

REQUEST TO AMEND COMMERCIAL WIND ENERGY FACILITY SPECIAL USE PERMIT – TEMPORARY CONCRETE BATCH PLANT

Meridian Wind Park – Porter Township

BV PROJECT NO. 198674

PREPARED FOR

DTE

DTE Electric Company

16 MARCH 2021



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1.0 Applicant Information and Authorization

DTE Electric Company (DTE) seeks to amend the special use permit for the commercial wind energy facility approved by the Porter Township Planning Commission on November 11, 2020 to include approval to erect and operate a temporary concrete batch plant, and submits the following information and attached appendices in support of its request.

The proposed site is owned by the Ruth A. Coppens Inter-Vivos Trust under agreement dated March 22, 2000. DTE has rights to use the land for wind energy development, including construction activities, under the terms of a standard utility easement for wind energy development. The recorded memorandum of this easement grant and legal description of the proposed site is included in Appendix A.

DTE's address is One Energy Plaza, Detroit, Michigan 48226. Communications relating to this request should be sent in care of Jason Hannath, DTE Site Manager for the Meridian Wind Park project at jason.hannath@dteenergy.com.

2.0 Location and General Description of Proposed Land Use

DTE proposes to erect and operate a temporary concrete batch plant to support construction of the Meridian Wind Park in Section 25 of Porter Township. The proposed site is in the southeast corner of Porter Township, just northwest of the intersection of Meridian Road and Redstone Road. Barton Malow Company, DTE’s construction contractor, will erect and operate the batch plant. Figure 2-1 depicts the proposed location within the project site and its proximity to the project’s temporary laydown yard in Mount Haley Township.

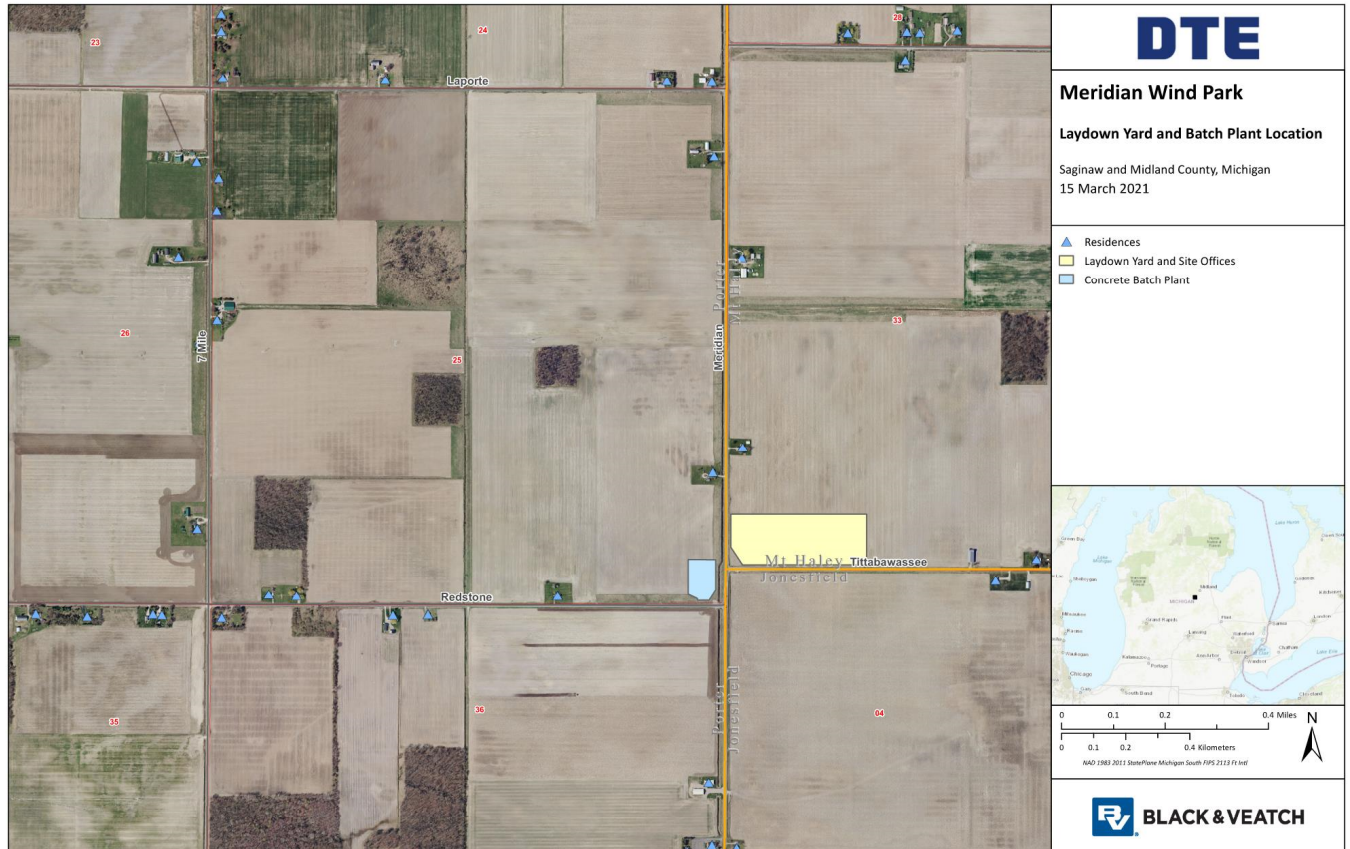


Figure 2-1 Batch Plant Site Location

2.1 Location

This location is proposed for the following reasons: (i) it is centrally located within the project site, (ii) it is adjacent to M-30/Meridian Road, a Class A paved road, (iii) it has frontage on a road intersecting Meridian Road, (iv) it is in close proximity to the laydown yard, and (v) the distance between the site and the nearest residence. The central location allows concrete to be mixed and efficiently transported to the wind turbine sites in Porter, Jonesfield, and Mount Haley Townships, which will minimize the distance trucks must travel to the turbines sites, benefitting the community and the project. The proximity to Meridian Road restricts delivery traffic to Class A paved roads. Frontage on a road that intersects Meridian Road allows the driveways to be located

off Meridian Road and requires truck turning movements to occur at intersections. The close proximity to the offices of the construction manager enhances oversight of operations and site security. The distance to the nearest residential property line (more than 800 feet) and adjoining agricultural uses minimizes potential conflicts with other uses.

2.2 Batch Plant Area Description

The batch plant consists of two metal concrete mixing structures and related processing equipment, staging areas for concrete transportation trucks, parking areas for the employees working at the location, and stockpiles of the raw ingredients for the concrete mix. A concrete washout area is not designated because significant concrete washout activity is not anticipated. (Concrete washout is the process for removing excess concrete from concrete trucks and equipment before it hardens.) Concrete washout water is contained on the delivery trucks, and each truck will be washed out in designated washout areas at the turbine construction sites. Sound levels associated with batch plant operations should not exceed those associated with agricultural activities involving heavy equipment.

Figures 2-2 and 2-3 depict a concrete batch plant operated by Barton Malow Company in connection with the construction of a wind energy facility in Gratiot County.



Figure 2-2 Steel concrete mixing structures and water tanks



Figure 2-3 Steel concrete mixing structures with material hoppers, water trucks and fuel tanks

2.3 Fueling

Onsite fuel will be stored in aboveground tanks in the main batch plant area. The designated fueling area is closely monitored and spill kits are always available. If a small spill occurs, spill kits are used to clean up the fuel, any contaminated soil is disposed of, and notice is given as required by applicable law.

2.4 Site Surfacing and Dust Control

The site will be surfaced with crushed limestone (MDOT 21AA) and served by two crushed limestone driveways connecting to Redstone Road. The driveway entrances are surfaced with large gravel to avoid mud tracking onto the roadway. Prior to the gravel being placed on the site, the topsoil will be stripped using bulldozers and loaders and stockpiled along the northern perimeter of the site. The stockpiles will be stabilized with vegetation and later used to restore the site.

Dust control measures will be triggered based on visual monitoring; visible dust will trigger a daily water spray of the site to reduce airborne dust. Chloride dust control chemicals such as magnesium chloride are typically applied periodically in a worst case scenario, only on the site area, and only at the minimum level needed to control the dust in accordance with manufacturer instructions.

2.5 Stormwater

Stormwater from the site will infiltrate through the crushed limestone surface into the existing agricultural field, or will flow to the drain along Redstone Road. New drain tile that ties into the existing field tile will be installed around the perimeter of the site to ensure proper connections. Any tile damaged in this process will be restored after the batch plant is disassembled and the land restored.

2.6 Well and Water Usage and Septic

Water for concrete mixing will be obtained from a permanent 4 inch water well having a projected depth of approximately 67 to 81 feet. The well driller will check the aquifer during drilling to confirm water availability. As drilling commences, the driller will be prepared to go as deep as 150 feet to ensure ample capacity for the planned water withdrawal (approximately 15,000 gallons per day). To control the amount of water drawn from the well, water will be periodically pumped into two to three tanker trucks located at the batch plant site at a rate of approximately 65 gallons per minute. The intent of this withdrawal plan is to keep water uptake to less than that typical of agricultural irrigation systems. (The drilling company that will drill this well works in the area and typically installs pumps on agricultural irrigation systems capable of pumping 400 to 500 gallons per minute. The pump that will be installed on this well is equivalent to a small residential pump, as most residential pumps are rated at 75 gallons per minute.)

Portable restrooms will be provided for employees working at the site. Per the Midland County Health Department, no permit is required; only use of a licensed septic waste hauler, which is planned. Drinking water will be from bottled water sources.

2.7 Lighting and Power

Lighting will only be used as needed during operation of the batch plant in early morning or evening. Due to the temporary nature of the batch plant, electrical power will be provided by a temporary diesel generator. This generator will be U.S. Tier IV certified to reduce emissions. The generator has a sound rating of 77 decibels at full load capacity. For comparison, a typical semi-truck engine operation produces around a 100 decibel sound level when idling. The generator will be shut down at night and other times when the batch plant is not in use. Because the generator will not run at night, site lighting will only be provided in connection with activity performed at times close to dawn and dusk.

2.8 Site Security

Site security is generally not a concern. The trucks and smaller equipment are locked nightly at the end of the shift. Due to size, theft of larger mixing equipment is not an issue. The same is true of raw materials. Trespass concerns are addressed by the site's proximity to the construction management offices. Additionally, a request for off-hours local law enforcement drive-by surveillance will be made, something that has been well received by local law enforcement in other jurisdictions.

2.9 Traffic Control and Haul Routes

The Midland County Road Commission's review of the driveway permit applications for the batch plant site specifically considered road safety and traffic control measures. Traffic control measures are shown on the site plan included as Appendix B. A reduced speed limit will be in effect near the entrances of the batch plant area and signs will be placed alerting drivers to the construction traffic entering and exiting the batch plant site. Travel for the concrete delivery trucks will be limited to designated travel routes that are laid out to ensure that no two concrete trucks pass each other en route, which limits potential damage to the shoulders of public roads and enhances safety for all road users.

All proposed haul routes to and from the batch plant site have been approved by the Midland County Road Commission. The overall transportation plan for the project (also approved by the Road Commission) and haul routes for all turbines are included in Appendix D. Estimated types of truck traffic include the following on typical full operation days: 8 mixers transporting 50 loads per day; 4 gravel trains with 10 total loads per day; and 2 cement tankers carrying 4 total loads per day.

2.10 Duration and Hours of Operation

The batch plant is intended to be a temporary, construction-related land use. The concrete mixing equipment will be removed along with the crushed limestone surfacing and the land restored to for agricultural use once the turbine foundation pours are completed. The batch plant equipment is anticipated to be erected in April 2021 and removed in October 2021. During this time period, a maximum of 120 days of use is anticipated. Depending on weather and schedule progress, the majority of the site activity will occur between April and July. During this time period, a 6-day work week is anticipated (Monday through Saturday), with work beginning before dawn and continuing until dusk. Occasional Sundays may be needed to make up for weather delays, but Sunday work will not be a regular part of the batch plant operations. After July 2021, sporadic days of use are anticipated during the week to complete various placements around the site. While removal of the equipment and gravel is anticipated by the end of October 2021, if weather prevents site restoration, we ask that the Planning Commission allow site restoration to be completed in the spring of 2022.

3.0 Site Plan

The site plan drawing included as Appendix B and the following narrative are intended to satisfy the requirements of Porter Township Zoning Ordinance Subsections 11.03.1 through 11.03.10:

- **Section 11.03.1:** The legal description of the land on which the batch plant will be located is attached as an exhibit to the recorded memorandum of easement included in Appendix A. The limits of the proposed batch plant site are shown on the site plan. Refer to Section 2.0 for a general description of the proposed use. The present zoning classification of the site is noted on the site plan.
- **Section 11.03.2:** The parcel on which the batch plant will be located is approximately 80 acres, having roughly 1,320 feet of frontage on Redstone Road and 2,458 feet of frontage on Meridian Road. As depicted on the site plan, the batch plant site is an area of roughly 420 feet by 280 feet (approximately 2.7 acres).
- **Section 11.03.3:** No buildings or structures are proposed. Only the temporary erection of concrete mixing equipment and accessory equipment, storage of raw materials, and parking of vehicles and trucks are proposed.
- **Section 11.03.4:** Other than the temporary removal of topsoil (which will be redistributed on site during restoration), no natural features will be removed or altered.
- **Section 11.03.5:** Proposed temporary driveways providing access to Redstone Road are shown on the site plan, and parking areas for employee vehicles (daytime) and concrete delivery trucks (overnight) are shown on the site plan.
- **Section 11.03.6:** The locations of existing overhead utilities adjacent to road rights-of-way are depicted on the site plan, No new public or private sewage disposal systems are proposed. Electricity will be supplied by a diesel generator as described in Section 2.0. A permanent private water well will be drilled as described in Section 2.6.
- **Section 11.03.07:** Adjacent land uses are labeled on the site plan.
- **Section 11.03.08:** A well permit has been obtained from the Midland County Health Department. The Midland County Soil Erosion and Sedimentation Control (SESC) Permitting Agent has issued an SESC permit. And the Michigan County Road Commission has issued permits for the two proposed driveways. Additionally, an air emissions permit has been issued by the Michigan Department of Environment, Great Lakes, and Energy (EGLE). Copies of these permits are included in Appendix C. No other county or state permits are required. The Midland County Health Department has also confirmed that no permits are required for the temporary portable toilet facilities (refer to email included in Appendix C).
- **Section 11.03.09:** Information describing anticipated water usage and dust control measures is discussed above.

- **Section 11.03.10:** The anticipated review and permitting fee has been deposited with the Township.

4.0 Compliance with Special Use Standards

Ordinance No. 249, the amendment to the Porter Township Zoning Ordinance that governs the siting, construction, and operation of commercial wind energy facilities, does not include any site development standards specific to temporary construction activities such as a concrete batch plant. Paragraph 10 of the Ordinance requires submission of the proposed transportation plan for construction and delivery vehicles. A copy of the transportation plan for the Meridian Wind Park and haul routes relating to the batch plant are attached as Appendix D.

