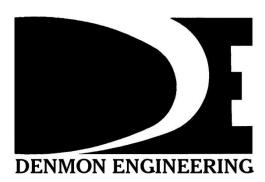
EXHIBIT R EAST OUACHITA DEVELOPMENT WETLAND DELINEATION REPORT







Denmon Engineering, Inc. - P.O. Box 8460, Monroe, LA 71211 – 318-388-1422 – www.denmon.com

EAST OUACHITA DEVELOPMENT WETLANDS DELINEATION REPORT

Wetlands Delineation and Jurisdictional Determination Request

Completed At:

Proposed LED-East Ouachita Project Site Monroe, Ouachita Parish, Louisiana

Report Date:

December 10, 2020

Prepared By:

Wetlands Unlimited, LLC PO Box 1892 West Monroe, Louisiana 71291



| 1.0 | EXECUTIVE SUMMARY | 1 |
|-----|---------------------|---|
| 2.0 | INTRODUCTION | 2 |
| 3.0 | SITE DESCRIPTION | 3 |
| 4.0 | METHODS | 4 |
| 5.0 | SOILS DESCRIPTION | 5 |
| 6.0 | VEGETATIVE ANALYSIS | 6 |
| 7.0 | HYDROLOGY | 7 |
| 8.0 | CONCLUSIONS | 8 |

LIST OF FIGURES

Figure 1 – Site Location Map

Figure 2 – Site Layout and Data Point Locations

Figure 3 – LiDAR Map

LIST OF TABLES

Table 1 – Delineation Survey Results

LIST OF APPENDICES

Appendix A - Site Photo Log

Appendix B - Wetland Data Forms

Appendix C - NRCS Hydric Soils Rating Report

1.0 EXECUTIVE SUMMARY

Wetlands Unlimited, LLC (WU) was contracted to complete a wetlands evaluation and delineation for a site proposed for listing in the Louisiana Certified Sites Program administered by Louisiana Economic Development to be a site for potential future development. The site is located east of Pecanland Mall and south of the Monroe Regional Airport in Monroe, Louisiana. The project boundary is an irregular shaped area located directly south of Millhaven road and approximately 100 feet east of an unnamed access road that borders the study area. The northern boundary of the wetland delineation study is located directly south of Millhaven road where two private properties intersect the boundary. Interstate 20 runs parallel to the southern boundary for 0.26 miles, then the boundary extends 1,225 feet to the northeast where it connects to the eastern boundary. The center of the project is located at approximate Latitude 32.494721° and approximate Longitude -92.024306°. An active soybean agricultural field is currently established across much of the property, where natural soil and vegetative characteristics have been significantly altered. A small circular area of residual overstory vegetation is present on the property at approximate Latitude 32.493074° and approximate Longitude -92.025773°, covering a total of 0.27 acres. Elevations across the property primarily appear level throughout, with the eastern portion of the study area being the exception. A north-south access road was constructed across the property, located approximately 783 feet west of the eastern project boundary. A low area along the eastern boundary was identified during the field study, where soybean production was not active, presumably due to enduring wet conditions. In this area natural vegetation has begun to reestablish itself into an emergent wetland scenario. No streams were identified on the property during the field survey.

WU estimates approximately 0.94 acres of freshwater emergent wetlands jurisdictional to the United States Army Corps of Engineers (USACE) are located within the proposed project footprint and designated area of this wetland delineation and evaluation. **Table 1** below and **Figure 2- Site Layout and Data Point Locations**, show the locations of data points chosen and installed for this delineation.

| Table 1: Delineation Survey Results | | | | | |
|---|-------------|-------------------|------------------|--|--|
| Data | Wetland | | | | |
| Point | Designation | Latitude** | Longitude** | | |
| 1 | Non-Wet | 32° 29' 35.123" N | 92° 1' 40.670" W | | |
| 2 | Non-Wet | 32° 29' 35.147" N | 92° 1' 32.911" W | | |
| 3* | Wet | 32° 29' 42.196" N | 92° 1' 14.795" W | | |
| 4 | Non-Wet | 32° 29' 41.713" N | 92° 1' 15.048" W | | |
| 5 | Non-Wet | 32° 29' 42.704" N | 92° 1' 15.920" W | | |
| 6 | Non-Wet | 32° 29' 42.924" N | 92° 1' 15.302" W | | |
| 7 | Non-Wet | 32° 29' 49.337" N | 92° 1' 20.966" W | | |
| 8 | Non-Wet | 32° 29' 48.651" N | 92° 1' 30.228" W | | |
| * Estimated Jurisdictional Wetland acreage = 0.94 acres | | | | | |

** UTM Zone 15 North

2.0 INTRODUCTION

A preliminary desktop evaluation was conducted to identify portions of the site as potential wetlands jurisdictional to the USACE. Upon completion of the desktop evaluation, wetland delineation field activities were conducted to confirm/invalidate the desktop findings and identify the boundaries between onsite uplands, wetlands, and streams likely considered jurisdictional to the USACE. These boundaries were determined based on the criteria described in the 1987 *Corps of Engineers Wetlands Delineation Manual* and 2010 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain (Version 2.0)*. Other technical resources utilized include the Ouachita Parish Soil Survey; Soil Mapping Units and Hydric Soils Designations – Louisiana, First Edition; Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database for Ouachita Parish, Louisiana; ESRI 2017: ArcGIS Desktop: Release 10.5.1, Redlands, CA: Environmental Systems Research Institute; National List of Plant Species that occur in Wetlands: Southeast (Region 2), May 1988; Louisiana State University Department of Geography and Anthropology, Louisiana Statewide GIS Atlas; Munsell Soil Color Book, 2017 Edition; and various botanical references.

This document summarizes the delineation study and conclusions. The support exhibits for this report are included as figures and appendices. The Figures section of the report includes the following figures: Figure 1 – Site Location Map, Figure 2 – Site Layout and Data Point Locations, and Figure 3 – LiDAR Map. The appendices include the following: Appendix A – Site Photo Log, Appendix B – Wetland Data Forms, and Appendix C – NRCS Hydric Soils Rating Report.

3.0 SITE DESCRIPTION

The subject property consists primarily of an active agricultural field that has been cultivated for soybean production but does have a small section of residual overstory vegetation, and a man-made access road. The study area is located directly south of Millhaven road and 100 feet east of an unnamed access road that borders the study area. The northern boundary of the wetland delineation study is located at approximate Latitude 32.497586° and approximate Longitude -92.025224°, approximately 1.72 miles east of the intersection of Millhaven Road and Garrett Road. The western boundary is flanked by an unnamed access road in the southern section of the study area and a nursing home in the northern half of the study area. Interstate 20 runs parallel to the southern boundary for 0.26 miles, then the boundary extends 1,225 feet to the northeast where it connects to the eastern boundary, which is flanked by overstory vegetation. The manmade access road transects the property north to south approximately 783 feet west of the eastern most property boundary.

Most of the study area is currently being used as a row crop agricultural field and is void of overstory trees. These cultivated areas on the property are dominated by soybean (*Glycine max*) and residual herbaceous species. A singular area with residual overstory vegetation is located at approximate Latitude 32.492968° and approximate Longitude -92.025807°, where agricultural activities were never implemented. This area is host to mature hardwood species in the overstory, midstory sapling regeneration, and a myriad of vines in the understory. Depressional areas along the eastern boundary, where soybean production was presumably hindered due to water retention, host several herbaceous wetland species in the understory. No streams or ditches were observed during the site survey.

4.0 METHODS

By definition, jurisdictional wetlands contain hydrophytic vegetation, hydric soils, and hydrology (periodic inundation or saturation in the upper 12 inches of the soil at some time during the growing season). All three elements must be present in an area to qualify as jurisdictional wetlands. With reference to **Figure 2**, Eight data points were installed to evaluate site characteristics in relation to wetland criteria. Soils, vegetation, and hydrology were examined at each data point. Data point locations are monumented on the ground with flagging and labeled by corresponding data point number. GPS locations of each data point were logged at plot center using a Trimble Geo7x Datalogger. Soils were evaluated by digging soil pits approximately 12 - 16 inches deep where soil descriptions and color could be compared to the published Ouachita Parish Soil Survey and NRCS soils descriptions. Vegetation was evaluated by noting, at a minimum, the species exhibiting 20% or greater dominance in each stratum (tree, sapling, shrub, herb, and woody vine) within a 30-foot radius of the soil pit location.

5.0 SOILS DESCRIPTION

With reference to the NRCS Soils Map and the Ouachita Parish Soil Survey, the subject property contains one primary soil type:

• Gallion silt loam

The NRCS hydric soils rating data for the property is provided in **Appendix C** of this report. Gallion silt loam is not listed on the NRCS hydric soils listing for Ouachita Parish, Louisiana.

According to the Ouachita Parish Soil Survey, Gallion silt loam soils are well drained, highly permeable soil series that was formed from loamy alluvium. Gallion silt loam soils are nearly level soils found near natural levees with slopes ranging from 0 to 1 percent. They are rarely believed to be flooded by stream overflow, and ponding is not frequent. Its drainage class is well drained, and their ability to transmit water is moderately high, so any inundation that does occur in the study area will disperse quickly. This soils series is considered prime farmland throughout its range.

6.0 VEGETATIVE ANALYSIS

Vegetation at each of the observed data points was evaluated to determine the hydrophytic designation of the plant community in each plot. A wetland/non-wetland designation was ultimately determined for the vegetation across all strata within the plant community. Because many plants exhibit a wide hydrologic tolerance there may not be strong differences, if any, across soil series having similar characteristics. Individual plant species have been assigned a hydrologic tolerance indicator status based on the ability to exist in low soil oxygen - highly saturated soil environments. The individual plants and their indicator status present during the field study were recorded on the data sheets for each data point. To meet the hydrophytic plant criteria, the vegetation at a data point must test positive for one of three indicator tests:

- Rapid Test: all dominant species across all strata at a given data point are rated OBL or FACW, or a combination of the two categories, based on a visual assessment.
- **Dominance Test:** >50% of the dominant plants at a given data point must rate an indicator status of facultative (FAC), facultative wetland (FACW), or obligate wetland (OBL).
- Prevalence Index: data points with a value of 3.0 or less when the weighted-average of all plant species is calculated using the numeric system outlined in the Wetland Determination Data Form

 Atlantic and Gulf Coastal Plain Region.

A total of fifteen species of plants listed in the USACE National Wetlands Plant List asserting 20% or greater dominance in their respective strata were recorded on the data points. Of these species, 6 were designated as FACU, 2 were designated as FACU, and 1 was designated as OBL. A complete listing of the dominant and non-dominant species observed at each data point is provided in the data sheets in **Appendix B – Wetland Data Forms**.

It should be noted that a majority of the allocated data point locations in this delineation study were located in an active row crop field cultivated for soybean (*Glycine max*) production. After extensive research WU could not find a definitive opinion on the wetland indicator status for this species. As such, soybean was issued a status indicator of NI (No Indicator) and not included in the percent cover analysis in plots where it was present. Soybean coverage throughout the study area was high and would have been considered a dominant species in many plots where it was identified.

7.0 HYDROLOGY

The term "wetland hydrology" encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively. Such characteristics are usually present in areas that are inundated or have soils that are saturated to the surface for sufficient duration to develop hydric soils and support vegetation typically adapted for life in periodically anaerobic soil conditions (1987 Field Guide to Wetland Delineation, page 31).

At the time of the site visit, the majority of the property was noted to be relatively dry, with evidence of lingering inundation in the low area along the eastern property boundary. Only one data point exhibited adequate characteristics of primary and secondary hydrologic indicators at the study site (DP-3), meaning wetland hydrology was present at that data point location. A number of data point locations passed the FAC neutral test (DP-4, DP-5, and DP-6) but did not have any other secondary hydrologic indicators, and therefore did not have wetland hydrology. Descriptions of primary and secondary hydrologic indicators can be found on the data forms in **Appendix B**.

