Montgomery Planning
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

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July 23, 2024

Hamid Shirazi
9810 Newhall Road
Potomac, MD 20854

Erin E. Girard
7600 Wisconsin Avenue, Suite 700
Bethesda, MD 20814

Re: Response Letter, Natural Resource Inventory/Forest Stand Delineation (NRI/FSD)
#420240850 - Persimmon Tree Subdivision

Dear Ms. Girard and Mr. Shirazi,

I have reviewed your request to reconsider Planning staff's determination regarding the existence of an intermittent stream on Mr. Shirazi's (Applicant) property located at 9810 Newhall Road and an adjacent strip of unaddressed land (the "Property"), as well as the relevant attachments. In preparing a response to your request, I asked Planning staff to provide information on their review of the Property, including all evidence used to support their determination. After reviewing the evidence presented from both the Applicant and Planning staff, I find sufficient evidence to support the intermittent stream delineation on the Property.

At a meeting between Planning staff, the Applicant, and the Applicant's prior legal counsel and plan preparer on February 8, 2024, Planning staff provided a detailed overview of the review of the Natural Resources Inventory/Forest Stand Delineation (NRI/FSD) and the factors supporting the determination of an intermittent stream. Planning staff noted the key physical features to properly identify the intermittent stream, including sinuosity, well-defined banks, deposits, sediments, debris, the presence of wetland vegetation, soil hydric indicators, and algae cover. Planning staff provided a PowerPoint presentation (Attachment), which was subsequently shared with the meeting participants and includes photographs and videos from the Property used to support its determination. The photographs, videos, and staff observations from the property demonstrate that prior to the disturbance (i.e., the installation of two pipes), the stream and its banks were well-developed.

Additionally, Planning staff created a 3D model using LIDAR data and a contour layer to demonstrate the presence of a well-developed channel with clear sinuosity, continuous bed, and bank throughout the natural channel's length, excluding the concrete channel between

9805 Logan Drive and 9901 Logan Drive. The model and the video previously provided by the applicant, clearly show sinuous patterns in the terrain. The video also shows flow during a heavy rain event. During site visits on November 14, 2023 and April 25, 2024, Planning staff found evidence of stream flow. Additionally, the 3D model also depicts evidence that stream banks were up to 2 feet high. Soil and core samples were collected during the site visits for groundwater testing, and observations included decayed leaf matter, sorted sediments, streambed forms, frequent flow marks, algae cover, and wetland vegetation. Evidence of erosion in the form of exposed vegetation roots along the banks, sediment, and debris was observed at 9306 Persimmon Tree Rd and the outfall of the pipes during Planning staff visits. Wetland vegetation such as American Sycamore and algae-covered rocks were identified along the stream channel. Groundwater was also noted during the Department of Permitting Services (DPS) inspection (pictures provided by DPS on December 2, 2023), and various hydrologic conditions, such as the presence of muck and accumulation of organic matter within a few inches of the topsoil on the stream banks were also observed.

The evidence above indicates that the channel was well-developed and exhibited the characteristic sinuosity of intermittent and perennial streams.

The Applicant was given the opportunity to present their perspective during the meeting with Planning staff on February 8, 2024. Additional discussion occurred regarding the existence of previous violations on the Property during the pipe installation project, which involved exceeding disturbance limits set by DPS and clearing a large area of forest without proper permits and approvals from Planning Department Forest Conservation staff.

As defined in the Environmental Guidelines approved by the Montgomery County Planning Board in 2021, intermittent streams "typically have baseflow at least once per year" and "will usually have baseflow during the winter and spring seasons." The Applicant's argument and evidence focus on the second part of the definition, which states that an intermittent stream will usually have baseflow during the winter. However, the first part of the definition is equally important, which states that intermittent streams have baseflow at least once per year. Planning staff has visited the site multiple times, with the most recent visit being on April 25, 2024. During that visit, water flow was observed on the Property, and the National Weather Service records (Table 1) for the area do not show any precipitation in the 72 hours before the environmental staff's visit.

