



**To:** Patrick McCarthy  
 Leah Grossman  
 Chip Reading  
**EDR Project No:** 14048

**From:** Ben Brazell  
 Lindsay Donahoe

**Date:** August 20, 2019

**Reference:** Cassadaga Wind Project – Summary of Facility Changes  
 Case No. 14-F-0490

**Comments:**

Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C. (“EDR”) has prepared this memorandum to summarize changes to the Cassadaga Wind Project (the “Facility”). Specifically, this memorandum addresses certain Facility components that have been moved more than 500 feet from the location proposed in the Application and approved in the Certificate of Environmental Compatibility and Public Need (“Certificate”) issued to Cassadaga Wind LLC (the “Certificate Holder”) on January 17, 2018 by the New York State Board on Electric Generation Siting and the Environment (“Siting Board”). The proposed moves are related to further engineering refinement associated with certain segments of collection lines, access roads, and the transmission line. As such, the location of some components has shifted more than 500 feet from the layout proposed at the time the Certificate was issued (“Certified Layout”). Please refer to Figure 1 of this memorandum for a general depiction of the proposed changes in relation to the Certified Layout.

**ACCESS ROADS**

***Description of Change and Impact Review***

There are four access road segments that have shifted more than 500 feet from the Certified locations presented in the original Application and associated supplements:

- Access Road to T53: Turbine T53 will now be accessed from Cook Road to the north, whereas the previous access road connected turbine T53 to Route 77 to the south and west. Figure 2, Sheet 1 shows the Certified Layout design as compared with the current proposed layout. The proposed access road from Cook Road to T53 is approximately 1,800 feet long and located primarily on agricultural land. Of the 1,800 feet, approximately 1,100 feet of the access road are located beyond 500 feet of the Certified Facility. The road

location was modified to avoid grading challenges associated with the existing dirt road in the vicinity of Wetland P. The Certified access road would have required significant grading to allow for facility equipment delivery and that grading would have had a large permanent impact to Wetland P.

The Certified access road location to T53 was previously sited on two parcels. The proposed access road is a more direct route and one of the previous parcels (owner: Teddy Lebaron, parcel ID: 201.00-1-29.1) will no longer be crossed by the proposed access route. The segment of the Certified access road that has been removed originally crossed one wetland with a temporary impact of 0.044 acre and a permanent impact of 0.024 acre. Subsequent to the Application, a grading analysis of this road for equipment delivery indicated that the temporary and permanent impacts to this wetland would be significantly larger. The proposed alignment also reduces impacts to Wetland Q.

The now proposed access road will cross two streams: Stream JM - temporary impacts of 0.005 acre (78 linear feet) and permanent impacts of 0.004 acre (74 linear feet) and Stream T - temporary impacts of 0.02 acre (100 linear feet) and 0.024 acre (156 linear feet) of permanent impact. Stream JM is a Class C stream and is a tributary to New York State Department of Environmental Conservation (NYSDEC)-mapped Canadaway Creek and Stream T is a portion of Canadaway Creek, mapped by the NYSDEC as a Class C stream.

A Conceptual Wetland Mitigation Plan was submitted to the Siting Board on June 21, 2019, which identified the site selection process, baseline information protocols, mitigation work plan and maintenance plan, performance standards, monitoring requirements and financial assurances that would be followed as part of the wetland mitigation. Wetland mitigation activities will include wetland establishment (creation), wetland restoration, wetland enhancement, and buffer restoration. The NYSDEC has provided approval of the Conceptual Plan. The impacts to wetlands will be addressed in a Final Mitigation Plan, based on the Conceptual Mitigation Plan.

The Certificate Holder consulted with the New York State Department of Agriculture and Markets (NYSDAM) to address the impacts to agricultural land associated with this access road shift. In an email correspondence dated August 15, 2019 (Attachment A), NYSDAM indicated that they had no concerns with this change.

