

Attachment 4: Wetland and Waters of the U.S.
Memorandum – Ogden Dunes Additional Parcels

Memo

Date:	Tuesday, May 26, 2020
Project:	DT-NWI Project
To:	Nicole Barker, NICTD
From:	Janice Reid, Project Manager, HDR Andrea Cline, Senior Environmental Scientist, HDR
Subject:	Double Track – Northwest Indiana (DT-NWI) Project Ogden Dunes Additional Parcels: Wetland Assessment Report

Introduction

As requested, on April 27, 2020 HDR completed a wetland assessment of the five additional parcels and the area that would potentially be effected by Stagecoach Road widening as part of the Ogden Dunes station parking. This assessment is part of the overall NEPA re-evaluation required for the DT-NWI project, for which a finding of No Significant Impact was issued by the Federal Transit Administration in 2018. This memorandum was prepared to document our findings.

The study area is located south of US Highway 12 and west and north of Stagecoach Road and consists of five separate residential parcels. The Parcel Identification Numbers (PIN) are 6402352014000017, 640235252009000017, 640235252013000017, 640235252008000017, and 640235252010000017. No wetlands nor waters were identified within the study area. The delineation was completed in accordance with the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (October 2010). An aerial photograph of the site with data point locations is shown on Exhibit 6. Information collected on site is listed in the attached data forms.

Methodology

The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (October 2010), identifies the mandatory technical criteria for wetland Identification. The three essential characteristics of a jurisdictional wetland are hydrophytic vegetation, hydric soils and wetland hydrology as described below:

Hydrophytic Vegetation: The hydrophytic vegetation criterion is based on a separation of plants into five basic groups:

1. Obligate wetland plants (OBL) almost always occur (estimated probability >99%) in wetlands under natural conditions;
2. Facultative wetland plants (FACW) usually occur in wetlands (estimated probability 67-99%), but occasionally are found in non-wetlands;

3. Facultative plants (FAC) are equally likely to occur in wetlands or non-wetlands (estimated probability 34-66%);
4. Facultative upland plants (FACU) usually occur in non-wetlands (estimated probability 67-99%), but occasionally are found in wetlands: and
5. Obligate upland plants (UPL) almost always occur (estimated probability >99%) in non-wetlands under natural conditions.

Three procedures completed in the following order are used to determine if hydrophytic vegetation is present:

1. Rapid Test: The Rapid Test for hydrophytic vegetation is met if all dominant species across all strata are OBL or FACW, or a combination of the two based on a visual assessment.
2. Dominance Test: Using the 50/20 Rule, if greater than 50% of the plants present are FAC, FACW, or OBL, the subject area meets the hydrophytic vegetation criterion.
3. Prevalence Index: Each plant species in a sampling plot is assigned a numeric value (OBL=1; FACW=2; FAC=3; FACU=4; UPL=5). Based on the sampling data, the absolute cover is calculated for each species in each stratum and using the specified formula, if the Prevalence Index is 3 or less, hydrophytic vegetation is present.
4. Morphological Adaptations: Various species may develop physical characteristics after growing in wetland areas such as multi-stemmed trunks, shallow roots and buttressed stems. Hydrophytic vegetation is present if an adaptation is observed in more than 50% of FACU species growing in an area that contains hydric soil and wetland hydrology.

Hydric Soils: Hydric soils are defined in the manual as “soils that are saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part.” Field indicators of hydric soil are found in the NTCHS Field Indicators of Hydric Soils in the United States (USDA Natural Resources Conservation Service 2006b or current version).

Wetland Hydrology: The wetland hydrology criterion is often the most difficult to determine. Typically, the presence of water for a portion of the growing season creates anaerobic conditions. Anaerobic conditions lead to the prevalence of wetland plants. Morphological adaptations of plants, driftlines and watermarks are examples of wetland hydrology field indicators.

Results and Discussion

Study Area

The study area contained two houses, a warehouse, two driveways, mowed lawn, and upland treed areas, as shown on the attached Exhibits. The study area is characterized at data points 1B and 2B. The vegetated portions of the study area were dominated by red oak (*Quercus rubra*) and multiflora rose (*Rosa multiflora*), and box elder (*Acer negundo*) and Kentucky bluegrass (*Poa pratensis*). No wetlands or waters were identified within the study area.

Reference Materials

The following reference materials were reviewed and used to assist in the wetland field reconnaissance. They are included as Exhibits 1-6.

UNITED STATES GEOLOGICAL SURVEY

The study area is located south of US Highway 12 and west of Stagecoach Road in Ogden Dunes, Porter County, Indiana and along Stagecoach Road. Geographically, the study area is located in Section 35, Township 37 North, Range 7 West of the Second Principal Meridian. The longitude and latitude for the project site is -87.1891, 41.6153. Study area boundaries were provided by NICTD. The United States Geological Survey (USGS), Portage Quadrangle (2019), was reviewed to determine historic local drainage patterns. The USGS indicates that the majority of is of higher elevation than the surrounding area, consisting of two hills.

NATIONAL WETLAND INVENTORY

The National Wetland Inventory (NWI) map, Porter Quadrangle (<https://www.fws.gov/wetlands/data/Mapper.html>, accessed May 7, 2020), indicates no wetlands are mapped within the study area. The NWI serves only as a large scale guide and actual wetland locations and types often vary from those that are mapped. No wetlands were mapped within the study area.

SOIL SURVEY

The Soil Survey of Porter County, Indiana (<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>, accessed May 7, 2020), was reviewed to determine the location of hydric soils within the study area. Mapped hydric soil can be indicative of wetland conditions. The following soils were mapped within the study area:

OaC - Oakville fine sand, 4 to 12 percent slopes

FLOOD INSURANCE RATE MAP

The Flood Insurance Rate Map (FIRM) for Porter County, Indiana and Incorporated Areas, Map Number 18127C0102D (effective September 30, 2015) was reviewed to determine the locations of regulatory floodplain on site. The presence of floodplain can be indicative of wetland hydrology. The FIRM indicated that there is no floodplain mapped with in the study area.

List of Exhibits:

Exhibit 1: Site Characterization Photographs

Exhibit 2: USGS Topographic Map, Portage Quadrangle

Exhibit 3: National Wetland Inventory

Exhibit 4: Soil Survey

Exhibit 5: Flood Insurance Rate Map

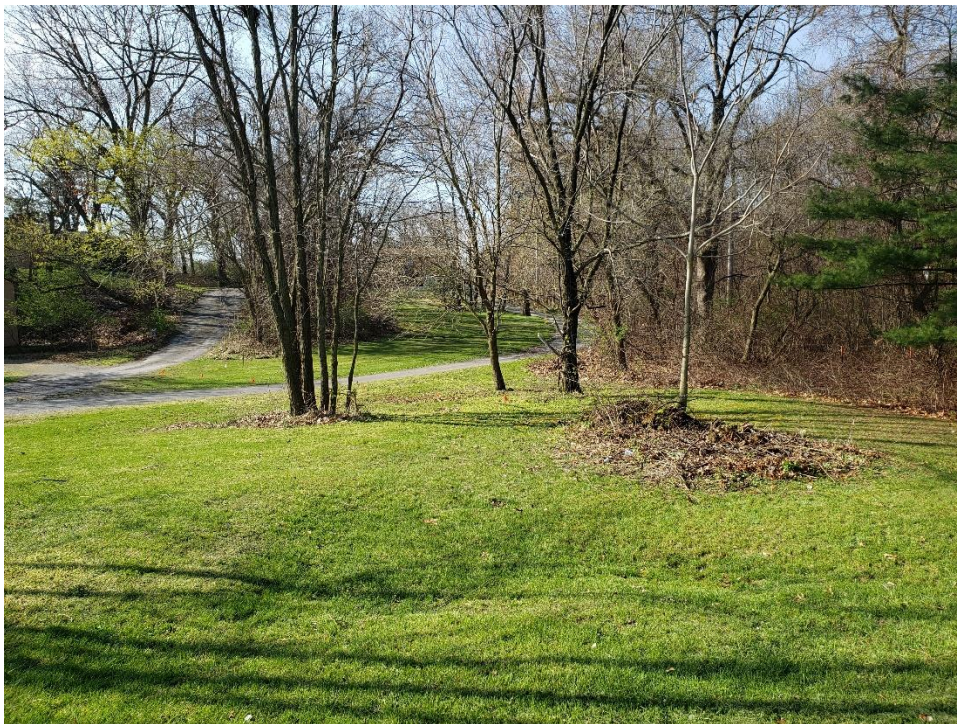
Exhibit 6: Ogden Dunes Aerial

Exhibit 7: Wetland Determination Data Forms — Midwest Region

Exhibit 1: Site Characterization Photographs



Data point 1B



Data point 2B

Topographic map of the Portage area showing the project location. The map features contour lines, a 'Filtration Plant' label, and a 'ROAD' label. A yellow dashed line indicates the 'Original EA Boundary', and a pink solid line indicates the 'Project Area'. The project area is located near a road and a ditch, with a 'GRADE' label nearby. The map also shows a 'RA' line and a 'BM 610' marker.

