: 00725116 and 00725120 )
- **Planning Area(s):** Rural
- **Area:** 30.391 acres

### REQUEST

The applicant proposes the development of a residential subdivision consisting of 15 units of single-family detached housing on approximately 30 acres. The master plan includes required open space, park, and greenway features along with street infrastructure. The applicant intends to meet all applicable requirements as part of the Master Plan process identified in Davidson Planning Ordinance (DPO) Section 14.6.

## 2. PLANNING STAFF REVIEW - PRELIMINARY

### BACKGROUND

The total master plan area consists of two parcels, with one parcel fronting East Rocky River Road for the entirety of its northern boundary. This 14-acre parcel is currently covered by pine trees, with a few hardwood species in places. The other parcel sits at the far eastern end of Kistler Farm Road. This 15.7-acre parcel contains open area on its western side before hardwood forest begins and covers the eastern two-thirds of the parcel. Together, these parcels comprise the proposed 30-acre residential master plan.

The current project team became involved in October 2018 and worked through various plans on these sites, encountering a number of constraints such as open space and connectivity requirements in

addition to Kistler Farm Rd. being an NCDOT facility that necessitates improvements if development occurs. In May 2019 a plan was submitted that included internal streets and open spaces that did not meet ordinance requirements; a revised plan was submitted in November that addresses these and other issues identified earlier this year.

The resulting plan proposes 15 units on 30 acres and includes a variety of open space/park areas, two multi-use paths, and required infrastructure related to streets, stormwater, etcetera. The following sections offer greater detail concerning specific plan features and how they do/do not meet Davidson Planning Ordinance requirements.

## **PLANNING AND DEVELOPMENT STANDARDS**

### CONTEXT

The proposed residential subdivision is in keeping with the predominant area land use – single-family detached housing. The area features a mix of housing arrangements involving both master-planned and existing, non-master planned residences, including:

- Large-lot homes that do not directly front roads on parcels ranging from 5-10 acres (and many in excess of 10 acres);
- Large-lot homes that directly front roads on parcels about 1-2 acres in size;
- Large-lot homes that are part of master-planned subdivisions (i.e. River Run); and
- Smaller-lot homes that are part of master-planned subdivisions (i.e. Summit River Run).

On the larger, non-master planned parcels there is a mix of residential-only parcels and parcels that contain residences as well as primary or ancillary uses like equestrian or agricultural enterprises. Overall, the area seems to be in an extended transition period from larger lot/parcel residences to large/small lot residential subdivisions as long-time landowners sell their land, which is then subdivided into further residential lots via deed and master planning. However, the area's enduring land use pattern continues to be a mix of residential and agricultural uses.

The plan's central open space feature fronted by single-family homes along Road A acknowledges the range of existing development patterns: Across Kistler Farm Rd. to the south sit large lot residences with deep setbacks. The lots proposed along the east portion of Kistler Farm Rd., however, bear more resemblance to lot sizes in the adjacent River Run subdivision to the west – though the plan's proposed lots of 0.7 – 1.0 acres are larger than the 0.5-acre size found there. Overall, the proposed master plan incorporates characteristics of existing master-planned and non-master planned residential lots. The proposal is subject to the Rural Planning Area standards listed in DPO 2.2.12, which emphasize agricultural or residential uses that protect natural features and environmentally-sensitive areas.

### HOUSING

Concerning the proposed building type: The proposed plan meets both the permitted building types and setbacks specified in the ordinance (DPO Tables 2-45, 2-46). With the implementation of the Rural Area Plan the master plan reflects a greater emphasis on the preservation of publicly-accessible open space now required in the Rural Planning Area. Along with the ordinance's connectivity requirements, this has served to shape the residential lot layout to be centered around open and public spaces, such as streets, and related features. Building and streetscape renderings have been provided to give an indication of the intended residential character. It should be noted that these are illustrative in nature – in accordance with ordinance requirements – and that features such as tree preservation or plantings would need to meet the standards set forth in the ordinance.

Lastly, the proposal does not include affordable housing; the applicant intends to satisfy DPO 5.2 Affordable Housing/Covered Development Projects by making a payment-in-lieu for two units (\$53,100).