Additionally, pictures from the DPS staff site visit on December 2, 2022, showed water ponding/accumulation in the channel being trenched (Figure 1). The National Weather Service records (Table 2) for the area show zero precipitation in the two days before the DPS site visit (and no more than 0.25 inches of precipitation in the 24 hours starting 4 hours before the site visit). This suggests that the work being executed found seeps, springs, or wetland areas that

were disturbed within the stream bed channel during the construction, causing the water to emerge from the ground. These features are currently observed on the adjacent property at 9306 Persimmon Tree Road. This evidence supports the determination that before the pipes were installed on the Property, there was a stream meeting the definition of "intermittent stream," as provided in the Environmental Guidelines.

Also, I have reviewed the January 5, 2024 letter from the Maryland Department of the Environment (MDE). During plan review, Planning staff requested that Mr. Shirazi's consultants obtain a letter from MDE confirming that the stream is not part of the Waters of the U.S. and assessing whether the stream is an ephemeral stream, for Planning staff's consideration (Figure 2). Planning staff was not in any way deferring a final determination of the stream classification to MDE.

MDE's letter refers to a pipe drainage rather than a stream or natural channel. Moreover, the same letter specifically states that the drainage pipe outfalls only into a stormwater drainage feature, which is non-jurisdictional of MDE. Although Planning staff considered MDE's finding that the drainage pipe as it currently exists is not considered "waters of the state," MDE's letter did not address the nature of the stream as it existed *before* the pipe was installed, which is the primary issue for Planning staff's determination. Therefore, although MDE did provide input on jurisdictional issues relevant to their review, stream delineation for ephemeral and intermittent streams and their associated buffer is solely the responsibility of the Montgomery County Planning Department, using the Environmental Guidelines approved by the Montgomery Planning Board in 2021. Further, the MDE letter mentioned finding water flow on December 21, 2023, but noted that it was deemed likely due to precipitation. The National Weather Service records (Table 3) for the area did not show any precipitation in the 48 hours prior to MDE's visit.

While Planning staff considered MDE's letter in addition to the evidence described above when making the determination of the classification of the stream, the MDE letter only addressed the current environmental features on the Property, most of which were disturbed from their original state. Therefore, I do not find the MDE letter to conflict with the intermittent stream determination made by Planning staff.

Planning staff also considered the report prepared by Soil & Environmental Consultants, Inc. (S&EC), which uses the NC Division of Water Quality 2010 Methodology for Identification of Intermittent and Perennial Streams and their Origins (Version 4.11. North Carolina Department of Environment and Natural Resources, Division of Water Quality, Raleigh, NC). As previously communicated in the response letter provided by Planning staff on May 1, 2024, the stream delineation method used by S&EC differs from that used in Montgomery County, which is outlined in the Environmental Guidelines approved by the Montgomery Planning Board in

2021. Furthermore, Planning staff observed that the findings from S&EC and Wetland Studies and Solutions were inconsistent with the National Resources Inventory (NRI) application submitted by the Applicant in October 2023. The discrepancy arose because the proposed plan showed an intermittent stream and its corresponding buffer extending further into the Property. However, the consultant's report aims to support a different scenario than the one provided by the Applicant. Planning staff has determined that the submitted reports from S&EC and Wetland Studies and Solutions were not persuasive in making a final determination for the status of the stream on the Property, as they both focused on and evaluated the adjoining property, where Planning staff and previous plan preparers had already identified an intermittent stream and associated buffers.

After reviewing the evidence presented, I find that Planning staff provided sufficient evidence to support the existence of an intermittent stream on the Property for the reasons stated above. Therefore, the NRI/FSD application must be revised to include all environmental features such as, but not limited to, showing a stream and its associated buffer, as well as cleared canopy forest within the stream valley buffer area. If you need more information regarding the Natural Resource Inventory/ Forest Stand Delineation (NRI/FSD) process please review the Forest Conservation Law Chapter 22A, 1992 Trees Approved Technical Manual 1992, and the 2021 Environmental Guidelines for Management of Development in Montgomery County. Failure to submit an NRI/FSD application that meets these requirements will result in a denial of the NRI/FSD and subsequent enforcement action.

Finally, to address these environmental concerns, and ensure compliance with the regulations, it is essential that you work closely with our Forest Conservation inspectors and Environmental Planners to resolve the identified issues. This will involve taking the necessary steps to address pending violations by implementing mitigation procedures, such as reforesting the cleared areas and restoring the stream and its buffer as part of your plans, and fulfilling any other conditions specified by the Planning Department and other relevant agencies, such as DPS.

