

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Certification

OFFICIAL STATE USE ONLY	Site #:	Permit #:	NR2404.074
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Section 1. Applicant Information (individual responsible for site, signs certification below)

Applicant Name (company or individual): AC Projects, INC		SOS # 1990	Status: N/A
Primary Contact/Signatory: Randolph L Chapdelaine		Signatory's Title or Position: President AC Projects INC	
Mailing Address: 7376 Walker Rd Fairview, TN 37062		City: Fairview	State: TN Zip: 37062
Phone: 615-799-8104	Fax: na	E-mail: Surveying@Chapsurveyor.com	

Section 2. Alternate Contact/Consultant Information (a consultant is not required)

Alternate Contact Name: James R. Orr			
Company: O&M Services LLC		Title or Position: Owner	
Mailing Address: 1756 Warren Hollow Rd.		City: Nolensville	State: TN Zip: 37135
Phone: 615-423-5118	Fax: na	E-mail: jim.orr@aecom.com	

Section 3. Fee (application will be incomplete until fee is received)

No Fee Fee Submitted with Application Amount Submitted: \$50

Current application fee schedules can be found at the Division of Water Resources webpage at:
<https://www.tn.gov/environment/permit-permits/water-permits/1/aquatic-resource-alteration-permit--arap-.html>
 or by calling (615) 532-0625. Please make checks payable to "Treasurer, State of Tennessee".

Billing Contact (if different from Applicant): Name: **James R. Orr** Email: **jim.orr@aecom.com**

Address: **1756 Warren Hollow Rd. Nolensville TN 37135** Phone: **615-423-5118**

Section 4. Project Details (fill in information and check appropriate boxes)

Site or Project Name: Curitiba Plateau	Nearest City, Town or Major Landmark: Fairview TN		
Street Address or Location (include zip): (off) 2958 Fairview, Blvd.			
County(ies): Williamson	MS4 Jurisdiction: <small>Williamson Co.</small>	Latitude (dd.ddd): 35.946598,	
		Longitude (dd.ddd): -87.174184	
Resources Proposed for Alteration:	<input checked="" type="checkbox"/> Stream / River	<input type="checkbox"/> Wetland	<input type="checkbox"/> Reservoir
Name of Water Resource (for more information, access http://tdeconline.tn.gov/dwr): tributary to Walker Br.			
Brief Project Description (a more detailed description is required under Section 8): see supplemental information attached. Applicant wishes to construct a crossing over the tributary.			

Does the proposed activity require approval from the U.S. Army Corps of Engineers, the Tennessee Valley Authority, or any other federal, state, or local government agency? Yes No

If Yes, provide the permit reference numbers:

Will the activity require a 401 Water Quality Certification Yes No

If Yes, attach any 401 WQC pre-filing meeting request documentation

Is the proposed activity associated with a larger common plan of development: Yes No

If Yes, submit site plans and identify the location and overall scope of the common plan of development.

Plans attached? Yes No

If applicable, indicate any other federal, state, or local permits that are associated with the overall project site (common plan of development) that have been obtained in the past (e.g., construction general permit and/or other ARAP):

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Section 5. Project Schedule (fill in information and check appropriate boxes)	
Proposed start date: Spring 2024	Estimated end date: within 2 weeks of start date
Is any portion of the activity complete now?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, describe the extent of the completed portion:	

The required information in Sections 6-11 must be submitted on a separate sheet(s) and submitted in the same numbered format as presented below. If any question is not applicable, state the reason why it is not applicable.

Section 6. Description	Attached	
	Yes	No
6.1 A narrative description of the scope of the project	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.2 USGS topographic map indicating the exact location of the project (can be a photographic copy)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.3 Photographs of the resource(s) proposed for alteration with location description (photo locations should be noted on map)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.4 A narrative description of the existing stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.5 A narrative description of the proposed stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.6 In the case of wetlands, include a wetland delineation with delineation forms and site map denoting location of data points	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.7 A copy of all hydrologic or jurisdictional determination documents issued for water resources on the project site	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section 7. Project Rationale	Attached	
	Yes	No
Describe the need for the proposed activity, including, but not limited to the purpose, alternatives considered and rationale for selection of least impactful alternative, and what will be done to avoid or minimize impacts to water resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Section 8. Technical Information	Attached	
	Yes	No
8.1 Detailed plans, specifications, blueprints, or legible sketches of present site conditions and the proposed activity. Plans must be 8.5.x 11 inches. Additional larger plans may also be submitted to aid in application review. The detailed plans should be superimposed on existing and new conditions (e.g., stream cross sections where road crossings are proposed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8.2 For the proposed activity and compensatory mitigation, provide a discussion regarding the sequencing of events and construction methods and any proposed monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8.3 Depiction and narrative on the location and type of erosion prevention and sediment control (EPSC) measures for the proposed alterations and any other measures to treat, control, or manage impacts to waters	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<p>Section 9. Water Resources Degradation (degree of proposed impact)</p> <p>Note that in most cases, activities that exceed the scope of the General Permit limitations are considered greater than <i>de minimis</i> degradation to water quality.</p> <p>Please provide your basis for concluding the proposed activity will cause one of the following levels of water quality degradation:</p> <p><input checked="" type="checkbox"/> a. <i>De minimis</i> degradation, no appreciable permanent loss of resource values</p> <p><input type="checkbox"/> b. Greater than <i>de minimis</i> degradation (if greater than <i>de minimis</i> complete Sections 10-11)</p> <p><i>For information and guidance on the definition of de minimis and degradation, refer to the Antidegradation Statement in Chapter 0400-40-03-.06 of the Tennessee Water Quality Criteria Rule:</i> https://publications.tnsosfiles.com/rules/0400/0400-40/0400-40.htm</p> <p><i>For more information on specifics on what General Permits can cover, refer to the Natural Resources Unit webpage at:</i> https://www.tn.gov/environment/permit-permits/water-permits/1/aquatic-resource-alteration-permit--arap-.html</p>
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Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Certification

Section 10. Detailed Alternatives Analysis		Attached	
		Yes	No
10.1	Analyze all reasonable alternatives and describe the level of degradation and permanent loss of resource value caused by each alternative. Assessment must consider options other than the "Preferred" and "No Action" alternatives. Provide associated rationale for selecting or rejecting all alternatives considered and demonstration that the least impactful practicable alternative was selected.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10.2	Discuss the social and economic consequences of each alternative	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10.3	Demonstrate that the degradation associated with the preferred alternative will not violate water quality criteria for uses designated in the receiving waters, and is necessary to accommodate important economic and social development in the area	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Section 11. Compensatory Mitigation		Attached	
		Yes	No
11.1	A detailed discussion of the proposed compensatory mitigation. Provide evidence of credit reservation if proposing to utilize a third-party provider.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11.2	Analysis of any proposed appreciable loss of resource value using the TN Stream Mitigation Guidelines. Provide Stream Quantification Tool (SQT) results if applicable. Include Existing Condition Score (ECS) and debit/credit calculations.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11.3	Describe how the compensatory mitigation would result in no net loss of resource value	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11.4	Provide a detailed monitoring plan for the compensatory mitigation site if permittee-responsible project is proposed	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11.5	Describe the long-term protection measures for the compensatory mitigation site if permittee-responsible project is proposed (e.g., deed restrictions, conservation easement)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Certification and Signature