EDR evaluated the location of the access road shift in relation to the *Phase IB Archaeology Survey* report (EDR, 2016a) and the *Historic Architectural Resources Survey* (EDR, 2016b) that were previously prepared for the Facility. EDR reviewed the shift to the access road in detail and determined that based on the low-to-negligible potential impacts to archaeological resources, additional archaeological survey is not warranted (Attachment B). This report was submitted to SHPO on July 29, 2019 for review and concurrence. SHPO concurred with these findings on August 14, 2019. This concurrence is included as Attachment C.

- Access Road to T4: The Certified access road traveled south from T4 and then turned west to Lewis Road. The proposed access road travels generally west to Lewis Road. Figure 2, Sheet 1 shows the Certified Layout as compared with the current proposal. The proposed access road is approximately 900 feet in length and is located on the same parcel as the Certified location (Figure 4-4 of the Article 10 Application) on active agricultural land. Of the 900 feet, approximately 200 feet are located beyond 500 feet of the Certified Facility. The proposed road was changed to alleviate grading concerns associated with the slope south of T4.

There are no wetland impacts associated with either the Certified or proposed access road locations.

The Certificate Holder consulted with the New York State Department of Agriculture and Markets (NYSDAM) to address the impacts to agricultural land associated with this access road shift (Attachment A). NYSDAM indicated that the field appears to have historically been maintained as a permanent grass/hay field and has not been utilized as row crops. As the field is farmed in a north-south direction, NYSDAM recommends that the road be constructed at grade to allow for farm equipment to traverse the road. Based on this recommendation, to the extent possible this road will be constructed at grade. If final conditions do not allow for the entire road to be at grade, the landowner will be consulted for placement of appropriate equipment crossings to minimize impacts to farming activities.

EDR evaluated the location of the access road shift in relation to the *Phase IB Archaeology Survey* report (EDR, 2016a) and the *Historic Architectural Resources Survey* (EDR, 2016b) that were previously prepared for the Facility. EDR reviewed the shift to the access road in detail and determined that based on the low-to-negligible potential impacts to archaeological resources, additional archaeological survey is not warranted (Attachment B). This report was submitted to SHPO on July 29, 2019 for review and concurrence. SHPO concurred with these findings on August 14, 2019. This concurrence is included as Attachment C.

- Access Road to T13: The Certified access road reached T13 from the west. The proposed access road travels along the same route as the Certified location, from the west at the intersection of Plank Road; and then continues south from T13 until it intersects Weaver Road. Figure 2, Sheet 2 shows the Certified Layout as compared with the current proposed route. The additional southern section of the access road is approximately 900 feet in length, is located on the same parcel with the same agricultural land use as the Certified access road and will be temporarily installed for use during construction. After construction, the portion of the access road to Plank Road will remain while the portion of the access road south of T13 (to Weaver Road) will be restored to its original condition. Of the 900 feet, approximately 330 feet are located beyond 500 feet of the Certified Facility. The additional temporary road is proposed to avoid concerns with installing a turning radius at the intersection of Plank and Weaver roads, and will be utilized to access T23, T17, and T14.

As described above, the Certified and proposed access road are located on the same parcel and as such there is no change to the land use between the two routes.

There were no wetlands crossed by the Certified access road. The proposed temporary access road crosses one wetland for a total temporary impact of 0.016 acre. This small, temporary impact will be restored during the restoration of the project access roads.

In addition, the Certificate Holder consulted with the New York State Department of Agriculture and Markets (NYSDAM) to address the impacts to agricultural land associated with this access road shift (Attachment A). The temporary portion of the access road will be restored per NYSDAM guidelines after construction and therefore, NYSDAM had no concerns about this change.

EDR evaluated the location of the access road shift in relation to the *Phase IB Archaeology Survey* report (EDR, 2016a) and the *Historic Architectural Resources Survey* (EDR, 2016b) that were previously prepared for the Facility. EDR reviewed the shift to the access road in detail and determined that based on the low-to-negligible potential impacts to archaeological resources, additional archaeological survey is not warranted (Attachment B). This report was submitted to SHPO on July 29, 2019 for review and concurrence. SHPO concurred with these findings on August 14, 2019. This concurrence is included as Attachment C.