Sincerely,

Jason K. Sartori
Planning Director

cc: Robert Tjaden (Tjaden Design Associates, LLC)

Table 1. Precipitation Data, April 2024

Climatological Data for DALECARLIA RESERVOIR, DC - April 2024

Date	Temperature				HDD	CDD	Precipitation	New Snow	Snow Depth
	Maximum	Minimum	Average	Departure					
2024-04-01	66	46	56.0	6.1	9	0	0.09	0.0	0
2024-04-02	66	46	56.0	5.7	9	0	0.36	0.0	0
2024-04-03	52	47	49.5	-1.2	15	0	0.04	0.0	0
2024-04-04	M	M	M	M	M	M	S	M	M
2024-04-05	56	37	46.5	-5.1	18	0	0.05A	0.0	0
2024-04-06	54	40	47.0	-5.0	18	0	0.00	0.0	0
2024-04-07	55	36	45.5	-6.9	19	0	0.00	0.0	0
2024-04-08	M	M	M	M	M	M	S	M	M
2024-04-09	73	38	55.5	2.3	9	0	0.00A	0.0	0
2024-04-10	78	32	55.0	1.4	10	0	0.00	0.0	0
2024-04-11	78	38	58.0	4.0	7	0	0.00	0.0	0
2024-04-12	M	M	M	M	M	M	S	M	M
2024-04-13	71	53	62.0	7.2	3	0	0.03A	0.0	0
2024-04-14	66	43	54.5	-0.7	10	0	0.00	0.0	0
2024-04-15	83	43	63.0	7.4	2	0	0.00	0.0	0
2024-04-16	84	53	68.5	12.5	0	4	0.00	0.0	0
2024-04-17	76	50	63.0	6.6	2	0	0.00	0.0	0
2024-04-18	76	50	63.0	6.3	2	0	0.00	0.0	0
2024-04-19	M	M	M	M	M	M	S	M	M
2024-04-20	M	M	M	M	M	M	M	M	M
2024-04-21	M	M	M	M	M	M	M	M	M
2024-04-22	M	M	M	M	M	M	M	M	M
2024-04-23	63	36	49.5	-9.0	15	0	0.00A	0.0	0
2024-04-24	72	36	54.0	-4.8	11	0	0.00	0.0	0
2024-04-25	73	50	61.5	2.4	3	0	0.00	0.0	0
2024-04-26	73	42	57.5	-1.9	7	0	0.00	0.0	0
2024-04-27	73	42	57.5	-2.2	7	0	0.00	0.0	0
2024-04-28	58	52	55.0	-5.0	10	0	0.00	0.0	0
2024-04-29	75	55	65.0	4.7	0	0	0.00	0.0	0
2024-04-30	90	52	71.0	10.4	0	6	0.00	0.0	0
Sum	1611	1017	-	-	186	10	0.57	0.0	-
Average	70.0	44.2	57.1	1.5	-	-	-	-	0.0
Normal	67.6	43.6	55.6	-	305	23	3.53	0.0	-