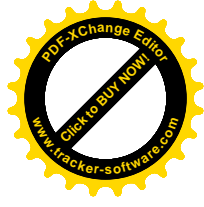
An application submitted by a corporation must be signed by a principal executive officer; from a partnership or proprietorship, by the partner or proprietor respectively; from a municipal, state, federal or other public agency or facility, the application must be signed by either a principal executive officer, ranking elected official, or other duly authorized employee. ***I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury. The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.***

RANDOLPH L. CHAPDELA	PRESIDENT AC PROJECT		March 11, 2024
Printed Name	Official Title	Signature	Date

Note that this form must be signed by the principal executive officer, partner or proprietor, or a ranking elected official in the case of a municipality; for details see **Certification and Signature** statement above. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed ARAP Application form (keep a copy for your records) to the appropriate EFO for the county(ies) where the proposed activity is located, addressed to **Attention: ARAP Processing**. You may also electronically submit the complete application and all associated attachments to water.permits@tn.gov.

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	8383 Wolf Lake Drive, Bartlett	38133-4119	Cookeville	1221 South Willow Ave.	38506
Jackson	1625 Hollywood Drive	38305-4316	Chattanooga	1301 Riverfront Pkwy., Ste. 206	37402
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601





AQUATIC RESOURCE ALTERATION PERMIT APPLICATION PACKAGE

7376 Walker Road, Fairview TN 37066 Sanford Road, Nolensville,
Tennessee

Date: March 2024

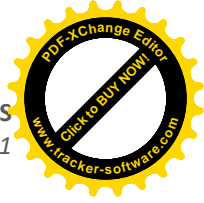


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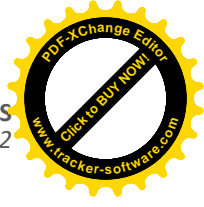
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Table 6.4-1. Potential Jurisdictional Waters Identified within the Project Survey Area

Appendices

Appendix I: Figures

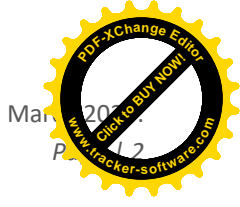
Appendix II: HD Form and Photographic log

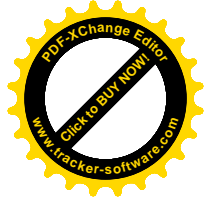
Appendix III: Site Drawing

Appendix III: Wetland and Stream Delineation Forms



1.0 ARAP PERMIT APPLICATION







6.0 PROJECT DESCRIPTION

6.1 A NARRATIVE DESCRIPTION OF THE SCOPE OF THE PROJECT

AC Projects Inc contracted Lord and Winter to conduct an Hydrologic Determination of the proposed Project (Figure 1). The survey area associated with the proposed Project was 43 acres in size and included all areas to be utilized for construction of a single family residence. Site development will involve a road crossing of one intermittent stream. Construction components include the following:

1. Place 65ft of 36 inch RCP pipe in the streambed for a road crossing and provide rip rap wing walls on the downstream side of the road.
2. Place 220' of 60 inch pipe in the WWC bed for a road crossing.

Total Limits of Disturbance = 950 Sq. ft.

All in-stream work will be completed from the bank. Approximately 65 feet of stream will be culverted under an access road during the project. All work will be conducted during dry conditions where practicable. No temporary timber mat bridge crossings are required for equipment access. See Table 1 for waterbody impact description.

Appropriate erosion and sediment control measure will be in place to protect water quality. The Project will comply with all ARAP conditions. Site location maps are provided in Appendix I.

6.2 USGS TOPOGRAPHIC MAP INDICATING THE EXACT LOCATION OF THE PROJECT

A copy of the USGS Topographic Map, Figure 1, is in Appendix I.

6.3 PHOTOGRAPHS OF THE RESOURCE(S) PROPOSED FOR ALTERATION WITH LOCATION DESCRIPTION

A Photographic log of the Project is provided in the Appendix II and photo locations are noted on Figure 2 in Appendix I.

6.4 A NARRATIVE DESCRIPTION OF THE EXISTING STREAM AND/OR WETLAND CHARACTERISTICS INCLUDING, BUT NOT LIMITED TO, DIMENSIONS (e.g. DEPTH, LENGTH, AVERAGE WIDTH), SUBSTRATE AND RIPARIAN VEGETATION

During the June, 2023 survey two streams and three WWC's were identified on the property. Only Stream 2 will be impacted by the project. Table 1 provides a summary of the waterbody resources within the Project.

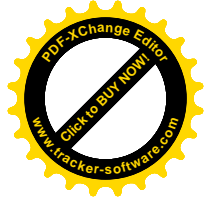
Stream 2

Stream 2 is an unnamed tributary of Walker Branch that flows southwest to northeast through forested land (Figures 2, Appendix I). Stream 2 will be covered by 65 feet of road bed and culverted by a 36 RCP inch pipe. Water was flowing within the channel at the time of survey with a channel width of approximately 3.5 feet and high water mark no more than 9 inches. Bankful width and depth were 3.5 feet and 0.75 foot, respectively. Substrate was comprised primarily of cobble, gravel and clay 8 inches. Bankful width and depth were 5 feet and 0.75 foot, respectively. Substrate was comprised primarily of bedrock, cobble and gravel.



Table 1. Hydrologic Determination Summary

Obsevation	Begin/End (Latitude/Longitude)	Primary Field Indicator	Secondary Field Indicator	Approximate Length and Width within Study Area (LF)	WOTS Opinion	Pre-2015 Regime WOTUS Opinion
Walker Br 1-1 1-2	35.948918, -87.173244/ 35.948626, -87.173182	'Presence of multiple populations of obligate lotic organisms with > 2-month aquatic phase' and 'Presence of fish (except Gambusia)'	-	L: 29 W: 8.5	Stream	WOTUS Perennial stream, Walker Branch, with continuous surface connection to Section 10/404 resource outside of Study Area.
Stream 2 2-1 2-2	35.948937, -87.173277/ 35.945373, -87.174951	'Presence of fish (except Gambusia)'	23.5	L: 1428 W: 5.0	Stream	WOTUS Intermittent stream with continuous surface connection to Section 10/404 resource outside of Study Area.
2-2 2-3 2-4	35.945373, -87.174951/ 35.943984, -87.174704	-	13.25	L: 527 W: 6.0	WWC	*Non-WOTUS Ephemeral stream with continuous surface connection to Section 10/404 resource outside of Study Area.
3-1 3-2	35.947048, -87.174173/ 35.946842, -87.173747	"Defined bed and bank absent and vegetation dominated by upland and FACU"	-	L: 158 W: 2	WWC	Non-WOTUS Suspect non-tributary drainage feature with no continuous surface connection to Section 10/404 resource.
4-1 4-2	35.945997, -87.174677/ 35.945665, -87.174136	-	4.25	L: 217 W: 6.0	WWC	Non-WOTUS Suspect non-tributary drainage feature with no continuous surface connection to Section 10/404 resource.