8.0 CONCLUSIONS

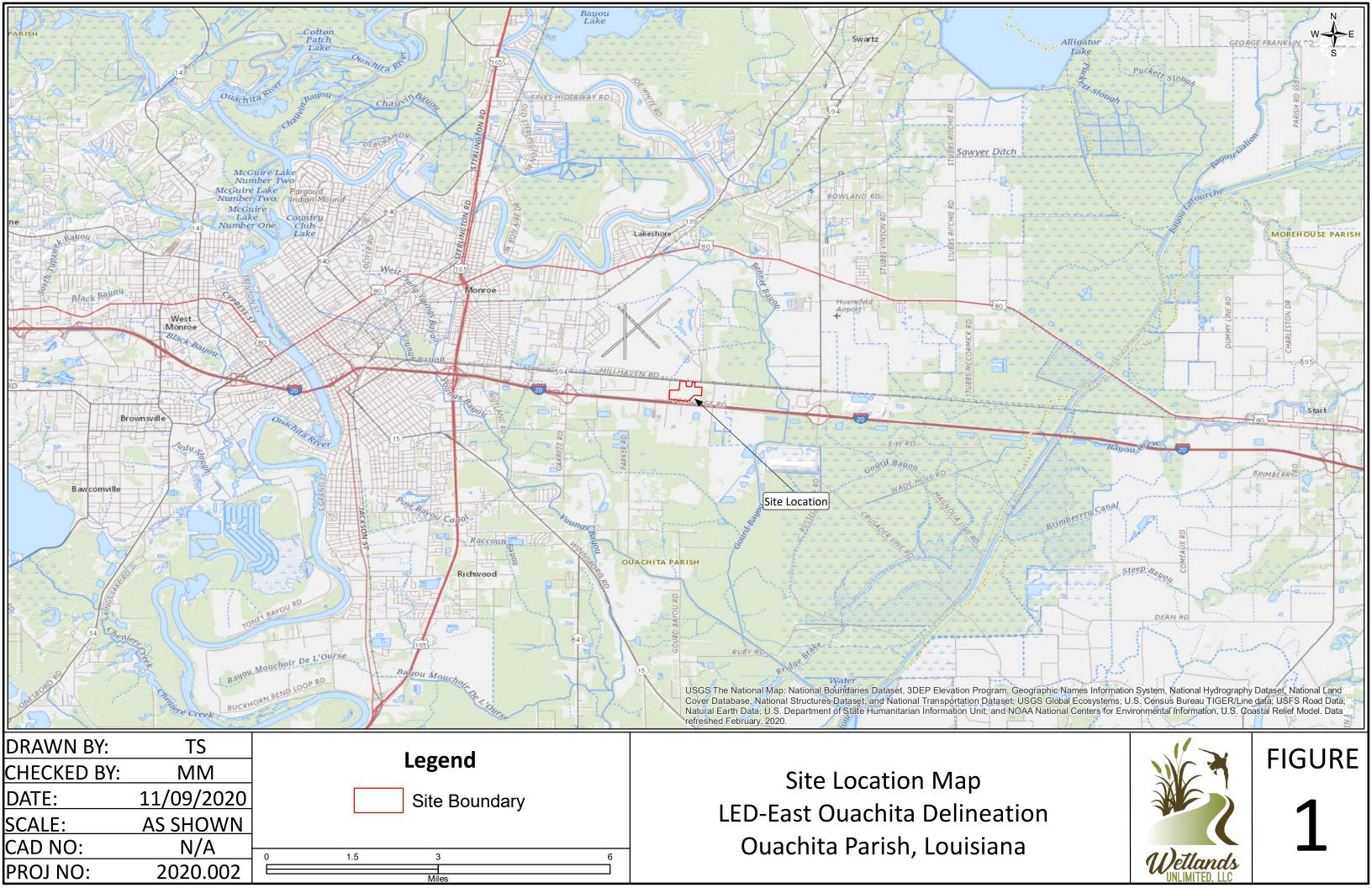
This approximately 66.45-acre project area located in Ouachita Parish, Louisiana was examined for the occurrence of wetlands and/or waters of the United States that may be determined to be under USACE jurisdiction. As discussed in the text portion of this report and depicted in the attached figures and data sheets, evidence of approximately 0.94 acres of jurisdictional wetlands at the site does exist. The jurisdictional wetlands observed at the site appeared to be best classified as freshwater emergent wetlands.

Eight data points were analyzed for wetland indicators, and one was found to sufficiently exhibit the necessary hydrology, vegetation, and soil characteristics to be classified as a wetland area (DP-3). The locations of each of the observed data points are provided in Figure 2 – Site Layout and Data Point Locations and Figure 3 – LiDAR Map.

The data point locations were mapped using a Trimble Geo7X asset surveyor and Pathfinder Version 2.70 software. Landscape features are presented to be within 18 inches of their true global position (differentially corrected positions).

The wetland delineation and conclusions presented herein are the opinion of the investigator and should be considered as a preliminary determination. Final authority as to the presence of jurisdictional wetlands lies with the USACE.







DRAWN BY: TS MM CHECKED BY: DATE: 11/13/2020 SCALE: **AS SHOWN**

N/A CAD NO: PROJ NO: 2020.002 Legend

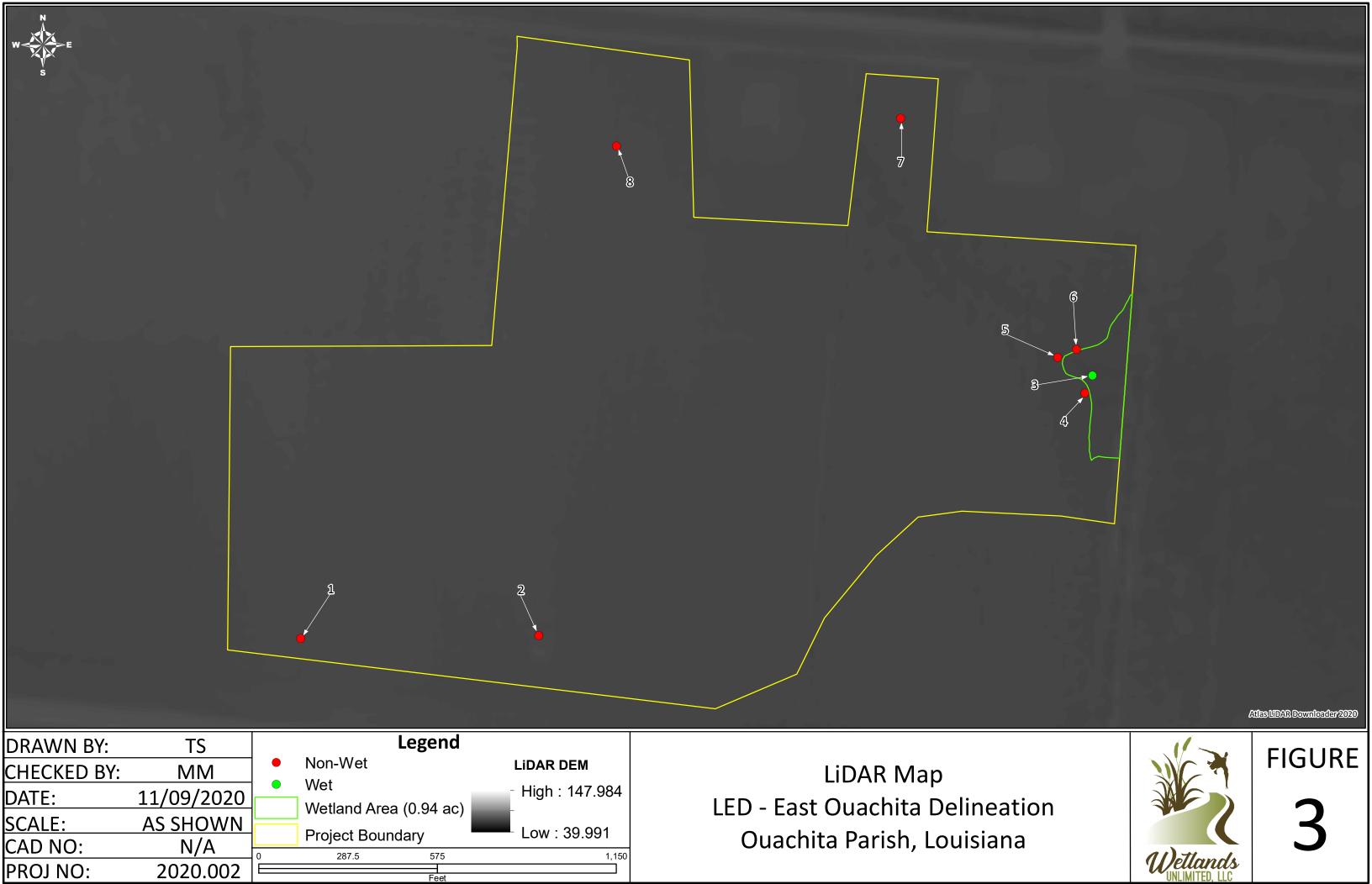
Wetland Area (0.94ac) Non-Wet

Project Boundary Wet

287.5 575 Site Layout and Data Point Locations LED - East Ouachita Delineation Ouachita Parish, Louisiana



FIGURE



APPENDIX A
Site Photo Log



PHOTO NO. 1 DESCRIPTION:

Data Point 1: Center



PHOTO NO. 2 DESCRIPTION:

Data Point 1: Soil Profile



PHOTO NO. 3
DESCRIPTION:

Data Point 1: Facing North



PHOTO NO. 4
DESCRIPTION:

Data Point 1: Facing East



PHOTO NO. 5 DESCRIPTION:

Data Point 1: Facing South



PHOTO NO. 6 DESCRIPTION:

Data Point 1: Facing West



PHOTO NO. 7 DESCRIPTION:

Data Point 2: Center



PHOTO NO. 8 DESCRIPTION:

Data Point 2: Soil Profile



PHOTO NO. 9 DESCRIPTION:

Data Point 2: Facing North



PHOTO NO. 10 DESCRIPTION:

Data Point 2: Facing East



PHOTO NO. 11 DESCRIPTION:

Data Point 2: Facing South



PHOTO NO. 12 DESCRIPTION:

Data Point 2: Facing West



PHOTO NO. 13 DESCRIPTION:

Data Point 3: Center



PHOTO NO. 14 DESCRIPTION:

Data Point 3: Soil Profile



PHOTO NO. 15 DESCRIPTION:

Data Point 3: Facing North



PHOTO NO. 16 DESCRIPTION:

Data Point 3: Facing East



PHOTO NO. 17 DESCRIPTION:

Data Point 3: Facing South



PHOTO NO. 18 DESCRIPTION:

Data Point 3: Facing West



PHOTO NO. 19 DESCRIPTION:

Data Point 4: Center



PHOTO NO. 20 DESCRIPTION:

Data Point 4: Soil Profile



PHOTO NO. 21 DESCRIPTION:

Data Point 4: Facing North



PHOTO NO. 22 DESCRIPTION:

Data Point 4: Facing East



PHOTO NO. 23 DESCRIPTION:

Data Point 4: Facing South



PHOTO NO. 24 DESCRIPTION:

Data Point 4: Facing West



PHOTO NO. 25 DESCRIPTION:

Data Point 5: Center



PHOTO NO. 26 DESCRIPTION:

Data Point 5: Soil Profile



PHOTO NO. 27 DESCRIPTION:

Data Point 5: Facing North



PHOTO NO. 28 DESCRIPTION:

Data Point 5: Facing East



PHOTO NO. 29 DESCRIPTION:

Data Point 5: Facing South



PHOTO NO. 30 DESCRIPTION:

Data Point 5: Facing West



PHOTO NO. 31 DESCRIPTION:

Data Point 7: Center



PHOTO NO. 32 DESCRIPTION:

Data Point 7: Soil Profile



PHOTO NO. 33 DESCRIPTION:

Data Point 7: Facing North



PHOTO NO. 34 DESCRIPTION:

Data Point 7: Facing East



PHOTO NO. 35 DESCRIPTION:

Data Point 7: Facing South

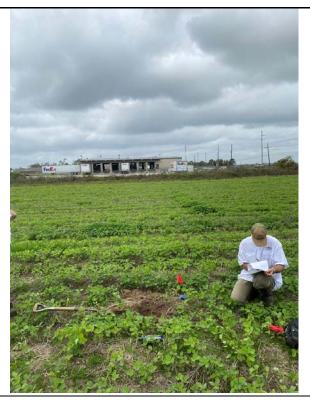


PHOTO NO. 36 DESCRIPTION:

Data Point 7: Facing West



PHOTO NO. 37 DESCRIPTION:

Data Point 8: Center



PHOTO NO. 38 DESCRIPTION:

Data Point 8: Soil Profile

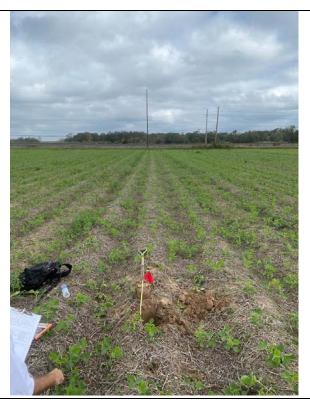


PHOTO NO. 39 DESCRIPTION:

Data Point 8: Facing North

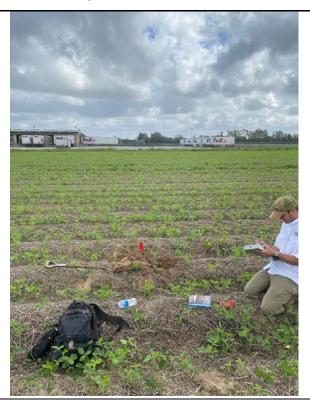


PHOTO NO. 40 DESCRIPTION:

Data Point 8: Facing East



PHOTO NO. 41 DESCRIPTION:

Data Point 8: Facing South



PHOTO NO. 42 DESCRIPTION:

Data Point 8: Facing West

APPENDIX B
Wetland Data Forms

| Project/Site: LED - East Ouachita Delineation City | _{//County:} Monroe/Ouachita | Sampling Date: 10-27-2020 |
|--|---|---------------------------------|
| Applicant/Owner: EAST OUACHITA DEVELOPMENT, LLC | //County: Monroe/Ouachita State: LA | Sampling Point: DP-1 |
| | ction, Township, Range: S2 T17N R4E | - · · · · <u></u> |
| | al relief (concave, convex, none): None | Slope (%): 0-1 |
| Subregion (LRR or MLRA): MLRA 131B Lat: 32° 29' 35 | 5.123" N Long. 92° 1' 40.670" V | V Datum. UTMZ15N |
| Soil Map Unit Name: Gallion Silt Loam | NWI classifi | cation: Not Mapped |
| Are climatic / hydrologic conditions on the site typical for this time of year? | Yes No (If no, explain in F | Remarks.) |
| Are Vegetation, Soil, or Hydrology significantly dist | curbed? Are "Normal Circumstances" | present? Yes No |
| Are Vegetation, Soil, or Hydrology naturally problem | matic? (If needed, explain any answe | ers in Remarks.) |
| SUMMARY OF FINDINGS – Attach site map showing sa | | |
| Lhudrophutia Variatation Drasanta Var | | |
| Hydrophytic Vegetation Present? Yes No _ ✓ Hydric Soil Present? Yes No _ ✓ | Is the Sampled Area | / |
| Hydrophytic Vegetation Present? Yes No ✓ Hydric Soil Present? Yes No ✓ Wetland Hydrology Present? Yes No ✓ | within a Wetland? Yes | No <u></u> |
| Remarks: | | |
| Active soybean field. | | |
| Notive 30ybean neid. | | |
| | | |
| | | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | Secondary Indic | ators (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil | l Cracks (B6) |
| Surface Water (A1) Aquatic Fauna (B13) | ☐ Sparsely Ve | egetated Concave Surface (B8) |
| High Water Table (A2) Marl Deposits (B15) (L | RR U) Drainage Pa | atterns (B10) |
| Saturation (A3) Hydrogen Sulfide Odor | · (C1) | ines (B16) |
| Water Marks (B1) — Oxidized Rhizospheres | s along Living Roots (C3) 🔲 Dry-Season | Water Table (C2) |
| Sediment Deposits (B2) Presence of Reduced I | lron (C4) | rrows (C8) |
| ☐ Drift Deposits (B3) ☐ Recent Iron Reduction | _ | /isible on Aerial Imagery (C9) |
| Algal Mat or Crust (B4) Thin Muck Surface (C7) | | Position (D2) |
| ☐ Iron Deposits (B5) ☐ Other (Explain in Rema | | |
| Inundation Visible on Aerial Imagery (B7) | FAC-Neutra | ` ' |
| Water-Stained Leaves (B9) | Sphagnum i | moss (D8) (LRR T, U) |
| Field Observations: | | |
| Surface Water Present? Yes No Depth (inches): | | |
| Water Table Present? Yes No Depth (inches): | | nt? Yes No_ |
| Saturation Present? Yes No _ ✓ _ Depth (inches): (includes capillary fringe) | Wetland Hydrology Prese | nt? Yes No <u>▼</u> |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, p | revious inspections), if available: | |
| | | |
| Remarks: | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| VEGETATION | (Five Strata) | - Use | scientific | names o | f plants |
|------------|---------------|-------|------------|---------|----------|
| | | | | | |

| 30 Foot | Absolute Dominant | | Dominance Test worksheet: |
|---|-------------------|---|---|
| <u>Tree Stratum</u> (Plot size: 30 Feet) | % Cover Species | ? _Status_ | Number of Dominant Species |
| 1. None | 77 | 20 <u></u> | That Are OBL, FACW, or FAC: |
| 2 | | | Total Number of Dominant |
| 3 | 211 | | Species Across All Strata: 1 (B) |
| 4 | | | |
| | | | Percent of Dominant Species That Are OBL FACW or FAC: (A/B) |
| 5 | | | That Are OBL, FACW, or FAC: (A/B) |
| 6 | | . — | Prevalence Index worksheet: |
| 0 | = Total Co | _ | Total % Cover of:Multiply by: |
| 50% of total cover: 0 | 20% of total cove | r: <u>U</u> | OBL species 0 $x 1 = 0$ |
| Sapling Stratum (Plot size: 30 Feet) | | | |
| 1. None | | | FACW species $\frac{0}{4F}$ $x = \frac{0}{4F}$ |
| 2 | | | FAC species $\underline{15}$ $\times 3 = \underline{45}$ |
| 3 | | | FACU species <u>35</u> x 4 = <u>140</u> |
| | | . — — | UPL species $1 \times 5 = 5$ |
| 4 | | | Column Totals: 51 (A) 190 (B) |
| 5 | | . — | |
| 6. | | <u>-</u> | Prevalence Index = B/A = 3.73 |
| | 0 = Total Co | | Hydrophytic Vegetation Indicators: |
| 50% of total cover: 0 | 20% of total cove | r: <u>0</u> | 1 - Rapid Test for Hydrophytic Vegetation |
| Shrub Stratum (Plot size: 30 Feet) | | | 2 - Dominance Test is >50% |
| 1. None | | | 3 - Prevalence Index is ≤3.0¹ |
| 2. | | | - |
| | | | Problematic Hydrophytic Vegetation¹ (Explain) |
| 3. | | | |
| 4 | | . — | ¹ Indicators of hydric soil and wetland hydrology must |
| 5 | | | be present, unless disturbed or problematic. |
| 6 | | | Definitions of Five Vegetation Strata: |
| | 0 = Total Co | ver | Tree – Woody plants, excluding woody vines, |
| 50% of total cover: 0 | 20% of total cove | r: 0 | approximately 20 ft (6 m) or more in height and 3 in. |
| Herb Stratum (Plot size: 30 Feet) | | | (7.6 cm) or larger in diameter at breast height (DBH). |
| 1. Glycine max | 50 | NI | |
| 2. Poa annua | 35 Yes | FACU | Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less |
| | | FAC | than 3 in. (7.6 cm) DBH. |
| 3. Ellisia nyctelea | 10 | | |
| 4. Mollugo verticillata | 5 | FAC_ | Shrub – Woody plants, excluding woody vines, |
| 5. Brassica juncea | | UPL | approximately 3 to 20 ft (1 to 6 m) in height. |
| 6 | | | Herb - All herbaceous (non-woody) plants, including |
| 7 | | | herbaceous vines, regardless of size, and woody |
| 8. | | | plants, except woody vines, less than approximately |
| | | | 3 ft (1 m) in height. |
| 9 | H/7 | . — | Woody vine - All woody vines, regardless of height. |
| 10 | | | |
| 11 | | | |
| | 51 = Total Co | | |
| 50% of total cover: 26 | 20% of total cove | r: <u>11 </u> | |
| Woody Vine Stratum (Plot size: 30 Feet) | | | |
| 1. None | | | |
| 2 | | • | |
| E . | | | |
| 3 | | | |
| 4 | · | .— | |
| 5 | HOO | | Hydrophytic |
| | 0 = Total Co | ver | Vegetation |
| 50% of total cover: 0 | 20% of total cove | r: <u>0</u> | Present? Yes No V |
| Remarks: (If observed, list morphological adaptations bel | OW) | - | <u></u> |
| (| Glycine max is | | d in the Wetland Plant List. Therefore, it was |
| | | | (no indicator) and not included in the hydric |
| | rating calculat | ions. | |

| Profile Desc | ription: (Describe | to the depth | needed to docu | ment the i | ndicator | or confirn | n the absence o | of indicators.) |
|--------------|--|----------------|----------------|------------|----------|------------------|------------------------|--|
| Depth | Matrix | | | x Features | | . 2 | | |
| (inches) | Color (moist) | | Color (moist) | % | Type' | Loc ² | <u>Texture</u> | Remarks |
| 0-12 | 7.5YR 4/4 | _ 100 _ | | | | | Sandy Loam | |
| 12-14 | 5YR 4/4 | 100 | | | | | Sandy Loam | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | - |
| 1 | | | | | | | | |
| | oncentration, D=De Indicators: (Applicators) | | | | | ains. | | PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ : |
| l <u> </u> | | Cable to all L | _ | | • | DD C T I | | • |
| Histosol | oipedon (A2) | | Polyvalue Be | | , , , | | · — | uck (A9) (LRR O) uck (A10) (LRR S) |
| | stic (A3) | | Loamy Muck | | | | | ed Vertic (F18) (outside MLRA 150A,B) |
| | en Sulfide (A4) | | Loamy Gley | | | , | | nt Floodplain Soils (F19) (LRR P, S, T) |
| | d Layers (A5) | | Depleted Ma | | | | L Anomal | ous Bright Loamy Soils (F20) |
| | Bodies (A6) (LRR I | | Redox Dark | , | , | | , | A 153B) |
| | icky Mineral (A7) (L | | Depleted Da | | | | | rent Material (TF2) |
| _ | esence (A8) (LRR luck (A9) (LRR P, T) | J) | Redox Depr | • | 5) | | | nallow Dark Surface (TF12) Explain in Remarks) |
| _ | d Below Dark Surfa | ce (A11) | Depleted Oc | , | (MLRA 1 | 51) | | -xpiaiii iii (cinaiks) |
| | ark Surface (A12) | , | Iron-Mangar | | | | T) ³ Indica | ators of hydrophytic vegetation and |
| | rairie Redox (A16) (| | = | | | , U) | | and hydrology must be present, |
| | Mucky Mineral (S1) | (LRR O, S) | Delta Ochric | | | | | ss disturbed or problematic. |
| | Gleyed Matrix (S4) Redox (S5) | | Reduced Ve | | | | | |
| | Matrix (S6) | | | | | | RA 149A, 153C, | 153D) |
| | rface (S7) (LRR P, | S, T, U) | | g = 0 a | , (. | _0/ (| ,, | |
| Restrictive | Layer (if observed |): | | | | | | |
| Type: | | | | | | | | |
| Depth (in | ches): | | <u></u> | | | | Hydric Soil F | Present? Yes No |
| Remarks: | -:1 11 1 | | | J : | | -l 4- | | -1 d.v.ati |
| 5 | oli nad been | previousi | y worked an | d was i | n rows | aue to | agricultur | al production. |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| İ | | | | | | | | |

| Project/Site: LED - East Ouachita Delineation City/ | County: Monroe/Ouachita | Sampling Date: 10-27-2020 |
|--|--|---------------------------------|
| Applicant/Owner: EAST OUACHITA DEVELOPMENT, LLC | County: Monroe/Ouachita State: LA | Sampling Point: DP-2 |
| | tion, Township, Range: S2 T17N R4E | |
| | al relief (concave, convex, none): Concave | Slope (%): 0-1 |
| Subregion (LRR or MLRA): MLRA 131B Lat: 32° 29' 35 | .147" N Long: 92° 1' 32.911" W | / Datum: UTMZ15N |
| Soil Map Unit Name: Gallion Silt Loam | NWI classific | cation: Not Mapped |
| Are climatic / hydrologic conditions on the site typical for this time of year? | | |
| Are Vegetation, Soil, or Hydrology significantly distu | | |
| Are Vegetation, Soil, or Hydrology naturally problem | | |
| SUMMARY OF FINDINGS – Attach site map showing sai | | , |
| Hydrophytic Vegetation Present? Yes _ ✓ _ No Hydric Soil Present? Yes No _ ✓ _ Wetland Hydrology Present? Yes No _ ✓ _ | Is the Sampled Area within a Wetland? Yes | No <u>√</u> |
| Wetland Hydrology Present? Yes No✓ Remarks: | | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | Secondary Indica | ators (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | | Cracks (B6) |
| Surface Water (A1) Aquatic Fauna (B13) | _ | getated Concave Surface (B8) |
| High Water Table (A2) High Water Table (A2) Marl Deposits (B15) (LF | | |
| Saturation (A3) Hydrogen Sulfide Odor | | |
| ☐ Water Marks (B1) ☐ Oxidized Rhizospheres | · · — | Water Table (C2) |
| Sediment Deposits (B2) Presence of Reduced In | on (C4) $\qquad \qquad \qquad \qquad \square$ Crayfish Bur | rows (C8) |
| Drift Deposits (B3) | n Tilled Soils (C6) 🔲 Saturation V | isible on Aerial Imagery (C9) |
| Algal Mat or Crust (B4) Thin Muck Surface (C7) | <u> </u> | Position (D2) |
| ☐ Iron Deposits (B5) ☐ Other (Explain in Remai | - | |
| Inundation Visible on Aerial Imagery (B7) | ☐ FAC-Neutral | ` ' |
| Water-Stained Leaves (B9) | <u>∐</u> Sphagnum r | noss (D8) (LRR T, U) |
| Field Observations: | | |
| Surface Water Present? Yes No Depth (inches): | | |
| Water Table Present? Yes No Depth (inches): | | nt? Yes No |
| Saturation Present? Yes No Depth (inches): | Wetland Hydrology Preser | 1t? Yes No <u>▼</u> |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr | evious inspections), if available: | |
| | | |
| Remarks: | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| VEGETATION | (Five Strata) | - Use | scientific | names o | f plants |
|------------|---------------|-------|------------|---------|----------|
| | | | | | |