DTE respectfully submits that its request to amend its Special Land Use Permit to include a temporary concrete batch plant to support construction of the Meridian Wind Park should be granted because the proposed use has been designed and will be operated in a manner that satisfies the following standards for approval set forth in Section 10.02 of the Porter Township Zoning Ordinance:

- **Special Use Standard No. 1:** This standard is not applicable because Article Nine and Ordinance No. 249 do not impose any supplementary provisions applicable to a temporary concrete batch plant, and the proposed use does not involve the construction of any buildings or structures.
- **Special Use Standard No. 2:** The nature, location, and size of the proposed temporary concrete batch plan will not change the essential character of the surrounding area, nor will it disrupt the orderly and proper development of the Residential-Farming zoning district as a whole. The proposed use does not involve the construction of any permanent buildings or structures; it is limited to improving the surface of the land with gravel to support the placement of concrete mixing equipment and truck traffic. Upon removal of the mixing equipment, the land will be restored and again be available for agricultural use. Because of the temporary nature of the use, it will not discourage permitted uses of the adjacent lands and buildings in the future.
- **Special Use Standard No. 3:** The temporary concrete batch plan will not diminish the value of land, buildings, or structures in the district because it is temporary in nature and the land will be restored upon removal of the concrete mixing equipment. Improvements to the property as a result of the batch plant use include a new permanent well that can be used at the landowner's discretion.
- **Special Use Standard No. 4:** The temporary concrete batch plant will not increase traffic hazards or cause congestion on the public thoroughfares of the area. The driveway access to the batch plant facility will be off Redstone Road, a less traveled route that intersects Meridian Road, a Class A paved public road. Turning movements leaving the facility will be from a controlled road intersection rather than from a driveway into the flow of traffic. The driveway permits issued by the Midland County Road Commission are conditioned on specific traffic safety

measures and signage being put in place, as disclosed in Appendix B and Appendix C.

- **Special Use Standard No. 5:** The water supply and sewage disposal systems proposed are adequate for a temporary concrete batch plant. Non-potable water will be supplied by a permanent well under a permit issued by the Midland County Health Department. The Health Department has confirmed that the plan for portable toilets does not require a permit. A licensed septic waste hauler will be hired to service the facility as required by applicable health codes.
- **Special Use Standard No. 6:** The concrete batch plant is not a permanent use of the land. As a temporary element of construction activity, it will be no more objectionable to nearby properties than other construction activities. The site is isolated from nearby residences; the nearest residential property line is more than 800 feet away. Glare, flashing lights, fumes, and odor are not associated with this type of use. The distance between the batch plant and residences should mitigate noise, vibration, and dust, if any. DTE commits to causing Barton Malow to follow the dust control measures described in this application and agrees that compliance with those measures should be a condition of approval. DTE further acknowledges that the Porter Township has adopted a Noise Ordinance, Ordinance No. 247, and commits to causing Barton Malow to maintain its equipment and machinery in good condition and repair so it will not emit loud noise beyond what is reasonable given the use and purpose of the equipment and machinery to ensure compliance with the ordinance.
- **Special Use Standard No. 7:** Compliance with SESC requirements has been shown through the SESC permit issued by the Midland County SESC agent for the proposed batch plant. The proposed use has been designed and will be operated to prevent spills and discharges of fuel to the surface of the ground, groundwater, and nearby water bodies through the use of double-walled aboveground fuel tanks, limiting fueling activity to a designated area, monitoring of fueling activities, the availability of spill cleanup kits, and adherence to reporting and disposal procedures, consistent with the requirements of Section 9.08 of the Zoning Ordinance.
- **Special Use Standard No. 8:** The temporary concrete batch plant is consistent with the intent and purpose of the Zoning Ordinance. The proposed use and site plan have been shown to comply with all applicable regulations and to be not injurious to the future use of adjacent properties or development generally within the zoning district. The proposed use supports construction of a special use – a commercial wind energy facility – approved by the Planning Commission on November 11, 2020 on the basis of the wind energy facility’s compatibility with Township planning policies and regulations and subject to conditions protective of public health, safety, and general welfare.