- Access Road to T31: The proposed road follows a similar path as the Certified location; however, where the Certified road travels southwest from T31 to Boutwell Hill Road, the proposed location makes a sharper turn to the west and intersects with Boutwell Hill Road approximately 900 feet northwest of the original intersection. Figure 2, Sheet 3 shows the Certified Layout design as compared with the current proposed layout. The access road is approximately 2,000 feet in length. Of the 2,000 feet, approximately 400 feet are located beyond 500 feet of the Certified Facility.

The previously Certified access road traversed several terrace drains, whereas the proposed road will only cross one of these drains. In addition, the Certified road would have required significant grading, resulting in increased impacts to the surrounding agricultural fields. The proposed access road generally follows the direction which the field is worked by the farmer. As this road alignment minimizes crossings of additional terrace drains, NYSDAM expressed no concerns about this change (Attachment A).

The land use (agriculture) and parcel owner are the same for both the Certified and proposed access road. The Certified route did not impact any wetlands. The proposed access road will temporarily impact one wetland for a total of 0.04 acres. The impacts to wetlands will be addressed in a Final Mitigation Plan, based on the Conceptual Mitigation Plan described above.

EDR evaluated the location of the access road shift in relation to the *Phase IB Archaeology Survey* report (EDR, 2016a) and the *Historic Architectural Resources Survey* (EDR, 2016b) that were previously prepared for the Facility. EDR reviewed the shift to the access road in detail and determined that based on the low-to-negligible potential impacts to archaeological resources, additional archaeological survey is not warranted (Attachment B). This report was submitted to SHPO on July 29, 2019 for review and concurrence. SHPO concurred with these findings on August 14, 2019. This concurrence is included as Attachment C.

## COLLECTION LINES

### ***Description of Change and Impact Review***

There are two small portions of buried collection line that have been moved more than 500 feet from the Certified locations:

- Collection Line to T10: The new portion of proposed collection line is approximately 450 feet long and located approximately 900 feet south of turbine T10. Figure 2, Sheet 2 shows the Certified Layout design as compared

with the current proposed layout. The Certified line traveled east from T10 to T42 and then southwest from T42 to Farrington Hollow Road. Subsequent to issuance of the Certificate, Cassadaga Wind eliminated T42 from the facility. As a result of the removal of T42, the proposed collection line travels straight south from T10 and eliminates approximately 800 feet of collection line.

There is no change to the parcel owner or surrounding land use as a result of this shift. There were no wetland impacts associated with the Certified collection line location. The proposed location will cross one wetland for a total forest conversion impact of 0.013 acre and one stream with a temporary impact of 0.003 acre. The stream is not associated with any NYSDEC-mapped streams. The impacts to wetlands will be addressed in a Final Mitigation Plan, based on the Conceptual Mitigation Plan described above.

EDR evaluated the location of the collection line shift in relation to the *Phase IB Archaeology Survey* report (EDR, 2016a) and the *Historic Architectural Resources Survey* (EDR, 2016b) that were previously prepared for the Facility. EDR reviewed the shift to the collection line in detail and determined that based on the low-to-negligible potential impacts to archaeological resources, additional archaeological survey is not warranted (Attachment B). This report was submitted to SHPO on July 29, 2019 for review and concurrence. SHPO concurred with these findings on August 14, 2019. This concurrence is included as Attachment C.

- Collection Line to T13 and T23: The Certified collection line originally traveled north from T13 before turning east and then south. The proposed collection line travels south from T13 and then turns east, where it continues along the originally Certified route. Figure 2, Sheet 2 shows the Certified Layout design as compared with the current proposed layout. The section of collection line greater than 500 feet from the Certified layout is approximately 800 feet. The proposed realignment has been made in order to minimize tree clearing, avoid several crossings of an overhead electrical line, minimize wetland impacts and shorten the overall length of line. The proposed line is approximately 800 feet shorter than the Certified route.