| - 30 Feet | | Dominant | | Dominance Test worksheet: |
|---|------------------|------------|---------------|--|
| <u>Tree Stratum</u> (Plot size: 30 Feet | 10 | Species? | | Number of Dominant Species That Are OBL FACIAL or FACI |
| 1. Celtis laevigata | 50 | Yes | FAC | That Are OBL, FACW, or FAC: (A) |
| 2. Quercus nigra | 10 | | FAC | Total Number of Dominant |
| 3. Carya illinoinensis | 5 | • | FACU | Species Across All Strata: 5 (B) |
| 4. Ligustrum sinense | 2 | 7 | FAC_ | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: 60 (A/B) |
| 6 | | | | |
| | 67 | = Total Co | ver | Prevalence Index worksheet: |
| 50% of total cover: 34_ | 20% of | total cove | r: 14 | Total % Cover of:Multiply by: |
| Sapling Stratum (Plot size: 30 Feet) | | | | OBL species x 1 = |
| 1. Triadica sebifera | 1 | | FAC | FACW species x 2 = |
| 2 Sassafras albidum | 5 | Yes | FACU | FAC species x 3 = |
| | | | | FACU species x 4 = |
| 3 | | 7 | | UPL species x 5 = |
| 4 | | | | Column Totals: (A) (B) |
| 5 | | | | |
| б | | | | Prevalence Index = B/A = |
| • | 55 | = Total Co | | Hydrophytic Vegetation Indicators: |
| 50% of total cover: 3 | 20% of | total cove | r: <u>2</u> | 1 - Rapid Test for Hydrophytic Vegetation |
| Shrub Stratum (Plot size: 30 Feet) | | | | ✓ 2 - Dominance Test is >50% |
| 1. None | | | | 3 - Prevalence Index is ≤3.0 ¹ |
| 2 | | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 3 | | | | |
| 4 | | | | ¹ Indicators of hydric soil and wetland hydrology must |
| 5. | | | | be present, unless disturbed or problematic. |
| 6 | | | | Definitions of Five Vegetation Strata: |
| | _ | = Total Co | wer | - |
| 50% of total cover: 0 | - | | | Tree – Woody plants, excluding woody vines, |
| | 20% 0 | total cove | 1 | approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). |
| Herb Stratum (Plot size: 30 Feet) 1. Solidago altissima | 1 | | FACU | (1.5 only of larger in diameter at preast neight (BBH). |
| | - | V | | Sapling – Woody plants, excluding woody vines, |
| 2. Carex blanda | - <u>10</u> 5 | Yes | FAC | approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. |
| 3. Claytonia virginica | - 5 | Yes | FACU | · · · · · · · · · · · · · · · · · · · |
| 4. <u>-</u> | | 7 | | Shrub – Woody plants, excluding woody vines, |
| 5 | | | | approximately 3 to 20 ft (1 to 6 m) in height. |
| 6 | - — | · • | | Herb - All herbaceous (non-woody) plants, including |
| 7 | | | | herbaceous vines, regardless of size, and woody |
| 8 | | | | plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 9. | 500 | NS: | S | |
| 10 | | | | Woody vine – All woody vines, regardless of height. |
| 11. | | | | 1 |
| ···- <u>-</u> | 16 | = Total Co | wer | |
| 500/ official courses 8 | | | | |
| 50% of total cover: 8 | ∠∪% 01 | total cove | · | |
| Woody Vine Stratum (Plot size: 30 Feet) 1. Ampelopsis arborea | 10 | | FAC | |
| | 10 | | FAC | |
| 2. Vitis rotundifolia | 20 | Vari | | |
| 3. Toxicodendron radicans | 80 | Yes | FAC | |
| 4. Smilax glauca | 2 | - | FAC | |
| _{5.} Bignonia capreolata | 5 | | FAC | Hydrophytic |
| | 117 | = Total Co | ver | Vegetation |
| 50% of total cover: <u>59</u> | 20% of | total cove | r: <u>2</u> 4 | Present? Yes V No No |
| Remarks: (If observed, list morphological adaptations bel | OW) | | | |
| | Locate | ed within | n an area | that has not been converted to agricultural |
| | use. | | | |
| | | | | |

| Profile Desc | ription: (Describe | to the depth | needed to docu | ment the ir | ndicator | or confirm | n the absence of | f indicators.) | |
|-----------------|--|-----------------|----------------|-------------|---------------------|------------------|--------------------------|--|----------------|
| Depth | Matrix | | | x Features | | | | | |
| (inches) 0-4 | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | Texture | Remarks | |
| | 7.5YR 3/2 | _ 100 _ | | | | | Sandy Loam | | |
| 4-14 | 7.5YR 4/3 | | | | | | Sandy Loam | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | - | | | | | | | | _ |
| | | | | | | | | | |
| 1 | | | | | | | 2 | | |
| | oncentration, D=De Indicators: (Applicators) | | | | | ains. | | L=Pore Lining, M=Mate or Problematic Hydric | |
| Histosol | | Lable to all Li | Polyvalue Be | | • | DD C T I | | ck (A9) (LRR 0) | Julis . |
| | oipedon (A2) | | Thin Dark S | | . , . | | | ck (A10) (LRR S) | |
| Black Hi | | | Loamy Muck | | | | | Vertic (F18) (outside | MLRA 150A,B) |
| | en Sulfide (A4) | | Loamy Gley | - | | , | | t Floodplain Soils (F19 | |
| | d Layers (A5) | | Depleted Ma | | | | | us Bright Loamy Soils | (F20) |
| | Bodies (A6) (LRR I | | Redox Dark | | | | 1 1 ' | 153B) | |
| | icky Mineral (A7) (L esence (A8) (LRR I | | Depleted Da | | | | | ent Material (TF2) allow Dark Surface (TF | 12) |
| | ick (A9) (LRR P, T) | | Marl (F10) (I | ` |) | | | xplain in Remarks) | 12) |
| | d Below Dark Surfa | | Depleted Oc | , | MLRA 1 | 51) | <u> </u> | xpiair ii rtomarko) | |
| | ark Surface (A12) | | Iron-Mangar | nese Masse | es (F12) (I | LRR O, P, | T) ³ Indicate | ors of hydrophytic vege | etation and |
| | rairie Redox (A16) (| | | | | , U) | | nd hydrology must be p | |
| | Mucky Mineral (S1) | (LRR O, S) | Delta Ochric | | | 0 A 4 E 0 D \ | | s disturbed or problem | atic. |
| | Gleyed Matrix (S4) Redox (S5) | | Reduced Ve | | | | | | |
| | Matrix (S6) | | | | | | RA 149A, 153C, 1 | 53D) | |
| | rface (S7) (LRR P, | S, T, U) | | | ., (- | , (| | , | |
| Restrictive I | Layer (if observed |): | | | | | | | |
| Type: | | | _ | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil Pi | resent? Yes | _ No <u></u> ✓ |
| Remarks: | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Project/Site: LED - East Ouachita Delineation City/C | county: Monroe/Ouachita | Sampling Date: 10-27-2020 |
|---|---|---|
| Applicant/Owner: EAST OUACHITA DEVELOPMENT, LLC | County: Monroe/Ouachita State: LA | Sampling Point: DP-3 |
| | on, Township, Range: S2 T17N R4E | . 0 |
| Landform (hillslope, terrace, etc.): Terrace Local | relief (concave, convex, none): Concave | Slope (%): 0-1 |
| Landform (hillslope, terrace, etc.): Terrace Local Subregion (LRR or MLRA): MLRA 131B Lat: 32° 29' 42. | 196" N Long: 92° 1' 14.795" W | Datum: UTMZ15N |
| Soil Map Unit Name: Gallion Silt Loam | NWI classific | ation: Not Mapped |
| Are climatic / hydrologic conditions on the site typical for this time of year? Y | _ | |
| Are Vegetation ✓, Soil ✓, or Hydrology significantly disturi | | |
| Are Vegetation, Soil, or Hydrology naturally problems | | |
| SUMMARY OF FINDINGS – Attach site map showing sam | | , |
| | , 3 , | , |
| Hydrophytic Vegetation Present? Yes ✓ No | Is the Sampled Area | , |
| Hydric Soil Present? Yes ✓ No Wetland Hydrology Present? Yes ✓ No | within a Wetland? Yes <u>✓</u> | No |
| Remarks: | 1 | |
| Low area with standing water. | | |
| Low area with standing water. | | |
| | | |
| | | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | Secondary Indica | ators (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil | Cracks (B6) |
| Surface Water (A1) Aquatic Fauna (B13) | | getated Concave Surface (B8) |
| High Water Table (A2) Marl Deposits (B15) (LRF | | |
| Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (Control of the control | | |
| ☐ Water Marks (B1) ☐ Oxidized Rhizospheres a☐ Sediment Deposits (B2) ☐ Presence of Reduced Iro | | Water Table (C2) |
| Drift Deposits (B3) Recent Iron Reduction in | = ····/ | isible on Aerial Imagery (C9) |
| Algal Mat or Crust (B4) | _ | Position (D2) |
| ☐ Iron Deposits (B5) ☐ Other (Explain in Remark | (s) Shallow Aqu | itard (D3) |
| Inundation Visible on Aerial Imagery (B7) | FAC-Neutral | |
| ✓ Water-Stained Leaves (B9) | ☐ Sphagnum n | noss (D8) (LRR T, U) |
| Field Observations: Surface Water Present? Yes ✓ No Depth (inches): 0-1 | | |
| Water Table Present? Yes No Depth (inches): | | |
| Saturation Present? Yes ✓ No Depth (inches): 0-4 | | nt? Yes ✓ No |
| (includes capillary fringe) | | 100 |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre | vious inspections), if available: | |
| Remarks: | | |
| Nemarks. | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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

| 20 54 | Absolute | Dominant | Indicator | Dominance Test worksheet: |
|---|----------|------------------|---------------|---|
| Tree Stratum (Plot size: 30 Feet) | % Cover | Species? | _Status_ | Number of Dominant Species |
| 1. None | | · · <u>-</u> | 2 50 | That Are OBL, FACW, or FAC: 2 (A) |
| 2. | | | | |
| | | | | Total Number of Dominant |
| 3. | | ()) | | Species Across All Strata: 2 (B) |
| 4 | | | | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: 100 (A/B) |
| 6 | | | | That A C OBE, I ACW, OF I AC. |
| 0 | <u> </u> | = Total Cov | | Prevalence Index worksheet: |
| 0 | | | | Total % Cover of: Multiply by: |
| 50% of total cover: 0 | 20% o | f total cover: | <u>U</u> | |
| Sapling Stratum (Plot size: 30 Feet) | | | | OBL species x 1 = |
| 1. None | | | | FACW species x 2 = |
| | | | | FAC species x 3 = |
| 2 | | | | FACU species x 4 = |
| 3. | | | | 12 |
| 4 | | | | UPL species x 5 = |
| 5 | | | | Column Totals: (A) (B) |
| 5. | | | | |
| O. <u>~</u> | | | | Prevalence Index = B/A = |
| | - 43 | = Total Cov | | Hydrophytic Vegetation Indicators: |
| 50% of total cover: 0 | 20% o | f total cover: | 0 | 1 - Rapid Test for Hydrophytic Vegetation |
| Shrub Stratum (Plot size: 30 Feet) | | | | |
| Mana | | | | 2 - Dominance Test is >50% |
| = | | | | 3 - Prevalence Index is ≤3.0¹ |
| 2. | | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 3. | | | | |
| 4 | | | | 1 |
| | | - | | ¹ Indicators of hydric soil and wetland hydrology must |
| 5 | | | | be present, unless disturbed or problematic. |
| 6 | | | | Definitions of Five Vegetation Strata: |
| | 0 | = Total Cov | er | The Note of the plants and the second sections |
| 50% of total cover: 0 | 20% 0 | f total cover: | 0 | Tree – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. |
| | | r total cover. | | (7.6 cm) or larger in diameter at breast height (DBH). |
| Herb Stratum (Plot size: 30 Feet) | 40 | | FACIL | |
| 1. Sida spinosa | 10 | | FACU | Sapling – Woody plants, excluding woody vines, |
| 2. Cyperus iria | 15 | | FACW | approximately 20 ft (6 m) or more in height and less |
| 3. Panicum dichotomiflorum | 20 | Yes | FACV# | than 3 in. (7.6 cm) DBH. |
| 4 Alternanthera philoxeroides | 25 | Yes | OBL | Shrub Mandy plants avaluding woody vines |
| *** | | 100 | $\overline{}$ | Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. |
| 5. Cyperus pseudovegetus | | | FACW | approximatory of to 20 K (1 to 0 m) in noight. |
| 6. Echinochloa crus-galli | 5 | | FAC₩ | Herb – All herbaceous (non-woody) plants, including |
| 7. | | | | herbaceous vines, regardless of size, and woody |
| | | | | plants, except woody vines, less than approximately |
| 8 | | Ka . | | 3 ft (1 m) in height. |
| 9 | - | (1) <u></u> | | Woody vine – All woody vines, regardless of height. |
| 10 | | | | voody ville – All woody villes, regardless of fleight. |
| 11. | | | | |
| | 76 | T-4-10 | | |
| 20 | | = Total Cov | | |
| 50% oftotal cover: 38 | 20% o | f total cover: | <u>16</u> | |
| Woody Vine Stratum (Plot size: 30 Feet) | | | | |
| 1. None | | | | |
| | | | | |
| 2. | | 10. | | |
| 3 | | | | |
| 4. | | | | |
| 5 | | | | |
| · | | | = | Hydrophytic |
| _ | 0 | = Total Cov | | Vegetation Present? Yes ✓ No |
| 50% of total cover: 0 | 20% o | f total cover: | 0 | Present? Yes Y No No |
| Remarks: (If observed, list morphological adaptations below | ow). | | 70 | 1 |
| (,,,,, | . , . | | | |
| | | | | |
| | | | | |