5-1 5-2	35.944060, -87.174653/ 35.942949, -87.173502	"Defined bed and bank absent and vegetation dominated by upland and FACU"	-	L: 534 W: 2.0	WWC	Non-WOTUS Suspect non-tributary drainage feature with no continuous surface connection to Section 10/404 resource.
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NOTES:

1 Feature naming convention.

6.5 A NARRATIVE DESCRIPTION OF THE PROPOSED STREAM AND/OR WETLAND CHARACTERISTICS INCLUDING, BUT NOT LIMITED TO, DIMENSIONS (e.g. DEPTH, LENGTH, AVERAGE WIDTH), SUBSTRATE AND RIPARIAN VEGETATION

6.5 A NARRATIVE DESCRIPTION OF THE PROPOSED STREAM AND/OR WETLAND CHARACTERISTICS INCLUDING, BUT NOT LIMITED TO, DIMENSIONS (e.g. DEPTH, LENGTH, AVERAGE WIDTH), SUBSTRATE AND RIPARIAN VEGETATION

Stream 2 is listed by the FWS NWI map as R5UBH, it was classified in the field as an intermittent stream with an HD score of 23.5. Average width was 5 feet and OHWM of 8 inches. Water was flowing at the time and substrate is bedrock and gravel. Riparian vegetation includes hardwood forest of oaks, hickory and poplar.

AC Projects will follow all Special and General Conditions as set forth in the current ARAP for Minor Impacts to Wetlands (expiration April 7, 2025).

6.6 IN THE CASE OF WETLANDS, INCLUDE A WETLAND DELINEATION WITH DELINEATION FORMS AND SITE MAP DENOTING LOCATION OF DATA POINTS

No wetlands will be impacted by the project. None were delineated on the site. on Figure 2.

6.7 A COPY OF ALL HYDROLOGIC OR JURISDICTIONAL DETERMINATION DOCUMENTS ISSUED FOR WATER RESOURCES ON THE PROJECT SITE

Appendix III contains a copy of the hydrologic determination report and WWC-1 is outlined on Figure 2.

7.0 PROJECT RATIONALE – DESCRIBE THE NEED FOR THE PROPOSED ACTIVITY, INCLUDING, BUT NOT LIMITED TO, THE PURPOSE, ALTERNATIVES CONSIDERED, AND WHAT WILL BE DONE TO AVOID OR MINIMIZE IMPACTS TO STREAMS OR WETLANDS

Project Need

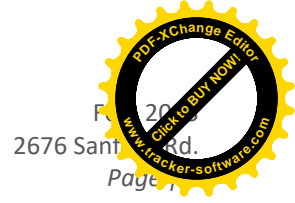
AC Projects proposes to develop the site for residential property. Access to the construction site on the property requires crossing the tributary.

Alternatives

As a single residence development, no alternatives are available. Planning Commission.

Avoidance/Minimization

One stream will be culverted. The crossing will be done at the narrowest and lowest sloped area of the stream.



8.0 Technical Information

8.1 DETAILED PLANS, SPECIFICATIONS, BLUEPRINTS, OR LEGIBLE SKETCHES OF PRESENT SITE CONDITIONS AND THE PROPOSED ACTIVITY. PLANS MUST BE 8.5 X 11 INCHES. ADDITIONAL LARGER PLANS MAY ALSO BE SUBMITTED TO AID IN APPLICATION REVIEW. THE DETAILED PLANS SHOULD BE SUPERIMPOSED ON EXISTING AND NEW CONDITIONS (e.g., stream cross sections where road crossings are proposed)

Appendix I contains the figures: contains the proposed construction drawings. Documents included in Appendix I are as follows: Documents included in Appendix I are as follows:

- Figure 1 - USGS Topographic Map
- Figure 2 - Aerial Map

8.2 FOR BOTH THE PROPOSED ACITVITY AND COMPENSATORY MITIGATION, PROVIDE A DISCUSSION REGARDING THE SEQUENCING OF EVENTS AND CONSTRUCTION METHODS

No compensatory mitigation is required for this Project as all waterbody impacts will be within the conditions of the General permit for Minor Impact to Wetlands.

Construction Sequencing is as follows:

- Mobilization;
- Surveying and flagging the development;
- Installing temporary sediment barriers (rock construction entrance, silt fence, timber mat bridge);
- Grading the site;
- Installation of pipe and road crossing; and
- Project site development, restoration and clean-up, including seeding and mulching,
 - Monitor revegetation planting
 - Remove final erosion and sediment control measures once permanent vegetation has reached greater than 70% coverage.

9.0 WATER RESOURCES DEGRADATION

Since the impacts resulting from the proposed work will only include minor filling and stabilization, it is expected that the Project will only cause de minimus degradation to water quality.

10.0 DETAILED ALTERNATIVES ANALYSIS

N/A



11.0 COMPENSATORY MITIGATION

N/A



APPENDIX I

figures

- Figure 1 Site Location Topographic Map
- Figure 2 Aerial Map and NWI Features
- Figure 3 National Hydrologic Database
- Figure 4 NRCS Soil Survey Map
- Figure 5 Study Area and 2 foot contours
- Figures 6a and 6b Aerial Map with photos of stream