The proposed shift between turbines T13 and T23 travels through two of the same parcels as the Certified layout and one additional parcel (parcel owner: Stanley Dybka, parcel ID: 203.00-1-12). The two parcels crossed by both the proposed and Certified routes are classified by NYSORP as Vacant. The new parcel crossed by the proposed route is classified as Residential (see Figure 4-1, Sheet 2 of the Article 10 Application).

The Certified collection route crossed one wetland (Wetland 6X) and resulted in a temporary impact of 0.246 acre. There are no wetland impacts associated with the proposed collection line. NYSDAM did not express concerns for any underground collection lines.

EDR evaluated the location of the collection line shift in relation to the *Phase IB Archaeology Survey* report (EDR, 2016a) and the *Historic Architectural Resources Survey* (EDR, 2016b) that were previously prepared for the Facility. EDR reviewed the shift to the collection line in detail and determined that based on the low-to-negligible potential impacts to archaeological resources, additional archaeological survey is not warranted (Attachment B). This report was submitted to SHPO on July 29, 2019 for review and concurrence. SHPO concurred with these findings on August 14, 2019. This concurrence is included as Attachment C.

## **TRANSMISSION LINE**

### ***Description of Change and Impact Review***

The proposed transmission line route remains largely as approved in the Certificate. A small segment of the transmission line (approximately 1,100 feet in length) is sited greater than 500 feet from the Certified alignment. This segment is located approximately 1.4 miles east of the proposed POI substation. Figure 2, Sheet 4 shows the Certified Layout design as compared with the current proposed layout. The re-aligned transmission line segment is on the same parcel as the Certified transmission line route and both the Certified alignment and the proposed alignment are located within existing agricultural fields. The proposed change has been made to increase spacing from an existing gas well as well as to address landowner concerns (see Figure 2, Sheet 4).

As described above, the re-aligned transmission line segment is located on the same parcel and has the same land use as the Certified segment, as depicted in Figure 4-4, Sheet 24 and Figure 4-1, Sheet 3 of the Article 10 Application. There are minor temporary wetland impacts associated with the proposed portion of the transmission line, which are associated with agricultural land and as such the wetland functions and values have been compromised. The Certified route did not result in any impacts to streams or wetlands. The proposed route will result in temporary impacts to one wetland, totaling 0.041 acre. The wetland is a maintained agricultural field drainage swale, and impacts will be limited to temporary mat crossings. It is anticipated that the mat crossings will avoid any impacts to this feature.

Consultation with NYSDAM identified potential concerns with guy wires being located in agricultural fields. The turning structures proposed for this alignment will be self-supporting and will not require guy wires. Therefore, no additional impacts are anticipated to agricultural field from this change.

EDR evaluated the location of the proposed transmission line in relation to the *Phase IB Archaeology Survey* report (EDR, 2016a) and the *Historic Architectural Resources Survey* (EDR, 2016b) that were previously prepared for the Facility. EDR reviewed the shift to the transmission line in detail and determined that based on the low-to-negligible potential impacts to archaeological resources, additional archaeological survey is not warranted (Attachment B). This report was submitted to SHPO on July 29, 2019 for review and concurrence. SHPO concurred with these findings on August 14, 2019. This concurrence is included as Attachment C.



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## memorandum

### REFERENCES

Environmental Design & Research Landscape Architecture, Engineering, and Environmental Services (EDR). 2016a. *Cassadaga Wind Project, Phase 1B Archaeological Survey*. Environmental Design and Research, Syracuse, NY.

EDR. 2016b. *Historic Architectural Resources Survey: Cassadaga Wind Project, Chautauqua County, New York*. March 2016. Prepared by EDR, Syracuse, NY.