Figure 1. DPS Photo During Pipe Installation

Table 2. Precipitation Data, December 2022

Climatological Data for DALECARLIA RESERVOIR, DC - December 2022

Date	Temperature				HDD	CDD	Precipitation	New Snow	Snow Depth
	Maximum	Minimum	Average	Departure					
2022-12-01	57	28	42.5	0.7	22	0	0.00	0.0	0
2022-12-02	44	25	34.5	-7.0	30	0	0.00	0.0	0
2022-12-03	51	26	38.5	-2.8	26	0	0.25	0.0	0
2022-12-04	63	35	49.0	8.0	16	0	0.25	0.0	0
2022-12-05	62	25	43.5	2.8	21	0	0.00	0.0	0
2022-12-06	62	25	43.5	3.0	21	0	0.02	0.0	0
2022-12-07	51	39	45.0	4.8	20	0	0.22	0.0	0
2022-12-08	M	M	M	M	M	M	M	0.0	0
2022-12-09	57	36	46.5	6.8	18	0	0.00	0.0	0
2022-12-10	49	28	38.5	-1.0	26	0	0.00	0.0	0
2022-12-11	42	29	35.5	-3.8	29	0	0.00	0.0	0
2022-12-12	46	33	39.5	0.5	25	0	0.05	0.0	0
2022-12-13	42	30	36.0	-2.8	29	0	0.00	0.0	0
2022-12-14	42	23	32.5	-6.1	32	0	0.00	0.0	0
2022-12-15	41	26	33.5	-4.8	31	0	0.60	0.0	0
2022-12-16	43	33	38.0	-0.1	27	0	1.55	0.0	0
2022-12-17	50	30	40.0	2.1	25	0	0.00	0.0	0
2022-12-18	46	34	40.0	2.3	25	0	0.00	0.0	0
2022-12-19	43	27	35.0	-2.5	30	0	0.00	0.0	0
2022-12-20	40	24	32.0	-5.2	33	0	0.00	0.0	0
2022-12-21	40	22	31.0	-6.0	34	0	0.00	0.0	0
2022-12-22	45	22	33.5	-3.3	31	0	0.00	0.0	0
2022-12-23	54	32	43.0	6.4	22	0	1.99	0.0	0
2022-12-24	42	10	26.0	-10.4	39	0	0.00	0.0	0
2022-12-25	41	10	25.5	-10.8	39	0	0.00	0.0	0
2022-12-26	32	15	23.5	-12.6	41	0	0.00	0.0	0
2022-12-27	32	25	28.5	-7.4	36	0	0.00	0.0	0
2022-12-28	40	22	31.0	-4.7	34	0	0.00	0.0	0
2022-12-29	49	26	37.5	1.9	27	0	0.00	0.0	0
2022-12-30	55	28	41.5	6.1	23	0	0.00	0.0	0
2022-12-31	65	29	47.0	11.8	18	0	0.00	0.0	0
Sum	1426	797	-	-	830	0	4.93	0.0	-
Average	47.5	26.6	37.1	-1.2	-	-	-	-	0.0
Normal	46.9	29.6	38.3	-	829	0	3.81	0.8	-

Responded by: Robert Tjaden - 1/9/24 2:30 PM
MDE letter provided with this submission and buffer shown.

Reviewer Response: Ariel Zelaya - 12/18/23 3:03 PM
Please show an intermittent stream and its associated buffer within the study area. All streams/wetlands and associated buffers located on or within 200 feet of the subject property must be shown on the NRI/FSD summary map. Or, please present an official letter from the MDE stating that the stream is not part of the Waters of the U.S. and is an ephemeral stream for consideration.

Responded by: Robert Tjaden - 12/13/23 11:01 AM
Stream added to portion of 9810 Newhall Road. No buffer was added. Please reference M-NCPPC Montgomery County Planning Department Environmental Guidelines - Stream Buffers on page 5. Please note that this property is not in the Ten Mile Creek Watershed. "In most of the County, ephemeral streams do not require a stream buffer, but these streams should be protected as much as possible through plan layout and conditions on a voluntary basis."

Reviewer Response: Ariel Zelaya - 12/6/23 1:17 PM
Other adjoining properties to the south also have the same natural channel running along their boundaries, and the NRI/FSDs have identified it as a stream and stream buffer. Please review the files 42010200E, 42021194E, and 42011034E for more information.

Responded by: Robert Tjaden - 11/30/23 12:51 PM
Ephemeral stream head is located on adjacent property 0 Persimmon Tree Road directly south of 9810 Newhall Road property. Storm drain pipes discharges to this stream head through subject property study area shown on plan. Per Montgomery County Environmental Guidelines, no buffer is required for ephemeral streams in this watershed. Previously approved NRI 42021194E shows this stream location as well.