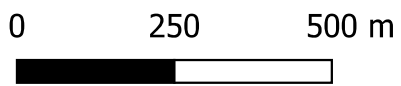
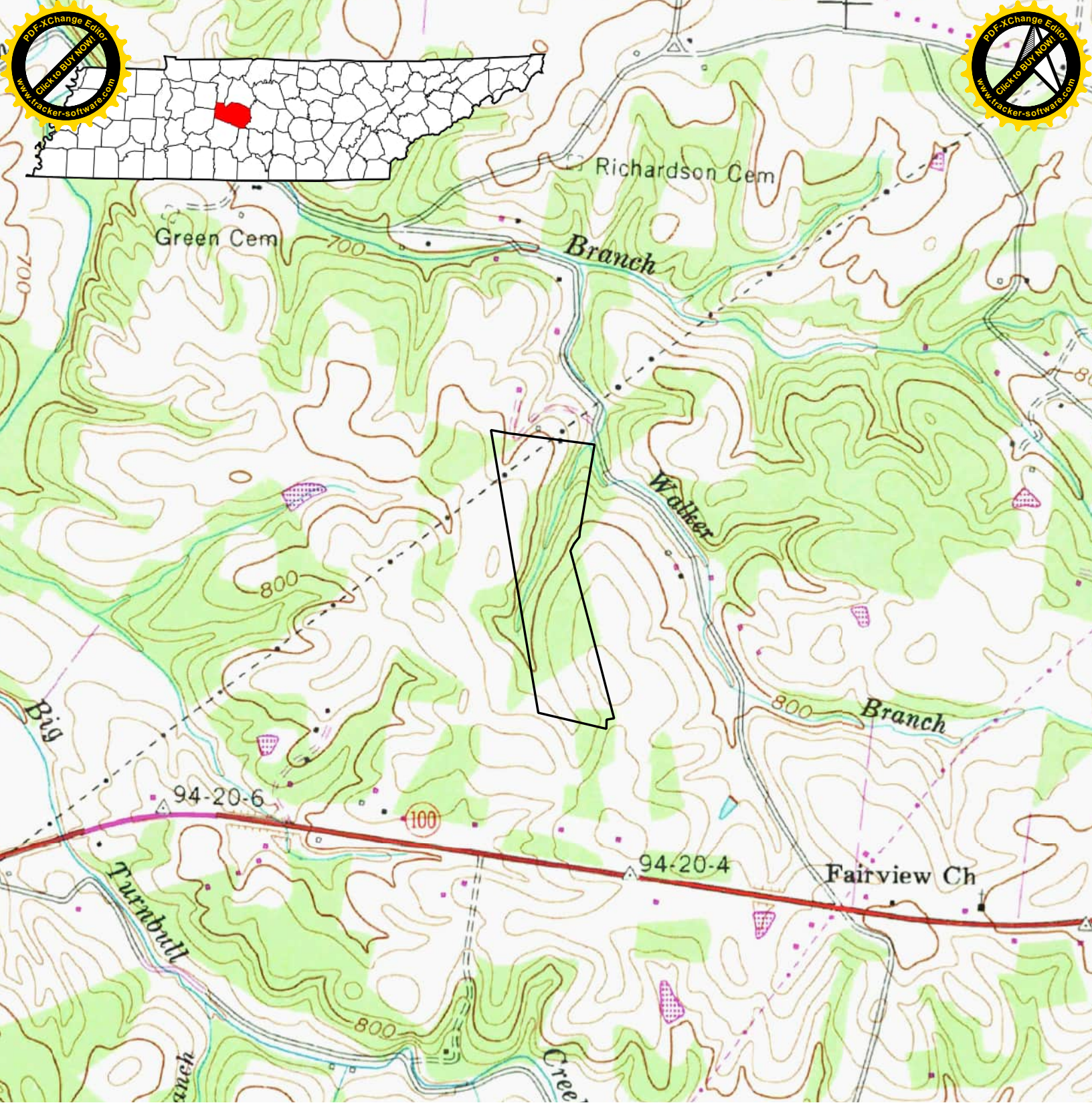



Figure 1
Study Area

Legend

 Study Area

Hydrologic Determination and
Wetland Delineation
2958 Fairview Road
Chapelaine & Associates

August 2023



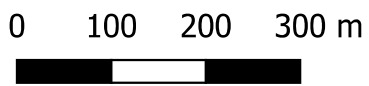
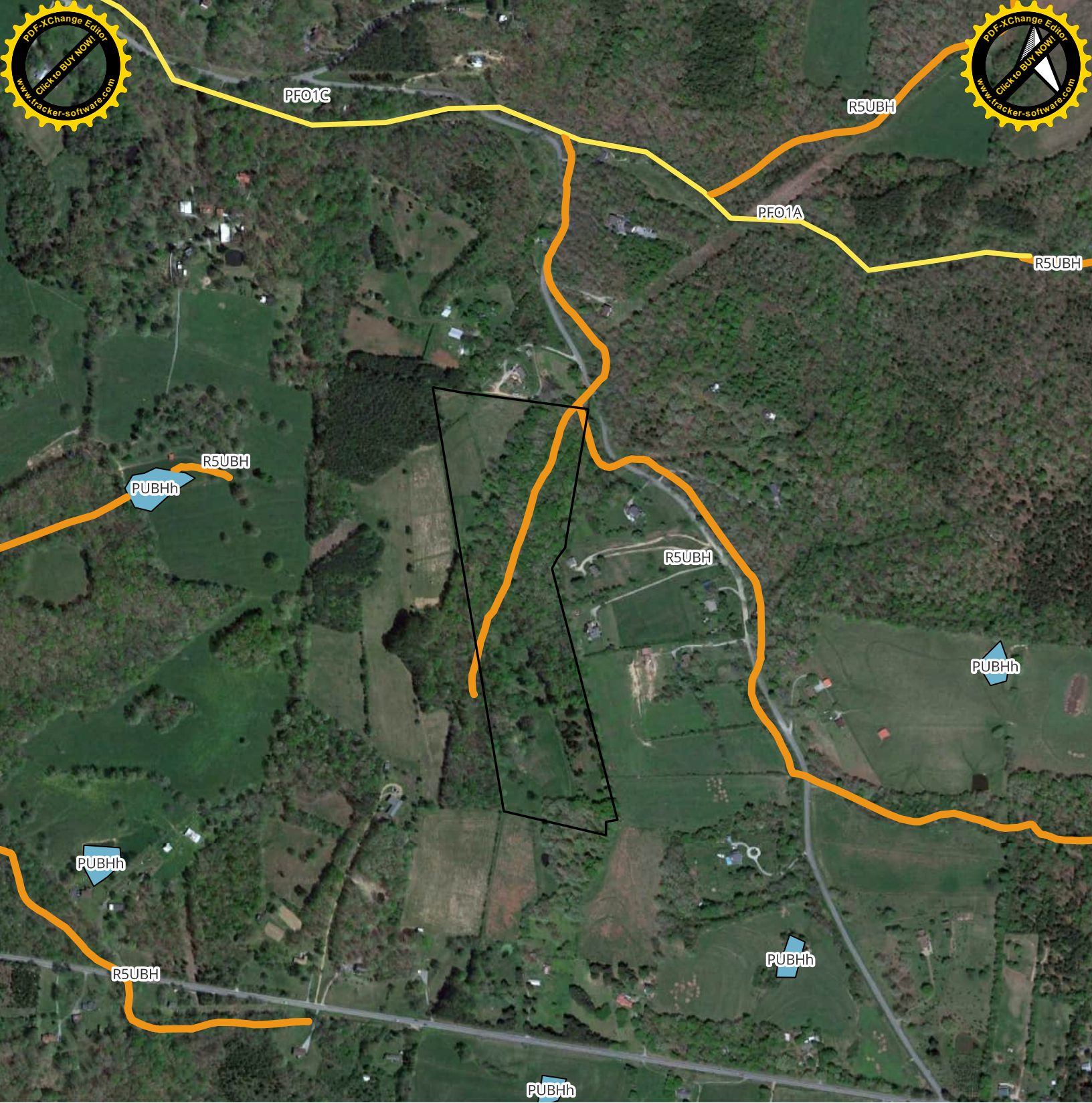