### STREETS/CONNECTIVITY

The proposed street network contains two street types, both based on the Rural Road cross-section (DPO 6.7.3). Roads A and B will feature a street flanked by vegetative swales and a sidewalk, while Kistler Farm Rd. will be updated to include swales and an eight-foot sidepath along its northern edge. The use of a sidepath, rather than an on-street bike lane, is proposed as a preferable arrangement more in keeping with the rural feel of the area. Since the Public Input Session in November 2019, the “hammerhead” turnaround at the end of Road B (connecting to the Dishman property) has been reinserted based on Mecklenburg County Fire Dept. requirements. The eastern connection to the Wade property continues to feature a “hammerhead” turnaround due to the distance between Lots 13-14 and the Road A intersection, which exceeds the maximum fire department service distance. Between Road A and the eastern end of Kistler Farm Rd. the plan proposes a pedestrian connection – this fulfills the ordinance’s overall connectivity requirements while recognizing that there is little to no benefit of requiring a street connection north between Lots 10-11 due to the narrow configuration of PID 00725188 (Dishman). Also in keeping with the existing rural feel, the plan does not propose any on-street parking. Instead, parking will be accommodated within private drives on individual lots; based on the proposed lot sizes, which afford significant lot depth, this arrangement seems fine.

Because Kistler Farm Rd. is an NCDOT facility, the Town of Davidson must petition NCDOT for control of the road and then permit the developer to make the required improvements prior to the road being accepted as part of the public street network. NCDOT has indicated a willingness to allow this so that necessary street improvements can be made (including street extension/cul-de-sac removal), with the street ultimately becoming part of Davidson through annexation as part of the master plan process (as is typical for new developments).

A transportation impact analysis (TIA) was not required for the proposal since it contains less than 50 units (6.10.1.C); however, a \$500.00 fee per lot must be paid to the Connectivity and Traffic Calming fund. Participants at the Public Input Session (PIS) noted the difficulty of turning left from East Rocky River Rd. onto Kistler Farm Rd. and asked whether anything could be done about this based on the increase development proposed (a turn lane was suggested by some participants). Per the PIS Report, NCDOT standards do not require the addition of a turn lane based on the number of units existing and proposed; residents are encouraged to work the Public Works to further address this issue.

One change regarding connectivity that emerged from the PIS concerns access to the Batts property at the far southeastern end of Kistler Farm Road’s current alignment. The landowner expressed concern about the Kistler Farm Road extension negatively impacting future access to their property. The extension of this road eliminates the cul-de-sac that provides access to the site currently. The plan proposes two driveways to be extended south of Kistler Farm Rd., with the underlying land from the cul-de-sac that lies outside of the future road right-of-way being assigned to the adjacent landowners. Additionally, the developer provided an access easement to the Batts property along their entire shared boundary along the extended Kistler Farm Road.

### OPEN SPACE/GREENWAYS/TREE PRESERVATION

Per the ordinance requirements (DPO 2.2.12, 7.5.1), the plan sets aside a minimum of 50% of the site as publicly-accessible open space. The plan proposes much of the open space remain undisturbed, including land east of Lots 14-15, north and east of Lots 1-6, and portions of the central open space feature along Kistler Farm Road. Along with these undisturbed spaces, the proposal features a park as

well as sidepaths along both East Rocky River Rd. (per the Mobility Plan, Pg. 79) and Kistler Farm Road. A network of ordinance-required sidewalks and pedestrian linkages/trails connect these elements. In fact, a little more than half of the lots front the central open space area on Kistler Farm Road.

A trail connection to the east, as discussed in earlier plan iterations, has now been illustrated and further information has been provided regarding the park area, whose 0.5-acre space will be cleared, replanted, and serve as a focal point for the development. Further confirmation that the proposed elements meet ordinance requirements (DPO 7.4.1), including Parks & Rec. Master Plan requirements, will be provided during the construction document approval process (which is standard practice). Access to and from the park has been illustrated, and crosswalks showing safe connections to this and other sidewalk, sidepath, and trail amenities have been shown. During the PIS one participant asked whether the proposed trails could be accessed by horses since at least one of the adjacent, existing land uses features equestrian facilities. The developer agreed to this proposal and a note has been included on the plan.