| Profile Desc | ription: (Describe | to the depth | needed to docu | ment the | indicator | or confirn | n the absence of inc | licators.) | |
|---------------|--|----------------|----------------|------------|--------------------|------------------|----------------------------|---------------------------------------|------------|
| Depth | Matrix | | Red | ox Feature | | | | | |
| (inches) | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> | Remarks | |
| 0-6 | 7.5YR 4/2 | 98 | 7.5YR 4/6 | 2 | | | Clay Loam | | |
| 9-14 | 7.5YR 3/2 | 100 | | | | | Clay Loam | | |
| | - | | | | | | | | _ |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | - · | | | | | |
| l | | | | | | | | | |
| | oncentration, D=De | | | | | ains. | | ore Lining, M=Matri | |
| Hydric Soil | Indicators: (Applie | cable to all L | | | - | | | roblematic Hydric S | Soils': |
| Histosol | (A1) | | Polyvalue B | elow Surfa | ace (S8) (L | RR S, T, U | | | |
| Histic E | oipedon (A2) | | Thin Dark S | | | | | A10) (LRR S) | |
| l | stic (A3) | | Loamy Mucl | | | (O) | | rtic (F18) (outside N | |
| | en Sulfide (A4) | | Loamy Gley | | (F2) | | | oodplain Soils (F19) | |
| | d Layers (A5) | | ✓ Depleted Ma | | | | | Bright Loamy Soils (| F20) |
| | Bodies (A6) (LRR I | | Redox Dark | | | | (MLRA 15 | , | |
| | ucky Mineral (A7) (L | | Depleted Da | | | | | Material (TF2) | 2) |
| | resence (A8) (LRR I uck (A9) (LRR P, T) | | Redox Depr | • | 0) | | | Dark Surface (TF1 in in Remarks) | 4) |
| | d Below Dark Surfa | | Depleted Oc | | /MI DA 1 | 54\ | Utilei (Expia | in in Remarks) | |
| _ | ark Surface (A12) | ce (ATT) | Iron-Mangai | , , | • | - | T) ³ Indicators | of hydrophytic veget | tation and |
| 1 = | rairie Redox (A16) (| (MLRA 150A) | | | | | | ydrology must be pr | |
| | /lucky Mineral (S1) | | Delta Ochric | | | , •, | | sturbed or problema | |
| | Gleyed Matrix (S4) | (, | Reduced Ve | | | 0A. 150B) | | , , , , , , , , , , , , , , , , , , , | |
| | Redox (S5) | | Piedmont FI | | | | | | |
| | Matrix (S6) | | | | | | RA 149A, 153C, 153D |)) | |
| Dark Su | rface (S7) (LRR P, | S, T, U) | | _ | | | | | |
| Restrictive | Layer (if observed) |): | | | | | | | |
| Type: | | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil Prese | ent? Yes ✓ | No |
| Remarks: | , | | | | | | , | | |
| rtornarto. | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Project/Site: LED - East Ouachita Delineation City/ | County: Monroe/Ouachita | ampling Date: 10-27-2020 |
|--|---|---------------------------------------|
| Applicant/Owner: EAST OUACHITA DEVELOPMENT, LLC | County: Monroe/Ouachita Sa | ampling Point: DP-4 |
| | tion, Township, Range: S2 T17N R4E | |
| Landform (hillslone terrace etc.). Flat | al relief (concave, convey, none). None | Slope (%): 0-1 |
| Subregion (LRR or MLRA): MLRA 131B Lat: 32° 29' 41 | .713" N Long: 92° 1' 15.048" W | Datum: UTMZ15N |
| Soil Map Unit Name: Gallion Silt Loam | NWI classification | on: Not Mapped |
| Are climatic / hydrologic conditions on the site typical for this time of year? | Yes No (If no, explain in Rem | arks.) |
| Are Vegetation, Soil, or Hydrology significantly distu | urbed? Are "Normal Circumstances" pres | ent? Yes No |
| Are Vegetation, Soil, or Hydrology naturally problen | natic? (If needed, explain any answers in | n Remarks.) |
| SUMMARY OF FINDINGS – Attach site map showing sal | mpling point locations, transects, ir | nportant features, etc. |
| Under the Versetation Present? | | |
| Hydrophytic Vegetation Present? Yes | Is the Sampled Area | / |
| Wetland Hydrology Present? Yes No✓ | within a Wetland? Yes | No <u> </u> |
| Remarks: | .1 | |
| Active soybean field. | | |
| Thouve soybeatt field. | | |
| | | |
| | | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | Secondary Indicators | s (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil Cra | acks (B6) |
| Surface Water (A1) Aquatic Fauna (B13) | Sparsely Vegeta | ated Concave Surface (B8) |
| High Water Table (A2) Marl Deposits (B15) (LF | RR U) Drainage Patteri | ns (B10) |
| Saturation (A3) Hydrogen Sulfide Odor | · · · - | ` ' |
| | along Living Roots (C3) Dry-Season Wat | |
| Sediment Deposits (B2) | - ' | ' ' |
| Drift Deposits (B3) Recent Iron Reduction i | _ | le on Aerial Imagery (C9) |
| Algal Mat or Crust (B4) Thin Muck Surface (C7) Other (Evelsis in Rema | | ` ' |
| ☐ Iron Deposits (B5) ☐ Other (Explain in Rema☐ Inundation Visible on Aerial Imagery (B7) | rks) Shallow Aquitard FAC-Neutral Tes | ` ' |
| Water-Stained Leaves (B9) | = | s (D8) (LRR T, U) |
| Field Observations: | <u> </u> | 3 (20) (2 : (1: 1) 3) |
| Surface Water Present? Yes No Depth (inches): | | |
| Water Table Present? Yes No _ ✓ Depth (inches): | | |
| Saturation Present? Yes No Depth (inches): | | Yes No |
| (includes capillary fringe) | | |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr | evious inspections), if available: | |
| Remarks: | | |
| Remarks. | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| VEGETATION | (Five Strata) | - Use | scientific | names o | f plants |
|------------|---------------|-------|------------|---------|----------|
| | | | | | |

| 30 Foot | | | t Indicator | Dominance Test worksheet: |
|---|------------------|------------|-------------|---|
| Tree Stratum (Plot size: 30 Feet) | % Cover | Species' | ? _Status_ | Number of Dominant Species 2 |
| 1. None | | | | That Are OBL, FACW, or FAC: 2 (A) |
| 2 | | | | Total Number of Dominant |
| 3 | | | | Species Across All Strata: 2 (B) |
| 4 | | | | |
| 5 | | | | Percent of Dominant Species That Are ORL FACW or FAC: 100 |
| 6 | 7 K | | ** | That Are OBL, FACW, or FAC: 100 (A/B) |
| D | | | | Prevalence Index worksheet: |
| 0 | 0 | | _ | Total % Cover of: Multiply by: |
| 50% of total cover: 0 | 20% of | total cove | r: <u>U</u> | OBL species x1 = |
| Sapling Stratum (Plot size: 30 Feet) | | | | |
| 1. None | | | | FACW species x 2 = |
| 2 | | | | FAC species x 3 = |
| 3. | | | | FACU species x 4 = |
| 4. | | | •: | UPL species x 5 = |
| | | | | Column Totals: (A) (B) |
| 5 | | - | | |
| 6. <u>-</u> | | | | Prevalence Index = B/A = |
| | 35 | = Total Co | | Hydrophytic Vegetation Indicators: |
| 50% of total cover: 0 | 20% of | total cove | r: <u>0</u> | 1 - Rapid Test for Hydrophytic Vegetation |
| Shrub Stratum (Plot size: 30 Feet) | | | | ✓ 2 - Dominance Test is >50% |
| 1. None | | | | 3 - Prevalence Index is ≤3.0¹ |
| 2. | | | | |
| | | | | Problematic Hydrophytic Vegetation¹ (Explain) |
| 3. | | | | |
| 4 | | | | ¹ Indicators of hydric soil and wetland hydrology must |
| 5 | | | | be present, unless disturbed or problematic. |
| 6 | | | | Definitions of Five Vegetation Strata: |
| | 0 | = Total Co | over | Tree – Woody plants, excluding woody vines, |
| 50% of total cover: 0 | 20% of | total cove | r: 0 | approximately 20 ft (6 m) or more in height and 3 in. |
| Herb Stratum (Plot size: 30 Feet) | 7/ | | | (7.6 cm) or larger in diameter at breast height (DBH). |
| 1. Cyperus pseudovegetus | 15 | Yes | FAC₩ | |
| 2. Echinochloa colona | 20 | Yes | FACW | Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less |
| | 5 | 103 | | than 3 in. (7.6 cm) DBH. |
| 3. Alternanthera philoxeroides | | - | OBL | , , , |
| 4. Glycine max | 5 | | . <u>NI</u> | Shrub – Woody plants, excluding woody vines, |
| 5 | | | | approximately 3 to 20 ft (1 to 6 m) in height. |
| 6 | | | | Herb - All herbaceous (non-woody) plants, including |
| 7 | | | | herbaceous vines, regardless of size, and woody |
| 8. | | | | plants, except woody vines, less than approximately |
| | | | - | 3 ft (1 m) in height. |
| 9 | #//3 | - | | Woody vine – All woody vines, regardless of height. |
| 10 | | | | |
| 11 | | - | | |
| | 40 | = Total Co | over | |
| 50% of total cover: 20 | 20% of | total cove | r: 8 | |
| Woody Vine Stratum (Plot size: 30 Feet) | | | | |
| None | | | | |
| | | | . — | |
| 2 | | | | |
| 3 | | | | |
| 4. | | | | |
| 5. | 20 | | | Hydrophytic |
| | 0 | = Total Co | wer | Hydrophytic Vegetation |
| 500/ -51-1-1 N | | | | Present? Yes V No |
| 50% of total cover: 0 | | total cove | r. <u>U</u> | |
| Remarks: (If observed, list morphological adaptations bel | ow). | e may i | e not liste | d in the Wetland Plant List. Therefore, it was |
| | | | | (no indicator) and not included in the hydric |
| | | | | (no maicator) and not included in the hydric |
| | rating | calculat | IUIIS. | |

| Profile Desc | ription: (Describe | e to the depth | needed to docum | ent the indicator | or confirm | n the absence of indica | ators.) |
|---------------|---------------------------------------|----------------|----------------------------|--------------------------|--------------------|--------------------------------|----------------------------------|
| Depth | Matrix | | | Features | | | |
| (inches) | Color (moist) | % | Color (moist) | %Type ¹ | Loc ² | <u>Texture</u> | Remarks |
| 0-3 | 7.5YR 5/4 | 100 | | | | Sandy Loam | |
| 3-10 | 7.5YR 4/3 | 100 | | | | Sandy Loam | |
| 10-14 | 5YR 4/4 | 100 | | | | Sandy Loam | |
| | | | | | - | | _ |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| ¹Type: C=Co | oncentration, D=De | pletion, RM=R | educed Matrix, MS | =Masked Sand G | rains. | ² Location: PL=Pore | e Lining, M=Matrix. |
| | | | RRs, unless otherv | | | | lematic Hydric Soils³: |
| Histosol | (A1) | | Polyvalue Beld | ow Surface (S8) (| LRR S, T, U | J) 1 cm Muck (A9) | (LRR 0) |
| Histic Ep | oipedon (A2) | | Thin Dark Sur | face (S9) (LRR S | , T, U) | 2 cm Muck (A10 | |
| Black Hi | ` ' | | | Mineral (F1) (LR | R O) | | (F18) (outside MLRA 150A,B) |
| | en Sulfide (A4) | | Loamy Gleyed | | | | Iplain Soils (F19) (LRR P, S, T) |
| _ | d Layers (A5) | D T 11) | Depleted Matr | | | - | ht Loamy Soils (F20) |
| | Bodies (A6) (LRR acky Mineral (A7) (L | | Redox Dark S Depleted Dark | | | (MLRA 153B) Red Parent Mat | |
| | esence (A8) (LRR | | Redox Depres | | | | ark Surface (TF12) |
| | ick (A9) (LRR P, T) | | Marl (F10) (LF | , , | | Other (Explain i | ` ' |
| | d Below Dark Surfa | | _ ` ` ` | ric (F11) (MLRA 1 | 51) | ` ` ' | , |
| l | ark Surface (A12) | | Iron-Mangane | se Masses (F12) | (LRR O, P, | | nydrophytic vegetation and |
| _ | rairie Redox (A16) | | | ce (F13) (LRR P, | | - | rology must be present, |
| _ | Mucky Mineral (S1) | (LRR O, S) | | F17) (MLRA 151) | | | bed or problematic. |
| _ | Gleyed Matrix (S4) | | | ic (F18) (MLRA 1 | | | |
| | Redox (S5) Matrix (S6) | | | odplain Soils (F19 | | RA 149A, 153C, 153D) | |
| _ :: | rface (S7) (LRR P, | S. T. U) | Anomalous bi | ight Loamy Cons | (1 20) (WEI | 143A, 1000, 100D) | |
| | Layer (if observed | | | | | | |
| Type: | | | | | | | _ |
| Depth (inc | ches): | | _ | | | Hydric Soil Present | ? Yes No_ <u>√</u> _ |
| Remarks: | , <u> </u> | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Project/Site: LED - East Ouachita Delineation City/ | County: Monroe/Ouachita | Sampling Date: 10-27-2020 |
|---|------------------------------------|--------------------------------|
| Applicant/Owner: EAST OUACHITA DEVELOPMENT, LLC | County: Monroe/Ouachita State: LA | Sampling Point: DP-5 |
| | tion, Township, Range: S2 T17N R4E | . 0 |
| Landform (hillslope, terrace, etc.): Terrace Local | | Slope (%): 0-1 |
| Subregion (LRR or MLRA): MLRA 131B Lat: 32° 29' 42 | .704" N Long. 92° 1' 15.920" W | Datum: UTMZ15N |
| Soil Map Unit Name: Gallion Silt Loam | NWI classific | ation: Not Mapped |
| Are climatic / hydrologic conditions on the site typical for this time of year? | | |
| Are Vegetation, Soil, or Hydrology significantly distu | | |
| Are Vegetation, Soil, or Hydrology naturally problem | | |
| SUMMARY OF FINDINGS – Attach site map showing sai | | • |
| Hadaalada Vandalaa Baaada Vandalaa Ala | | |
| Hydrophytic Vegetation Present? Yes _ ✓ No ✓ Hydric Soil Present? Yes No _ ✓ _ | Is the Sampled Area | / |
| Hydrophytic Vegetation Present? Yes | within a Wetland? Yes | No <u>√</u> |
| Remarks: | | |
| Active soybean field. | | |
| , isang sayasan nasan | | |
| | | |
| | | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | Secondary Indica | tors (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil | Cracks (B6) |
| Surface Water (A1) Aquatic Fauna (B13) | | getated Concave Surface (B8) |
| High Water Table (A2) Marl Deposits (B15) (LF | | |
| ☐ Saturation (A3) ☐ Hydrogen Sulfide Odor ☐ Water Marks (B1) ☐ Oxidized Rhizospheres | · · | mes (B16) Water Table (C2) |
| Sediment Deposits (B2) Valer Marks (B1) Oxidized Rhizospheres Presence of Reduced In | | |
| Drift Deposits (B3) Recent Iron Reduction i | <u> </u> | sible on Aerial Imagery (C9) |
| Algal Mat or Crust (B4) Thin Muck Surface (C7) | | Position (D2) |
| ☐ Iron Deposits (B5) ☐ Other (Explain in Rema | rks) 🔲 Shallow Aqui | tard (D3) |
| Inundation Visible on Aerial Imagery (B7) | FAC-Neutral | Test (D5) |
| Water-Stained Leaves (B9) | ☐ Sphagnum m | noss (D8) (LRR T, U) |
| Field Observations: | | |
| Surface Water Present? Yes No Depth (inches): | | |
| Water Table Present? Yes No Depth (inches): | | nt? Yes No_ |
| Saturation Present? Yes No Depth (inches): (includes capillary fringe) | Wetland Hydrology Presen | t? Yes No_ <u>▼</u> _ |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr | evious inspections), if available: | |
| | | |
| Remarks: | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| VEGETATION | (Five Strata) | - Use | scientific | names o | f plants |
|------------|---------------|-------|------------|---------|----------|
| | | | | | |

