

**SECTION 404 DELINEATION
+/- 60-ACRE GREENFIELD SITE
CLARK COUNTY, ARKANSAS**

OCTOBER 8, 2024

Prepared for:
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ECCI Project No. 5213-3001

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ATTACHMENT A:	Sampling Point Data Sheets
ATTACHMENT B:	Representative Photos
ATTACHMENT C:	Reference Maps

1.0 INTRODUCTION

The Economic Development Corporation of Clark County, Arkansas contracted with Engineering Compliance and Construction, Inc. (ECCI) of Little Rock, Arkansas, to delineate Section 404 wetlands and other waters of the United States (WOTUS) within the proposed project site of approximately 62 acres. The project site is located west of Hwy 67 South (N. Elm Street) and immediately south of the Missouri Pacific Railroad, north of Gurdon, Clark County, Arkansas (Figure 1). The area of the delineation is mapped on the USGS *The National Map* Topo basemap for quadrangle Gurdon, AR (7.5-minute series) (Figures 2 and 3). The project area is located in the northwest quarter of Section 21, Township 9 South, Range 20 West. Approximate central coordinates of the project area are 33.9435°N, -93.1533°W (NAD 83).

2.0 MATERIALS AND METHODS

ECCI conducted a Level 3, routine wetland delineation as described in the US Army Corps of Engineers (USACE) *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). Field investigations for the delineation were conducted during September 2024. ECCI evaluated the area of the delineation for potential Section 404 jurisdictional areas, i.e., wetlands and other WOTUS, and complied with the USACE 1987 Manual and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region Version 2.0* (Engineer Research and Development Center 2010).

Sampling point locations were selected to evaluate areas appearing to have at least some potential for USACE regulation under Section 404 of the Clean Water Act (CWA), and to evaluate the project area for the purpose of collecting data regarding vegetative community type(s). Eleven (11) sampling point locations were established within the project area, along with two (2) sampling point locations established adjacent to the project area as reference points; data were collected on vegetation, hydrology, and soils at each location (Figures 3 and 4) (Attachment A).

The *Keys to the Flora of Arkansas* (Smith 1994) was used to confirm certain plant identifications and the *USACE Cold Regions Research and Engineering Laboratory's Atlantic and Gulf Coastal Plain Regional Wetland Plant List* (2020) was used to determine wetland indicator status for the dominant species. Soil pits were dug with a sharpshooter shovel to a depth of approximately 16 to 18 inches, where possible, and soil colors were determined with the aid of Munsell color charts. Soil survey data from the Natural Resources Conservation Service's (NRCS) *Web Soil Survey* (2019) were used to determine the map units for the area. Also, the NRCS (Soil Data Access) *Clark County, Arkansas Hydric Soils Map List and Map Units with Hydric Inclusions* was used to assist in the selection of sampling points appearing to have a potential for the occurrence of hydric soils.

A smartphone using ARCGIS collector paired with a Geode GPS with sub-meter accuracy was used for marking sampling site locations and potential Section 404 feature boundaries.

3.0 FINDINGS AND RESULTS

3.1 General Site Description

Topography of the project site is generally flat and overall gently sloping toward the south. Two primary plant communities were observed within the project area, as described in Section 3.2.1 below. Two wetlands and no other aquatic features were observed within the project area. Figures 1 through 4 provide maps of the project area. Attachment A provides completed sampling point data sheets. Attachment B provides representative photos of the project area. Attachment C provides various reference maps of the project area.

Historic aerial images indicate that the area was likely cleared of trees in the early 1980s and since that time has been in silviculture. Planted pine trees were harvested circa 2018. The area has since been replanted and currently is dominated by pines of large sapling/small tree size. The boundary of the project area includes a trail/travelway that is periodically maintained (mowed).

3.2 Wetlands

ECCI observed two features, WET-A and WET-B totaling ~0.42 acre, that meet the technical criteria for classification as wetlands (Figures 3 and 4; Attachment B, Photos 14-17). WET-A is located near the southeastern corner of the site and WET-B is located near the southwestern corner of the site. Table 2 provides a summary of each wetland feature. The observed wetland features are both generally linear (with some wider depressional areas) drainageway features extending offsite to the south as ephemeral drainage features. These features appear to be historic natural drainageways. A travelway located along the southern boundary of the project area along with past silviculture activity have likely altered the natural flow regime, resulting in flow through these drainages to slow and become detained for an extended period of time, thus creating wetland conditions. These wetland features have been planted in pine along with the surrounding areas. However, hydrology in these wetland areas has created a distinct vegetative difference (less density of pine with a higher percentage of herbaceous vegetation) between these areas and the surrounding planted pine upland areas (Attachment B, Photos 14-17). These wetland features are generally mixed-strata, with areas of herbaceous, shrub/sapling, and some small, planted tree cover.

Site observations, as well as available aerial image resources, reveal a likely continuous downstream surface hydrologic connection to a TNW (see Section 3.4). Due to the presence of this continuous downstream surface hydrologic connection to a TNW, these wetland features will likely be considered jurisdictional under the current interpretation of Section 404 of the CWA.

3.2.1 Vegetation

The project area consists of two primary vegetation communities, i.e., a row planted pine community and a mixed-strata drainageway wetland community.

The row planted pine community was observed throughout the majority of the project site. This community was observed to be vegetated dominantly by planted loblolly pine (*Pinus taeda*). Other species dominant in their strata at some locations within the project area include: groundseltree (*Baccharis halimifolia*), winged sumac (*Rhus copallinum*), lesser poverty rush

(*Juncus tenuis*), slender wood oats (*Chasmanthium sessiliflorum*), tall goldenrod (*Solidago altissima*), southern dewberry (*Rubus trivialis*), and Japanese honeysuckle (*Lonicera japonica*) (Attachment B, Photos 1-13).

The mixed-strata drainageway wetland community, located within WET-A and WET-B, included species mostly in the sapling/shrub and herbaceous strata, with limited cover of species in the tree and woody vine strata. This community is dominated by loblolly pine, groundsell tree, black willow (*Salix nigra*), sweetgum (*Liquidambar styraciflua*), soft rush (*Juncus effusus*), lesser poverty rush, ovate false fiddleleaf (*Hydrolea ovata*), late-flowering thoroughwort (*Eupatorium serotinum*), red-root flatsedge (*Cyperus erythrorhizos*), cottongrass bulrush (*Scirpus cyperinus*), beaked cut-throat grass (*Coleataenia anceps*), broom sedge (*Andropogon virginicus*), peppervine (*Ampelopsis arborea*), and southern dewberry (Attachment B, Photos 14-17).

Two reference point locations were established to the west and south of the project area in an undisturbed, upland mixed forest community. Dominant vegetation observed at these locations include white oak (*Quercus alba*), willow oak (*Quercus phellos*), black oak (*Quercus velutina*), shag-bark hickory (*Carya ovata*), parsley-leaf hawthorn (*Crataegus marshallii*), slender wood oats, eastern poison ivy (*Toxicodendron radicans*), and Japanese honeysuckle (Attachment B, Photos 20-21).

Positive indicators of hydrophytic vegetation were observed at five of the eleven sampling point locations, i.e., S-04, S-06, S-07, S-10, and S-11 (Table 1; Attachment A). The two sampling point locations that displayed indicators of hydrophytic vegetation that were not located within wetland features, i.e., S-04 and S-11, had no dominant Obligate (OBL) or Facultative Wetland (FACW) species; rather, all dominant species in these two areas were either Facultative (FAC) species (FAC species are equally likely to be found in uplands and wetlands), Facultative Upland (FACU), or Upland (UPL). The greater than 50% dominance of FAC species in these locations is largely due to silviculture activities, including the planting of loblolly pine which has an indicator status of FAC. Other than possibly the wetland features (which have also been impacted by silviculture activities), and as evidenced by the lack of hydrophytic vegetation

at the reference point locations, it is likely that positive indicators of hydrophytic vegetation in some areas of the site are the result of silviculture activities rather than natural conditions.

3.2.2 Wetland Hydrology

Hydrology within the onsite wetland areas appears to be primarily associated with seasonal runoff/short term inundation during periods of heavy rainfall. Hydrologic indicators observed within the onsite wetland features include surface soil cracks, drainage patterns, saturation visible on aerial imagery, and positive FAC-neutral tests.

No positive primary indicators of wetland hydrology were observed. Secondary indicators of hydrology were observed at the three sampling point locations, i.e., S-06, S-07, and S-10, within observed wetland features, (Table 1; Attachment A).

3.2.3 Soils

Table 3 summarizes soils mapped within the project site by the NRCS *Web Soil Survey* 3.4 (Attachment C). Hydric soil status of each soil map unit is taken from the NRCS hydric soils lists for Clark County, Arkansas. The majority of the project site is mapped as Eutaw silty clay loam, 0 to 2 percent slopes (~65% of the project area). Positive indicators of hydric soils were observed at eight of the eleven sampling point locations, i.e., S-02, S-03, S-04, S-06, S-07, S-08, S-09, and S-10 (Table 1, Attachment A). As evidenced by the lack of hydric soils at the reference point locations, it is likely that the observed hydric soils have developed in response to alterations in hydrology and soil exposure to oxygen as a result of silviculture activities.

Table 1.1. Summary of findings at each of the 11 onsite sampling point locations.

Sampling Point	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Technical Wetland
S-01	No	No	No	No
S-02	No	Yes	No	No
S-03	No	Yes	No	No
S-04	Yes	Yes	No	No
S-05	No	No	No	No
S-06	Yes	Yes	Yes	Yes
S-07	Yes	Yes	Yes	Yes
S-08	No	Yes	No	No
S-09	No	Yes	No	No
S-10	Yes	Yes	Yes	Yes
S-11	Yes	No	No	No

Table 1.2. Summary of findings at each of the 2 offsite reference sampling point locations.

Sampling Point	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Technical Wetland
R-1	No	No	No	No
R-2	No	No	No	No

Table 2. Summary of two wetland features.

Wetland ID	Wetland Vegetative Type	Acreage (acres onsite)	Photo #'s
WET-A	Mixed-strata drainageway	0.34	14-16
WET-B	Mixed-strata drainageway	0.08	17

Table 3. Summary of soil map units.

Soil Map Unit Name	Description	Hydric
Clark County, Arkansas		
Eutaw silty clay loam, 0 to 2 percent slopes	Poorly drained soils found on flats	Yes
Gurdon silt loam, 1 to 3 percent slopes	Somewhat poorly drained soils found on terraces	Yes
Kipling silt loam, 0 to 2 percent slopes	Somewhat poorly drained soils found on interfluves	Yes
Urbo silty clay loam, occasionally flooded	Somewhat poorly drained soils found on floodplains	Yes

3.3 Other Waters of the US

The historic 1901 USGS topographic map illustrates no aquatic features within the project area. The 1970, 1972, 1973, 2014, 2017, and 2020 USGS topographic maps illustrate a single aquatic feature onsite, i.e., a stream channel near the southwestern corner of the site. Similarly, the NWI maps this same stream channel (Attachment C). The stream channel is classified by NWI within the project area as R4SBC (a riverine, intermittent, seasonally flooded, streambed). The mapped channel near the southwestern corner of the project area is not readily visible in the aerial images reviewed (1949, 1956, 1968, 1976, 1983, 1985, 1989, 1990, 1994, 2000, 2006, 2009, 2010, 2013, 2015, 2017, 2019, and 2021). In five of the aerial images, i.e., 1983, 1985, 1989, 1990, and 1994, a drainageway is readily visible near the southeastern corner of the site.