Figure 2. Exchange between Planning Staff and Applicant Consultant

Table 3. Precipitation Data, December 2023

Climatological Data for DALECARLIA RESERVOIR, DC - December 2023

Date	Temperature				HDD	CDD	Precipitation	New Snow	Snow Depth
	Maximum	Minimum	Average	Departure					
2023-12-01	56	29	42.5	0.7	22	0	0.00	0.0	0
2023-12-02	49	36	42.5	1.0	22	0	0.20	0.0	0
2023-12-03	55	45	50.0	8.7	15	0	0.75	0.0	0
2023-12-04	55	40	47.5	6.5	17	0	0.00	0.0	0
2023-12-05	55	32	43.5	2.8	21	0	0.00	0.0	0
2023-12-06	49	34	41.5	1.0	23	0	0.00	0.0	0
2023-12-07	43	28	35.5	-4.7	29	0	0.00	0.0	0
2023-12-08	46	28	37.0	-3.0	28	0	0.00	0.0	0
2023-12-09	57	30	43.5	3.8	21	0	0.00	0.0	0
2023-12-10	57	30	43.5	4.0	21	0	0.00	0.0	0
2023-12-11	60	33	46.5	7.2	18	0	1.55	0.5	1
2023-12-12	46	26	36.0	-3.0	29	0	0.00	0.0	0
2023-12-13	45	25	35.0	-3.8	30	0	0.00	0.0	0
2023-12-14	49	24	36.5	-2.1	28	0	0.00	0.0	0
2023-12-15	47	25	36.0	-2.3	29	0	0.00	0.0	0
2023-12-16	54	25	39.5	1.4	25	0	0.00	0.0	0
2023-12-17	M	M	M	M	M	M	S	M	M
2023-12-18	56	46	51.0	13.3	14	0	2.10A	0.0	0
2023-12-19	56	35	45.5	8.0	19	0	0.00	0.0	0
2023-12-20	57	26	41.5	4.3	23	0	0.00	0.0	0
2023-12-21	56	26	41.0	4.0	24	0	0.00	0.0	0
2023-12-22	56	26	41.0	4.2	24	0	0.00	0.0	0
2023-12-23	48	32	40.0	3.4	25	0	0.00	0.0	0
2023-12-24	46	36	41.0	4.6	24	0	0.05	0.0	0
2023-12-25	50	37	43.5	7.2	21	0	0.00	0.0	0
2023-12-26	M	M	M	M	M	M	S	M	M
2023-12-27	M	M	M	M	M	M	M	M	M
2023-12-28	54	46	50.0	14.3	15	0	0.87A	0.0	0
2023-12-29	57	40	48.5	12.9	16	0	0.00	0.0	0
2023-12-30	58	34	46.0	10.6	19	0	0.05	0.0	0
2023-12-31	49	35	42.0	6.8	23	0	0.00	0.0	0
Sum	1466	909	-	-	625	0	5.57	0.5	-
Average	52.4	32.5	42.4	4.1	-	-	-	-	0.0
Normal	46.9	29.6	38.3	-	829	0	3.81	0.8	-