The plan also contains information based on an environmental inventory (EI) conducted. The EI included a survey of the site area's hundreds of trees, many stands of which were found to be comprised of mature trees – with several specimen trees identified. A total of 705 trees of 12 inches or greater diameter breast height were identified. Document pages EXH-06 and EXH-07 detail the mature trees and identify the specimen trees intended for preservation, most of which lie east of Lots 14-15. Calculations on EXH-06 indicate that the proposal meets DPO 9.3.2 by preserving at least 20% of the mature tree canopy (141 trees); EXH-14 indicates that the proposal meets the threshold set in 9.3.1, Table 9-1 to exceed a minimum of 30% canopy coverage. Through preservation of existing vegetation and new tree plantings the plan shows 41% coverage at build-out.

For all tree requirements, including new street tree plantings, the plan follows the ordinance applicable at the time of the initial master plan application submittal (April 2019). Per DPO 9.4.1.A, this means that trees along Rural Roads may be planted in a more informal pattern than the required 45'-50' on-center, so long as the total number of trees planted equals the number required on a non-Rural Road. Therefore, the 98 required trees are spread throughout the lots and often clustered; this approach allows for greater flexibility in locating driveway access for each lot. Notably, Lots 11-13 do not currently feature many – if any – trees (a condition mirrored on the front of existing Kistler Farm Rd. lots to the south); trees have been added through each of these lots as well as in the central park area and along East Rocky River Road.

Public comments from the Public Input Session described the importance of preserving the current feel of the area, including by limiting clear-cutting. The developer's proposed deed restrictions address this concern (discussed below), though further refinement concerning a minimum preservation threshold for each lot – as noted as a possibility in the PIS Report – is needed prior to master plan approval.

Lastly, it should be noted that the Environmental Inventory identifies an existing pond on-site (east of Lot 8). According to the US Army Corp. of Engineers (USACE), the "pond" is actually a shallow depression that occasionally collects water. Earlier conversations between staff and the project team had contemplated celebrating this feature in accordance with ordinance requirements for open space. However, in light of the USACE findings, the developer's proposal to remove this feature is acceptable as it presented a liability with its location straddling private property, a utility easement, and open space.

#### STORMWATER TREATMENT/BMP DESIGN

Best Management Practices (BMPs) are devices or facilities that mitigate development impacts by controlling and/or treating rainwater runoff from hardscape surfaces. Among the project team and staff

BMPs have been a topic of discussion throughout this plan’s evolution and their specific location and sizes have become clearer since the Public Input Session in November 2019.

The plan requires two such facilities – one along Kistler Farm Rd. and one east of/behind Lot 15. Each requires the removal of trees to install “sand filters,” which are shallow basins with grass bottoms that hold rainwater after an event and allow it to seep into the ground. Given the prominent location and high-visibility of the Kistler Farm Rd. feature, enhanced planting and screening strategies are recommended. The Landscape Schematic Design (EXH-14) proposes a number of required street trees to be installed in informal groups around this facility. Staff review comments on the current plans note the opportunity for additional plantings within the basin to create a more natural feel; this is supported by the corresponding Meck. County BMP Design Manual as well as the recently-adopted Davidson Comprehensive Plan’s Policy 2.2.6, which encourages practices that mimic natural process (as opposed to a Bermuda-grass only design).

### DEED RESTRICTIONS

In response to various topics raised through the Public Input Session as well as ordinance requirements, the developer proposes a set of deed restrictions. Below is a list of draft restrictions requiring further refinement prior to plan approval:

- 1. Lot Design:**
  - a. Landscaping:** There shall be no clear cutting of any lot or removal of vegetation in the common open spaces.
  - b. Trees:** All trees planted by the developer to satisfy the “street trees” requirement in DPO Section 9 may not be removed. Select trees may be relocated and/or replanted only with written permission from the Town of Davidson Planning Director and Arborist.
- 2. Home Design:**
  - a. Construction:** Each home must be site built
  - b. Size:** Homes must contain a minimum of 2,500 square feet
  - c. Type:** No modular or mobile homes are allowed
  - d. Approval:**
    - All home, garage, and accessory structure building plans must go through the Architectural Review Committee (ARC) and, where applicable, the Town of Davidson.
    - All accessory structures or outbuildings must be built with like-kind construction and/or materials of the main residential unit and must be approved by the ARC.
    - The developer remains the ARC through each lot until final lot is sold.
- 3. Lot Restrictions:**
  - a. Animals:** No cattle, poultry, swine or farm animals are permitted, nor is no animal breeding of any type allowed.
  - b. Fencing:** No chain link fences or barbwire fencing are allowed. Privacy fencing must be approved by the ARC and meet Davidson Planning Ordinance requirements.
  - c. Vehicles:**
    - No unregistered or junk vehicles are allowed in driveways or yards.
    - No commercial vehicles with company logos or advertising can be kept in driveways or yards.
    - No RV's, campers or boats may be parked in driveways, yards or where they are visible from street or neighbors
- 4. Uses:**
  - a. Commercial:** No commercial offices with employees working from the home are permitted.