The USGS-mapped channel near the southwestern corner of the project area was observed to be part of a linear drainageway wetland feature, i.e. WET-B. Field observations revealed the drainageway visible in select aerial images near the southeastern corner of the project area to be part of a linear drainageway wetland feature, i.e. WET-A.

Field observations confirmed a lack of other WOTUS, e.g., ponds, lakes, streams, rivers, etc., within the project area.

3.4 Downstream Hydrologic Connectivity

Drainage from the site generally flows toward the south. Just south of both WET-A and WET-B, ephemeral drainages were observed offsite (Attachment B, Photos 18-19). Although the downstream flow path was not traced in the field (due to lack of access to adjoining properties), available desktop resources indicate that drainage from the site is conveyed by two drainageways south to Caney Creek; Caney Creek flows generally east to Terre Noire Creek; Terre Noire Creek flows generally southeast to the Ouachita River, a TNW. Due to the indication of a continuous surface hydrologic connection of onsite wetland features to a TNW, both WET-A and WET-B will likely be considered jurisdictional (according to the pre-2015 regulatory regime, consistent with the Supreme Court's decision in *Sackett*, and subsequent USACE/EPA

jurisdictional determinations with similar continuous surface hydrologic connections) under Section 404 of the CWA.

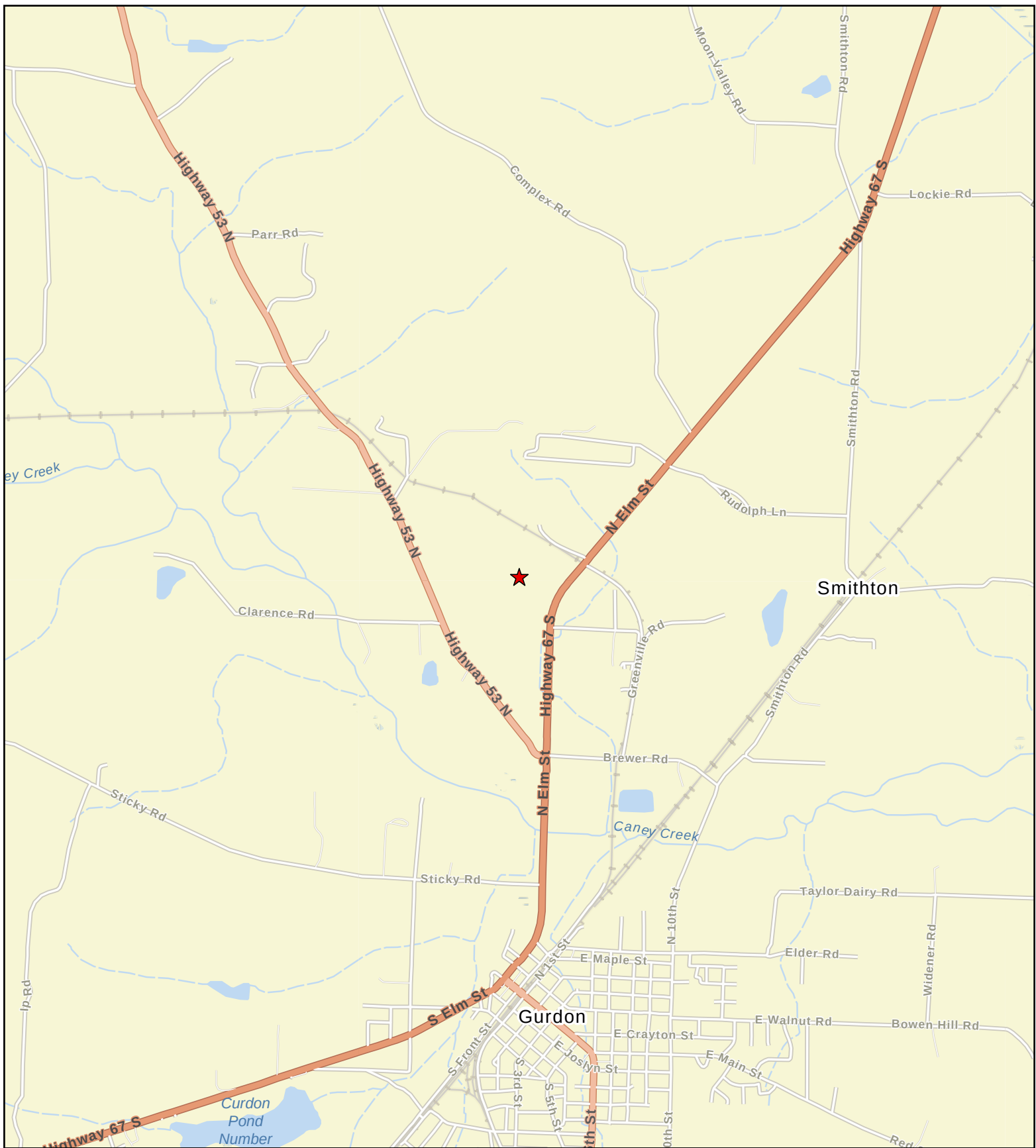
4.0 FEMA 100-YEAR FLOODPLAIN AND FLOODWAY ISSUES

The Federal Emergency Management Agency (FEMA) maps the entirety of the project area as unshaded Zone X. Unshaded Zone X is a FEMA designation for areas of minimal flood hazard that are outside the 0.2 percent annual-chance flood. A FEMA FIRMette is provided in Attachment C.

5.0 SUMMARY AND CONCLUSIONS

- ECCI observed two wetland features, totaling approximately 0.42 acre within the project area.
- No potential other WOTUS, e.g., ponds, lakes, streams, rivers, etc., were observed within the project area.
- FEMA maps the entire project area outside the 0.2 percent annual-flood chance floodplain.

Figures



Economic Development Corporation of Clark County - +/-60-Acre Greenfield Site



★ Project Area

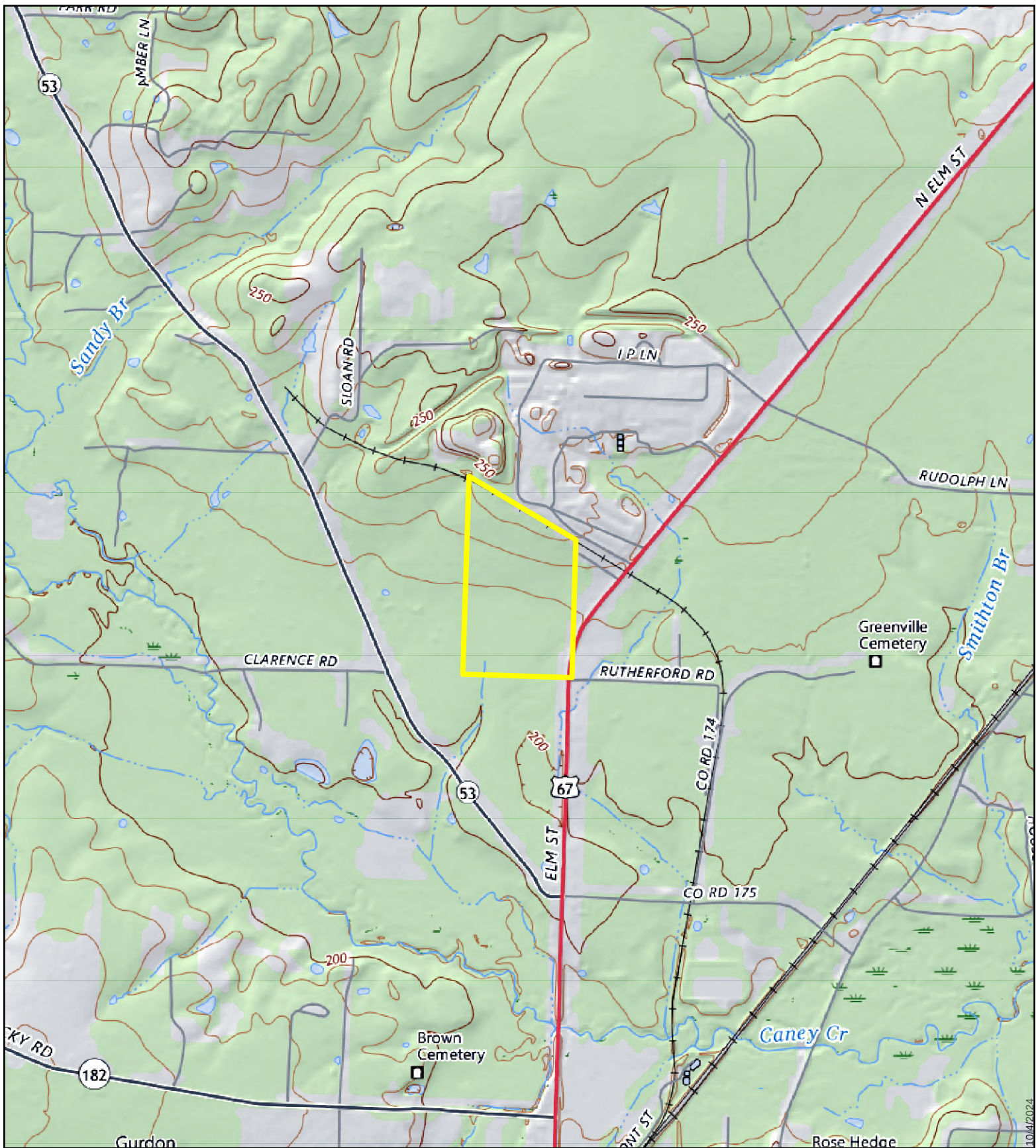
1 Miles



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Background: Esri, DeLorme, HERE, USGS, Intermap, increment P Corp.,
NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom

Figure 1. Map showing project vicinity overlaid on ESRI World Street Maps.

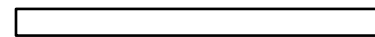


Economic Development Corporation of Clark County - +/-60-Acre Greenfield Site



 Project Area

3,000

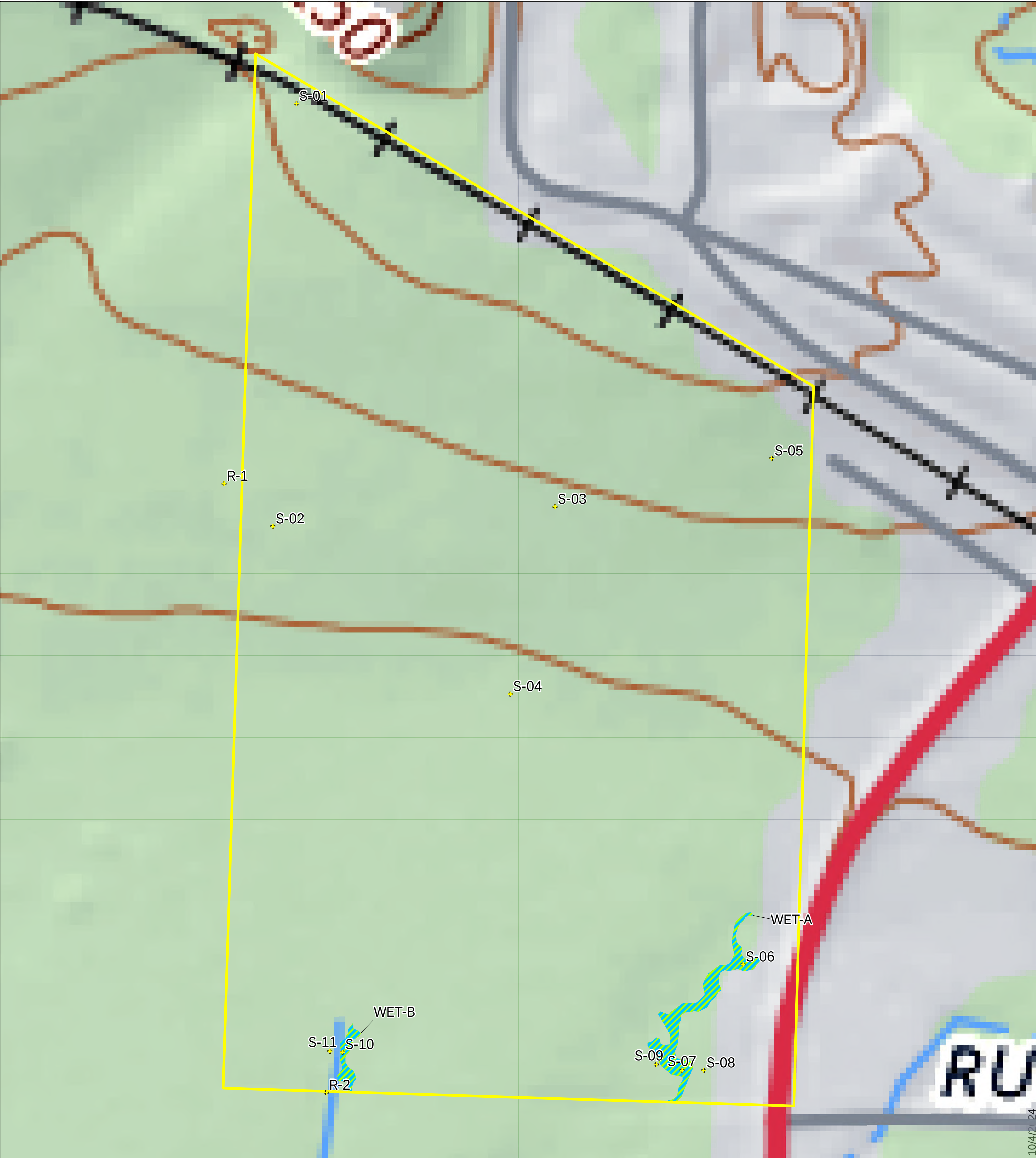
 Feet



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Background: USGS The National Map

Figure 2. Map showing project area overlaid on USGS The National Map 7.5 Minute Quadrangle Topo.



**Economic Development Corporation of Clark County -
+/-60-Acre Greenfield Site**



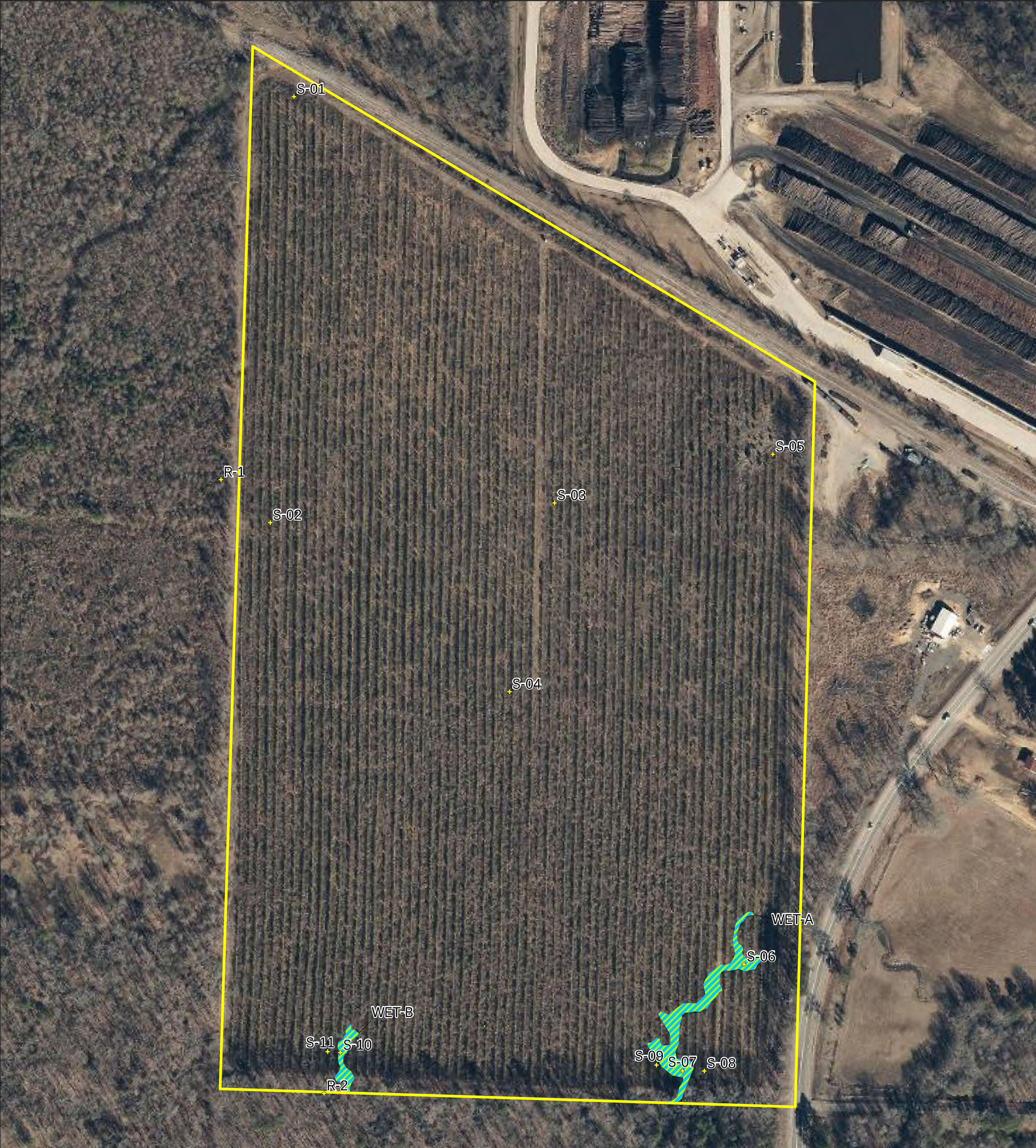
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- Sample Points
- Wetlands
- Project Area



Background: USGS The National Map; October 2024

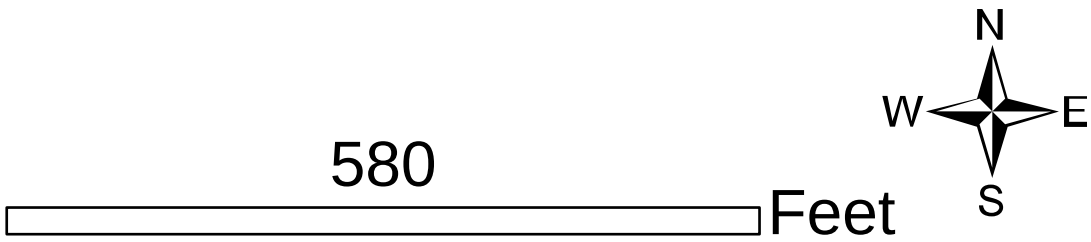
Figure 3. Map showing project details overlaid on USGS The National Map 7.5 Minute Quadrangle Topo .



**Economic Development Corporation of Clark County -
+/-60-Acre Greenfield Site**



- Sample Points
- Wetlands
- Project Area



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Figure 4. Map showing project details overlaid on 2023 9-inch aerial imagery.

Attachment A

Sampling Point Data Sheets

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: S-01
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1
Subregion (LRR or MLRA): P 135B Lat: 33.94712 Long: -93.15491 Datum: WGS 84
Soil Map Unit Name: 31 - Kipling silt loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation ☒, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	
Remarks: Active silviculture.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Aquatic Fauna (B13)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Marl Deposits (B15) (LRR U)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Other (Explain in Remarks)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)		☐ FAC-Neutral Test (D5)	
		☐ Sphagnum moss (D8) (LRR T, U)	
Field Observations:			
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No ☒	
Water Table Present? Yes _____ No ☒	Depth (inches): _____		
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: S-01

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.33</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>3</u></td> <td>x 2 = <u>6</u></td> </tr> <tr> <td>FAC species <u>95</u></td> <td>x 3 = <u>285</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>2</u></td> <td>x 5 = <u>10</u></td> </tr> <tr> <td>Column Totals: <u>140</u> (A)</td> <td><u>461</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.29</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>3</u>	x 2 = <u>6</u>	FAC species <u>95</u>	x 3 = <u>285</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>2</u>	x 5 = <u>10</u>	Column Totals: <u>140</u> (A)	<u>461</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>3</u>	x 2 = <u>6</u>																	
FAC species <u>95</u>	x 3 = <u>285</u>																	
FACU species <u>40</u>	x 4 = <u>160</u>																	
UPL species <u>2</u>	x 5 = <u>10</u>																	
Column Totals: <u>140</u> (A)	<u>461</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Pinus taeda</u>	<u>70</u>	☒	<u>FAC</u>															
2. <u>Baccharis halimifolia</u>	<u>15</u>	_____	<u>FAC</u>															
3. <u>Quercus velutina</u>	<u>2</u>	_____	_____															
4. <u>Rhus copallinum</u>	<u>2</u>	_____	<u>UPL</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>89</u> = Total Cover																		
50% of total cover: <u>44.50</u> 20% of total cover: <u>17.80</u>																		
Herb Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Solidago altissima</u>	<u>25</u>	☒	<u>FACU</u>															
2. <u>Carex sp.</u>	<u>10</u>	☒	_____															
3. <u>Pycnanthemum muticum</u>	<u>5</u>	_____	<u>FAC</u>															
4. <u>Phragmites australis</u>	<u>3</u>	_____	<u>FACW</u>															
5. <u>Eupatorium capillifolium</u>	<u>2</u>	_____	<u>FACU</u>															
6. <u>Liquidambar styraciflua</u>	<u>2</u>	_____	<u>FAC</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>47</u> = Total Cover																		
50% of total cover: <u>23.50</u> 20% of total cover: <u>9.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Rubus trivialis</u>	<u>10</u>	☒	<u>FACU</u>															
2. <u>Lonicera japonica</u>	<u>3</u>	_____	<u>FACU</u>															
3. <u>Smilax bona-nox</u>	<u>3</u>	_____	<u>FAC</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>16</u> = Total Cover																		
50% of total cover: <u>8.00</u> 20% of total cover: <u>3.20</u>																		
Remarks: (If observed, list morphological adaptations below).																		

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: S-01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 4	10YR 3/2	100					Silt	
4 - 16	10YR 4/6	90			D	M	Silt	
4 - 16	10YR 4/2	10					Silt	
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| ☐ Histosol (A1) | ☐ Polyvalue Below Surface (S8) (LRR S, T, U) |
| ☐ Histic Epipedon (A2) | ☐ Thin Dark Surface (S9) (LRR S, T, U) |
| ☐ Black Histic (A3) | ☐ Loamy Mucky Mineral (F1) (LRR O) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Stratified Layers (A5) | ☐ Depleted Matrix (F3) |
| ☐ Organic Bodies (A6) (LRR P, T, U) | ☐ Redox Dark Surface (F6) |
| ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U) | ☐ Depleted Dark Surface (F7) |
| ☐ Muck Presence (A8) (LRR U) | ☐ Redox Depressions (F8) |
| ☐ 1 cm Muck (A9) (LRR P, T) | ☐ Marl (F10) (LRR U) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Ochric (F11) (MLRA 151) |
| ☐ Thick Dark Surface (A12) | ☐ Iron-Manganese Masses (F12) (LRR O, P, T) |
| ☐ Coast Prairie Redox (A16) (MLRA 150A) | ☐ Umbric Surface (F13) (LRR P, T, U) |
| ☐ Sandy Mucky Mineral (S1) (LRR O, S) | ☐ Delta Ochric (F17) (MLRA 151) |
| ☐ Sandy Gleyed Matrix (S4) | ☐ Reduced Vertic (F18) (MLRA 150A, 150B) |
| ☐ Sandy Redox (S5) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149A) |
| ☐ Stripped Matrix (S6) | ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| ☐ Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: S-02
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Furrow Local relief (concave, convex, none): Linear Slope (%): 1
Subregion (LRR or MLRA): P 135B Lat: 33.94441 Long: -93.15508 Datum: WGS 84
Soil Map Unit Name: 20 - Eutaw silty clay loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes ☒ No _____	
Wetland Hydrology Present? Yes _____ No ☒	
Remarks: Active silviculture.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Aquatic Fauna (B13)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Marl Deposits (B15) (LRR U)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Other (Explain in Remarks)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)		☐ FAC-Neutral Test (D5)	
		☐ Sphagnum moss (D8) (LRR T, U)	
Field Observations:			
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No ☒	
Water Table Present? Yes _____ No ☒	Depth (inches): _____		
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: S-02

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>95</u></td> <td>x 3 = <u>285</u></td> </tr> <tr> <td>FACU species <u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>140</u> (A)</td> <td><u>465</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.32</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>95</u>	x 3 = <u>285</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>140</u> (A)	<u>465</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>95</u>	x 3 = <u>285</u>																	
FACU species <u>45</u>	x 4 = <u>180</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>140</u> (A)	<u>465</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Pinus taeda</u>	<u>70</u>	☒	<u>FAC</u>															
2. <u>Baccharis halimifolia</u>	<u>15</u>	_____	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>85</u> = Total Cover																		
50% of total cover: <u>42.50</u> 20% of total cover: <u>17.00</u>																		
Herb Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Solidago altissima</u>	<u>25</u>	☒	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Chasmanthium sessiliflorum</u>	<u>10</u>	☒	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>35</u> = Total Cover																		
50% of total cover: <u>17.50</u> 20% of total cover: <u>7.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Rubus trivialis</u>	<u>20</u>	☒	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>20</u> = Total Cover																		
50% of total cover: <u>10.00</u> 20% of total cover: <u>4.00</u>																		
Remarks: (If observed, list morphological adaptations below).				Hydrophytic Vegetation Present? Yes _____ No ☒														

SOIL

Sampling Point: S-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 3/2	100					Silt	
2 - 6	10YR 3/3	90	10YR 6/3	10	D	M	Silt	
6 - 16	5Y 6/1	80	7.5YR 4/6	20	C	M	Silty Clay	
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils³:**

- | | | |
|--|---|---|
| ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U) | ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) | ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
(MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks) |
|--|---|---|

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Soil pit in furrow (low area between ridges upon which pine trees have been planted).

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: S-03
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Furrow Local relief (concave, convex, none): Linear Slope (%): 1
Subregion (LRR or MLRA): P 135B Lat: 33.94454 Long: -93.15292 Datum: WGS 84
Soil Map Unit Name: 20 - Eutaw silty clay loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes ☒ No _____	
Wetland Hydrology Present? Yes _____ No ☒	
Remarks: Active silviculture.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ Aquatic Fauna (B13) ☐ High Water Table (A2) ☐ Marl Deposits (B15) (LRR U) ☐ Saturation (A3) ☐ Hydrogen Sulfide Odor (C1) ☐ Water Marks (B1) ☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Sediment Deposits (B2) ☐ Presence of Reduced Iron (C4) ☐ Drift Deposits (B3) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface (C7) ☐ Iron Deposits (B5) ☐ Other (Explain in Remarks) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Water-Stained Leaves (B9)		<u>Secondary Indicators (minimum of two required)</u> ☐ Surface Soil Cracks (B6) ☐ Sparsely Vegetated Concave Surface (B8) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No ☒ Depth (inches): _____ Water Table Present? Yes _____ No ☒ Depth (inches): _____ Saturation Present? Yes _____ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: S-03

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>110</u></td> <td>x 3 = <u>330</u></td> </tr> <tr> <td>FACU species <u>44</u></td> <td>x 4 = <u>176</u></td> </tr> <tr> <td>UPL species <u>10</u></td> <td>x 5 = <u>50</u></td> </tr> <tr> <td>Column Totals: <u>164</u> (A)</td> <td><u>556</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.39</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>110</u>	x 3 = <u>330</u>	FACU species <u>44</u>	x 4 = <u>176</u>	UPL species <u>10</u>	x 5 = <u>50</u>	Column Totals: <u>164</u> (A)	<u>556</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>110</u>	x 3 = <u>330</u>																	
FACU species <u>44</u>	x 4 = <u>176</u>																	
UPL species <u>10</u>	x 5 = <u>50</u>																	
Column Totals: <u>164</u> (A)	<u>556</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Pinus taeda</u>	<u>60</u>	☒	<u>FAC</u>															
2. <u>Baccharis halimifolia</u>	<u>10</u>	_____	<u>FAC</u>															
3. <u>Rhus copallinum</u>	<u>10</u>	_____	<u>UPL</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>80</u> = Total Cover																		
50% of total cover: <u>40.00</u> 20% of total cover: <u>16.00</u>																		
Herb Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Pycnanthemum muticum</u>	<u>15</u>	☒	<u>FAC</u>															
2. <u>Solidago altissima</u>	<u>15</u>	☒	<u>FACU</u>															
3. <u>Juncus tenuis</u>	<u>10</u>	_____	<u>FAC</u>															
4. <u>Chasmanthium sessiliflorum</u>	<u>5</u>	_____	<u>FAC</u>															
5. <u>Muhlenbergia schreberi</u>	<u>5</u>	_____	<u>FAC</u>															
6. <u>Schizachyrium scoparium</u>	<u>5</u>	_____	<u>FACU</u>															
7. <u>Ambrosia artemisiifolia</u>	<u>2</u>	_____	<u>FACU</u>															
8. <u>Lespedeza virginica</u>	<u>2</u>	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>59</u> = Total Cover																		
50% of total cover: <u>29.50</u> 20% of total cover: <u>11.80</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Rubus trivialis</u>	<u>20</u>	☒	<u>FACU</u>															
2. <u>Toxicodendron radicans</u>	<u>5</u>	_____	<u>FAC</u>															
3. <u>Lonicera japonica</u>	<u>2</u>	_____	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>27</u> = Total Cover																		
50% of total cover: <u>13.50</u> 20% of total cover: <u>5.40</u>																		
Remarks: (If observed, list morphological adaptations below).																		

Hydrophytic Vegetation Indicators:
☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ Problematic Hydrophytic Vegetation¹ (Explain)

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ☒

SOIL

Sampling Point: S-03**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 3/2	90	10YR 5/2	10	D	M	Silt	
2 - 16	5Y 6/1	85	7.5YR 4/6	10	C	M	Silty Clay	5% black concretions
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
(MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Soil pit in furrow (low area between ridges upon which pine trees have been planted).

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: S-04
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Furrow Local relief (concave, convex, none): Linear Slope (%): 1
Subregion (LRR or MLRA): P 135B Lat: 33.94334 Long: -93.15326 Datum: WGS 84
Soil Map Unit Name: 20 - Eutaw silty clay loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes ☒ No _____	
Wetland Hydrology Present? Yes _____ No ☒	
Remarks: Active silviculture.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Aquatic Fauna (B13)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Marl Deposits (B15) (LRR U)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Other (Explain in Remarks)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)		☐ FAC-Neutral Test (D5)	
		☐ Sphagnum moss (D8) (LRR T, U)	
Field Observations:			
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No ☒	
Water Table Present? Yes _____ No ☒	Depth (inches): _____		
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

Sampling Point: S-04

Tree Stratum (Plot size: <u>30 ft r</u>)				Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Pinus taeda</u>	<u>40</u>	<u>✓</u>	<u>FAC</u>		
2.						
3.						
4.						
5.						
6.						
7.						
8.						
		<u>40</u> = Total Cover				
		50% of total cover: <u>20.00</u> 20% of total cover: <u>8.00</u>				
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)						
1.	<u>Baccharis halimifolia</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>		
2.	<u>Rhus copallinum</u>	<u>10</u>	<u>✓</u>	<u>UPL</u>		
3.						
4.						
5.						
6.						
7.						
8.						
		<u>35</u> = Total Cover				
		50% of total cover: <u>17.50</u> 20% of total cover: <u>7.00</u>				
Herb Stratum (Plot size: <u>30 ft r</u>)						
1.	<u>Juncus tenuis</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>		
2.	<u>Chasmanthium sessiliflorum</u>	<u>5</u>	<u>✓</u>	<u>FAC</u>		
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
		<u>25</u> = Total Cover				
		50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u>				
Woody Vine Stratum (Plot size: <u>30 ft r</u>)						
1.	<u>Rubus trivialis</u>	<u>50</u>	<u>✓</u>	<u>FACU</u>		
2.						
3.						
4.						
5.						
		<u>50</u> = Total Cover				
		50% of total cover: <u>25.00</u> 20% of total cover: <u>10.00</u>				

Remarks: (If observed, list morphological adaptations below).

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.66 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>90</u>	x 3 = <u>270</u>
FACU species <u>50</u>	x 4 = <u>200</u>
UPL species <u>10</u>	x 5 = <u>50</u>
Column Totals: <u>150</u> (A)	<u>520</u> (B)

Prevalence Index = B/A = 3.46

Hydrophytic Vegetation Indicators:

☐ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No

SOIL

Sampling Point: S-04**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 3/2	90	10YR 4/2	7	D	M	Silt	
3 - 18			10YR 3/6	3	D	M		
3 - 18	10YR 6/1	85	10YR 4/6	10	D	M	Silty Clay	5% black concretions
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
(MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Soil pit in furrow (low area between ridges upon which pine trees have been planted).

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
 Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: S-05
 Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Undulating Slope (%): 0-3
 Subregion (LRR or MLRA): P 135B Lat: 33.94485 Long: -93.15125 Datum: WGS 84
 Soil Map Unit Name: 31 - Kipling silt loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)

Are Vegetation ☒, Soil ☒, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

Hydrophytic Vegetation Present?	Yes _____	No <u>✓</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>✓</u>
Hydric Soil Present?	Yes _____	No <u>✓</u>			
Wetland Hydrology Present?	Yes _____	No <u>✓</u>			
Remarks:					
Active silviculture. Minor undulations, appear to be associated with most recent tree harvest.					

Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)					
☐ Surface Water (A1)	☐ Aquatic Fauna (B13)	☐ Surface Soil Cracks (B6)			
☐ High Water Table (A2)	☐ Marl Deposits (B15) (LRR U)	☐ Sparsely Vegetated Concave Surface (B8)			
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)			
☐ Water Marks (B1)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Moss Trim Lines (B16)			
☐ Sediment Deposits (B2)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)			
☐ Drift Deposits (B3)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)			
☐ Algal Mat or Crust (B4)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)			
☐ Iron Deposits (B5)	☐ Other (Explain in Remarks)	☐ Geomorphic Position (D2)			
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)			
☐ Water-Stained Leaves (B9)		☐ FAC-Neutral Test (D5)			
		☐ Sphagnum moss (D8) (LRR T, U)			
Field Observations: Surface Water Present? Yes _____ No ☒ Depth (inches): _____ Water Table Present? Yes _____ No ☒ Depth (inches): _____ Saturation Present? Yes _____ No ☒ Depth (inches): _____ (includes capillary fringe)			Wetland Hydrology Present? Yes _____ No ☒		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: S-05

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Pinus taeda</u>	<u>25</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40.00</u> (A/B)														
2. <u>Salix nigra</u>	<u>5</u>		<u>OBL</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
<u>30</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>49</u></td> <td>x 3 = <u>147</u></td> </tr> <tr> <td>FACU species <u>40</u></td> <td>x 4 = <u>160</u></td> </tr> <tr> <td>UPL species <u>12</u></td> <td>x 5 = <u>60</u></td> </tr> <tr> <td>Column Totals: <u>106</u> (A)</td> <td><u>372</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.50</u>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>49</u>	x 3 = <u>147</u>	FACU species <u>40</u>	x 4 = <u>160</u>	UPL species <u>12</u>	x 5 = <u>60</u>	Column Totals: <u>106</u> (A)	<u>372</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>5</u>	x 1 = <u>5</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>49</u>	x 3 = <u>147</u>																	
FACU species <u>40</u>	x 4 = <u>160</u>																	
UPL species <u>12</u>	x 5 = <u>60</u>																	
Column Totals: <u>106</u> (A)	<u>372</u> (B)																	
50% of total cover: <u>15.00</u> 20% of total cover: <u>6.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Baccharis halimifolia</u>	<u>20</u>	☒	<u>FAC</u>															
2. <u>Cercis canadensis</u>	<u>10</u>	☒	<u>UPL</u>															
3. <u>Quercus velutina</u>	<u>5</u>																	
4. <u>Sambucus canadensis</u>	<u>3</u>																	
5. <u>Acer negundo</u>	<u>2</u>		<u>FAC</u>															
6. <u>Rhus copallinum</u>	<u>2</u>		<u>UPL</u>															
7. _____				Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
8. _____																		
<u>42</u> = Total Cover																		
50% of total cover: <u>21.00</u> 20% of total cover: <u>8.40</u>																		
Herb Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Solidago altissima</u>	<u>10</u>	☒	<u>FACU</u>															
2. <u>Juncus tenuis</u>	<u>2</u>		<u>FAC</u>															
3. _____																		
4. _____																		
5. _____																		
6. _____																		
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
<u>12</u> = Total Cover				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
50% of total cover: <u>6.00</u> 20% of total cover: <u>2.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Rubus trivialis</u>	<u>30</u>	☒	<u>FACU</u>															
2. _____																		
3. _____																		
4. _____																		
5. _____																		
<u>30</u> = Total Cover																		
50% of total cover: <u>15.00</u> 20% of total cover: <u>6.00</u>																		
Remarks: (If observed, list morphological adaptations below).				Hydrophytic Vegetation Present? Yes _____ No ☒														

SOIL

Sampling Point: S-05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 6	10YR 2/2	95	10YR 3/3	5	D	M	Silt	
6 - 14	10YR 4/3	90	10YR 2/1	10		M	Silt	
14 - 18	2.5Y 7/1	80	7.5YR 5/8	15	C	M		5% black concretions
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
(MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: S-06
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Undulating Slope (%): 1
Subregion (LRR or MLRA): P 135B Lat: 33.94161 Long: -93.15147 Datum: WGS 84
Soil Map Unit Name: 20 - Eutaw silty clay loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation ☒, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____	Is the Sampled Area within a Wetland? Yes ☒ No _____
Hydric Soil Present? Yes ☒ No _____	
Wetland Hydrology Present? Yes ☒ No _____	
Remarks: Active silviculture.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Aquatic Fauna (B13)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Marl Deposits (B15) (LRR U)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☒ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Thin Muck Surface (C7)	☒ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Other (Explain in Remarks)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)		☒ FAC-Neutral Test (D5)	
		☐ Sphagnum moss (D8) (LRR T, U)	
Field Observations:			
Surface Water Present? Yes _____ No ☒ Depth (inches): _____		Wetland Hydrology Present? Yes ☒ No _____	
Water Table Present? Yes _____ No ☒ Depth (inches): _____			
Saturation Present? Yes _____ No ☒ Depth (inches): _____ (includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: S-06

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Pinus taeda</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>8</u> (A) Total Number of Dominant Species Across All Strata: <u>9</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>88.88</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>25</u> = Total Cover 50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>14</u></td> <td>x 1 = <u>14</u></td> </tr> <tr> <td>FACW species <u>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>111</u></td> <td>x 3 = <u>333</u></td> </tr> <tr> <td>FACU species <u>9</u></td> <td>x 4 = <u>36</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>136</u> (A)</td> <td><u>387</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.84</u>	Total % Cover of:	Multiply by:	OBL species <u>14</u>	x 1 = <u>14</u>	FACW species <u>2</u>	x 2 = <u>4</u>	FAC species <u>111</u>	x 3 = <u>333</u>	FACU species <u>9</u>	x 4 = <u>36</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>136</u> (A)	<u>387</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>14</u>	x 1 = <u>14</u>																	
FACW species <u>2</u>	x 2 = <u>4</u>																	
FAC species <u>111</u>	x 3 = <u>333</u>																	
FACU species <u>9</u>	x 4 = <u>36</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>136</u> (A)	<u>387</u> (B)																	
<u>24</u> = Total Cover 50% of total cover: <u>12.00</u> 20% of total cover: <u>4.80</u>																		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Baccharis halimifolia</u>	<u>15</u>	<u>✓</u>	<u>FAC</u>															
2. <u>Liquidambar styraciflua</u>	<u>5</u>	<u>✓</u>	<u>FAC</u>															
3. <u>Fraxinus pennsylvanica</u>	<u>2</u>	_____	<u>FACW</u>															
4. <u>Salix nigra</u>	<u>2</u>	_____	<u>OBL</u>															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>24</u> = Total Cover 50% of total cover: <u>12.00</u> 20% of total cover: <u>4.80</u>																		
Herb Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Andropogon virginicus</u>	<u>30</u>	<u>✓</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Coleataenia anceps</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>															
3. <u>Eupatorium serotinum</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>															
4. <u>Hydrolea ovata</u>	<u>10</u>	<u>✓</u>	<u>OBL</u>															
5. <u>Juncus tenuis</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>															
6. <u>Muhlenbergia schreberi</u>	<u>5</u>	_____	<u>FAC</u>															
7. <u>Desmodium paniculatum</u>	<u>3</u>	_____	<u>FACU</u>															
8. <u>Acalypha virginica</u>	<u>1</u>	_____	<u>FACU</u>															
9. <u>Carex frankii</u>	<u>1</u>	_____	<u>OBL</u>															
10. <u>Elymus virginicus</u>	<u>1</u>	_____	<u>FAC</u>															
11. <u>Scirpus atrovirens</u>	<u>1</u>	_____	<u>OBL</u>															
12. _____	_____	_____	_____															
<u>82</u> = Total Cover 50% of total cover: <u>41.00</u> 20% of total cover: <u>16.40</u>				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Rubus trivialis</u>	<u>5</u>	<u>✓</u>	<u>FACU</u>															
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Remarks: (If observed, list morphological adaptations below).																		
Hydrophytic Vegetation Present? Yes <u>✓</u> No _____																		

SOIL

Sampling Point: **S-06**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	10YR 3/2	100					Silt	
3 - 16	10YR 5/2	90	10YR 4/6	10	C	M	Silty Clay	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| ☐ Histosol (A1) | ☐ Polyvalue Below Surface (S8) (LRR S, T, U) |
| ☐ Histic Epipedon (A2) | ☐ Thin Dark Surface (S9) (LRR S, T, U) |
| ☐ Black Histic (A3) | ☐ Loamy Mucky Mineral (F1) (LRR O) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Stratified Layers (A5) | ☒ Depleted Matrix (F3) |
| ☐ Organic Bodies (A6) (LRR P, T, U) | ☐ Redox Dark Surface (F6) |
| ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U) | ☐ Depleted Dark Surface (F7) |
| ☐ Muck Presence (A8) (LRR U) | ☐ Redox Depressions (F8) |
| ☐ 1 cm Muck (A9) (LRR P, T) | ☐ Marl (F10) (LRR U) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Ochric (F11) (MLRA 151) |
| ☐ Thick Dark Surface (A12) | ☐ Iron-Manganese Masses (F12) (LRR O, P, T) |
| ☐ Coast Prairie Redox (A16) (MLRA 150A) | ☐ Umbric Surface (F13) (LRR P, T, U) |
| ☐ Sandy Mucky Mineral (S1) (LRR O, S) | ☐ Delta Ochric (F17) (MLRA 151) |
| ☐ Sandy Gleyed Matrix (S4) | ☐ Reduced Vertic (F18) (MLRA 150A, 150B) |
| ☐ Sandy Redox (S5) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149A) |
| ☐ Stripped Matrix (S6) | ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| ☐ Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Soil pit in furrow (low area between ridges upon which pine trees have been planted).

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: S-07
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
Subregion (LRR or MLRA): P 135B Lat: 33.94094 Long: -93.15193 Datum: WGS 84
Soil Map Unit Name: 20 - Eutaw silty clay loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation ☒, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____	Is the Sampled Area within a Wetland? Yes ☒ No _____
Hydric Soil Present? Yes ☒ No _____	
Wetland Hydrology Present? Yes ☒ No _____	
Remarks: Active silviculture.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Aquatic Fauna (B13)	☒ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Marl Deposits (B15) (LRR U)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☒ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Thin Muck Surface (C7)	☒ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Other (Explain in Remarks)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)		☒ FAC-Neutral Test (D5)	
		☐ Sphagnum moss (D8) (LRR T, U)	
Field Observations:			
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	Wetland Hydrology Present? Yes ☒ No _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____		
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: S-07

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Pinus taeda</u>	<u>5</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>88</u></td> <td>x 1 = <u>88</u></td> </tr> <tr> <td>FACW species <u>3</u></td> <td>x 2 = <u>6</u></td> </tr> <tr> <td>FAC species <u>17</u></td> <td>x 3 = <u>51</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>2</u></td> <td>x 5 = <u>10</u></td> </tr> <tr> <td>Column Totals: <u>110</u> (A)</td> <td><u>155</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>1.40</u>	Total % Cover of:	Multiply by:	OBL species <u>88</u>	x 1 = <u>88</u>	FACW species <u>3</u>	x 2 = <u>6</u>	FAC species <u>17</u>	x 3 = <u>51</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>2</u>	x 5 = <u>10</u>	Column Totals: <u>110</u> (A)	<u>155</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>88</u>	x 1 = <u>88</u>																	
FACW species <u>3</u>	x 2 = <u>6</u>																	
FAC species <u>17</u>	x 3 = <u>51</u>																	
FACU species <u>0</u>	x 4 = <u>0</u>																	
UPL species <u>2</u>	x 5 = <u>10</u>																	
Column Totals: <u>110</u> (A)	<u>155</u> (B)																	
<u>14</u> = Total Cover 50% of total cover: <u>7.00</u> 20% of total cover: <u>2.80</u>																		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Salix nigra</u>	<u>10</u>	☒	<u>OBL</u>															
2. <u>Diospyros virginiana</u>	<u>2</u>	_____	<u>FAC</u>															
3. <u>Rhus copallinum</u>	<u>2</u>	_____	<u>UPL</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>14</u> = Total Cover 50% of total cover: <u>7.00</u> 20% of total cover: <u>2.80</u>																		
Herb Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Hydrolea ovata</u>	<u>50</u>	☒	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Cyperus erythrorhizos</u>	<u>20</u>	☒	<u>OBL</u>															
3. <u>Coleataenia anceps</u>	<u>10</u>	_____	<u>FAC</u>															
4. <u>Juncus effusus</u>	<u>5</u>	_____	<u>OBL</u>															
5. <u>Cyperus strigosus</u>	<u>3</u>	_____	<u>FACW</u>															
6. <u>Persicaria hydropiperoides</u>	<u>3</u>	_____	<u>OBL</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>91</u> = Total Cover 50% of total cover: <u>45.50</u> 20% of total cover: <u>18.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. _____	_____	_____	_____	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
_____ = Total Cover 50% of total cover: _____ 20% of total cover: _____																		
Hydrophytic Vegetation Present? Yes ☒ No _____																		
Remarks: (If observed, list morphological adaptations below).																		

SOIL

Sampling Point: S-07**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 1	10YR 3/2	100					Silt	
1 - 18	10YR 5/1	80	10YR 4/6	15	C	M	Silty Clay	
1 - 18			10YR 4/3	5	C	M	Silty Clay	
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils³:**

- | | | |
|---|--|---|
| ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U) | ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) | ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
(MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks) |
|---|--|---|

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: S-08
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Furrow Local relief (concave, convex, none): Linear Slope (%): 1
Subregion (LRR or MLRA): P 135B Lat: 33.94092 Long: -93.15176 Datum: WGS 84
Soil Map Unit Name: 20 - Eutaw silty clay loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes ☒ No _____	
Wetland Hydrology Present? Yes _____ No ☒	
Remarks: Active silviculture.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Aquatic Fauna (B13)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Marl Deposits (B15) (LRR U)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Other (Explain in Remarks)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)		☐ FAC-Neutral Test (D5)	
		☐ Sphagnum moss (D8) (LRR T, U)	
Field Observations:			
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No ☒	
Water Table Present? Yes _____ No ☒	Depth (inches): _____		
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: S-08

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Pinus taeda</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>25</u> = Total Cover 50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>55</u></td> <td>x 3 = <u>165</u></td> </tr> <tr> <td>FACU species <u>75</u></td> <td>x 4 = <u>300</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>130</u> (A)</td> <td><u>465</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.57</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>55</u>	x 3 = <u>165</u>	FACU species <u>75</u>	x 4 = <u>300</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>130</u> (A)	<u>465</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>55</u>	x 3 = <u>165</u>																	
FACU species <u>75</u>	x 4 = <u>300</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>130</u> (A)	<u>465</u> (B)																	
<u>30</u> = Total Cover 50% of total cover: <u>15.00</u> 20% of total cover: <u>6.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Baccharis halimifolia</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>															
2. <u>Pinus taeda</u>	<u>5</u>	_____	<u>FAC</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>30</u> = Total Cover 50% of total cover: <u>15.00</u> 20% of total cover: <u>6.00</u>																		
Herb Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Lespedeza cuneata</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Solidago altissima</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Saccharum officinarum</u>	<u>5</u>	_____	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>35</u> = Total Cover 50% of total cover: <u>17.50</u> 20% of total cover: <u>7.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Rubus trivialis</u>	<u>30</u>	<u>✓</u>	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Lonicera japonica</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>40</u> = Total Cover 50% of total cover: <u>20.00</u> 20% of total cover: <u>8.00</u>																		
Remarks: (If observed, list morphological adaptations below).				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>														

SOIL

Sampling Point: S-08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 3/2	90	10YR 5/2	10	D	M	Silt	
2 - 18	10YR 5/2	90	10YR 4/6	10	C	M	Silty Clay	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
 (MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

Soil pit in furrow (low area between ridges upon which pine trees have been planted).

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: S-09
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Furrow Local relief (concave, convex, none): Linear Slope (%): 1
Subregion (LRR or MLRA): P 135B Lat: 33.94097 Long: -93.15213 Datum: WGS 84
Soil Map Unit Name: 20 - Eutaw silty clay loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes ☒ No _____	
Wetland Hydrology Present? Yes _____ No ☒	
Remarks: Active silviculture.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Aquatic Fauna (B13)	☐ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Marl Deposits (B15) (LRR U)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Other (Explain in Remarks)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)		☐ FAC-Neutral Test (D5)	
		☐ Sphagnum moss (D8) (LRR T, U)	
Field Observations:			
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No ☒	
Water Table Present? Yes _____ No ☒	Depth (inches): _____		
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: S-09

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Pinus taeda</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>25</u> = Total Cover 50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>35</u></td> <td>x 1 = <u>35</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>67</u></td> <td>x 4 = <u>268</u></td> </tr> <tr> <td>UPL species <u>20</u></td> <td>x 5 = <u>100</u></td> </tr> <tr> <td>Column Totals: <u>152</u> (A)</td> <td><u>493</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.24</u>	Total % Cover of:	Multiply by:	OBL species <u>35</u>	x 1 = <u>35</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>67</u>	x 4 = <u>268</u>	UPL species <u>20</u>	x 5 = <u>100</u>	Column Totals: <u>152</u> (A)	<u>493</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>35</u>	x 1 = <u>35</u>																	
FACW species <u>0</u>	x 2 = <u>0</u>																	
FAC species <u>30</u>	x 3 = <u>90</u>																	
FACU species <u>67</u>	x 4 = <u>268</u>																	
UPL species <u>20</u>	x 5 = <u>100</u>																	
Column Totals: <u>152</u> (A)	<u>493</u> (B)																	
<u>27</u> = Total Cover 50% of total cover: <u>13.50</u> 20% of total cover: <u>5.40</u>																		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Rhus copallinum</u>	<u>20</u>	<u>✓</u>	<u>UPL</u>															
2. <u>Pinus taeda</u>	<u>5</u>	_____	<u>FAC</u>															
3. <u>Carya glabra</u>	<u>2</u>	_____	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>27</u> = Total Cover 50% of total cover: <u>13.50</u> 20% of total cover: <u>5.40</u>																		
Herb Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Scirpus cyperinus</u>	<u>20</u>	<u>✓</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Carex frankii</u>	<u>15</u>	<u>✓</u>	<u>OBL</u>															
3. <u>Solidago altissima</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>50</u> = Total Cover 50% of total cover: <u>25.00</u> 20% of total cover: <u>10.00</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Rubus trivialis</u>	<u>50</u>	<u>✓</u>	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>50</u> = Total Cover 50% of total cover: <u>25.00</u> 20% of total cover: <u>10.00</u>																		
Remarks: (If observed, list morphological adaptations below).				Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>														

SOIL

Sampling Point: S-09**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 3/2	90	10YR 5/2	10	D	M	Silt	
2 - 18	10YR 5/2	90	10YR 4/6	10	C	M	Silty Clay	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U)

- ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
(MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Soil pit in furrow (low area between ridges upon which pine trees have been planted).

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: S-10
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Linear Slope (%): 1
Subregion (LRR or MLRA): P 135B Lat: 33.94104 Long: -93.15454 Datum: WGS 84
Soil Map Unit Name: 89 - Urbo silty clay loam, occasionally flooded NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____	Is the Sampled Area within a Wetland? Yes ☒ No _____
Hydric Soil Present? Yes ☒ No _____	
Wetland Hydrology Present? Yes ☒ No _____	
Remarks: Active silviculture.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)			
☐ Surface Water (A1)	☐ Aquatic Fauna (B13)	☒ Surface Soil Cracks (B6)	
☐ High Water Table (A2)	☐ Marl Deposits (B15) (LRR U)	☐ Sparsely Vegetated Concave Surface (B8)	
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☒ Drainage Patterns (B10)	
☐ Water Marks (B1)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Moss Trim Lines (B16)	
☐ Sediment Deposits (B2)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)	
☐ Algal Mat or Crust (B4)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Iron Deposits (B5)	☐ Other (Explain in Remarks)	☐ Geomorphic Position (D2)	
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)		☒ FAC-Neutral Test (D5)	
		☐ Sphagnum moss (D8) (LRR T, U)	
Field Observations:			
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	Wetland Hydrology Present? Yes ☒ No _____	
Water Table Present? Yes _____ No ☒	Depth (inches): _____		
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: S-10

Tree Stratum (Plot size: <u>8x10 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. _____	_____	_____	_____	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>8</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
_____ = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>24</u></td> <td>x 1 = <u>24</u></td> </tr> <tr> <td>FACW species <u>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>53</u></td> <td>x 3 = <u>159</u></td> </tr> <tr> <td>FACU species <u>25</u></td> <td>x 4 = <u>100</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>104</u> (A)</td> <td><u>287</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>2.75</u>	Total % Cover of:	Multiply by:	OBL species <u>24</u>	x 1 = <u>24</u>	FACW species <u>2</u>	x 2 = <u>4</u>	FAC species <u>53</u>	x 3 = <u>159</u>	FACU species <u>25</u>	x 4 = <u>100</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>104</u> (A)	<u>287</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>24</u>	x 1 = <u>24</u>																	
FACW species <u>2</u>	x 2 = <u>4</u>																	
FAC species <u>53</u>	x 3 = <u>159</u>																	
FACU species <u>25</u>	x 4 = <u>100</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>104</u> (A)	<u>287</u> (B)																	
50% of total cover: _____ 20% of total cover: _____																		
Sapling/Shrub Stratum (Plot size: <u>8x10 ft r</u>)																		
1. <u>Baccharis halimifolia</u>	<u>15</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☒ 3 - Prevalence Index is ≤3.0 ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Callicarpa americana</u>	<u>5</u>	☒	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>20</u> = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
50% of total cover: <u>10.00</u> 20% of total cover: <u>4.00</u>																		
Herb Stratum (Plot size: <u>8x10 ft r</u>)																		
1. <u>Coleataenia anceps</u>	<u>10</u>	☒	<u>FAC</u>															
2. <u>Juncus effusus</u>	<u>10</u>	☒	<u>OBL</u>															
3. <u>Juncus tenuis</u>	<u>10</u>	☒	<u>FAC</u>															
4. <u>Scirpus cyperinus</u>	<u>10</u>	☒	<u>OBL</u>															
5. <u>Solidago altissima</u>	<u>5</u>	_____	<u>FACU</u>															
6. <u>Eupatorium serotinum</u>	<u>3</u>	_____	<u>FAC</u>															
7. <u>Persicaria hydropiperoides</u>	<u>3</u>	_____	<u>OBL</u>	Hydrophytic Vegetation Present? Yes ☒ No _____														
8. <u>Eleocharis obtusa</u>	<u>1</u>	_____	<u>OBL</u>															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>52</u> = Total Cover																		
50% of total cover: <u>26.00</u> 20% of total cover: <u>10.40</u>																		
Woody Vine Stratum (Plot size: <u>7x10 ft r</u>)																		
1. <u>Rubus trivialis</u>	<u>15</u>	☒	<u>FACU</u>															
2. <u>Ampelopsis arborea</u>	<u>10</u>	☒	<u>FAC</u>															
3. <u>Toxicodendron radicans</u>	<u>5</u>	_____	<u>FAC</u>															
4. <u>Thyrsanthella difformis</u>	<u>2</u>	_____	<u>FACW</u>															
5. _____	_____	_____	_____															
<u>32</u> = Total Cover																		
50% of total cover: <u>16.00</u> 20% of total cover: <u>6.40</u>																		
Remarks: (If observed, list morphological adaptations below).																		

SOIL

Sampling Point: S-10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 3	7.5YR 3/2	90	7.5YR 4/6	10	C	M	Silt	
3 - 18	7.5YR 6/1	80	7.5YR 4/6	15	C	M	Silty Clay	
3 - 18			7.5YR 4/3	5	C	M	Silty Clay	
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|--|---|
| ☐ Histosol (A1) | ☐ Polyvalue Below Surface (S8) (LRR S, T, U) |
| ☐ Histic Epipedon (A2) | ☐ Thin Dark Surface (S9) (LRR S, T, U) |
| ☐ Black Histic (A3) | ☐ Loamy Mucky Mineral (F1) (LRR O) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Stratified Layers (A5) | ☒ Depleted Matrix (F3) |
| ☐ Organic Bodies (A6) (LRR P, T, U) | ☐ Redox Dark Surface (F6) |
| ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U) | ☐ Depleted Dark Surface (F7) |
| ☐ Muck Presence (A8) (LRR U) | ☐ Redox Depressions (F8) |
| ☐ 1 cm Muck (A9) (LRR P, T) | ☐ Marl (F10) (LRR U) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Ochric (F11) (MLRA 151) |
| ☐ Thick Dark Surface (A12) | ☐ Iron-Manganese Masses (F12) (LRR O, P, T) |
| ☐ Coast Prairie Redox (A16) (MLRA 150A) | ☐ Umbric Surface (F13) (LRR P, T, U) |
| ☐ Sandy Mucky Mineral (S1) (LRR O, S) | ☐ Delta Ochric (F17) (MLRA 151) |
| ☐ Sandy Gleyed Matrix (S4) | ☐ Reduced Vertic (F18) (MLRA 150A, 150B) |
| ☐ Sandy Redox (S5) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149A) |
| ☐ Stripped Matrix (S6) | ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| ☐ Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR O)
- ☐ 2 cm Muck (A10) (LRR S)
- ☐ Reduced Vertic (F18) (outside MLRA 150A,B)
- ☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No _____

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: S-11
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Furrow Local relief (concave, convex, none): Linear Slope (%): 1
Subregion (LRR or MLRA): P 135B Lat: 33.94105 Long: -93.15464 Datum: WGS 84
Soil Map Unit Name: 89 - Urbo silty clay loam, occasionally flooded NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation ☒, Soil ☒, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No _____	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	
Remarks: Active silviculture.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ☐ Surface Water (A1) ☐ Aquatic Fauna (B13) ☐ High Water Table (A2) ☐ Marl Deposits (B15) (LRR U) ☐ Saturation (A3) ☐ Hydrogen Sulfide Odor (C1) ☐ Water Marks (B1) ☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Sediment Deposits (B2) ☐ Presence of Reduced Iron (C4) ☐ Drift Deposits (B3) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface (C7) ☐ Iron Deposits (B5) ☐ Other (Explain in Remarks) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Water-Stained Leaves (B9)		<u>Secondary Indicators (minimum of two required)</u> ☐ Surface Soil Cracks (B6) ☐ Sparsely Vegetated Concave Surface (B8) ☐ Drainage Patterns (B10) ☐ Moss Trim Lines (B16) ☐ Dry-Season Water Table (C2) ☐ Crayfish Burrows (C8) ☐ Saturation Visible on Aerial Imagery (C9) ☐ Geomorphic Position (D2) ☐ Shallow Aquitard (D3) ☐ FAC-Neutral Test (D5) ☐ Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes _____ No ☒ Depth (inches): _____ Water Table Present? Yes _____ No ☒ Depth (inches): _____ Saturation Present? Yes _____ No ☒ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: S-11

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Pinus taeda</u>	<u>25</u>	☒	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.00</u> (A/B)														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>25</u> = Total Cover 50% of total cover: <u>12.50</u> 20% of total cover: <u>5.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: left;">Multiply by:</th> </tr> <tr> <td>OBL species <u>10</u></td> <td>x 1 = <u>10</u></td> </tr> <tr> <td>FACW species <u>7</u></td> <td>x 2 = <u>14</u></td> </tr> <tr> <td>FAC species <u>80</u></td> <td>x 3 = <u>240</u></td> </tr> <tr> <td>FACU species <u>52</u></td> <td>x 4 = <u>208</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>149</u> (A)</td> <td><u>472</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.16</u>	Total % Cover of:	Multiply by:	OBL species <u>10</u>	x 1 = <u>10</u>	FACW species <u>7</u>	x 2 = <u>14</u>	FAC species <u>80</u>	x 3 = <u>240</u>	FACU species <u>52</u>	x 4 = <u>208</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>149</u> (A)	<u>472</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>10</u>	x 1 = <u>10</u>																	
FACW species <u>7</u>	x 2 = <u>14</u>																	
FAC species <u>80</u>	x 3 = <u>240</u>																	
FACU species <u>52</u>	x 4 = <u>208</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>149</u> (A)	<u>472</u> (B)																	
<u>32</u> = Total Cover 50% of total cover: <u>16.00</u> 20% of total cover: <u>6.40</u>																		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Baccharis halimifolia</u>	<u>25</u>	☒	<u>FAC</u>															
2. <u>Callicarpa americana</u>	<u>5</u>	_____	<u>FACU</u>															
3. <u>Fraxinus pennsylvanica</u>	<u>2</u>	_____	<u>FACW</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>32</u> = Total Cover 50% of total cover: <u>16.00</u> 20% of total cover: <u>6.40</u>																		
Herb Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Coleataenia anceps</u>	<u>15</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☒ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Muhlenbergia schreberi</u>	<u>15</u>	☒	<u>FAC</u>															
3. <u>Scirpus cyperinus</u>	<u>10</u>	_____	<u>OBL</u>															
4. <u>Carex intumescens</u>	<u>5</u>	_____	<u>FACW</u>															
5. <u>Solidago altissima</u>	<u>5</u>	_____	<u>FACU</u>															
6. <u>Desmodium paniculatum</u>	<u>2</u>	_____	<u>FACU</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>52</u> = Total Cover 50% of total cover: <u>26.00</u> 20% of total cover: <u>10.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Rubus trivialis</u>	<u>40</u>	☒	<u>FACU</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>40</u> = Total Cover 50% of total cover: <u>20.00</u> 20% of total cover: <u>8.00</u>																		
Hydrophytic Vegetation Present? Yes ☒ No _____																		
Remarks: (If observed, list morphological adaptations below).																		

SOIL

Sampling Point: S-11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 2	10YR 3/2	100					Silt	
2 - 18	10YR 5/3	90	10YR 4/6	10	C	M	Silty Clay	
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)****Indicators for Problematic Hydric Soils³:**

- | | | |
|--|--|--|
| ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U) | ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) | ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
(MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks) |
|--|--|--|

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

Soil pit in furrow (low area between ridges upon which pine trees have been planted).

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: R-1
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 1
Subregion (LRR or MLRA): P 135B Lat: 33.94468 Long: -93.15546 Datum: WGS 84
Soil Map Unit Name: 20 - Eutaw silty clay loam, 0 to 2 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	
Remarks: Reference point in non-silviculture area to the west.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ Aquatic Fauna (B13)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Marl Deposits (B15) (LRR U)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)	☐ Other (Explain in Remarks)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)
☐ Water-Stained Leaves (B9)		☐ FAC-Neutral Test (D5)
		☐ Sphagnum moss (D8) (LRR T, U)
Field Observations:		Wetland Hydrology Present? Yes _____ No ☒
Surface Water Present? Yes _____ No ☒ Depth (inches): _____		
Water Table Present? Yes _____ No ☒ Depth (inches): _____		
Saturation Present? Yes _____ No ☒ Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: R-1

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Quercus phellos</u>	<u>25</u>	☒	<u>FACW</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>9</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>44.44</u> (A/B)														
2. <u>Quercus alba</u>	<u>10</u>	☒	<u>FACU</u>															
3. <u>Quercus velutina</u>	<u>5</u>																	
4. <u>Ulmus alata</u>	<u>5</u>		<u>FACU</u>															
5. _____																		
6. _____																		
7. _____																		
8. _____																		
<u>45</u> = Total Cover 50% of total cover: <u>22.50</u> 20% of total cover: <u>9.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>28</u></td> <td>x 2 = <u>56</u></td> </tr> <tr> <td>FAC species <u>41</u></td> <td>x 3 = <u>123</u></td> </tr> <tr> <td>FACU species <u>39</u></td> <td>x 4 = <u>156</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>108</u> (A)</td> <td><u>335</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.10</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>28</u>	x 2 = <u>56</u>	FAC species <u>41</u>	x 3 = <u>123</u>	FACU species <u>39</u>	x 4 = <u>156</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>108</u> (A)	<u>335</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>28</u>	x 2 = <u>56</u>																	
FAC species <u>41</u>	x 3 = <u>123</u>																	
FACU species <u>39</u>	x 4 = <u>156</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>108</u> (A)	<u>335</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Crataegus marshallii</u>	<u>10</u>	☒	<u>FAC</u>															
2. <u>Quercus velutina</u>	<u>10</u>	☒																
3. <u>Carya ovata</u>	<u>5</u>	☒	<u>FACU</u>															
4. <u>Quercus alba</u>	<u>5</u>	☒	<u>FACU</u>															
5. <u>Quercus alba</u>	<u>5</u>	☒	<u>FACU</u>															
6. <u>Ulmus alata</u>	<u>3</u>		<u>FACU</u>															
7. <u>Fraxinus pennsylvanica</u>	<u>2</u>		<u>FACW</u>															
8. _____																		
<u>40</u> = Total Cover 50% of total cover: <u>20.00</u> 20% of total cover: <u>8.00</u>																		
Herb Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Chasmanthium sessiliflorum</u>	<u>20</u>	☒	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Pycnanthemum muticum</u>	<u>5</u>		<u>FAC</u>															
3. <u>Solidago altissima</u>	<u>3</u>		<u>FACU</u>															
4. <u>Elymus virginicus</u>	<u>2</u>		<u>FAC</u>															
5. <u>Desmodium paniculatum</u>	<u>1</u>		<u>FACU</u>															
6. <u>Parthenium hysterophorus</u>	<u>1</u>		<u>FAC</u>															
7. _____																		
8. _____																		
9. _____																		
10. _____																		
11. _____																		
12. _____																		
<u>32</u> = Total Cover 50% of total cover: <u>16.00</u> 20% of total cover: <u>6.40</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Toxicodendron radicans</u>	<u>3</u>	☒	<u>FAC</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Lonicera japonica</u>	<u>2</u>	☒	<u>FACU</u>															
3. <u>Thyrsanthella difformis</u>	<u>1</u>		<u>FACW</u>															
4. _____																		
5. _____																		
<u>6</u> = Total Cover 50% of total cover: <u>3.00</u> 20% of total cover: <u>1.20</u>																		
Remarks: (If observed, list morphological adaptations below).				Hydrophytic Vegetation Present? Yes _____ No ☒														

SOIL

Sampling Point: R-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 18	10YR 3/2	100					Silt	
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- | | |
|---|--|
| ☐ Histosol (A1) | ☐ Polyvalue Below Surface (S8) (LRR S, T, U) |
| ☐ Histic Epipedon (A2) | ☐ Thin Dark Surface (S9) (LRR S, T, U) |
| ☐ Black Histic (A3) | ☐ Loamy Mucky Mineral (F1) (LRR O) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Gleyed Matrix (F2) |
| ☐ Stratified Layers (A5) | ☐ Depleted Matrix (F3) |
| ☐ Organic Bodies (A6) (LRR P, T, U) | ☐ Redox Dark Surface (F6) |
| ☐ 5 cm Mucky Mineral (A7) (LRR P, T, U) | ☐ Depleted Dark Surface (F7) |
| ☐ Muck Presence (A8) (LRR U) | ☐ Redox Depressions (F8) |
| ☐ 1 cm Muck (A9) (LRR P, T) | ☐ Marl (F10) (LRR U) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Ochric (F11) (MLRA 151) |
| ☐ Thick Dark Surface (A12) | ☐ Iron-Manganese Masses (F12) (LRR O, P, T) |
| ☐ Coast Prairie Redox (A16) (MLRA 150A) | ☐ Umbric Surface (F13) (LRR P, T, U) |
| ☐ Sandy Mucky Mineral (S1) (LRR O, S) | ☐ Delta Ochric (F17) (MLRA 151) |
| ☐ Sandy Gleyed Matrix (S4) | ☐ Reduced Vertic (F18) (MLRA 150A, 150B) |
| ☐ Sandy Redox (S5) | ☐ Piedmont Floodplain Soils (F19) (MLRA 149A) |
| ☐ Stripped Matrix (S6) | ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) |
| ☐ Dark Surface (S7) (LRR P, S, T, U) | |

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (**LRR O**)
- ☐ 2 cm Muck (A10) (**LRR S**)
- ☐ Reduced Vertic (F18) (**outside MLRA 150A,B**)
- ☐ Piedmont Floodplain Soils (F19) (**LRR P, S, T**)
- ☐ Anomalous Bright Loamy Soils (F20)
- (MLRA 153B)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: EDCCC +/-60-acre Greenfield Site City/County: Clark County Sampling Date: 2024-09-11
Applicant/Owner: Economic Development Corporation of Clark County, Arkansas State: Arkansas Sampling Point: R-2
Investigator(s): Jimmy Rogers Section, Township, Range: S21 T9S R20W
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0
Subregion (LRR or MLRA): P 135B Lat: 33.9408 Long: -93.15466 Datum: WGS 84
Soil Map Unit Name: 89 - Urbo silty clay loam, occasionally flooded NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒	Is the Sampled Area within a Wetland? Yes _____ No ☒
Hydric Soil Present? Yes _____ No ☒	
Wetland Hydrology Present? Yes _____ No ☒	
Remarks: Reference point in non-silviculture area to the south.	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
☐ Surface Water (A1)	☐ Aquatic Fauna (B13)	☐ Surface Soil Cracks (B6)
☐ High Water Table (A2)	☐ Marl Deposits (B15) (LRR U)	☐ Sparsely Vegetated Concave Surface (B8)
☐ Saturation (A3)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)
☐ Water Marks (B1)	☐ Oxidized Rhizospheres along Living Roots (C3)	☐ Moss Trim Lines (B16)
☐ Sediment Deposits (B2)	☐ Presence of Reduced Iron (C4)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Crayfish Burrows (C8)
☐ Algal Mat or Crust (B4)	☐ Thin Muck Surface (C7)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Iron Deposits (B5)	☐ Other (Explain in Remarks)	☐ Geomorphic Position (D2)
☐ Inundation Visible on Aerial Imagery (B7)		☐ Shallow Aquitard (D3)
☐ Water-Stained Leaves (B9)		☐ FAC-Neutral Test (D5)
		☐ Sphagnum moss (D8) (LRR T, U)
Field Observations:		
Surface Water Present? Yes _____ No ☒	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No ☒
Water Table Present? Yes _____ No ☒	Depth (inches): _____	
Saturation Present? Yes _____ No ☒ (includes capillary fringe)	Depth (inches): _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION (Four Strata) – Use scientific names of plants.

 Sampling Point: R-2

Tree Stratum (Plot size: <u>30 ft r</u>)	Absolute % Cover	Dominant Species?	Indicator Status															
1. <u>Quercus alba</u>	<u>20</u>	<u>✓</u>	<u>FACU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>28.57</u> (A/B)														
2. <u>Carya ovata</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>30</u> = Total Cover 50% of total cover: <u>15.00</u> 20% of total cover: <u>6.00</u>				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>13</u></td> <td>x 2 = <u>26</u></td> </tr> <tr> <td>FAC species <u>26</u></td> <td>x 3 = <u>78</u></td> </tr> <tr> <td>FACU species <u>57</u></td> <td>x 4 = <u>228</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>96</u> (A)</td> <td><u>332</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>3.45</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>13</u>	x 2 = <u>26</u>	FAC species <u>26</u>	x 3 = <u>78</u>	FACU species <u>57</u>	x 4 = <u>228</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>96</u> (A)	<u>332</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>13</u>	x 2 = <u>26</u>																	
FAC species <u>26</u>	x 3 = <u>78</u>																	
FACU species <u>57</u>	x 4 = <u>228</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>96</u> (A)	<u>332</u> (B)																	
<u>35</u> = Total Cover 50% of total cover: <u>17.50</u> 20% of total cover: <u>7.00</u>																		
Sapling/Shrub Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Quercus alba</u>	<u>15</u>	<u>✓</u>	<u>FACU</u>															
2. <u>Carya ovata</u>	<u>10</u>	<u>✓</u>	<u>FACU</u>															
3. <u>Fraxinus pennsylvanica</u>	<u>3</u>	_____	<u>FACW</u>															
4. <u>Ilex decidua</u>	<u>3</u>	_____	<u>FACW</u>															
5. <u>Pinus taeda</u>	<u>2</u>	_____	<u>FAC</u>															
6. <u>Quercus phellos</u>	<u>2</u>	_____	<u>FACW</u>															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
<u>35</u> = Total Cover 50% of total cover: <u>17.50</u> 20% of total cover: <u>7.00</u>																		
Herb Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Chasmanthium sessiliflorum</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators: ☐ 1 - Rapid Test for Hydrophytic Vegetation ☐ 2 - Dominance Test is >50% ☐ 3 - Prevalence Index is ≤3.0 ¹ ☐ Problematic Hydrophytic Vegetation ¹ (Explain)														
2. <u>Dichantherium clandestinum</u>	<u>5</u>	_____	<u>FACW</u>															
3. <u>Elymus virginicus</u>	<u>1</u>	_____	<u>FAC</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
8. _____	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
<u>26</u> = Total Cover 50% of total cover: <u>13.00</u> 20% of total cover: <u>5.20</u>																		
Woody Vine Stratum (Plot size: <u>30 ft r</u>)																		
1. <u>Toxicodendron radicans</u>	<u>3</u>	<u>✓</u>	<u>FAC</u>	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.														
2. <u>Lonicera japonica</u>	<u>2</u>	<u>✓</u>	<u>FACU</u>															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
<u>5</u> = Total Cover 50% of total cover: <u>2.50</u> 20% of total cover: <u>1.00</u>																		
Hydrophytic Vegetation Present? Yes _____ No <u>✓</u>																		
Remarks: (If observed, list morphological adaptations below).																		

SOIL

Sampling Point: R-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0 - 18	2.5YR 4/3	100					Silty Clay	
-								
-								
-								
-								
-								
-								

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|---|---|---|
| ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5)
☐ Organic Bodies (A6) (LRR P, T, U)
☐ 5 cm Mucky Mineral (A7) (LRR P, T, U)
☐ Muck Presence (A8) (LRR U)
☐ 1 cm Muck (A9) (LRR P, T)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Coast Prairie Redox (A16) (MLRA 150A)
☐ Sandy Mucky Mineral (S1) (LRR O, S)
☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Dark Surface (S7) (LRR P, S, T, U) | ☐ Polyvalue Below Surface (S8) (LRR S, T, U)
☐ Thin Dark Surface (S9) (LRR S, T, U)
☐ Loamy Mucky Mineral (F1) (LRR O)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)
☐ Marl (F10) (LRR U)
☐ Depleted Ochric (F11) (MLRA 151)
☐ Iron-Manganese Masses (F12) (LRR O, P, T)
☐ Umbric Surface (F13) (LRR P, T, U)
☐ Delta Ochric (F17) (MLRA 151)
☐ Reduced Vertic (F18) (MLRA 150A, 150B)
☐ Piedmont Floodplain Soils (F19) (MLRA 149A)
☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) | ☐ 1 cm Muck (A9) (LRR O)
☐ 2 cm Muck (A10) (LRR S)
☐ Reduced Vertic (F18) (outside MLRA 150A,B)
☐ Piedmont Floodplain Soils (F19) (LRR P, S, T)
☐ Anomalous Bright Loamy Soils (F20)
(MLRA 153B)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks) |
|---|---|---|

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

Attachment B

Representative Photos



Photo 1: Project overview from northwest corner, looking southeast.



Photo 2: Project overview from north-central project edge, looking south.



Photo 3: Project overview from northeast corner, looking south/southwest.



Photo 4: Project overview from west-central project edge, looking east.



Photo 5: Project overview from east-central project edge, looking west.



Photo 6: Project overview from southeast corner, looking north along project edge.



Photo 7: Project overview from south-central project edge, looking north.



Photo 8: Project overview from southwest corner, looking northeast.



Photo 9: Row Planted pine community (near S-01).



Photo 10: Row Planted pine community (near S-03).



Photo 11: Row Planted pine community (near S-04).



Photo 12: Row Planted pine community (near S-09).



Photo 13: Row Planted pine community (near S-11).



Photo 14: WET-A, near S-06.



Photo 15: WET-A, near S-07.



Photo 16: WET-A, near S-07.



Photo 17: WET-B, near S-10.



Photo 18: Offsite (south) ephemeral drainageway, downstream of WET-A, looking south.



Photo 19: Offsite (south) ephemeral drainageway, downstream of WET-B, looking south.



Photo 20: Reference point (R-1) to the west of the project area.



Photo 21: Reference point (R-2) to the south of the project area.

Attachment C

Reference Maps



October 8, 2024

Wetlands

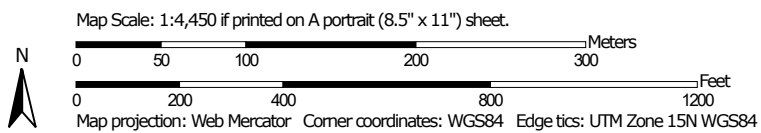
- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Soil Map—Clark County, Arkansas



Soil Map may not be valid at this scale.



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

9/3/2024
Page 1 of 3

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clark County, Arkansas

Survey Area Data: Version 5, Sep 8, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 14, 2019—Jan 7, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

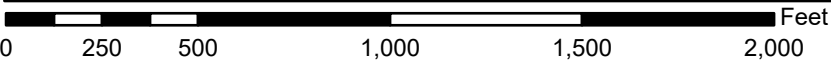
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
20	Eutaw silty clay loam, 0 to 2 percent slopes	40.8	65.0%
22	Gurdon silt loam, 1 to 3 percent slopes	0.5	0.8%
31	Kipling silt loam, 0 to 2 percent slopes	19.9	31.6%
89	Urbo silty clay loam, occasionally flooded	1.6	2.6%
Totals for Area of Interest		62.8	100.0%

National Flood Hazard Layer FIRMMette



93°9'31"W 33°56'52"N



1:6,000

93°8'53"W 33°56'23"N

Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



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 9/3/2024 at 3:35 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.