

Council Members

District 1: Terry Graham
District 2: Charlene McGriff
District 3: Billy Mosteller, Secretary
District 4: Larry Honeycutt
District 5: Steve Harper, Chair
District 6: Allen Blackmon
District 7: Brian Carnes, Vice-Chair

**County Administrator**

Dennis Marstall

County Attorney

John K. DuBose III

Clerk to Council

Sherrie Simpson

January 12, 2022

4:00 PM

**101 North Main Street
Lancaster, SC 29720**

**LANCASTER COUNTY COUNCIL
COMMITTEE OF THE WHOLE
County Council Chambers, County Administration
Building, 101 North Main Street, Lancaster, SC 29720**

AGENDA

1. **Call to Order - Chairman Steve Harper**
2. **Welcome and Recognition - Chairman Steve Harper**
3. **Pledge of Allegiance and Invocation - Council Member Brian Carnes**
4. **Approval of Agenda**

[deletion and additions of non-substantive matter]

5. **Citizens Comments**

[Lancaster County Council welcomes comments and input from citizens who may not be able to attend Council meetings in person. Written comments may be submitted via mail to ATTN: Sherrie Simpson, Post Office Box 1809, Lancaster, SC, 29721, by email to Sherrie Simpson at ssimpson@lancastersc.net or by online submission by selecting the "Citizens Comments" quick link located on the County website homepage at <https://www.mylancastersc.org/>. Comments must be no longer than approximately 3 minutes when read aloud. Comments received will be acknowledged during the Citizens Comments portion of the meeting. Comments will need to be received prior to 4:00 p.m. on the day before the meeting. Please use the same link above in order to submit input/comments for Public Hearings.]

6. **Discussion and Action Items**

- a. Comprehensive Plan Kick-Off - Rox Burhans/Ashley Davis
- b. Update on the Black Horse Run Road Stormwater Project - Scott Edgar

7. **Citizen Comments**

[If Council delays until end of meeting]

8. **Adjournment**

Anyone requiring special services to attend this meeting should contact 285-1565 at least 24 hours in advance of this meeting. Lancaster County Council agendas are posted at the Lancaster County

Administration Building and are available on the Website: www.mylancastersc.org

***Meetings are live streamed and can be found by using the following link:
<https://www.youtube.com/channel/UCgSIMrcYjcYcu1m-e6TV54w>***

Agenda Item Summary

Ordinance # / Resolution #: N/A

Contact Person / Sponsor: Ashley Davis / Planning

Department: Planning

Date Requested to be on Agenda: 1/12/2022

Issue for Consideration:

The Comprehensive Plan rewrite project is officially underway. In an effort to keep County Council apprised of our progress thus far and next steps moving forward, our lead consultants on the project (Benchmark Planning) have prepared a short presentation to present at the January 12th Committee of the Whole Meeting.

Points to Consider:

Project update only.

Funding and Liability Factors:

N/A

Council Options:

Project update only.

Recommendation:

Project update only.

ATTACHMENTS:

Description	Upload Date	Type
Summary Memo	1/3/2022	Backup Material



Date: December 22, 2021

To: Lancaster County Council

From: Ashley Davis, Senior Planner

RE: COMPREHENSIVE PLAN KICK-OFF AND OVERVIEW

The Comprehensive Plan rewrite project is officially underway. In an effort to keep County Council apprised of our progress thus far and next steps moving forward, our lead consultants on the project (Benchmark Planning) have prepared a short presentation to present at the January 12th Committee of the Whole Meeting.

The presentation will primarily focus on the structure of the plan, anticipated timing, and next steps in the planning process. There will also be a brief overview of the feedback received from the first Stakeholder Committee meeting which took place on December 14, 2021. The consultants and county staff will also be available for any questions or comments from County Council.

Please feel free to contact me at 285-6005 if you have any questions prior to the meeting.