Figure 2
Study Area vs.
National Wetland Inventory (NWI)

Hydrologic Determination and
Wetland Delineation
2958 Fairview Road
Chapdelaine & Associates

August 2023

Legend

- Study Area
- National Wetland Inventory**
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine

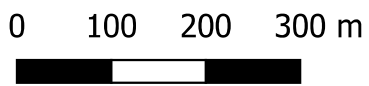
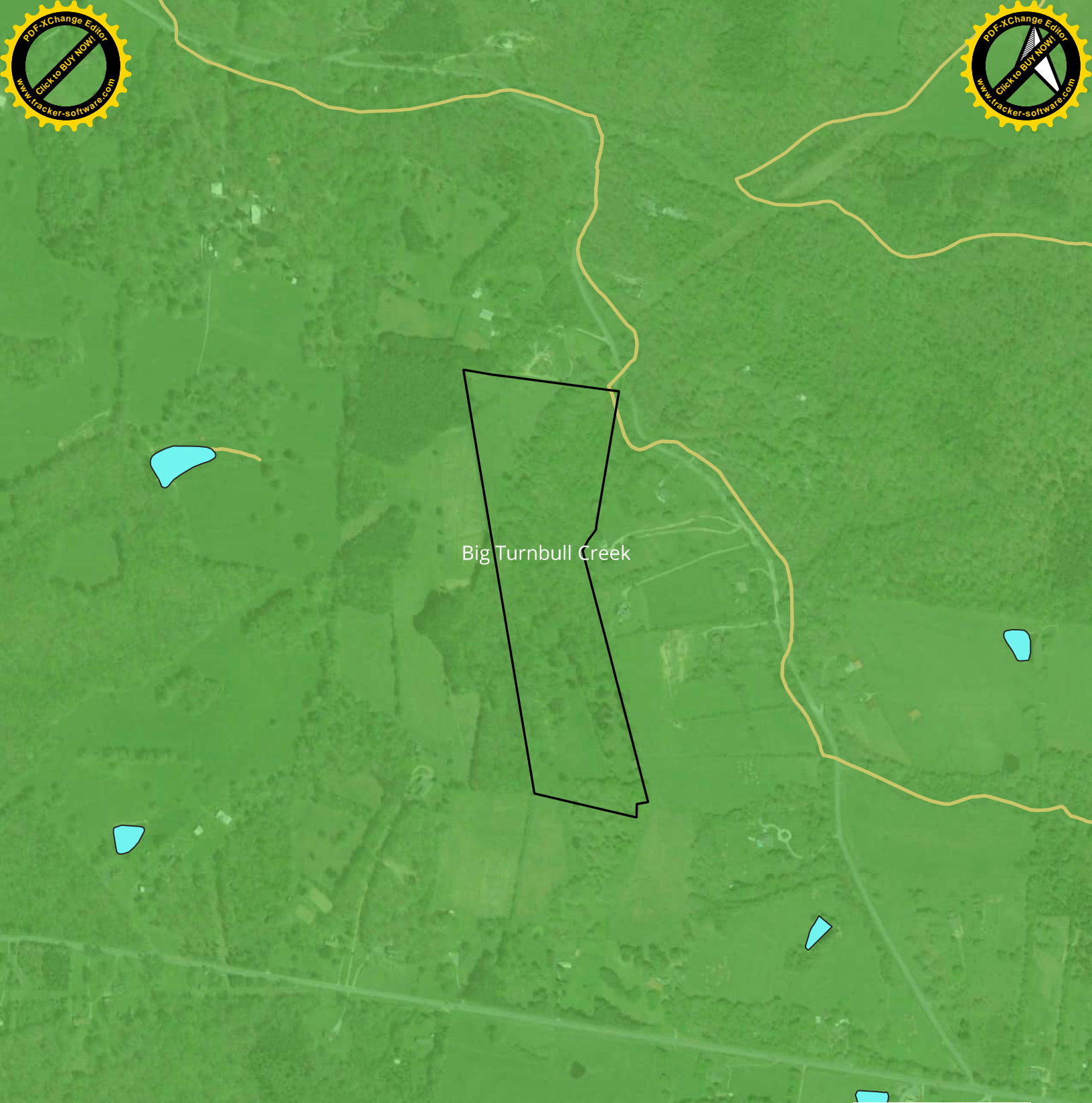


Figure 3
Study Area vs.
National Hydrography Dataset with
HUC 12 Watershed

Hydrologic Determination and
Wetland Delineation
2958 Fairview Road
Chapelaine & Associates

August 2023

Legend

-  Study Area
-  NHD Flowline
-  NHD Waterbody
- WBDHU12
-  051302040401

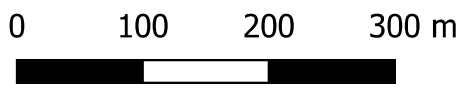


Figure 4
Study Area vs.
NRCS Web Soil Survey

Hydrologic Determination and
Wetland Delineation
2958 Fairview Road
Chapdelaine & Associates

August 2023

Legend

-  Study Area
-  GrC
- Soil Type**
-  HpC
-  BaC
-  MvB2
-  BoE
-  SeD
-  DkB



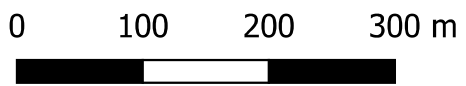




Figure 5
Study Area vs.
2-ft. Contours

Legend

-  Study Area
-  Contours

Hydrologic Determination and
Wetland Delineation
2958 Fairview Road
Chapdelaine & Associates



August 2023

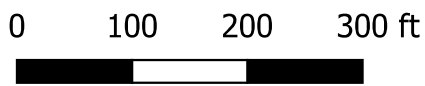


Figure 6a
 Study Area vs.
 Suspect Watercourse Opinion

Hydrologic Determination and
 Wetland Delineation
 2958 Fairview Road
 Chapdelaine & Associates

September 2023

Legend

- Study Area
- HD Observation Locations
- Upland Observation Points
- Suspect Watercourse Opinions**
- Stream- Perennial
- Stream- Intermittent
- WWC- Ephemeral
- WWC- Drainage Feature