Legend:

- Original EA Boundary (Yellow dashed line)
- Project Area (Pink solid line)

USGS PROJECT LOCATION MAP

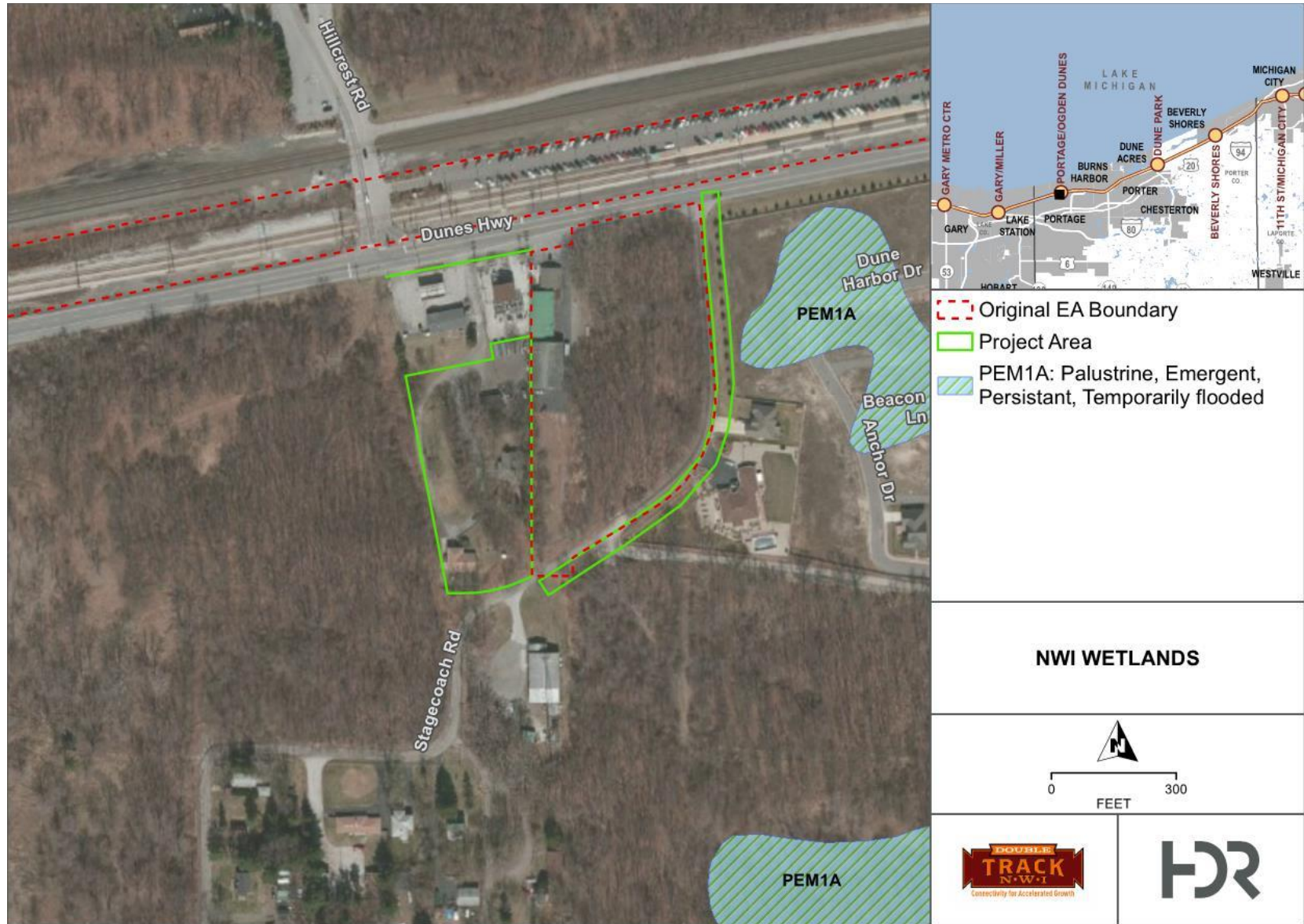
Portage Quadrangle

Scale: 0 to 1,000 FEET

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Exhibit 3: National Wetland Inventory



SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AERGRID, IGN, AND THE GIS USER COMMUNITY

Exhibit 4: Soil Survey

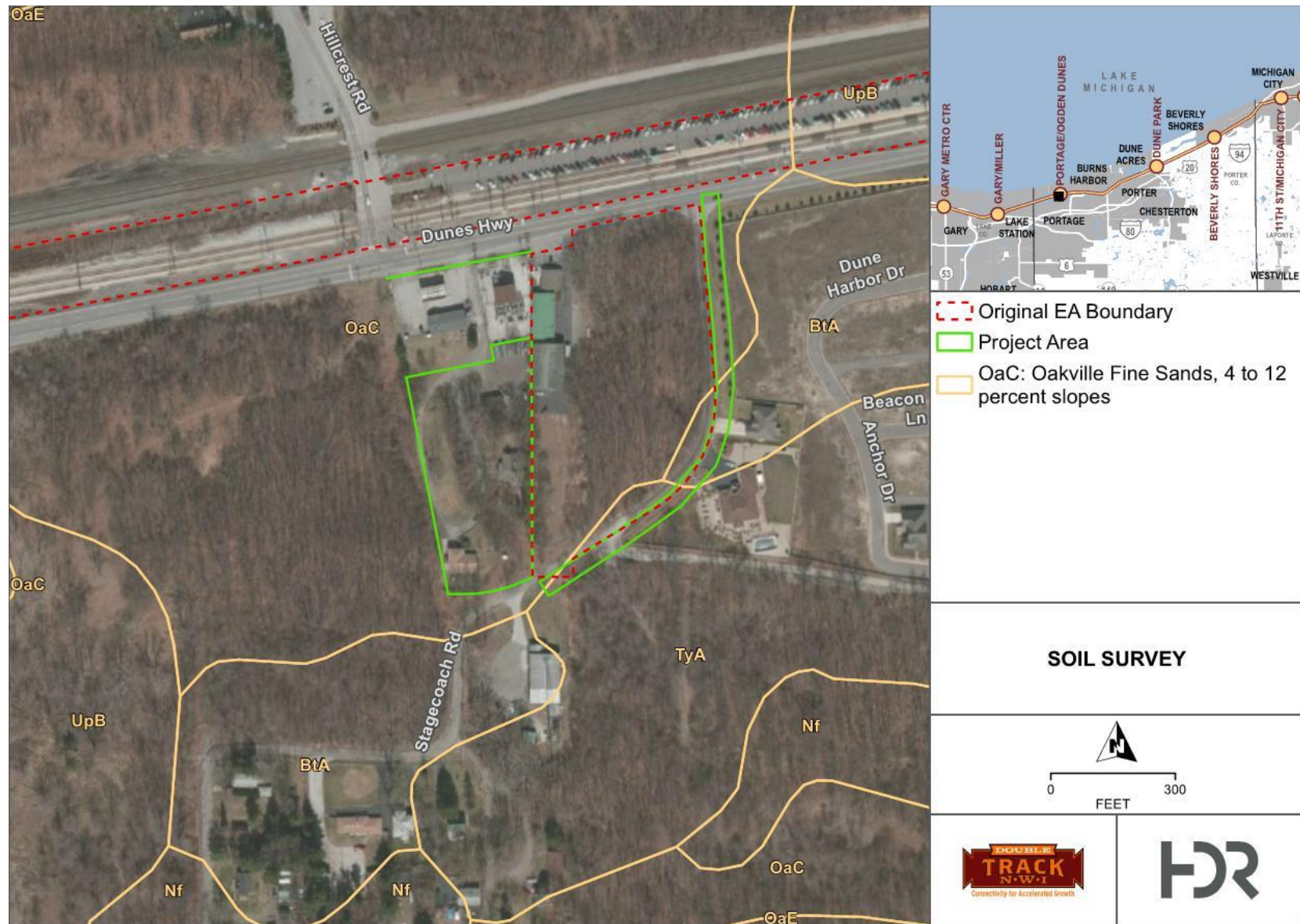


Exhibit 5: Flood Insurance Rate Map



Exhibit 6: Ogden Dunes Aerial