Agenda Item Summary

Ordinance # / Resolution #: N/A

Contact Person / Sponsor: Scott Edgar / Stormwater

Department: Stormwater

Date Requested to be on Agenda: 1/12/2022

Issue for Consideration:

No action is required from Council at this time; however, the Stormwater staff wanted to provide Council with a summary of the engineering report of the *Black Horse Run Drainage Study*. This report will be the basis for negotiations with the South Carolina Department of Transportation for upgrading the Black Horse Run Road crossing. This report/project was initiated by Lancaster County in 2021 to identify solutions that will help address the documented road flooding issues

Points to Consider:

The Technical Memorandum is attached for Council's review and consideration.

Funding and Liability Factors:

Council has previously set aside funds to pay for the project.

Council Options:

For information only for Council at this time.

Recommendation:

For information only for Council at this time. No action required.

ATTACHMENTS:

Description	Upload Date	Type
Technical Memorandum to the Black Horse Run Drainage Study report	1/4/2022	Executive Summary

Technical Memorandum



To: Scott Edgar, PE

From: Chris Baker, PE

Date: December 13, 2021

Subject: Black Horse Run Neighborhood Drainage Study
Lancaster County, SC
Preliminary Drainage Study

This Technical Memorandum is a supplement to the *Black Horse Run Drainage Study* report.

Introduction and Background

We have completed a review of the existing drainage conditions for the above captioned project. Our review included:

- *Collection of survey information of the site; including finished floor elevations of critical properties*
- *Use of HEC-RAS computer program to model the existing Six Mile Creek Floodplain in conjunction with the tributary to Six Mile Creek.*
- *Analysis of the influence of Six Mile Creek on the tributary to Six Mile Creek.*
- *Analysis of the 100-year flood elevation on critical properties*
- *Analysis of proposed improvements to Black Horse Run Road and Man O' War Road culvert crossings.*

Approach

Upon completion of the field surveys Mead and Hunt performed a field visit to assess the sites hydrologic and hydraulic conditions. The collection of this data would serve as the basis for the engineering analysis of the tributary to Six Mile Creek. HEC-RAS computer program was utilized.

Analysis

Six Mile Creek

The current model used by FEMA to determine floodplain and/or floodways for the effective Flood Insurance Study (FIS) 45057CV001C for Lancaster County and Incorporated Area, dated September 28, 2018, was obtained by Mead & Hunt. This model was used to analyze the effects of the Six Mile Creek floodplain on the tributary running through the Black Horse Run neighborhood. Detailed analysis of this model can be found in the drainage report.

Tributary to Six Mile Creek

Using the FEMA model described above as the base, a new reach was added to represent the tributary which runs through the Black Horse Run neighborhood utilizing both survey and LiDAR data. USGS's StreamStats software was used to find peak flows for the watershed at the Black Horse Run Road crossing and the Man O' War Road crossings. In order to account for the future build out of the upstream watershed, the total watershed impervious area was assumed to be 35% for the proposed improvements to the tributary. This 35% impervious area considers proposed development to the upstream as well as existing development and their green spaces.

Six Mile Creek Influence

To determine the limits of the flooding influence of Six Mile Creek onto the tributary a model was created that analyzed the tributary of Six Mile Creek only. The 100 year storm water surface elevations of this model were then compared to the water surface elevations of the model that included Six Mile Creek. The location where the water surface elevations of the tributary matched in the two models would determine where the influence of Six Mile Creek would stop. Based on our modeling, Six Mile Creek influences the tributary to approximately 40' upstream of Man O' War Road.

Flooding Impacts to Key Parcels

Finished floor elevations were collected for five (5) properties within the Six Mile Creek floodplain. These properties are shown on the attached exhibit. Below is a summary of the surveyed finished floor elevations and the corresponding 100 Year flood elevation adjacent to the properties.