| 30 Foot | Absolute Dominant Indicator | Dominance Test worksheet: |
|---|--|---|
| Tree Stratum (Plot size: 30 Feet) | % Cover Species? Status | Number of Dominant Species 1 |
| 1. None | 100 TO 10 | That Are OBL, FACW, or FAC: |
| 2 | | Total Number of Dominant |
| 3 | | Species Across All Strata: 1 (B) |
| 4 | | |
| | | Percent of Dominant Species That Are ORL FACW or FAC: 100 |
| 5 | 7. 7 | That Are OBL, FACW, or FAC: |
| 6 | | Prevalence Index worksheet: |
| 2 | = Total Cover | Total % Cover of: Multiply by: |
| | 20% of total cover: 0 | OBL species x 1 = |
| Sapling Stratum (Plot size: 30 Feet) | | |
| 1. None | | FACW species x 2 = |
| 2. | | FAC species x 3 = |
| 3 | | FACU species x 4 = |
| | | UPL species x 5 = |
| 4 | | Column Totals: (A) (B) |
| 5 | | |
| 6. <u> </u> | | Prevalence Index = B/A = |
| | = Total Cover | Hydrophytic Vegetation Indicators: |
| | 20% of total cover: 0 | 1 - Rapid Test for Hydrophytic Vegetation |
| Shrub Stratum (Plot size: 30 Feet) | | ✓ 2 - Dominance Test is >50% |
| 1. None | | 3 - Prevalence Index is ≤3.0¹ |
| 2. | | |
| | | Problematic Hydrophytic Vegetation¹ (Explain) |
| 3. | | |
| 4 | | ¹ Indicators of hydric soil and wetland hydrology must |
| 5 | | be present, unless disturbed or problematic. |
| 6 | | Definitions of Five Vegetation Strata: |
| | 0 = Total Cover | Tree – Woody plants, excluding woody vines, |
| 50% of total cover: 0 | 20% of total cover: 0 | approximately 20 ft (6 m) or more in height and 3 in. |
| Herb Stratum (Plot size: 30 Feet) | | (7.6 cm) or larger in diameter at breast height (DBH). |
| 1 Echinochloa crus-galli | 50 Yes FACV | |
| 2. Cyperus pseudovegetus | 5 FACW | Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less |
| | $-\frac{5}{5}$ NI | than 3 in. (7.6 cm) DBH. |
| 3. Glycine max | | |
| 4. Heteranthera limosa | 1 OBL | Shrub – Woody plants, excluding woody vines, |
| 5. Paspalum notatum | 2 FACU | approximately 3 to 20 ft (1 to 6 m) in height. |
| 6. Eclipta prostrata | | Herb - All herbaceous (non-woody) plants, including |
| 7 | | herbaceous vines, regardless of size, and woody |
| 8. | | plants, except woody vines, less than approximately |
| | | 3 ft (1 m) in height. |
| 9 | 6875 | Woody vine - All woody vines, regardless of height. |
| 10 | | |
| 11 | | |
| | 63 = Total Cover | |
| 50% of total cover: <u>32</u> | 20% of total cover: <u>13</u> | |
| Woody Vine Stratum (Plot size: 30 Feet) | | |
| 1. None | | |
| 2 | | |
| | | |
| 3 | | |
| 4 | . — . — . — . — . — . — . — . — . — . — | |
| 5 | | Hydrophytic |
| | 0 = Total Cover | Vegetation |
| 50% of total cover: 0 | 20% of total cover: 0 | Present? Yes V No No |
| Remarks: (If observed, list morphological adaptations bel | OW) | I. |
| | Glycine max is not liste | ed in the Wetland Plant List. Therefore, it was |
| | | (no indicator) and not included in the hydric |
| | rating calculations. | |

| Profile Desc | cription: (Describe | to the depth | needed to docu | ment the ir | ndicator | or confirn | n the absence o | of indicators.) | |
|------------------------|--|---------------|-------------------|---------------------|-------------------|------------------|--------------------------|---|--------------|
| Depth | Matrix | 0/ | | ox Features | | 12 | Tantona | Damanda | _ |
| (inches) | Color (moist) | | Color (moist) | % | Type ¹ | Loc ² | <u>Texture</u> | Remark | S |
| 0-14 | 7.5YR 5/3 | 100 | | | | | Sandy Loam | | |
| | | | | | | | · | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| ¹ Type: C=C | oncentration, D=Dep | oletion, RM=F | Reduced Matrix, M | S=Masked | Sand Gra | ains. | ² Location: F | PL=Pore Lining, M=M | atrix. |
| | Indicators: (Applic | | | | | | | or Problematic Hydr | |
| ☐ Histosol | (A1) | | Polyvalue Be | elow Surfac | e (S8) (L | RR S, T, L | ل) 🔲 1 cm Mu | ıck (A9) (LRR O) | |
| Histic E | oipedon (A2) | | Thin Dark S | urface (S9) | (LRR S, | T, U) | 2 cm Mu | uck (A10) (LRR S) | |
| | stic (A3) | | Loamy Muck | - | | (O) | | d Vertic (F18) (outsid | |
| | en Sulfide (A4) | | Loamy Gley | | -2) | | | nt Floodplain Soils (F | |
| | d Layers (A5) | | Depleted Ma | | • | | | ous Bright Loamy Soi | s (F20) |
| | Bodies (A6) (LRR F | | Redox Dark | | | | 1 1 ' | A 153B) | |
| | ıcky Mineral (A7) (L esence (A8) (LRR l | | Depleted Da | | | | | ent Material (TF2) allow Dark Surface (T | E12) |
| | uck (A9) (LRR P, T) |) | Marl (F10) (I | | ") | | — ′ | Explain in Remarks) | 112) |
| | d Below Dark Surfac | ce (A11) | Depleted Oc | , | MLRA 1 | 51) | | explain in recinario, | |
| | ark Surface (A12) | , , | Iron-Mangar | . , , | | | T) ³ Indica | tors of hydrophytic ve | getation and |
| Coast P | rairie Redox (A16) (| MLRA 150A) | Umbric Surfa | ace (F13) (I | LRR P, T | , U) | wetla | and hydrology must be | present, |
| | lucky Mineral (S1) (| LRR O, S) | Delta Ochric | | | | | ss disturbed or proble | matic. |
| | Sleyed Matrix (S4) | | Reduced Ve | | | | | | |
| | Redox (S5) | | Piedmont Fl | | | | | 4.50D) | |
| | Matrix (S6) | C T II) | Anomalous I | Bright Loan | ny Soils (I | F20) (MLR | RA 149A, 153C, | 153D) | |
| | rface (S7) (LRR P, S Layer (if observed) | | | | | | | | |
| Type: | Layer (ii observed) | • | | | | | | | |
| | ches): | | | | | | Hydric Soil P | Present? Yes | No <u> </u> |
| Remarks: | | | | | | | , , , , , , | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Project/Site: LED - East Ouachita Delineation City/ | County: Monroe/Ouachita | Sampling Date: 10-27-2020 |
|---|-------------------------------------|-------------------------------|
| Applicant/Owner: EAST OUACHITA DEVELOPMENT, LLC | County: Monroe/Ouachita State: LA | Sampling Point: DP-6 |
| | tion, Township, Range: S2 T17N R4E | |
| Landform (hillslope, terrace, etc.): Terrace Loca | | Slope (%): 0-1 |
| Subregion (LRR or MLRA): MLRA 131B Lat: 32° 29' 42. | .924" N Long: 92° 1' 15.302" W | Datum: UTMZ15N |
| Soil Map Unit Name: Gallion Silt Loam | NWI classifica | Not Mapped |
| Are climatic / hydrologic conditions on the site typical for this time of year? | Yes No (If no, explain in R∈ | emarks.) |
| Are Vegetation, Soil, or Hydrology significantly distu | | |
| Are Vegetation, Soil, or Hydrology naturally problem | | |
| SUMMARY OF FINDINGS – Attach site map showing sar | | |
| | | |
| Hydrophytic Vegetation Present? Yes | Is the Sampled Area | |
| Wetland Hydrology Present? Yes No _ ✓ | within a Wetland? Yes | No |
| Remarks: | | |
| Active soybean field. | | |
| Notive soybean neid. | | |
| | | |
| | | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | Secondary Indicat | ors (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil C | Cracks (B6) |
| Surface Water (A1) Aquatic Fauna (B13) | Sparsely Veg | etated Concave Surface (B8) |
| High Water Table (A2) Harl Deposits (B15) (LR | RR U) Drainage Patt | erns (B10) |
| Saturation (A3) | · · — | , , |
| ☐ Water Marks (B1) ☐ Oxidized Rhizospheres | | Vater Table (C2) |
| Sediment Deposits (B2) Presence of Reduced In | - ' | ` ' |
| Drift Deposits (B3) | | sible on Aerial Imagery (C9) |
| Algal Mat or Crust (B4) Thin Muck Surface (C7) Other (Evaluis in Remove | = · | ` ' |
| ☐ Iron Deposits (B5) ☐ Other (Explain in Remain Inundation Visible on Aerial Imagery (B7) | FAC-Neutral | , , |
| Water-Stained Leaves (B9) | = | oss (D8) (LRR T, U) |
| Field Observations: | <u> </u> | 300 (BO) (EINT 1, G) |
| Surface Water Present? Yes No Depth (inches): | | |
| Water Table Present? Yes No Depth (inches): | | |
| Saturation Present? Yes No ✓ Depth (inches): | | ? Yes No |
| (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr | avious inspections) if available | |
| Describe Recorded Data (stream gauge, monitoring well, aerial priotos, pr | evious irispections), ii available. | |
| Remarks: | | |
| ivernarys. | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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

| 20 Foot | Absolute | Dominant | Indicator | Dominance Test worksheet: |
|--|----------|---------------------|--|--|
| <u>Tree Stratum</u> (Plot size: 30 Feet | % Cover | Species? | _Status_ | Number of Dominant Species |
| 1. None | | | 20 | That Are OBL, FACW, or FAC: 1 (A) |
| 2. | | | | Total Nameh on of Domain and |
| 3 | | | | Total Number of Dominant Species Across All Strata: 1 (B) |
| | | | | Opecies Across Air Otrata. |
| 4 | | | | Percent of Dominant Species |
| 5 | | | | That Are OBL, FACW, or FAC: 100 (A/B) |
| 6 | - (1 | | | Durantamas Indan usankahaati |
| | 0 | = Total Co | ver . | Prevalence Index worksheet: |
| 50% of total cover: 0 | 20% c | of total cover | ·: <u>0</u> | Total % Cover of: Multiply by: |
| Sapling Stratum (Plot size: 30 Feet) | | | | OBL species x 1 = |
| Nene | | | | FACW species x 2 = |
| | | | | FAC species x 3 = |
| 2 | | | | FACU species x 4 = |
| 3. | | | | UPL species x 5 = |
| 4 | | | | |
| 5. | | | | Column Totals: (A) (B) |
| 6. | | | | Dravalance Index = D/A = |
| • | 0 | = Total Co | | Prevalence Index = B/A = |
| 50% of total cover: 0 | 539 | 5.6 | | Hydrophytic Vegetation Indicators: |
| | 20% 0 | n total cover | . — | 1 - Rapid Test for Hydrophytic Vegetation |
| Shrub Stratum (Plot size: 30 Feet) | | | | 2 - Dominance Test is >50% |
| 1. None | | | · | 3 - Prevalence Index is ≤3.0 ¹ |
| 2 | 810 | | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 3. | | | | |
| 4 | | | | 1 mail and are as the relation and resolution and the relationship and t |
| 5 | | | | ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| | | | | |
| 6. | | 50. 0 9. | | Definitions of Five Vegetation Strata: |
| _ | 0 | = Total Co | | Tree – Woody plants, excluding woody vines, |
| 50% of total cover: 0 | 20% c | of total cover | : 0 | approximately 20 ft (6 m) or more in height and 3 in. |
| Herb Stratum (Plot size: 30 Feet) | | | | (7.6 cm) or larger in diameter at breast height (DBH). |
| 1. Echinochloa colona | 40 | Yes | FACW | Sapling – Woody plants, excluding woody vines, |
| 2. Glycine max | 5 | | NI | approximately 20 ft (6 m) or more in height and less |
| 3. Cyperus pseudovegetus | 1 | | FACV | than 3 in. (7.6 cm) DBH. |
| 4. Sida spinosa | 2 | - | FACU | Shrub – Woody plants, excluding woody vines, |
| · · · · · · · · · · · · · · · · · · · | | | | approximately 3 to 20 ft (1 to 6 m) in height. |
| 5 | | | | Lapproximitation of the Lori () to a mily in medgini |
| 6. | | | | Herb – All herbaceous (non-woody) plants, including |
| 7 | | | | herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately |
| 8 | | | | 3 ft (1 m) in height. |
| 9 | 500 | 300 | | |
| | • | . — | | Woody vine - All woody vines, regardless of height. |
| 10 | - | | | |
| 11 | 12 | - | | |
| | 43 | = Total Co | | |
| 50% oftotal cover: 22 | 20% c | of total cover | : <u>9 </u> | |
| Woody Vine Stratum (Plot size: 30 Feet) | | | | |
| 1. None | | | 10 <u>7</u> | |
| 2. | | | | |
| | | 100 A | | |
| 3 | | | | |
| 4. | | | | |
| 5 | W | | a a | Hydrophytic |
| | 0 | = Total Co | | Vegetation No. |
| 50% of total cover: 0 | 20% c | of total cover | : 0 | Present? Yes V No No |
| Remarks: (If observed, list morphological adaptations belo | ow) | | | |
| | Glycii | | | d in the Wetland Plant List. Therefore, it was |
| | | | | (no indicator) and not included in the hydric |
| | ratino | a calculati | ons. | |