Feature 5 (534 LF)
 Start Lat./Long.: 35.944060, -87.174653
 End Lat./Long.: 35.942949, -87.173502



Feature 4 (217 LF)
 Start Lat./Long.: 35.945997, -87.174677
 End Lat./Long.: 35.945665, -87.174136



Feature 2b (527 LF)
 Start Lat./Long.: 35.945373, -87.174951
 End Lat./Long.: 35.943984, -87.174704

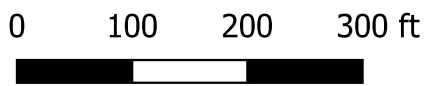


Figure 6b
 Study Area vs.
 Suspect Watercourse Opinion

Hydrologic Determination and
 Wetland Delineation
 2958 Fairview Road
 Chapdelaine & Associates

September 2023



Legend

- Study Area
- HD Observation Locations
- Upland Observation Points
- Suspect Watercourse Opinions**
- Stream- Perennial
- Stream- Intermittent
- WWC- Ephemeral
- WWC- Drainage Feature

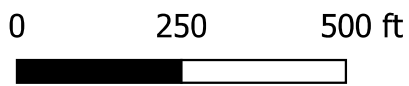
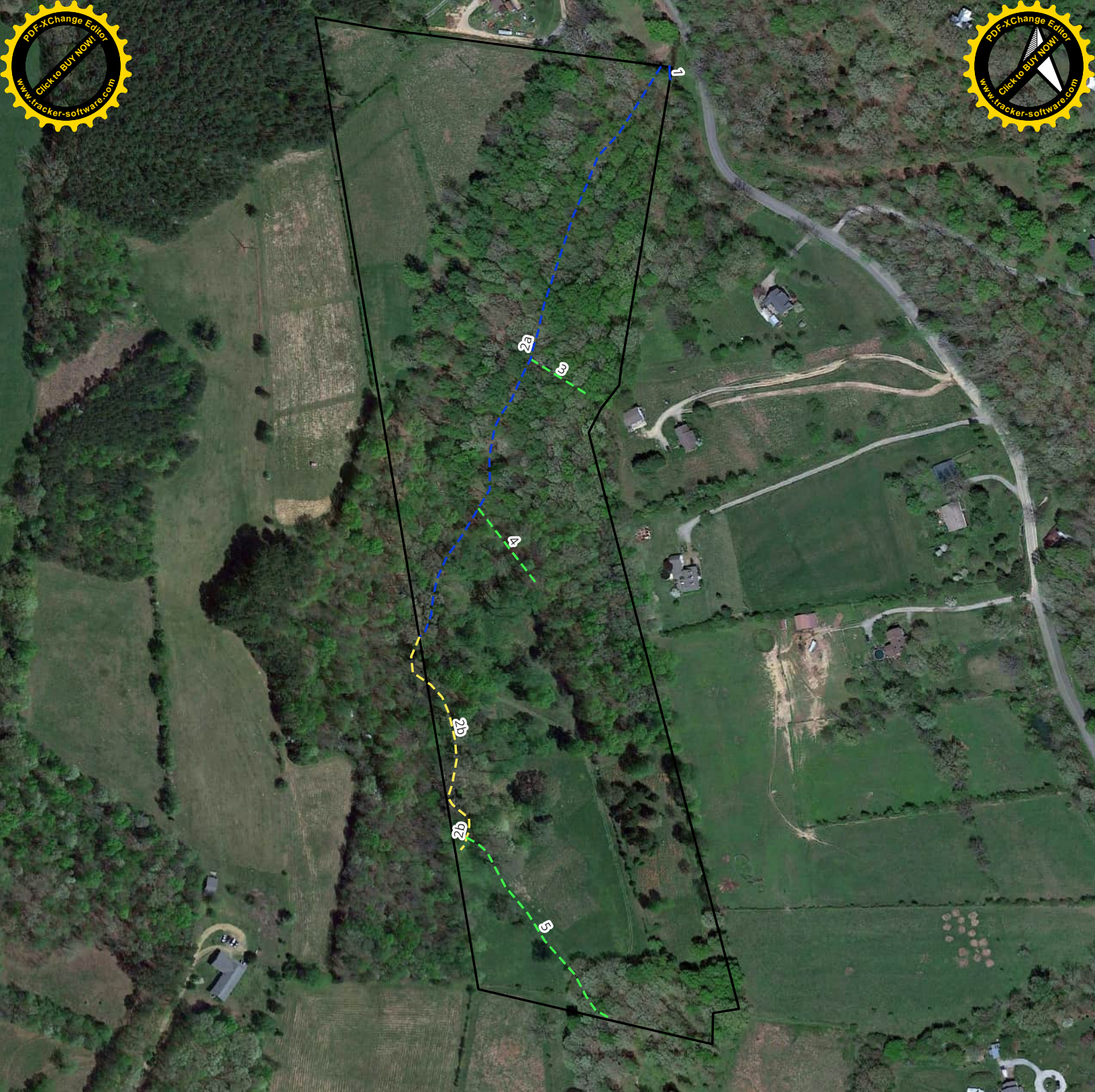


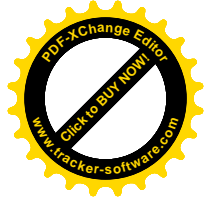
Figure 7
Study Area Review

Hydrologic Determination and
Wetland Delineation
2958 Fairview Road
Chapelaine & Associates

September 2023

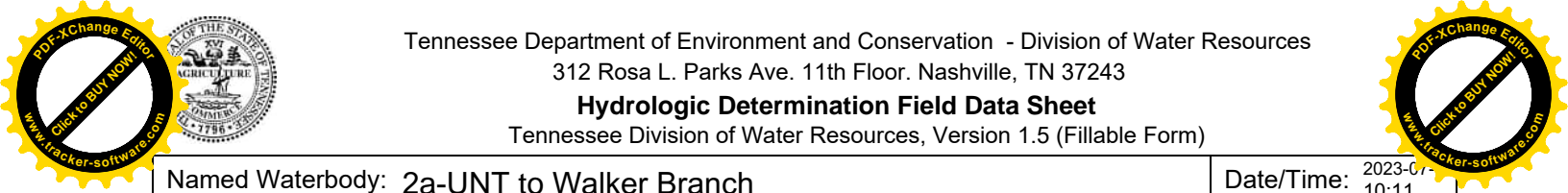
Legend

- Study Area
- Suspect Watercourse Opinions**
- Stream- Perennial
- Stream- Intermittent
- WWC- Ephemeral
- WWC- Drainage Feature



APPENDIX II

PHOTOGRAPHIC LOG HD Form and Photo



Hydrologic Determination Field Data Sheet

Tennessee Division of Water Resources, Version 1.5 (Fillable Form)

Named Waterbody: 2a-UNT to Walker Branch		Date/Time: 2023-07-10 10:11
Assessors/Affiliation: Ryan Spencer Lord and Winter LLC		Project ID : (833) 2958 Fairview Boulevard, Fairview, TN
Site Name/Description: 2-1 Stream 2,		
Site Location: 2958 Fairview Boulevard, Fairview, TN		
HUC (12 digit): 51302040401	Latitude: 35.948937389712285	
Previous Rainfall (7-days) : 1.15/CoCoRaHs TN-WL-98	Longitude: -87.17327714911696	
Precipitation this Season vs. Normal : Normal Conditions Source of recent & seasonal precip. data : USACE APT		
Watershed Size : 57-acres	County: Williamson	
Soil Type(s) / Geology : Bodice Gravelly silt loam	Source: NRCS	
Surrounding Land Use : Forest		
Degree of historical alteration to natural channel morphology & hydrology (select one & describe fully in Notes) : Absent		

Primary Field Indicators Observed

Primary Indicators	NO	YES
1. Hydrologic feature exists solely due to a process discharge	X	
2. Defined bed and bank absent, vegetation composed of upland and FACU species	X	
3. Watercourse dry anytime during February through April 15th, under normal precipitation / groundwater conditions	X	
4. Daily flow and precipitation records showing feature only flows in direct response to rainfall	N/A	N/A
5. Presence of multiple populations of obligate lotic organisms with ≥ 2 month aquatic phase	X	
6. Presence of fish (except <i>Gambusia</i>)		X
7. Presence of naturally occurring ground water table connection	X	
8. Flowing water in channel and 7 days since last precip >0.1" in local watershed	N/A	N/A
9. Evidence watercourse has been used as a supply of drinking water	X	

NOTE: If any Primary Indicators 1-9 = "Yes", then no further investigation is necessary. However, assessors may choose to score secondary indicators as supporting evidence.

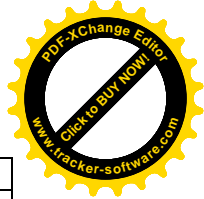
In the absence of a primary indicator, or other definitive evidence, complete the secondary indicator table on page 2 of this sheet, and provide score below.

Guidance for the interpretation and scoring of both the primary & secondary indicators is provided in *TDEC-DWR Guidance For Making Hydrologic Determinations, Version 1.5*

Overall Hydrologic Determination = Stream
Secondary Indicator Score (if applicable) = 23.5

Justification / Notes :

Bedrock channel bed prevented soil sample from being taken. Multiple observed fish species including shiners, chubs, and dace.



Secondary Field Indicator Evaluation

A. Geomorphology (Subtotal = 11.5)					
	Absent	Weak	Moderate	Strong	
1. Continuous bed and bank	0	1	2	3	2.5
2. Sinuous channel	0	1	2	3	1.5
3. In-channel structure: riffle-pool sequences	0	1	2	3	1
4. Sorting of soil textures or other substrate	0	1	2	3	1
5. Active/relic floodplain	0	0.5	1	1.5	0.5
6. Depositional bars or benches	0	1	2	3	1
7. Braided channel	0	1	2	3	0
8. Recent alluvial deposits	0	0.5	1	1.5	0.5
9. Natural levees	0	1	2	3	0.5
10. Headcuts	0	1	2	3	0
11. Grade controls	0	0.5	1	1.5	1.5
12. Natural valley or drainageway	0	0.5	1	1.5	1.5
13. At least second order channel on existing USGS or NRCS map	0	1	2	3	0

B. Hydrology (Subtotal = 5.5)					
	Absent	Weak	Moderate	Strong	
14. Subsurface flow/discharge into channel	0	1	2	3	0
15. Water in channel and >48 hours since sig. rain	0	1	2	3	3
16. Leaf litter in channel	1.5	1	0.5	0	1.25
17. Sediment on plants or on debris	0	0.5	1	1.5	0.5
18. Organic debris lines or piles (wrack lines)	0	0.5	1	1.5	0.75
19. Hydric soils in channel bed or sides of channel	No = 0		Yes = 1.5		0

C. Biology (Subtotal = 6.5)					
	Absent	Weak	Moderate	Strong	
20. Fibrous roots in channel bed ¹	3	2	1	0	2.5
21. Rooted plants in the thalweg ¹	3	2	1	0	1
22. Crayfish in stream (exclude in floodplain)	0	1	2	3	0
23. Bivalves/mussels	0	1	2	3	0
24. Amphibians	0	0.5	1	1.5	1.5
25. Macroinvertebrates (record type & abundance)	0	1	2	3	1.5
26. Filamentous algae; periphyton	0	1	2	3	0
27. Iron oxidizing bacteria/fungus	0	0.5	1	1.5	0
28. Wetland plants in channel bed ²	0	0.5	1	1.5	0

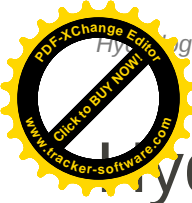
¹ Focus is on the presence of terrestrial plants.

² Focus is on the presence of aquatic or wetland plants.

Total Points = 23.5

Under Normal Conditions, Watercourse is a Wet Weather Conveyance if Secondary Indicator Score < 19 points

Notes :



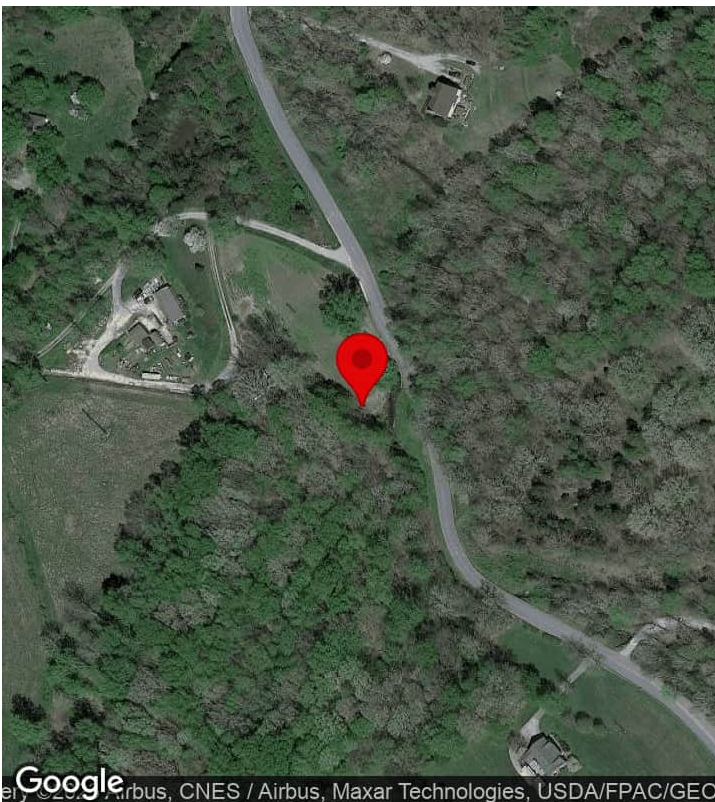
Hydrologic Determination



TDEC 2020 guidance and USACE OHWM

2-1, Stream

8/24/2023, 2:02:52 PM UTC



CREATED

🕒 7/18/2023, 3:11:46 PM UTC

👤 by Ryan Spencer

UPDATED

🕒 8/24/2023, 2:02:52 PM UTC

👤 by Ryan Spencer

LOCATION

📍 35.948937, -87.173277

PROJECT

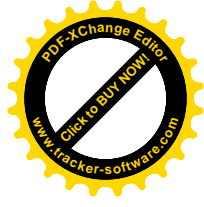
📁 (833) 2958 Fairview Boulevard, Fairview, TN