- b. **Non-Commercial:** Home offices are permitted as long as they adhere to Town of Davidson and Mecklenburg County requirements.
- 5. **Open Space:** All common open space and park areas shall be publicly-accessible and maintained by the homeowner’s association. The non-paved trails shall be accessible to equestrian use.

### 3. PUBLIC PLANS & POLICIES

Below is a list of town-adopted documents and a brief summary of each’s applicability to the proposed master plan:

- The **General Principles for Planning in Davidson (2015)** include tenets to guide development in Davidson. Principles relevant to this proposed development are listed below. They can be summarized as: Residential development should include a variety of housing and transportation options integrated with thoughtful open space preservation.
  1. We must preserve Davidson’s character and sense of community.
    - A street, sidewalk, and greenway network that knits the community together
  3. We must encourage alternative means of active transportation.
    - New greenway, bike, and sidewalk connections to existing developments
- The **Davidson Comprehensive Plan (2010)** characterizes the project site and surrounding area as a “Smart Suburban” context, describing these areas as “...transition areas between the more intense growth targets and existing low-intensity neighborhoods or protected open space. Residential development, public services and civic uses (such as churches and schools) and additional neighborhood-support centers are ideally located within” these areas.
- The **Town of Davidson Water/Sewer Policy (2018)** requires a determination by Charlotte Water regarding their ability to serve a site as well as whether a development proposal constitutes an extension (i.e. construction of a non-existing line) or connection (i.e. tapping into an existing line). Charlotte Water determined this project would be considered an extension. Moreover, per DPO 6.3.1.A, since the project is within 1,000 feet of an existing sewer line it must connect to these existing facilities. The Davidson Board of Commissioners reviewed the proposed request for water/sewer, ultimately approving the site for sewer access in July 2019 after an initial denial in May 2019.

### 4. OUTSTANDING ISSUES

Below is a list of items that require further clarification/resolution prior to the plan’s approval. Several of these have been noted previously in the Planning Staff Review – Preliminary section above. They are consolidated here to provide a single location for the identified issues.

- Deed Restrictions/Plan Note: Initial draft requires revisions for trees, open space.
  - Tree Clearing on Lots: The threshold and/or areas allowed to be cleared.
  - Open Space: Shall be publicly-accessible, including for equestrian uses on trails.
- BMP Design: The inclusion of additional plantings for the Kistler Farm Rd. facility.
- Street Cross-Sections: Minor details of each street need to be finalized.
- Retaining Walls: The extent and scale of retaining walls must be clarified, particularly in/around publicly-accessible open space areas and parks.

## 5. FYI OR REQUIRED ACTION

The Planning Board will officially review and provide comments on the master plan proposal.

## 5. HISTORY/NEXT STEPS

- Board of Commissioners Water/Sewer Connection Request: May/July 2019 [Complete]
- Planning Board FYI Presentation: October 2019 [Complete]
- Public Input Session: November 2019 [Complete]
- Master Plan Schematic Design Submittal: December 2019 [Complete]
- Planning Board Review & Comment: February 2019
- Final Master Plan Submittal for Review/Approval: February/March 2019
- Preliminary Plat (i.e. Construction Documents): TBD

## 6. RESOURCES & ATTACHMENTS

### ATTACHMENTS

- Master Plan Schematic Design, Application, & Statement of Intent: <http://www.townofdavidson.org/1224/Davidson-Farms-Kistler-Farm-Rd> (see “Documents” tab).

### RESOURCES

- Davidson Planning Ordinance (2015): <http://www.ci.davidson.nc.us/DocumentCenter/View/8499>
- Comprehensive Plan (2010): <http://www.townofdavidson.org/340/Davidson-Comprehensive-Plan>