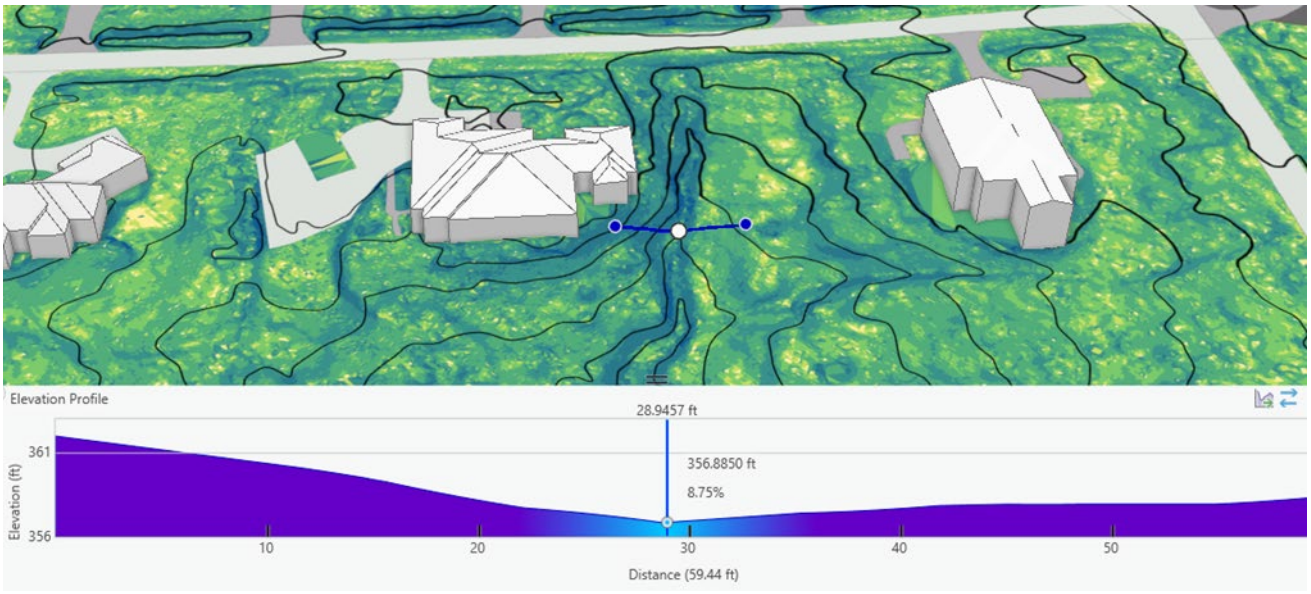

Figure 3. 3D Model: Stream Morphology Analysis, Cross section

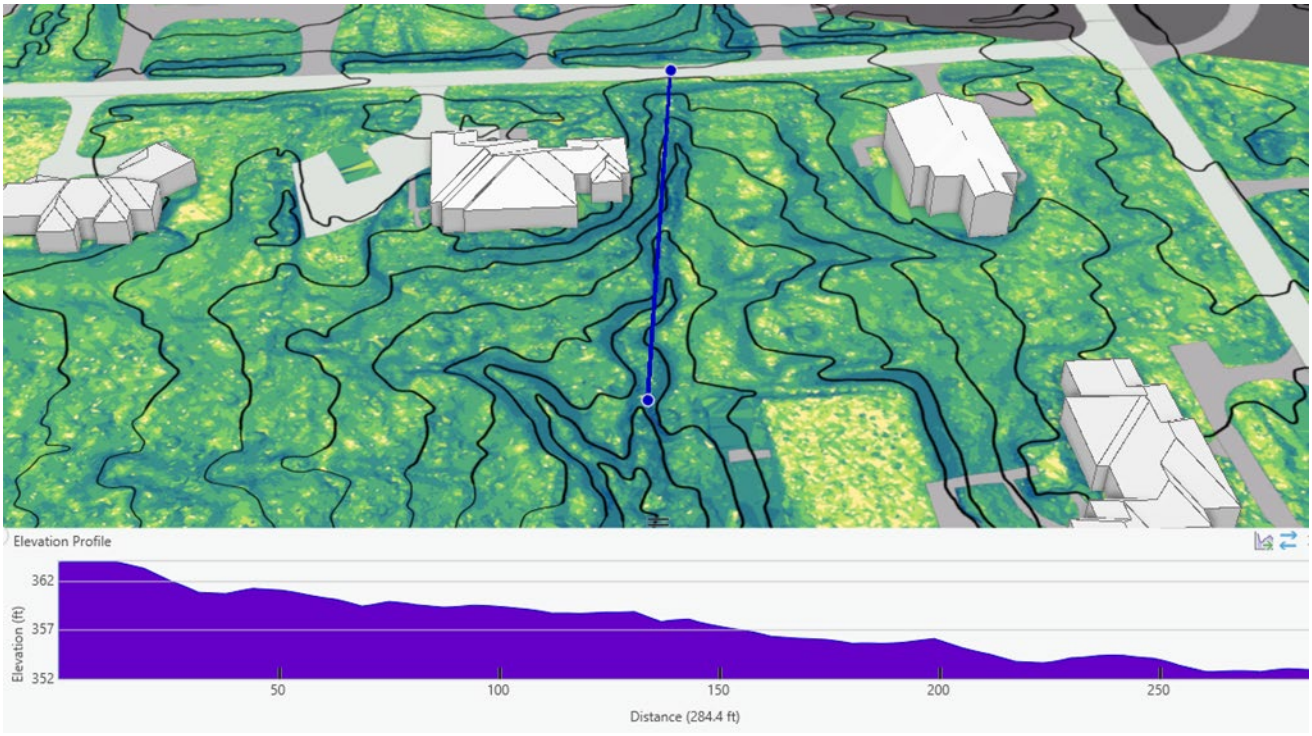

Figure 4. 3D Model: Stream Morphology Analysis, Slope

ATTACHMENT

PowerPoint presentation prepared by Planning staff, February 8, 2024