ASSIGNED TO

👤 No Assignment

Google Earth, © 2023, Airbus, CNES / Airbus, Maxar Technologies, USDA/FPAC/GEO



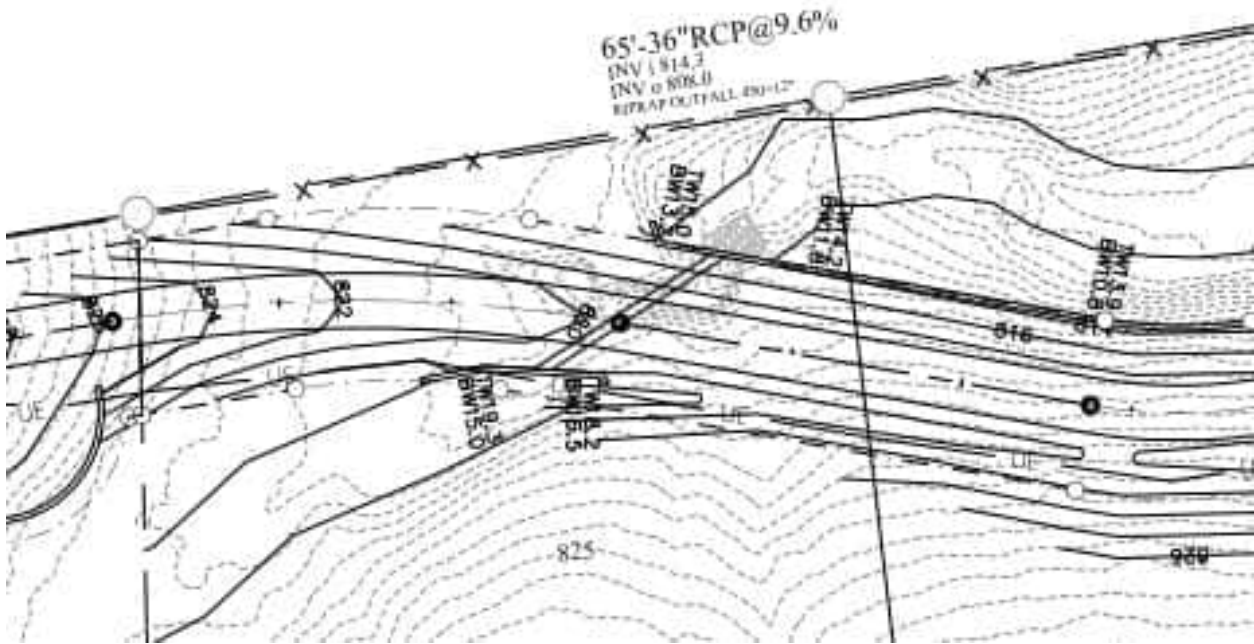


APPENDIX III
Site Drawing
WETLAND & STREAM DELINEATION DATA FORMS



O&M Services LLC
James R. Orr QHP 1018TN-11
1756 Warren Hollow Road
Nolensville TN 37135
615-423-5118

JBORR5@united.net; jim.orr@aecom.com





TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER
5105 EDMONDSON PIKE
NASHVILLE, TENNESSEE 37211

3/12/2024

TWRA Environmental Review:
7376 Walker Road, Williamson County, TN

The Tennessee Wildlife Resources Agency has reviewed the information that you provided. O&M Services, LLC have requested an endangered species review on the installation of a bridge over an unnamed tributary of Walker Branch in Williamson County, TN. No state listed species have been documented within two miles of the project location.

Therefore, we do not anticipate adverse impacts to state listed species under our authority due to the proposed construction; provided that best management practices to address erosion and sediment are implemented and maintained during construction activities. Thank you for the opportunity to review and comment on this proposed project. If I may be of further assistance, please contact me at katie.m.murphy@tn.gov.

Sincerely,

A handwritten signature in black ink that reads "Katie M. Murphy".

Katie Murphy
Region 2 Aquatic Habitat Biologist

The State of Tennessee

AN EQUAL OPPORTUNITY, EQUAL ACCESS, AFFIRMATIVE ACTION EMPLOYER



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Tennessee Ecological Services Field Office
446 Neal Street
Cookeville, TN 38501-4027
Phone: (931) 528-6481 Fax: (931) 528-7075

In Reply Refer To:
Project code: 2024-0057366
Project Name: 7376 Walker Road Fairview

March 04, 2024

Federal Action Agency (if applicable):

Subject: Record of project representative's no effect determination for '7376 Walker Road Fairview'

Dear james orr:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on March 04, 2024, for '7376 Walker Road Fairview' (here forward, Project). This project has been assigned Project Code 2024-0057366 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed

action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Gray Bat *Myotis grisescens* Endangered
- Leafy Prairie-clover *Dalea foliosa* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Price's Potato-bean *Apios priceana* Threatened
- Salamander Mussel *Simpsonaias ambigua* Proposed Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

Based upon your IPaC submission, your project has reached the determination of "No Effect" on the northern long-eared bat. If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Tennessee Ecological Services Field Office and reference Project Code 2024-0057366 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

7376 Walker Road Fairview

2. Description

The following description was provided for the project '7376 Walker Road Fairview':

40 acre single resident property single road crossing of a perennial stream.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@35.946518100000006,-87.17374735904741,14z>



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (*Myotis septentrionalis*). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. The proposed action does not intersect an area where the northern long-eared bat is likely to occur, based on the information available to U.S. Fish and Wildlife Service as of the most recent update of this key. If you have data that indicates that northern long-eared bats are likely to be present in the action area, answer "NO" and continue through the key.

Do you want to make a no effect determination?

Yes

PROJECT QUESTIONNAIRE

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: james orr
Address: 1756 Warren Hollow Rd
City: Nolensville
State: TN
Zip: 37135
Email jim.orr@aecom.com
Phone: 6154235118