Address	Finished Floor Elevation House	Finished Floor Elevation Garage	Nearest 100 Year Flood Elevation	House Impact	Garage Impact
9977 Black Horse Run – W/Finished Attached Garage	574.08'	566.19'	567.77'	No	Yes
9526 Man O' War Road – Single Family Home	572.12'	N/A	566.33'	No	N/A
9500 Man O' War Road – Single Family Home w/ Attached Garage	565.16'	561.37'	566.33'	Yes	Yes
9492 Man O' War Road – Single Family Home w/ Attached Garage	567.2'	564.94'	565.82'	No	Yes
9476 Man O' War Road – Single Family Home w/ Detached Garage	570.84'	571.2'	565.46'	No	No

Proposed Improvements

Based on analysis of the tributary to Six Mile Creek, the existing crossline pipes under Black Horse Run Road and Man O' War Road are undersized. The model shows that flooding of the roadways will occur for a 2-year storm event which produces 3.5" of rain within a 24 hour period. In accordance with SCDOT's design standards, the culverts under Black Horse Run Road and Man O' War Road should be designed to convey a 25-year storm event, which is a storm event producing 6.15" of rain in a 24 hour period.

Based on our analysis, in order to sufficiently pass the design storm event the following improvements would be required to each crossing:

Black Horse Run Road

- Raise the existing roadway elevation approximately 1'
- Construction of a 6' x 8' box culvert

Man O' War Road

- Raise the existing roadway elevation approximately 1'
- Construction of a 6' x 12' box culvert

The improvements above would safely pass the design storm event for Black Horse Run Road. Due to the influence of the Six Mile Creek Floodplain and limitations to the tributary geometry, the design storm event would overtop Man O' War Road by approximately 2" in the proposed condition.

Recommendation

Based on the review of the Black Horse Run tributary we offer the following summary and recommendations:

- Contact should be made with the property owners at 9977 Black Horse Run Road, 9500 Man O' War Road and 9492 Man O' War Road to discuss the apparent impacts to their properties due to flooding of Six Mile Creek and the subject tributary.
- The flooding of Six Mile Creek influences the tributary to approximately 40' upstream of Man O' War Road.
- A 6' x 8' box culvert should be further designed and analyzed at Black Horse Run Road.
- A 6' x 12' box culvert should be further designed and analyzed at Man O' War Road.

We appreciate this opportunity to provide this review for the County. If you have any additional questions or concerns, please do not hesitate to let me know.

Respectfully submitted,
MEAD & HUNT, Inc.

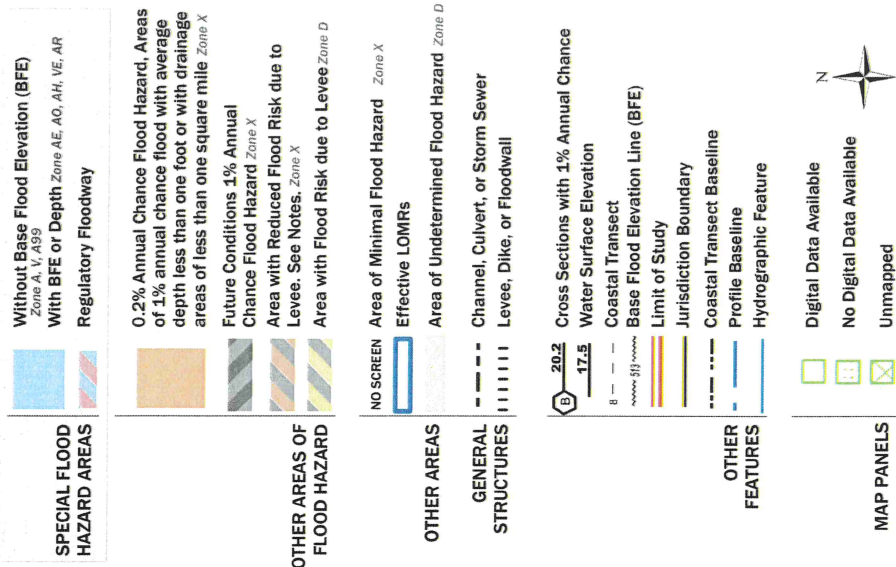
National Flood Hazard Layer FIRMette

80°50'59"W 34°59'55"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

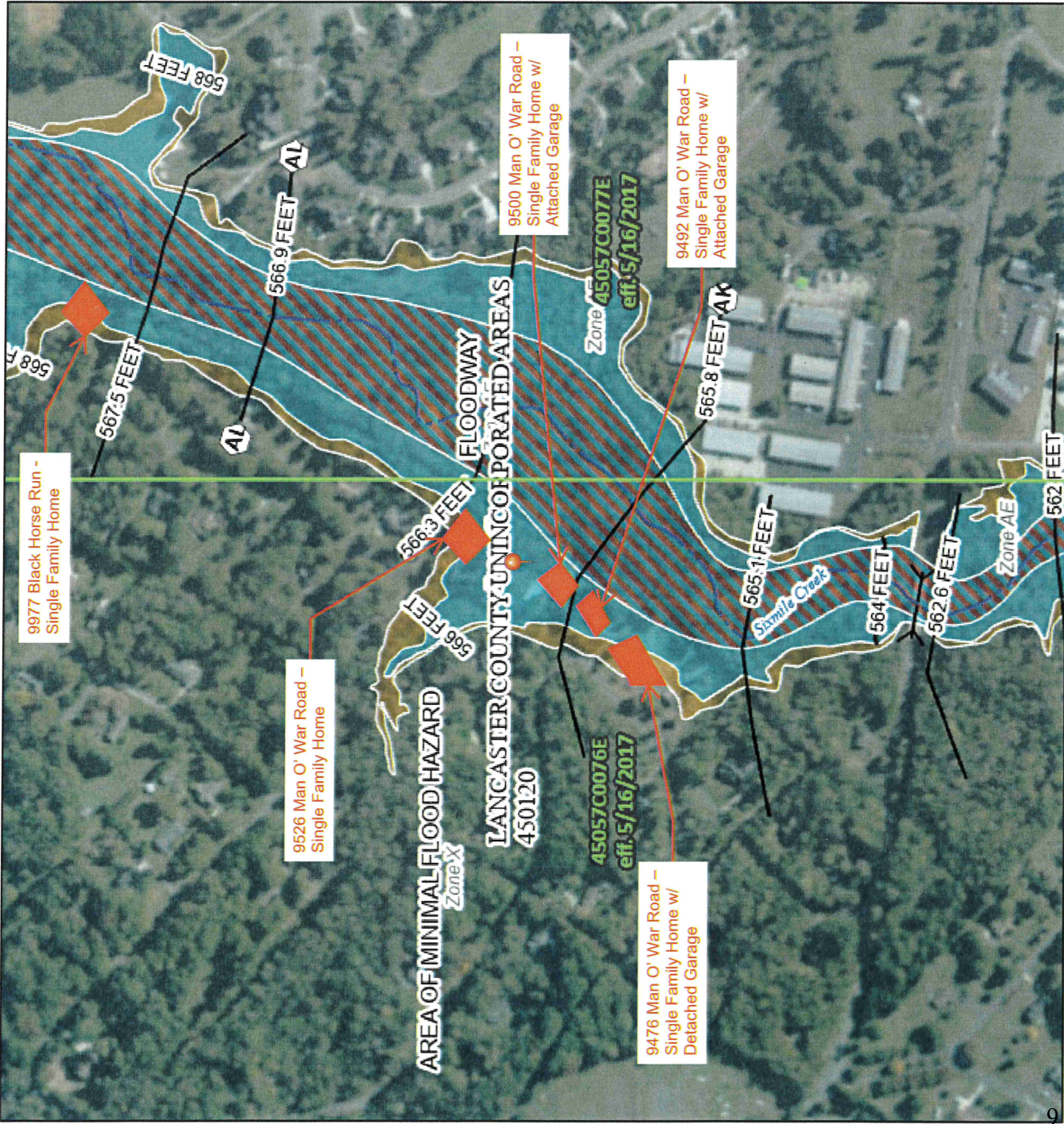


The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/4/2021 at 2:49 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



80°50'21"W 34°59'25"N

0 250 500 1,000 1,500 2,000 Feet

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020