| Profile Desc | cription: (Describe | to the depth | needed to docum | ent the indicato | r or confirm | n the absence of indi | cators.) |
|-------------------------|---------------------------------------|-----------------|------------------------|--------------------------|------------------|------------------------------|--|
| Depth | Matrix | | | K Features | | | |
| (inches) | Color (moist) | % | Color (moist) | % Type ¹ | Loc ² | Texture | Remarks |
| 0-11 | 7.5YR 5/3 | 100 | | | | Clay Loam | |
| 11-14 | 7.5YR 3/2 | 100 | | | | Clay | |
| | | | | | | | |
| | | | | | | | _ |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | _ |
| | | | | | | | |
| | | | | | | | |
| 1 _{T. max} 0-0 | | mlatian DM-D | a dura a di Matrix, MC | -Maskad Cand C | \ | 21 anation: DI -Da | no Lining NA-NA-Nativi |
| | oncentration, D=De Indicators: (Appli | | | | rains. | | re Lining, M=Matrix. bblematic Hydric Soils³: |
| l | | Cable to all Li | | • | | | • |
| Histoso | • • | | | ow Surface (S8) | | | |
| _ | pipedon (A2) | | | rface (S9) (LRR S | | 2 cm Muck (A | |
| | istic (A3) | | | / Mineral (F1) (LR | (R O) | | ic (F18) (outside MLRA 150A,B) |
| | en Sulfide (A4) | | Loamy Gleye | d Matrix (F2) | | | odplain Soils (F19) (LRR P, S, T) |
| | d Layers (A5) | | Depleted Mat | | | | right Loamy Soils (F20) |
| | Bodies (A6) (LRR | | Redox Dark S | | | (MLRA 153 | |
| | ucky Mineral (A7) (L | | | k Surface (F7) | | Red Parent M | |
| | resence (A8) (LRR | | Redox Depre | ` ' | | | Dark Surface (TF12) |
| | uck (A9) (LRR P, T) | | Marl (F10) (L l | , | | Other (Explain | n in Remarks) |
| Deplete | d Below Dark Surfa | ce (A11) | ■ Depleted Och | ric (F11) (MLRA | 151) | | |
| Thick D | ark Surface (A12) | | ☐ Iron-Mangane | ese Masses (F12) | (LRR O, P, | T) ³ Indicators o | f hydrophytic vegetation and |
| Coast P | rairie Redox (A16) | (MLRA 150A) | Umbric Surface | ce (F13) (LRR P, | T, U) | wetland hy | drology must be present, |
| Sandy N | Mucky Mineral (S1) | (LRR O, S) | Delta Ochric | (F17) (MLRA 151 |) | unless dist | urbed or problematic. |
| ☐ Sandy 0 | Gleyed Matrix (S4) | | Reduced Ver | tic (F18) (MLRA 1 | 50A, 150B) |) | |
| Sandy F | Redox (S5) | | | odplain Soils (F19 | | | |
| | Matrix (S6) | | | | | A 149A, 153C, 153D) | |
| Dark Su | ırface (S7) (LRR P, | S, T, U) | | | | | |
| | Layer (if observed | | | | | | |
| Type: | • | , | | | | | |
| , , <u> </u> | oboo): | | <u> </u> | | | Hudria Cail Dragge | nt? Yes No |
| | ches): | | | | | Hydric Soil Preser | nt? Yes No |
| Remarks: | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Project/Site: LED - East Ouachita Delineation City/ | /County: Monroe/Ouachita | Sampling Date: 10-27-2020 |
|---|-------------------------------------|--------------------------------|
| Applicant/Owner: EAST OUACHITA DEVELOPMENT, LLC | /County: Monroe/Ouachita State: LA | Sampling Point: DP-7 |
| | tion, Township, Range: S35 T18N R4E | . 0 |
| Landform (hillslope, terrace, etc.): Terrace Loca | | Slope (%): 0-1 |
| Subregion (LRR or MLRA): MLRA 131B Lat: 32° 29' 49 | 0.337" N Long. 92° 1' 20.966" W | Datum: UTMZ15N |
| Soil Map Unit Name: Gallion Silt Loam | NWI classific | ation: Not Mapped |
| Are climatic / hydrologic conditions on the site typical for this time of year? | | |
| Are Vegetation, Soil, or Hydrology significantly distu | | |
| Are Vegetation, Soil, or Hydrology naturally problem | | |
| SUMMARY OF FINDINGS – Attach site map showing sa | | |
| Lludranhutia Vagatatian Present? | T | |
| Hydrophytic Vegetation Present? Yes No✓ Hydric Soil Present? Yes No✓ | Is the Sampled Area | ./ |
| Hydrophytic Vegetation Present? Yes | within a Wetland? Yes | No |
| Remarks: | | |
| Active soybean field. | | |
| , | | |
| | | |
| | | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | | tors (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil | |
| Surface Water (A1) Aquatic Fauna (B13) | | getated Concave Surface (B8) |
| High Water Table (A2) Saturation (A3) Hydrogen Sulfide Odor | | |
| | · · · | Water Table (C2) |
| Sediment Deposits (B2) Presence of Reduced In | | |
| Drift Deposits (B3) Recent Iron Reduction i | - ' | sible on Aerial Imagery (C9) |
| Algal Mat or Crust (B4) Thin Muck Surface (C7) |) Geomorphic | Position (D2) |
| ☐ Iron Deposits (B5) ☐ Other (Explain in Rema | ırks) 🔲 Shallow Aqui | tard (D3) |
| Inundation Visible on Aerial Imagery (B7) | FAC-Neutral | , |
| Water-Stained Leaves (B9) | ☐ Sphagnum m | noss (D8) (LRR T, U) |
| Field Observations: | | |
| Surface Water Present? Yes No Depth (inches): | | |
| Water Table Present? Yes No Depth (inches): | | nt? Yes No_ |
| Saturation Present? Yes No Depth (inches): (includes capillary fringe) | Wetland Hydrology Presen | t? Yes No_ <u>▼</u> _ |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr | revious inspections), if available: | |
| | | |
| Remarks: | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| VEGETATION | (Five Strata) | – Use | scientific | names o | f plants |
|------------|---------------|-------|------------|---------|----------|
| | | | | | |

| 30 Foot | Absolute Dominant Indicator | Dominance Test worksheet: |
|--|-----------------------------|---|
| Tree Stratum (Plot size: 30 Feet) | % Cover Species? Status | Number of Dominant Species |
| 1. None | | That Are OBL, FACW, or FAC: (A) |
| 2. | | Total Number of Dominant |
| 3 | | Species Across All Strata: 2 (B) |
| 4 | | Percent of Dominant Species |
| 5 | | That Are OBL, FACW, or FAC: 0 (A/B) |
| 6. | | Prevalence Index worksheet: |
| 9 | = Total Cover | Total % Cover of:Multiply by: |
| | 20% of total cover: 0 | OBL species 0 x1 = 0 |
| Saping Stratum (Plot size: 30 Feet) | | FACW species $0 \times 2 = 0$ |
| 1. None | | FAC species 0 $x = 0$ |
| 2 | | FACU species 9 x 4 = 36 |
| 3 | | UPL species 0 $x = 0$ |
| 4 | | Column Totals: 9 (A) 36 (B) |
| 5 | | Column Totals. (A) (B) |
| 6 | | Prevalence Index = B/A = 4.0 |
| | = Total Cover | Hydrophytic Vegetation Indicators: |
| | 20% of total cover: 0 | 1 - Rapid Test for Hydrophytic Vegetation |
| Shrub Stratum (Plot size: 30 Feet) | | 2 - Dominance Test is >50% |
| 1. None | | 3 - Prevalence Index is ≤3.0¹ |
| 2 | | Problematic Hydrophytic Vegetation ¹ (Explain) |
| 3 | | |
| 4 | | ¹ Indicators of hydric soil and wetland hydrology must |
| 5 | | be present, unless disturbed or problematic. |
| 6 | | Definitions of Five Vegetation Strata: |
| | 0 = Total Cover | Tree – Woody plants, excluding woody vines, |
| 50% of total cover: 0 | 20% of total cover: 0 | approximately 20 ft (6 m) or more in height and 3 in. |
| Herb Stratum (Plot size: 30 Feet) | | (7.6 cm) or larger in diameter at breast height (DBH). |
| 1. Glycine max | 70 NI | Sapling – Woody plants, excluding woody vines, |
| 2. Sida spinosa | 3 Yes FACU | approximately 20 ft (6 m) or more in height and less |
| 3. Poa annua | 5 Yes FACU | than 3 in. (7.6 cm) DBH. |
| 4. Trifolium repens | 1 FACU | Shrub – Woody plants, excluding woody vines, |
| 5 | | approximately 3 to 20 ft (1 to 6 m) in height. |
| 6. | | Herb – All herbaceous (non-woody) plants, including |
| 7 | | herbaceous vines, regardless of size, and woody |
| 8. | | plants, except woody vines, less than approximately 3 ft (1 m) in height. |
| 9. | | |
| 10 | | Woody vine – All woody vines, regardless of height. |
| 11. | | |
| | 9 = Total Cover | |
| 50% oftotal cover: 5 | 20% of total cover: 2 | |
| Woody Vine Stratum (Plot size: 30 Feet) | 20 % of total sover: | |
| 1. None | | |
| 2. | | |
| | | |
| 3 | | |
| 4 | · — · — · — · | |
| J. | 0 = Total Cover | Hydrophytic Vegetation |
| 500/ -#4-4-1 0 | | Vegetation Present? Yes No ✓ |
| 50% of total cover: 0 | 20% of total cover: 0 | |
| Remarks: (If observed, list morphological adaptations be | Glycine max is not liste | d in the Wetland Plant List. Therefore, it was |
| | | (no indicator) and not included in the hydric |
| | rating calculations. | |

| Profile Desc | cription: (Describe | to the depth | needed to docu | ment the ir | ndicator | or confirm | n the absence of in | dicators.) |
|-----------------|--|--------------|------------------------|------------------|-------------------|------------------|-------------------------------|---|
| Depth | Matrix (naist) | 0/ | | ox Features | | 12 | Taratana | Demondo |
| (inches) 0-8 | Color (moist) 7.5YR 4/3 | _ <u>%</u> _ | Color (moist) | % | Type ¹ | Loc ² | Texture Sandy Loam | Remarks |
| | - | | | | | | | |
| 8-14 | 7.5YR 5/2 | 100 | | | | | Clay Loam | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| ¹Type: C=C | oncentration, D=De | oletion RM=F | Reduced Matrix M | S=Masked | Sand Gra | ains | ² l ocation: PI =F | Pore Lining, M=Matrix. |
| | Indicators: (Applic | | | | | | | Problematic Hydric Soils ³ : |
| Histosol | (A1) | | Polyvalue Be | elow Surfac | ce (S8) (L | RR S, T, L | J) 1 cm Muck (| (A9) (LRR O) |
| · 🛏 · | pipedon (A2) | | Thin Dark S | | | | | (A10) (LRR S) |
| | stic (A3) | | Loamy Muck | - | | O) | | ertic (F18) (outside MLRA 150A,B) |
| | en Sulfide (A4) d Layers (A5) | | Loamy Gley Depleted Ma | | -2) | | | loodplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20) |
| | Bodies (A6) (LRR F | P, T, U) | Redox Dark | | 6) | | (MLRA 15 | • |
| | ıcky Mineral (A7) (L | | Depleted Da | | | | 1 1 ' | Material (TF2) |
| | esence (A8) (LRR l | J) | Redox Depr | ` | 3) | | | w Dark Surface (TF12) |
| | ick (A9) (LRR P, T) | oo (A11) | Marl (F10) (I | , | MI DA 4 | -4\ | U Other (Expla | ain in Remarks) |
| | d Below Dark Surfac ark Surface (A12) | æ (ATT) | Depleted Oc | | | | T) ³ Indicators | of hydrophytic vegetation and |
| | rairie Redox (A16) (| MLRA 150A) | | | | | | hydrology must be present, |
| | lucky Mineral (S1) (| LRR O, S) | Delta Ochric | (F17) (ML | RA 151) | | unless di | isturbed or problematic. |
| | Gleyed Matrix (S4) | | Reduced Ve | | | | | |
| | Redox (S5) Matrix (S6) | | Piedmont Fl | | | | ŧ9A) RA 149A, 153C, 153I | D) |
| | rface (S7) (LRR P , | S. T. U) | Anomalous | Bright Loan | ily Solis (i | 20) (WILK | A 149A, 1930, 1931 | D) |
| | Layer (if observed) | | | | | | | |
| Type: | | | | | | | | |
| Depth (in | ches): | | | | | | Hydric Soil Pres | ent? Yes No <u>√</u> |
| Remarks: | | | | | | | -1 | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

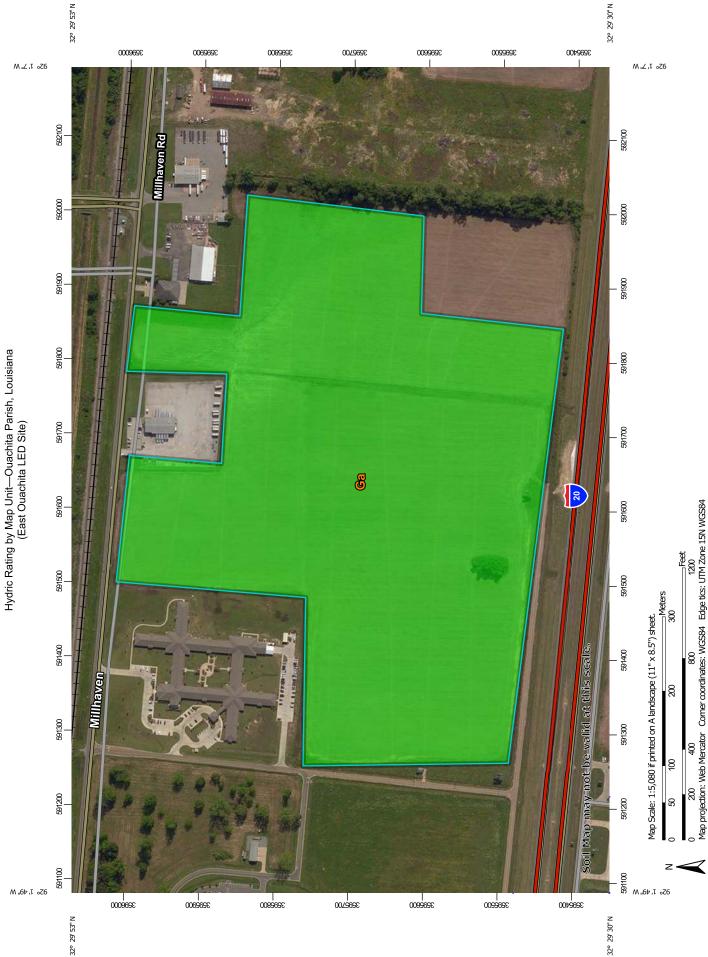
| Project/Site: LED - East Ouachita Delineation City | /County: Monroe/Ouachita | Sampling Date: 10-27-2020 |
|--|--------------------------------------|---------------------------------|
| Applicant/Owner: EAST OUACHITA DEVELOPMENT, LLC | /County: Monroe/Ouachita State: LA | Sampling Point: DP-8 |
| | etion, Township, Range: S35 T18N R4E | |
| Landform (hillslope, terrace, etc.): Terrace Loc | | Slope (%): 0-1 |
| Subregion (LRR or MLRA): MLRA 131B Lat: 32° 29' 48 | 3.651" N Long: 92° 1' 30.228" W | / Datum: UTMZ15N |
| Soil Map Unit Name: Gallion Silt Loam | NWI classific | cation: Not Mapped |
| Are climatic / hydrologic conditions on the site typical for this time of year? | Yes No (If no, explain in R | Remarks.) |
| Are Vegetation, Soil, or Hydrology significantly dist | | , |
| Are Vegetation, Soil, or Hydrology naturally probler | | |
| SUMMARY OF FINDINGS – Attach site map showing sa | | |
| Livedecophysic Versetation Drescard? | | · · · |
| Hydrophytic Vegetation Present? Yes No _ ✓ Hydric Soil Present? Yes No _ ✓ Wetland Hydrology Present? Yes No _ ✓ | Is the Sampled Area | / |
| Wetland Hydrology Present? Yes No _ ✓ | within a Wetland? Yes | No <u> </u> |
| Remarks: | | |
| Active soybean field. | | |
| Notive soybeatt field. | | |
| | | |
| | | |
| HYDROLOGY | | |
| Wetland Hydrology Indicators: | Secondary Indica | ators (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply) | Surface Soil | Cracks (B6) |
| Surface Water (A1) Aquatic Fauna (B13) | Sparsely Ve | getated Concave Surface (B8) |
| High Water Table (A2) Marl Deposits (B15) (LI | RR U) Drainage Pa | tterns (B10) |
| Saturation (A3) Hydrogen Sulfide Odor | (C1) Moss Trim L | ines (B16) |
| ☐ Water Marks (B1) ☐ Oxidized Rhizospheres | along Living Roots (C3) Dry-Season | Water Table (C2) |
| Sediment Deposits (B2) Presence of Reduced I | ron (C4) <u> </u> | rows (C8) |
| Drift Deposits (B3) | in Tilled Soils (C6) Saturation V | isible on Aerial Imagery (C9) |
| Algal Mat or Crust (B4) |) <u> </u> | Position (D2) |
| ☐ Iron Deposits (B5) ☐ Other (Explain in Rema | arks) Shallow Aqu | itard (D3) |
| Inundation Visible on Aerial Imagery (B7) | FAC-Neutral | Test (D5) |
| Water-Stained Leaves (B9) | ☐ Sphagnum n | noss (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 Preser | nt? Yes No |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, p | revious inspections), if available: | |
| | | |
| Remarks: | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| VEGETATION | (Five Strata) | – Use | scientific | names o | f plants |
|------------|---------------|-------|------------|---------|----------|
| | | | | | |

| - 30 Foot | Absolute Dominant Indicator | Dominance Test worksheet: |
|--|---|--|
| Tree Stratum (Plot size: 30 Feet 1. None | <u>% Cover Species? Status</u> | Number of Dominant Species |
| | | That Are OBL, FACW, or FAC: |
| 2 | | Total Number of Dominant Species Across All Strata: 1 (B) |
| 4 5 | | Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B) |
| 6. 🚅 | | Prevalence Index worksheet: |
| • | O = Total Cover | Total % Cover of:Multiply by: |
| | 20% of total cover: 0 | OBL species 0 x 1 = 0 |
| Sapling Stratum (Plot size: 30 Feet) | | FACW species 0 x 2 = 0 |
| 1. None | | FAC species $0 \times 3 = 0$ |
| 2 | | FACU species 5 x 4 = 20 |
| 3 | | UPL species $0 \times 5 = 0$ |
| 4 | | Column Totals: 5 (A) 20 (B) |
| 5 | | N |
| 6. ₂ | | Prevalence Index = B/A = 4.0 |
| | O = Total Cover | Hydrophytic Vegetation Indicators: |
| | 20% of total cover: 0 | 1 - Rapid Test for Hydrophytic Vegetation |
| Shrub Stratum (Plot size: 30 Feet) | | 2 - Dominance Test is >50% |
| 1. None | | 3 - Prevalence Index is ≤3.0 ¹ |
| 2 | | Problematic Hydrophytic Vegetation¹ (Explain) |
| 3 | | |
| 4 | | ¹Indicators of hydric soil and wetland hydrology must |
| 5 | | be present, unless disturbed or problematic. |
| 6 | O | Definitions of Five Vegetation Strata: |
| O | 0 = Total Cover | Tree – Woody plants, excluding woody vines, |
| | 20% of total cover: 0 | approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH). |
| Herb Stratum (Plot size: <u>30 Feet</u>) 1 Glycine max | 70 NI | (7.0 cm) of larger in diameter at breast height (DBH). |
| Poa annua | 5 Yes FACU | Sapling – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH. |
| 3 | 1832 - 1832 - 1832 - 1832 - 1832 - 1832 - 1832 - 1832 - 1832 - 1832 - 1832 - 1832 - 1832 - 1832 - 1832 - 1832 | |
| 4. <u>-</u> 5 | | Shrub – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height. |
| 6 | | Herb - All herbaceous (non-woody) plants, including |
| 7 | | herbaceous vines, regardless of size, <u>and</u> woody plants, except woody vines, less than approximately |
| 8. | | 3 ft (1 m) in height. |
| 9 | 18/2 | Woody vine – All woody vines, regardless of height. |
| 10 | | Woody vine - All woody vines, regulatess of height. |
| 11 | | |
| _ | 5 = Total Cover | |
| 50% of total cover: 3 | 20% of total cover: 1 | |
| Woody Vine Stratum (Plot size: 30 Feet) | | |
| 1. None | | |
| 2 | | |
| 3 | | |
| 4. | | |
| 5 | | Hydrophytic |
| 50% of total cover: 0 | 0 = Total Cover 20% of total cover: 0 | Vegetation Present? Yes No |
| Remarks: (If observed, list morphological adaptations bel | OW). Clycine may is not lister | d in the Wetland Plant List. Therefore, it was |
| | | (no indicator) and not included in the hydric |
| | rating calculations. | (|

| Profile Desc | cription: (Describe | to the depth | needed to docum | nent the indicat | or or confir | m the absence of i | ndicators.) | |
|--------------|----------------------|-----------------|-------------------|--------------------------|---------------------------------|-----------------------------|---|----|
| Depth | Matrix | | | x Features | | | | |
| (inches) | Color (moist) | % | Color (moist) | % Type | e ¹ Loc ² | <u>Texture</u> | Remarks | |
| 0-14 | 7.5YR 5/3 | 100 | | | | Sandy Loam | | |
| | | | | | | | | _ |
| | | | | · | | · ————— | | _ |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | _ |
| l ——— | | | | | | | | _ |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | _ |
| | oncentration, D=De | | | | Grains. | | =Pore Lining, M=Matrix. | |
| Hydric Soil | Indicators: (Appli | cable to all Li | RRs, unless other | wise noted.) | | Indicators for | Problematic Hydric Soils ³ : | |
| Histosol | (A1) | | | low Surface (S8) | | U) | (A9) (LRR O) | |
| Histic E | oipedon (A2) | | Thin Dark Su | rface (S9) (LRR | S, T, U) | | (A10) (LRR S) | |
| Black H | stic (A3) | | Loamy Mucky | y Mineral (F1) (L | RR O) | Reduced \ | /ertic (F18) (outside MLRA 150A, | B) |
| Hydroge | en Sulfide (A4) | | Loamy Gleye | ed Matrix (F2) | | Piedmont | Floodplain Soils (F19) (LRR P, S, | T) |
| Stratifie | d Layers (A5) | | Depleted Mat | trix (F3) | | Anomalous | s Bright Loamy Soils (F20) | |
| Organic | Bodies (A6) (LRR I | P, T, U) | Redox Dark | Surface (F6) | | (MLRA 1 | I53B) | |
| | ıcky Mineral (A7) (L | | | k Surface (F7) | | Red Paren | nt Material (TF2) | |
| | esence (A8) (LRR | | Redox Depre | | | | ow Dark Surface (TF12) | |
| | ıck (A9) (LRR P, T) | , | Marl (F10) (L | ` ' | | | olain in Remarks) | |
| | d Below Dark Surfa | ce (A11) | = ` ` ` | nric (F11) (MLRA | (151) | | , | |
| | ark Surface (A12) | , | = ' | ese Masses (F12 | | . T) ³ Indicator | rs of hydrophytic vegetation and | |
| _ | rairie Redox (A16) (| MLRA 150A) | = | ce (F13) (LRR P | | | hydrology must be present, | |
| | Mucky Mineral (S1) | | | (F17) (MLRA 15 | | | disturbed or problematic. | |
| | Gleyed Matrix (S4) | | | tic (F18) (MLRA | | | alotarboa or problematic. | |
| | Redox (S5) | | | odplain Soils (F | | | | |
| | Matrix (S6) | | | | | RA 149A, 153C, 15 | 3D) | |
| _ | rface (S7) (LRR P, | S T II) | Anomalous E | right Loanly Con | 3 (1 20) (MEI | XA 143A, 1000, 10 | <i>55)</i> | |
| | Layer (if observed) | | | | | | | |
| | Layer (II Observed) | '- | | | | | | |
| Type: | | | _ | | | | ./ | |
| Depth (in | ches): | | | | | Hydric Soil Pre | esent? Yes No | _ |
| Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

APPENDIX C NRCS Hydric Soils Rating Report



MAP LEGEND

Interstate Highways Aerial Photography Major Roads Local Roads US Routes Rails **Transportation** Background ŧ Not rated or not available Area of Interest (AOI) Hydric (66 to 99%) Hydric (33 to 65%) Hydric (1 to 32%) Not Hydric (0%) Hydric (100%) Soil Rating Polygons Area of Interest (AOI)

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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

contrasting soils that could have been shown at a more detailed 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 scale.

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

measurements.

Source of Map: Natural Resources Conservation Service

Coordinate System: Web Mercator (EPSG:3857)

Web Soil Survey URL:

Maps from the Web Soil Survey are based on the Web Mercator distance and area. A projection that preserves area, such as the projection, which preserves direction and shape but distorts 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.

Ouachita Parish, Louisiana Survey Area Data: Version 12, Sep 11, 2019 Soil Survey Area:

Not rated or not available

Hydric (66 to 99%) Hydric (33 to 65%)

Hydric (100%)

Soil Rating Points

Hydric (1 to 32%)

Not Hydric (0%)

Hydric (66 to 99%) Hydric (33 to 65%)

Hydric (100%)

Soil Rating Lines

Hydric (1 to 32%)

Not Hydric (0%)

Soil map units are labeled (as space allows) for map scales

Date(s) aerial images were photographed: Apr 26, 2015—May 1:50,000 or larger.

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.

Water Features

Not rated or not available

Streams and Canals

USDA

Hydric Rating by Map Unit

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---------------------------|-------------------|--------|--------------|----------------|
| Ga | Gallion silt loam | 0 | 73.5 | 100.0% |
| Totals for Area of Intere | st | 73.5 | 100.0% | |

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

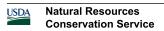
The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.



Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower