AIRPORT ZONING BOARD OF ADJUSTMENT

CITY OF BAY CITY

Tuesday, September 24, 2024 at 4:00 PM
COUNCIL CHAMBERS | 1901 5th Street

Vision Statement
We envision Bay City as a thriving, family-centered community where our citizens can live, work, worship, and play, while welcoming visitors to experience our beautiful environment and diverse culture.

AGENDA

CALL TO ORDER & CERTIFICATION OF QUORUM

APPROVAL OF AGENDA

APPROVAL OF MINUTES SUMMARY

1. **Airport Zoning Board of Adjustments meeting minutes of April 23, 2024**

PUBLIC COMMENTS

REGULAR ITEMS FOR DISCUSSION, CONSIDERATION AND/OR APPROVAL:

2. **Appeal by RWE Peyton Creek Wind Farm II, LLC of Administrative Agency's denial of five (5) permits and alternatively a request for variance for the placement of five (5) Wind Turbine Sites.**

3. **Potential closed meeting as authorized by Texas Government Code §551.071(1) to confer with its attorney regarding contemplated litigation; or (2) matters covered by the attorney client privilege.**

4. **Return to open session and take any action regarding matters discussed in closed session.**

ADJOURNMENT

AGENDA NOTICES:

Attendance by Other Elected or Appointed Officials:

The City Council of Bay City serves at the Airport Zoning Board of Adjustments and as such will be present at the meeting. It is also anticipated that members of other city board,

commissions and/or committees may attend the meeting in numbers that may constitute a quorum of the other city boards, commissions and/or committees. Notice is hereby given that the meeting, to the extent required by law, is also noticed as a meeting of the other boards, commissions and/or committees of the City, whose members may be in attendance. The members of the boards, commissions and/or committees may participate in discussions on the same items listed on the agenda, which occur at the meeting, but no action will be taken by such in attendance unless such item and action is specifically provided for on an agenda for that board, commission or committee subject to the Texas Open Meetings Act.

CERTIFICATION OF NOTICE

This is to certify that the above notice of a the Airport Zoning Board of Adjustment Meeting was posted on the front window of the City Hall of the City of Bay City, Texas on **Friday, September 20, 2024 before 4:00 p.m.** Any questions concerning the above items, please contact Mayor Robert K. Nelson at (979) 245-2137.

CITY OF BAY CITY

MINUTES ● APRIL 23, 2024

COUNCIL CHAMBERS | 1901 5th Street	**Bay City Airport Zoning Board of Adjustments**	**6:00 PM**

1901 5TH STREET
BAY CITY TX,77414

Mayor

Robert K. Nelson

Mayor Pro Tem	Councilman	Councilwoman
Blayne Finlay	Bradley Westmoreland	Becca Sitz
Councilman		**Councilman**
Jim Folse		Benjamin Flores

Through a united and collaborative effort, we seek to grow the City of Bay City with a diverse culture that is proud to call Bay City home. We envision a thriving family-centered community where citizens are involved in the future development of our city. We desire our citizens to work, play, worship and shop in the community in which we live. Visitors are welcomed and encouraged to enjoy the friendly environment and amenities the citizens and business owners have created together.

CALL TO ORDER AND CERTIFICATE OF QUORUM

The meeting was called to order by Mayor Robert K. Nelson at 8:40 p.m.

PRESENT
Mayor Robert K. Nelson
Mayor Pro Tem Blayne Finlay
Councilman Benjamin Flores
Councilman Jim Folse
Councilman Brad Westmoreland
Councilwoman Becca Sitz

PUBLIC COMMENTS

Mike Smith, 3075 County Road 457, stated that 20 land owners were not happy with the previous zoning regarding ponds and believed that the turbines will cause a potential hazard and asked Council to not grant a variance.

Jason Brown, 4628 County Road 457, a recreational and professional pilot, agreed with the safety concerns and discussed the issues he would have flying in and out to the Bay City airport due to fog and turbines and would go to an airport that's easier to get in and out of.

REGULAR ITEMS FOR DISCUSSION, CONSIDERATION AND/OR APPROVAL:

1. **Discuss, consider, and/or approve the rules and procedures of the Airport Zoning Board of Adjustments for the Hazard Area and Compatible Land Use Zoning Regulations for Bay City Regional Airport and to appoint a chairman of the Board of Adjustment. Pursuant to Local Government Code 241 Sec 241.032, Sec 241.033, and Sec 241.034**

   Motion made by Councilman Westmoreland to approve the rules and procedures of the Airport Zoning Board of Adjustments, Seconded by Mayor Pro Tem Finlay. Voting Yea: Mayor Nelson, Mayor Pro Tem Finlay, Councilman Flores, Councilman Folse, Councilman Westmoreland, and Councilwoman Sitz. Motion carried.

2. **Discuss and appoint a Chairman to the Airport Zoning Board of Adjustments**

   Motion made by Councilman Westmoreland to appoint Mayor Robert K. Nelson as chairman to the Airport Zoning Board of Adjustments, Seconded by Councilman Flores. Voting Yea: Mayor Nelson, Mayor Pro Tem Finlay, Councilman Flores, Councilman Folse, Councilman Westmoreland, and Councilwoman Sitz. Motion carried.

ADJOURNMENT

Motion made by Councilman Flores to adjourn, Seconded by Councilman Westmoreland. Voting Yea: Mayor Nelson, Mayor Pro Tem Finlay, Councilman Flores, Councilman Folse, Councilman Westmoreland, and Councilwoman Sitz. Motion carried and council adjourned at 8:58 p.m.

PASSED AND APPROVED, this 24th day of September 2024.

ROBERT K. NELSON, MAYOR	JEANNA THOMPSON
CITY OF BAY CITY, TEXAS	CITY SECRETARY

CITY OF BAY CITY

February 9, 2024

Mr. Rich Saunders
Senior Director, Utility-scale Development South
richard.saunders@rwe.com
RWE Clean Energy, LLC
701 Brazos St., Suite 1400
Austin, TX 78701

Re: Preliminary Consideration of 59 sites submitted to Matagorda County Environmental Health Department for wind turbine placement

Dear Mr. Saunders:

As the Interim City Manager, I have been working with you over the last two weeks to try and streamline your company's submissions for wind turbine sites as it relates to the Bay City Regional Airport (BCRA). The City appreciates your patience as there is presently an ongoing revision of the BCRA's Airport Plan Layout by the FAA. We have met a few times and at my request, you submitted a preliminary map of sites on Tuesday, February 6th. Upon receipt of the maps, James Mason, the City's Airport Manager, has diligently reviewed the sites and I am pleased to advise you that the City is able to immediately release forty-nine (49) of fifty-nine (59) sites proposed to you as not affecting BCRA safety concerns.

All reviews are conducted based upon safety concerns as outlined in the City's Code of Ordinances, Article 18, Section 18-44 which states:

Sec. 18-44. - Other use restrictions.

(1) ***Airport safety***. Except as provided in this section, no use may be made of land or water within the entirety of Matagorda County in such a manner as to **(1)** create electrical interference with navigational signals or radio communications between the airport and aircraft, **(2)** make it difficult for pilots to distinguish between airport lights and others, **(3)** result in glare in the eyes of pilots using the airport, **(4)** impair visibility in the vicinity of the airport, or **(5)** otherwise in any way endanger or interfere with the landing, taking off, or maneuvering of aircraft intending to use the airport. -

Based on the provision above, the City must conduct a cursory review under 18-44 of anything constructed in the county that affects 1-5 above, even if outside the Airport Zones defined in 18-40. In this circumstance (wind turbine installation), the City focused on anything in FAA 14 CFR Part 77 (over 200 feet).

For your information and consideration, the City must be diligent as it awaits its new Airport Layout Plan as mandated by the FAA. BCRA has been designated as a disaster relief airport for Matagorda County and adjacent cities/counties that don't have an airport. FAA has already determined the Airport will become a designated disaster relief airport for the **region** and the Airport Layout Plan is determining what the City will need to change at the Airport. This decision necessitates the City being diligent on the review of these situations county-wide.

Under the Airport Manager's review in the last 72 hours, I am pleased to advise you the City has determi release Forty-nine (49) out of fifty-nine (59) sites as "not in need of permit." On many, the reason the Airport Manager can determine there is no safety concern is that they are near other wind turbines that have previously been studied by the FAA and thus the City can be assured of how the FAA has previously determined safety concerns.

The remaining ten (10) sites are described on the attached spreadsheet with listed concerns. The City's preliminary decision DOES NOT mean that these sites will need to be permitted. It merely means that further information is needed to make a determination.

The first five (5) will need an FAA Study. This is based on a 2022 aeronautical study that removed one of the turbines in this vicinity due to LNAV 31 approach and would impact the departure procedure. Therefore, the FAA study is required for review prior to making any determination.

The remaining five (5) will require a variance that has been included in ongoing discussions with you. As you are aware, based on the FAA comments to the 7460 filed by the Sponsor, five of the ten have been identified through a FAA Aeronautical study to increase take-off minimums and obstacle departure procedures. Based on Section 18-44 (1) Airport Safety, these wind turbines appear to endanger or interfere with the landing, taking off, or maneuvering of aircraft intending to use the airport use because they do not conform to the Bay City Airport's published departure procedures as determined by the FAA. You have stated that an agreement can be reached between the City and your company to alleviate any of the City's costs in performing these changes.

To move forward on the latter sites that will require a variance, please refer to the process outlined in 18-38 and 18-67 of the Zoning Ordinance. Although the Ordinance outlines this process as occurring after "denial," I am requesting that you consider that the Airport Manager cannot grant the permit for the site until the variance has been approved. As such the City is considering this as part of the process. Please submit a permit request for these five sites along with a letter requesting a variance for a revision to the published departure procedures (200/1). With this request for variance, the Board of Adjustments (City Council) can grant this permit conditioned by your company reimbursing the City for all costs associated with publishing new departure plates. This will be memorialized in an agreement signed by both parties prior to granting of the permit with variance. Once the permit and variance request is received by the City's Airport Manager, I can expedite the process by calling a special meeting of the Board of Adjustments (City Council) providing at least a 72 hour notice.

To be clear, as for the first five that require an FAA study, please be assured that the City has no safety concerns about the base only construction for the wind turbine so long as it is built to the specifications contained in the issued FAA aeronautical study for the site elevation (Form 7460). For all vertical construction above the base, the City will have to await the results of the FAA study.

If you have any questions or concerns, I urge you to contact me at your earliest convenience.

Sincerely,

Scotty Jones, Interim City Manger

ROY B. LONGACRE*
DARRELL W. MOORE§
CHARLES L. BLACK†
LISA CHAVEZ
BENJAMIN E. GRANT‡
M. SHAUN GALOVICH
GRANT R. MILLER
JONATHAN S. MOORE*
DAVID W. THOMAS
MARK A. MARSHALL
JOSH MONHOLLON
ROSE VANDENBRAND

*BOARD CERTIFIED BY THE TEXAS BOARD OF LEGAL SPECIALIZATION PERSONAL INJURY TRIAL LAW CIVIL TRIAL LAW

§LICENSED IN TEXAS AND OKLAHOMA

†BOARD CERTIFIED BY THE TEXAS BOARD OF LEGAL SPECIALIZATION COMMERCIAL REAL ESTATE LAW

‡LICENSED IN TEXAS AND NEW MEXICO

*LICENSED IN TEXAS AND CALIFORNIA

WAGSTAFF Est. 1890 LLP
Attorneys & Counselors

OF COUNSEL
DIANN WADDILL

J. M. WAGSTAFF 1862-1952
JOHN H. ALVIS 1896-1971
R. M. WAGSTAFF 1892-1973
ROBERT H. ALVIS 1929-1997

www.wagstafflaw.com

March 8, 2024

Mr. James Mason
Airport Manager
Bay City Regional Airport
3598 FM 2540 N
Bay City, Texas 77414
Via email: jmason@cityofbaycity.org

Re: Peyton Creek Wind Farm II, LLC's wind turbine sites

Dear Mr. Mason:

Pursuant to Ms. Scotty Jones' letter, dated February 9, 2024 (the "**February 9th Letter**"), regarding the path forward to streamline Peyton Creek Wind Farm II, LLC's ("**Peyton Creek II**") submissions for wind turbine sites (each, a "**Site**") for the Peyton Creek II wind project (the "**Project**"), please find the Airport Hazard and Land Use Permit requests for the following five (5) turbine sites (the "**FAA Approved Sites**"): PC 2137c, PC 2134d, PC 2167, PC 2239, and PC 2183.

Peyton Creek II understands there are ongoing discussions between Matagorda County and Bay City (the "**City**") regarding the remaining ten (10) Sites that have not been released by the City, including the potential for a further release of some or all of the remaining Sites. Therefore, to preserve our right to request a variance from the city council, Peyton Creek II submits this letter.

Pursuant to the February 9th Letter, Bay City (the "**City**") has determined that forty-nine (49) out of the fifty-nine (59) Sites of the Project will not require an airport hazard and land use permit (a "**Permit**") pursuant to Section 18-67 of the Bay City Airport Zoning Ordinance (the "**Ordinance**"). Of the remaining ten (10) Sites, the Federal Aviation Administration (the "**FAA**") has issued Determinations of No Hazard (each a "**DNH**") with respect to the FAA Approved Sites, and applications are being submitted for DNHs for the remaining five (5) Sites, PC 2236, PC 2193a, PC 2235, PC 2233b, and PC 2234 (the "**Pending Sites**"). Of the FAA Approved Sites, only three Sites (PC 2137c, PC 2134d, PC 2167) fall within the 20,000' future use area as described in Section 18-67(1)(e) of the Ordinance, and therefore would require a Permit.

The City has determined that the FAA Approved Sites require variances (each, a "**Variance**"), although no Permits have been denied, based upon comments from the FAA that the published departure procedures (the "**PDPs**") would need to be revised due to the location of the FAA Approved Turbines. However, the City has indicated in the February 9th Letter that the City Council, sitting as the Board of Adjustment (the "**Board**"), will grant the Variance for each of the FAA Approved Sites, contingent upon

Peyton Creek II agreeing to pay any costs assessed by the FAA for the revisions to the PDPs. With respect to the Pending Sites, if any Variance is required by the City due to the FAA's determination that the PDPs will have to be further changed with respect to any of the Pending Sites, the Board will grant the Variance for each of the Pending Sites, contingent upon Peyton Creek II agreeing to pay any costs assessed by the FAA for such revisions to the PDPs.[1]

This letter is to serve as the request for Variances for the FAA Approved Sites (to allow for the revisions to the PDPs) and the agreement of Peyton Creek II to pay any costs assessed by the FAA for the revisions to the PDPs. We appreciate Ms. Jones' offer to expedite the variance process by calling a special meeting of the Board to consider this request for Variances. However, as Peyton Creek II is coordinating among several schedules, we propose to submit a list of available dates for the hearing on the Variance on or before Friday, March 15.

Additionally, by copy of this letter, Peyton Creek II is requesting that the City agree to conditionally release the Pending Sites awaiting FAA approval, subject to Peyton Creek II providing the Airport a copy of a DNHs from the FAA for each of the five (5) Pending Sites after the completion of the FAA aeronautical study, as well as Peyton Creek II's agreement to reimburse the City for any costs associated with publishing any new PDPs that may be required pursuant to the FAA aeronautical studies.

Peyton Creek II appreciates the time and diligence that both you and Ms. Jones have expended in reviewing the project turbine sites, as they pertain to the Airport. Peyton Creek II looks forward to being a partner in the community and has been encouraged by the level of professionalism and spirit of development exhibited by both Bay City and Matagorda County.

Thank you for your time and attention to this matter. If you have any questions regarding this matter, please do not hesitate to contact my office.

Yours Very Truly,

Mark A. Marshall

Cc: Ms. Scotty Jones
Interim City Manager
1901 Fifth Street
Bay City, Texas 77414
Via email: sjones@cityofbaycity.org

[1] Peyton Creek II believes that the City does not have jurisdiction with respect to any Sites outside of the 20,000' future use area as described in Section 18-67(1)(e), and reserves any claims with respect to jurisdiction, although desires to comply with the City's request in order to expedite the issuance of the building permits and any Permits required for such Sites.

814 Thornwick Drive
Houston, TX 77079
www.Civil-PEs.com

January 26, 2024

James Mason, CM, A.C.E.
Bay City Regional Airport
3598 FM 2540 North
Bay City, Texas 77414

Permit Application Technical Review: Permit Application: Structure PC2239 – Wind Turbine

Transmitted via email to jmason@cityofbaycity.org *on January 26, 2024*

Dear James.

We have completed a review of the structure reference above. This structure was previously studied under FAA's airspace review as study 2023-WTW-15845-OE. It is also noteworthy that this structure is under current study under airspace review as study 2024-WTW-1119-OE; which has not been determined at this time. This review is organized around the following sections of the ordinance:

Zoning Ordinance Section 18-41 – Height Limitations
Subsection: N/A
Reasons: We have no objection to the proposed structure based on the Part 77 surfaces identified in this Section.

Zoning Ordinance Section 18-42 – Compatible Land Use Area
Subsection: N/A
Reasons: We have no objection to the proposed structure based on noise compatibility requirements in this Section.

Zoning Ordinance Section 18-44 – Other Use Restrictions
Subsection: **(1) Airport Safety**
Reasons: This section does not permit use of land or water in the entirety of Matagorda County that might impair visibility in the vicinity of the airport, or otherwise in any way endanger or interfere with the landing, taking off, or maneuvering of aircraft intending to use the airport. This proposed item will affect landing and taking off from the airport in multiple ways:

1. This proposed structure is located 3.57 nm from the end of Runway 31, its departure end. This structure is within the "Diverse Departure Assessment Area" as defined under FAA Order 8260.3D and may require an Obstacle Departure Procedure. For southbound departures from the runway toward the proposed structure, the climb gradient needed to provide proper clearance over the structure will exceed the standard climb gradient; this has been noted in the airspace determination letter of December 20, 2023. Such a requirement interferes with operating out of the airport compared to the operating requirements today. As noted above, this structure is also under a current airspace study of which it is unknown as to the FAA's determination on it.

Based on the information provided above, we find this proposed structure to be contradictory to the zoning ordinance and hereby do not recommend approval of this structure.

Civil PEs, LLC

Thomas D Dodson, PE
Project Leader

Bay City
REGIONAL AIRPORT

www.FlyBayCity.com

3598 FM 2540 N Bay City, Texas 77414 (979) 244-5037

Airport Hazard and Land Use Permit

In accordance with Texas Local Government Code, Chapter 241, also known as the Airport Zoning Act, the Consolidated Hazard Area and Compatible Land Use Zoning Regulations have been revised by the Bay City Regional Airport Zoning Board. Revisions now include maps which allow for timelier identification of real properties within hazard and zoning areas.

The Airport Zoning Act found that airport hazards and obstructions have the potential for endangering the lives and property of users of Bay City Regional Airport and property or occupants of land it its vicinity. Obstructions may impact the size of areas available for the landing, taking off and maneuvering of aircraft and may affect aircraft instrument approach minimums.

The real property for which you are submitting a permit application is located within the Compatible Land Use Area and/or Hazard Area of the Bay City Regional Airport. Applications for building, electrical, plumbing, or mechanical permit(s) within these areas require an "Airport Hazard and Land Use Permit" be approved before any other permit will be issued. Airport Hazard and Land Use permits may restrict some aspects of the potential use, size, height, lighting, glare potential or construction of your building.

Any cost associated with a permit that requires the assistance of any person not employed by the City of Bay City or the County of Matagorda shall be paid by the permittee. The permit fee shall be calculated by the Bay City Regional Airport Manager and shall be paid before the permit will be reviewed or issued.

Please complete the attached permit application and submit to the Bay City Regional Airport in person or by mail or email (contact information below). The Bay City Regional Airport shall consider and provide an approval or denial within a reasonable period of time.

Bay City Regional Airport
Attention: Airport Manager
3598 FM 2540 N
Bay City, TX 77414
Airport@cityofbaycity.org
(979) 244-5037

The Consolidated Hazard Area and Compatible Land Use Zoning Regulations can be found in the *City of Bay City Municipal Code of Ordinances, Chapter 18 – Aviation*.

Bay City
REGIONAL AIRPORT

Airport Hazard and Land Use Permit Application

APPLICANT CONTACT INFORMATION:

1. Property Owner's Name: Peyton Creek Wind Farm II, LLC
2. Mailing Address: 353 N. Clark St., Chicago, IL 60654
3. Daytime Telephone: 512-461-9747 Alternate Telephone: _____
4. Email address: richard.saunders@rwe.com

PROPERTY INFORMATION:

5. 911 Site Address: 1032 CR 168, Bay City, TX 77414
6. Property ID Number from Matagorda County Appraisal District: 20761
7. Total Size of Site (Square Feet): 96.47 acres
8. Size of Improvements (Square Footage): 5,410
9. Site Elevation (Above Mean Sea level): 35'
10. Total Structure Height (Above Ground Level): 656'
11. Overall Height (No.9 + No. 10) above Mean Sea Level: 691'
12. Latitude of highest point of structure: 28 ° 54 ' 41 " 98 "
13. Longitude of highest point of structure: 95 ° 51 ' 23 " 32 "
14. Datum: X NAD 83 ___NAD 27 ___Other

TYPE OF IMPROVEMENT: (Please mark all that apply)

_____ New Building
_____ Antenna Structure
_____ Alteration to Existing Building
_____ Tree/Vegetation
X Other - Describe: Wind Turbine PC2239

X PRIVATE (Individual, corporation, nonprofit institution, etc.)

_____ PUBLIC (Federal, state or local government)

ATTACH SURVEY/DRAWING/DEPICTION/MAP OF THE PROPERTY AND PROPOSED IMPROVEMENT

DESCRIPTION OF IMPROVEMENT OR PROJECT AND INTENDED USE OF LAND(ATTACH SEPARATE SHEETS IF NEEDED)

Install Wind Turbine Generator - PC2239

Will the property be used for any of the following purposes:

- Residential? (Y/N): N
- Educational (including child care and vocational)? (Y/N): N
- Medical, Institutional, Convalescent, or Rehabilitative Care? (Y/N): N
- Nursing Homes? (Y/N): N

If you answered "Yes" to any of the above, please describe further the proposed use: _____

Will any improvement or use create or cause electrical interference with communications between aircrafts and the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use create or cause difficulty for pilots to distinguish aircraft and the proposed improvement or the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use result in glare in the eyes of pilots or otherwise impair visibility in the vicinity of the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use increase the likelihood of bird strikes? (Y/N): N

If "Yes," explain: _____

Will any improvement or use endanger or interfere with the landing, taking off, or maneuvering of aircraft? (Y/N): N

If "Yes," explain: _____

Yes, Include Take-off Maneuvers & Obstacle Definition Procedures

FAA AIRSPACE REVIEW:

Does this project require an airspace review by the FAA? Yes: X No: _____

Date FAA Form 7460-1 Submitted*: 02/05/2024

*Please contact the Airport Manager at (979) 323-1115, for assistance completing FAA Form 7460-1

Date Determination Letter received from FAA: _____
(If received please attach a copy to this application)

NOTICE

I hereby certify that I have read and examined this application and know the same to be true and correct. The granting of a permit does not presume to give authority to violate or cancel any other Federal, State or local law regulating construction or the performance of construction.

DocuSigned by:
Richard Saunders
8822855B4C62440...
Applicant's Signature

Richard Suanders
Print Name

Date: 3/5/2024

Return completed Application to:

Airport Manager
Bay City Regional Airport
3598 FM 2540 N
Bay City, Texas 77414
(979) 244-5037
airport@cityofbaycity.org

Should you have any questions please contact the Aviation Director at (979) 244-5037 or email at airport@cityofbaycity.org

For Office Use Only:

Date Application Received: 3/11/24

Is project consistent with the Airport Zoning Regulation: Yes _____ No X

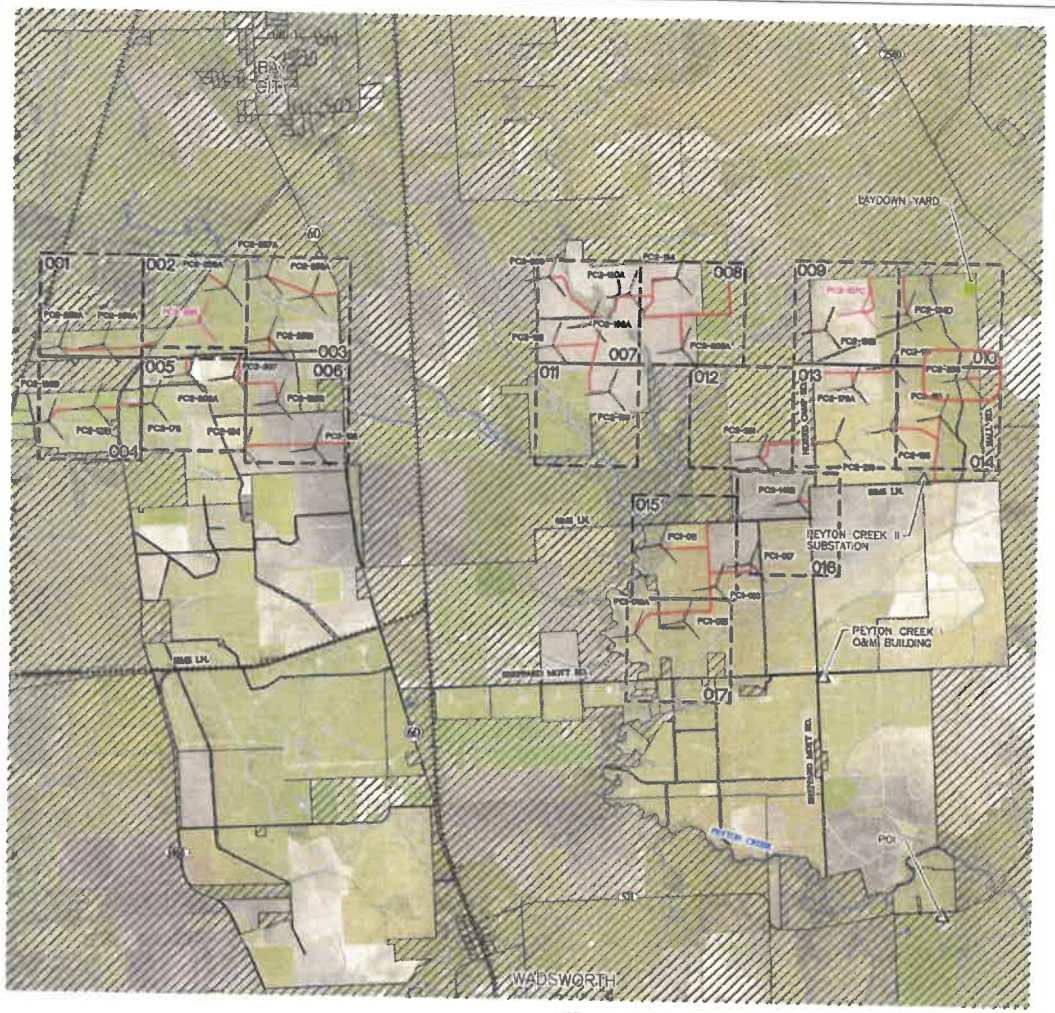
Reason for project not being considered consistent with zoning regulation:
INCREASE TAKE-OFF REQUIREMENTS & OBSTACLE DEPARTURE PROCEDURES

Airport Director Signature: _____

Date Application Considered by Administrative Agency Court.: _____

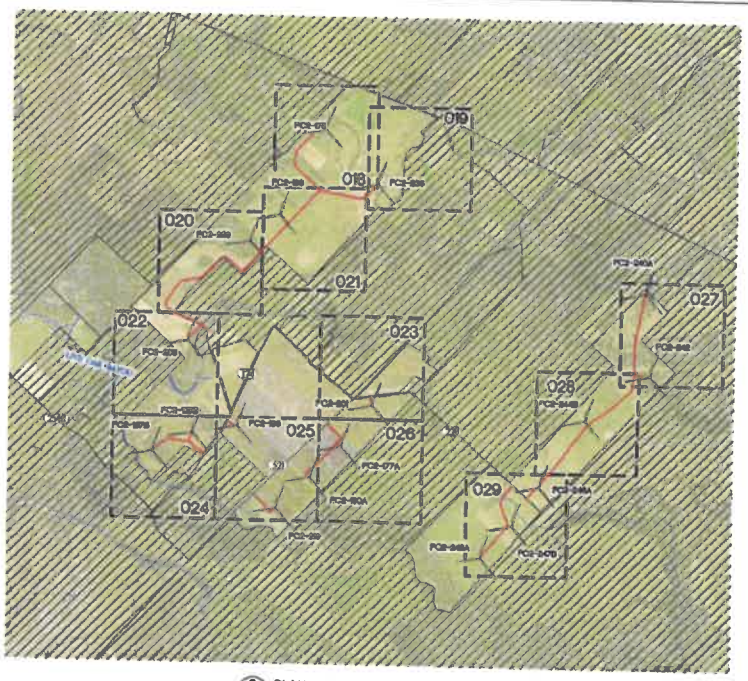
Permit Approved: Yes _____ No X

Permit Returned to Applicant 3/12/24 Via Mail Services.



1 PLAN: OVERALL SITE PLAN - WEST

0 3000 6000
SCALE IN FEET



2 PLAN: OVERALL SITE PLAN - EAST

0 3000 6000
SCALE IN FEET

LEGEND

- EXISTING ROAD
- EXISTING RAILROAD
- NHD WATERCOURSES
- WATERBODIES
- NON-PARTICIPATING BOUNDARY
- PROPOSED ACCESS ROAD
- PCX-XXX — VESTAS V163 TURBINE (PRIMARY)
- PCA-XXX — VESTAS V163 MW TURBINE (ALTERNATE)

90% DESIGN
NOT FOR CONSTRUCTION
09/29/2023

NO	BY	CHK	APP	DATE	REVISION DESCRIPTION
E	MAT	MAB	CMB2	09/29/2023	90% UPDATED DESIGN
D	JWM	CMB	CMB	11/18/2022	90% UPDATED DESIGN
C	JWM	CMB2	CMB	06/21/2022	30% UPDATED TURBINE ARRAY
B	REB	CMB	CMB	7/18/2022	30% REVIEW COMMENTS

30% DESIGN	
90% DESIGN	
90% DESIGN	
IFC	
RECORD	
RELEASED TO FOR	A B C D E 0 1
DATE RELEASED	

BARR
Project Office
BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
Suite 200
MINNEAPOLIS, MN 55435
Ph 1-800-632-2277
Fax (952) 832-2601
www.barr.com
Ph 1-801-632-2277

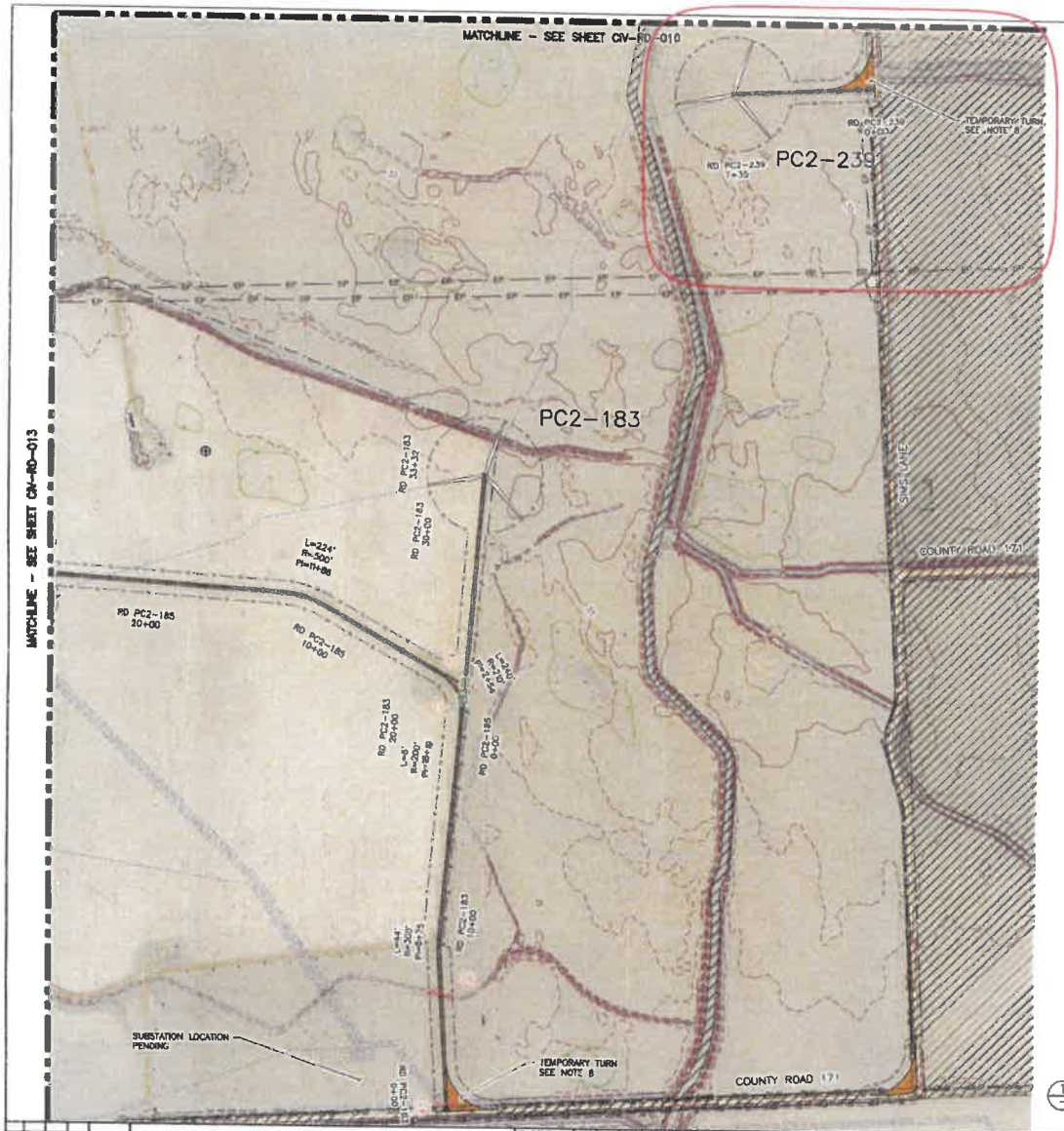
Scale	AS SHOWN
Date	05/18/21
Drawn	RJB2
Checked	CMB2
Designed	BARR
Approved	CMB2

RWE

PEYTON CREEK II WIND FARM
MATAGORDA COUNTY, TEXAS

OVERALL SITE PLAN
AND SHEET LAYOUT

BARR PROJECT No.	43M21003.00
CLIENT PROJECT No.	-
DWG. No.	CIV-GE-004
REV. No.	E



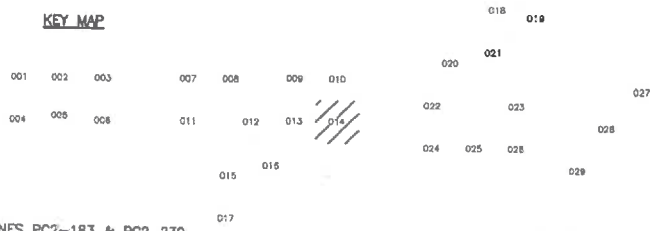
LEGEND

- PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING FENCE
- EXISTING PIPELINE
- EXISTING OVERHEAD POWER LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING GAS LINE
- EXISTING PUBLIC ROAD
- EXISTING GRAVEL
- EXISTING DITCH
- EXISTING CULVERT
- EXISTING BRIDGE
- EXISTING RAILROAD
- EXISTING EASEMENT
- EXISTING TREE LINE
- EXISTING WATER BODY
- NHD WATERCOURSES
- IDNR DESIGNATED RIVER
- WETLAND
- NWI WETLAND
- FEMA DELINEATED FLOOD ZONE A
- FEMA DELINEATED FLOOD ZONE A2
- FEMA DELINEATED FLOOD ZONE B
- NON-PARTICIPATING BOUNDARY
- CEMETERY
- EXISTING CONCRETE
- COLUMBIA BOTTOMLAND HARDWOODS
- BUILDING
- PROPOSED ACCESS ROAD
- PROPOSED TEMPORARY TURN
- PROPOSED COLLECTION LINE (BY OTHERS)
- DISTURBANCE LIMITS
- EXISTING WELL
- EXISTING POWER POLE
- FENCE CROSSING LOCATION
- UTILITY CROSSING LOCATION
- PCX-XXX — VESTAS V163 TURBINE (PRIMARY)
- VESTAS V163 TURBINE (ALTERNATE)
- PROPOSED CULVERT LOCATION
- PROPOSED LOW WATER CROSSING LOCATION

NOTES:

1. PRELIMINARY ROADS SHOWN. LOCATION OF ROADS TO BE DEFINED DURING FINAL DESIGN.
2. LOCATION OF ALL CULVERTS AND LOW WATER CROSSINGS SHOWN FOR PLANNING PURPOSES ONLY. FINAL LOCATION & SIZE TO BE DETERMINED DURING FINAL DESIGN.
3. CULVERTS AT INTERSECTIONS WITH PUBLIC ROADS TO FOLLOW TxDOT OR LOCAL AGENCY REQUIREMENTS.
4. EROSION CONTROL FEATURES NOT SHOWN. CONTRACTOR TO INSTALL EROSION CONTROL PER PROJECT SWPPP.
5. UNDERGROUND COLLECTION LINES NOT SHOWN. SEE ELECTRICAL CONSULTANT PLANS FOR CONSTRUCTION DETAILS, INCLUDING EROSION CONTROL DETAILS.
6. UTILITY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE UTILITY CROSSING AGREEMENTS.
7. CONTRACTOR TO FIELD ADJUST ROADS TO MINIMIZE TREE CLEARING REQUIREMENTS UPON APPROVAL FROM THE OWNER.
8. TEMPORARY TURNS BASED ON STANDARD TEMPLATES. SEE CIV-GE-009.
9. EXISTING CULVERTS SHALL BE PROTECTED, EXTENDED AND/OR REPLACED AS REQUIRED
10. RAISED ACCESS ROADS SHALL BE RAISED A MINIMUM OF 36" ABOVE EXISTING GROUND. SEE CIV-GE-007.
11. COORDINATE WITH RWE'S SITE REPRESENTATIVE AND LANDOWNER FOR REQUIREMENTS/SCHEDULE FOR IRRIGATION LINE WORK.

KEY MAP



1 PLAN: TURBINES PC2-183 & PC2-239

0 300 600

SCALE IN FEET

90% DESIGN
NOT FOR CONSTRUCTION
09/29/2023

NO.	BY	CHK	APP	DATE	REVISION DESCRIPTION
E					90% DESIGN UPDATED DESIGN
D					90% DESIGN UPDATED DESIGN
C					90% DESIGN UPDATES TURBINE ARRAY
B					90% REVIEW COMMENTS
A					90% REVIEW COMMENTS

90% DESIGN	
90% DESIGN	
P.E.	
RECORD	
RELEASED TO/FOR	A B C D E 0 1
DATE RELEASED	

BARR

BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
Suite 200
MINNEAPOLIS MN 55435

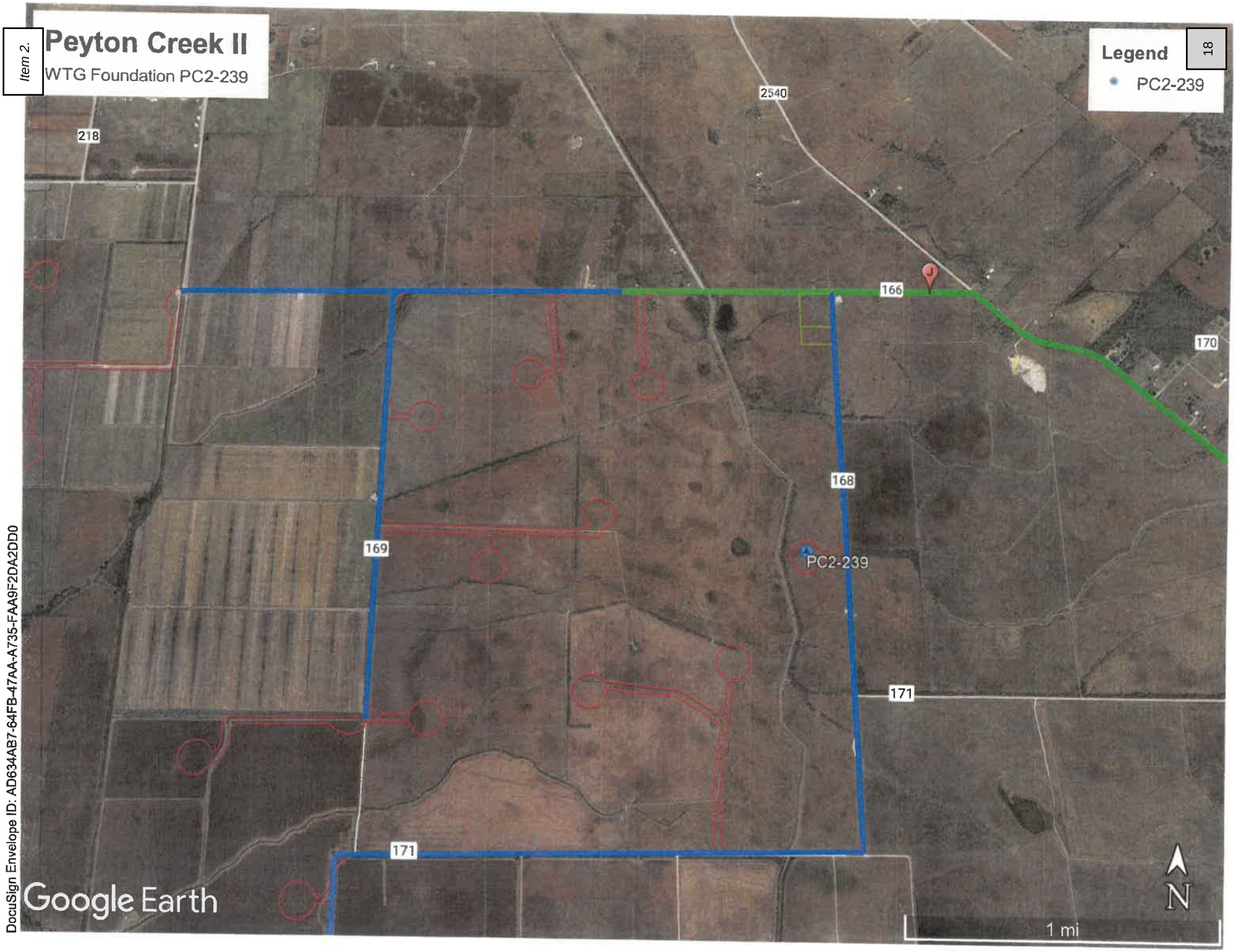
Scale	AS SHOWN
Date	05/19/21
Drawn	RB, BD
Checked	CMB2
Designed	BARR
Approved	CMBD

RWE

PEYTON CREEK II WIND FARM
MATAGORDA COUNTY, TEXAS

TURBINES PC2-183 & PC2-239
ROADS RD PC2-183, RD PC2-185 & RD PC2-239

BARR PROJECT No.	43M21003.00
CLIENT PROJECT No	-
DRAG No.	CIV-RD-014
REV. No.	E



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2023-WTW-15845-OE

Issued Date: 12/20/2023

Rich Saunders
Peyton Creek II
701 Brazos St
Suite 1400
Austin, TX 78701

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine PC2239
Location:	Bay City, TX
Latitude:	28-54-41.99N NAD 83
Longitude:	95-51-23.33W
Heights:	35 feet site elevation (SE)
	656 feet above ground level (AGL)
	691 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/synchronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Air Missions (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 06/20/2025 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before January 19, 2024. In the event an interested party files a petition for review, it must contain a full statement of the basis upon which the petition is made. Petitions can be submitted to the Manager, Rules and Regulations Group via email at OEPetitions@faa.gov, or via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, Room 425, 800 Independence Ave, SW., Washington, DC 20591. FAA encourages the use of email to ensure timely processing.

This determination becomes final on January 29, 2024 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. Any questions regarding your petition, contact Rules and Regulations Group via telephone (202) 267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should

be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Buck Reynolds, at (847) 294-7576, or Wayne.Reynolds@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2023-WTW-15845-OE.

Signature Control No: 606506173-607756155 (DNH -WT)
David Maddox
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts. The FAA does not have a database for all persons with an aeronautical and non-aeronautical interest. Therefore, the public is encouraged to re-distribute and forward notices of circularized cases to the maximum extent possible. Additionally, it is incumbent upon local state, county and city officials to share notice of circularized cases with their concerned citizens.

A list of commonly used acronyms and abbreviations is available at the end of this document. A full list is available at the FAA's public website at https://oeaaa.faa.gov/oeaaa/downloads/external/content/FAA_Acronyms.pdf .

1. PROPOSAL DESCRIPTION

This proposal is for 2 turbines within a proposed wind farm project that would be located 5.4 NM east extending clockwise to points 3.4 NM south through 8 NM southwest of the airport reference point for the Bay City Regional Airport (BYY), Bay City, Texas. The project had been previously studied and favorable determinations issued on 03/15/2023.

For the sake of efficiency, all of the wind turbines in this project that have similar impacts are included in this narrative.

The proposed wind turbines' described heights and locations are expressed in Above Ground Level (AGL) height, Above Mean Sea Level (AMSL) height and latitude (LAT)/longitude (LONG).

ASN	AGL	AMSL	LAT	LONG
2023-WTW-15844-OE	656	688	28-54-38.34N	95-52-28.21W
2023-WTW-15845-OE	656	691	28-54-41.99N	95-51-23.33W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1): Exceeds a height of 499 feet AGL at the site of the object. The proposals would all exceed this standard by 157 feet.

b. Section 77.17(a)(2): a height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 NM miles of the established reference point of BBY, and that height increases in the proportion of 100 feet for each additional NM from the airport up to a maximum of 499 feet. The following would exceed by:

2023-WTW-15844-OE 364 feet
2023-WTW-15845-OE 376 feet

c. Section 77.17 (a)(3): A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

The following proposal would increase TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES for RWY 13 at BYY. The increase would be from standard (200/1 ceiling/visibility) to standard with a minimum climb gradient of 231 ft. per NM until reaching 900 ft. AMSL.

2023-WTW-15845-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1): impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules.

At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of potential VFR Routes as defined by FAA Order 7400.2, Section 6-3-8. The turbines within 2 SM of a VFR Route would have an adverse effect upon VFR air navigation.

The following proposed turbines would lie within the lateral boundaries and exceed traffic pattern airspace (TPA) for CAT D aircraft at BYY (aircraft with approach speeds between 141-165 knots):

2023-WTW-15844-OE
2023-WTW-15845-OE

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

This proposal was not circularized to the public for comment. In accordance with FAA Order 7400.2, circularization is not necessary for a structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied. The associated wind farm was not circularized for public comment because the effect to the BBY RWY 13 departure procedure is less of an impact than previously favorably determined studies in this project. Air traffic has no objection to the proposal(s).

5. BASIS FOR DETERMINATION

a. IFR EFFECTS
The aeronautical study identified an IFR effect(s) for BBY. The increase to the BBY Runway 13 climb gradient is not considered excessive. Increasing the climb gradient would ensure the required obstacle clearances are maintained and would not have a significant impact on a pilot's ability to safely execute the procedures. Therefore, the proposed wind farm would not have a substantial adverse effect on IFR operations for BBY.

The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

b. VFR EFFECTS
The aeronautical study identified no substantial adverse effect on any existing or proposed VFR arrival or

departure operations. A portion of the proposals would be located within CAT D traffic pattern airspace but beyond the normally utilized traffic pattern airspace for BYY or any other known public use or military airports. At 656 feet AGL, the structures would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. Therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations.

c. RADAR EFFECTS

The aeronautical study identified no effect on ATC radar, direction finders, ATC tower line-of-sight visibility, air navigation, communication facilities, and other surveillance systems for any known public-use or military airports.

d. CHARTING AND CUMULATIVE EFFECT

The proposed structures would be charted on VFR sectional aeronautical charts and appropriately obstruction marked/lighted to make them more conspicuous to airmen should circumnavigation be necessary.

The cumulative impact of the proposed structures, when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose any substantial adverse effect on existing or proposed public-use or military airports or navigational facilities, nor would the proposals affect the capacity of any known existing or planned public-use or military airport.

6. DETERMINATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

7. CONDITIONS

The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, ten (10) days prior to beginning construction, at the OE/AAA website (http://oeaaa.faa.gov) for the following wind turbines reviewed as ASNs:

2023-WTW-15845-OE

Additionally, within five days after each project structure reaches its greatest height, the proponent is required to file a FAA form 7460-2, Actual Construction notification, at the OE/AAA website (http://oeaaa.faa.gov). This actual construction notification will be the source document detailing the site location, site elevation, structure height, and date structure was built for the FAA to map the structure on aeronautical charts and update the national obstruction database.

****

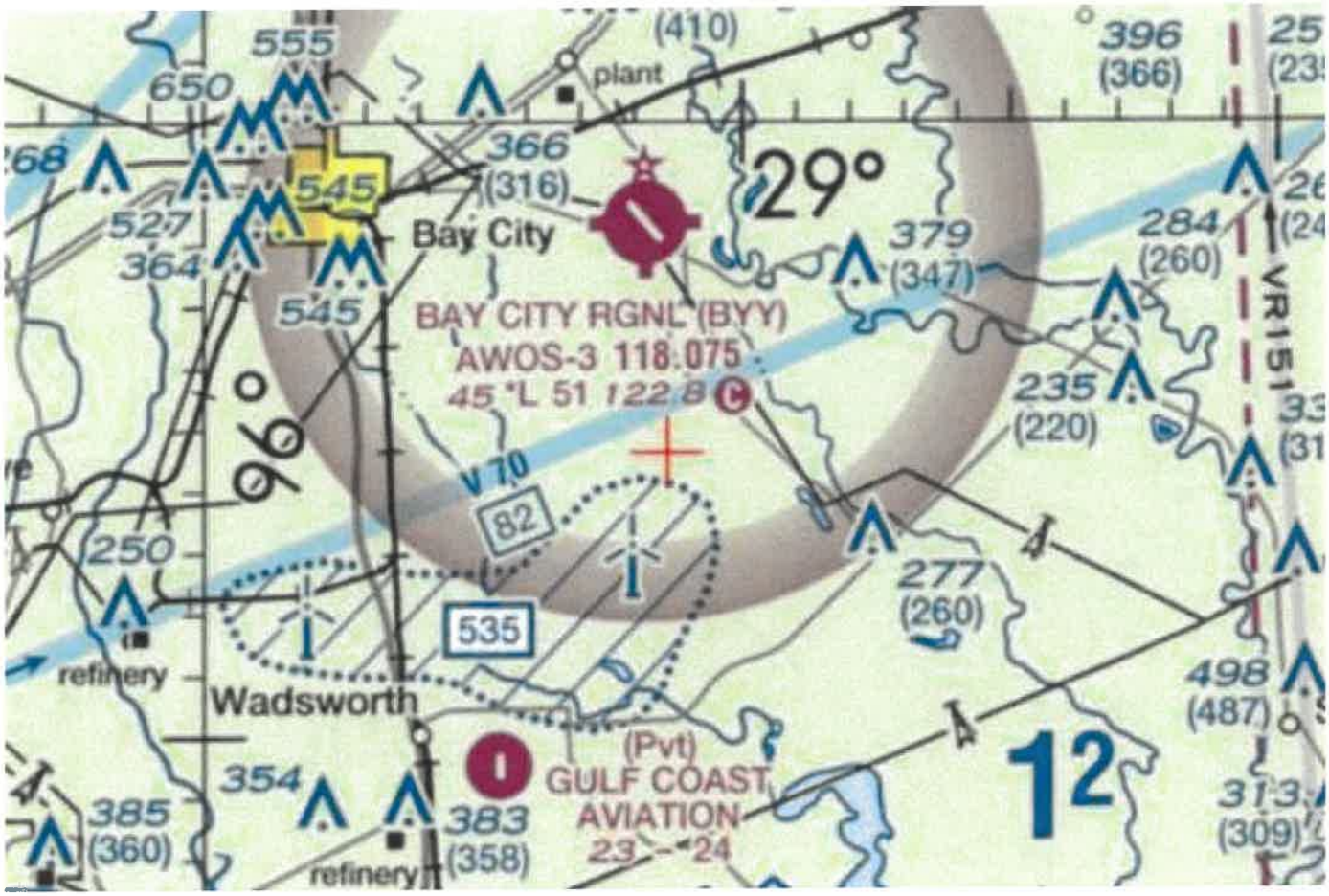
ACRONYMS & ABBREVIATIONS

AGL, Above Ground Level
AMSL, Above Mean Sea Level
ARP, Airport Reference Point
ARSR, Air Route Surveillance Radar
ARTCC, Air Route Traffic Control Center
ASN, Aeronautical Study Number
ASR, Airport Surveillance Radar
ATC, Air Traffic Control

ATCT, Air Traffic Control Tower
CARSR, Common Air Route Surveillance Radar
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System
IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude
NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in

SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway
VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2023-WTW-15845-OE



814 Thornwick Drive
Houston, TX 77079
www.Civil-PEs.com

March 11, 2024

James Mason, CM, A.C.E.
Bay City Regional Airport
3598 FM 2540 North
Bay City, Texas 77414

Permit Application Technical Review: Permit Application: Structure PC2183 – Wind Turbine

Transmitted via email to jmason@cityofbaycity.org *on March 11, 2024*

Dear James.

We have completed a review of the structure reference above. This structure was previously studied under FAA's airspace review as study 2022-WTW-3558-OE. This review is organized around the following sections of the ordinance:

Zoning Ordinance Section 18-41 – Height Limitations

Subsection: N/A

Reasons: We have no objection to the proposed structure based on the Part 77 surfaces identified in this Section.

Zoning Ordinance Section 18-42 – Compatible Land Use Area

Subsection: N/A

Reasons: We have no objection to the proposed structure based on noise compatibility requirements in this Section.

Zoning Ordinance Section 18-44 – Other Use Restrictions

Subsection: (1) Airport Safety

Reasons: This section does not permit use of land or water in the entirety of Matagorda County that might impair visibility in the vicinity of the airport, or otherwise in any way endanger or interfere with the landing, taking off, or maneuvering of aircraft intending to use the airport. This proposed item will affect taking off from the airport:

1. This proposed structure is located 3.72 nm from the end of Runway 31. This structure is within the "Diverse Departure Assessment Area" as defined under FAA Order 8260.3D and may require an Obstacle Departure Procedure. For southbound departures from the runway toward the proposed structure, the climb gradient needed to provide proper clearance over the structure will exceed the standard climb gradient; this has been noted in the airspace determination letter of March 15, 2023. Such a requirement interferes with operating out of the airport compared to the operating requirements today.

Based on the information provided above, we find this proposed structure to be contradictory to the zoning ordinance and hereby do not recommend approval of this structure.

Civil PEs, LLC

Thomas D Dodson, PE
Project Leader

Bay City
REGIONAL AIRPORT

www.FlyBayCity.com

3598 FM 2540 N Bay City, Texas 77414 (979) 244-5037

Airport Hazard and Land Use Permit

In accordance with Texas Local Government Code, Chapter 241, also known as the Airport Zoning Act, the Consolidated Hazard Area and Compatible Land Use Zoning Regulations have been revised by the Bay City Regional Airport Zoning Board. Revisions now include maps which allow for timelier identification of real properties within hazard and zoning areas.

The Airport Zoning Act found that airport hazards and obstructions have the potential for endangering the lives and property of users of Bay City Regional Airport and property or occupants of land it its vicinity. Obstructions may impact the size of areas available for the landing, taking off and maneuvering of aircraft and may affect aircraft instrument approach minimums.

The real property for which you are submitting a permit application is located within the Compatible Land Use Area and/or Hazard Area of the Bay City Regional Airport. Applications for building, electrical, plumbing, or mechanical permit(s) within these areas require an "Airport Hazard and Land Use Permit" be approved before any other permit will be issued. Airport Hazard and Land Use permits may restrict some aspects of the potential use, size, height, lighting, glare potential or construction of your building.

Any cost associated with a permit that requires the assistance of any person not employed by the City of Bay City or the County of Matagorda shall be paid by the permittee. The permit fee shall be calculated by the Bay City Regional Airport Manager and shall be paid before the permit will be reviewed or issued.

Please complete the attached permit application and submit to the Bay City Regional Airport in person or by mail or email (contact information below). The Bay City Regional Airport shall consider and provide an approval or denial within a reasonable period of time.

Bay City Regional Airport
Attention: Airport Manager
3598 FM 2540 N
Bay City, TX 77414
Airport@cityofbaycity.org
(979) 244-5037

The Consolidated Hazard Area and Compatible Land Use Zoning Regulations can be found in the *City of Bay City Municipal Code of Ordinances, Chapter 18 – Aviation*.

Bay City
REGIONAL AIRPORT

Airport Hazard and Land Use Permit Application

APPLICANT CONTACT INFORMATION:

1. Property Owner's Name: Peyton Creek Wind Farm II, LLC
2. Mailing Address: 353 N. Clark St., Chicago, IL 60654
3. Daytime Telephone: 512-461-9747 Alternate Telephone: _____
4. Email address: richard.saunders@rwe.com

PROPERTY INFORMATION:

5. 911 Site Address: 6277 CR 171, Bay City, TX 77414
6. Property ID Number from Matagorda County Appraisal District: 20584
7. Total Size of Site (Square Feet): 606.11acres
8. Size of Improvements (Square Footage): _____
9. Site Elevation (Above Mean Sea level): 43'
10. Total Structure Height (Above Ground Level): 656'
11. Overall Height (No.9 + No. 10) above Mean Sea Level: 699'
12. Latitude of highest point of structure: 28 ° 54 ' 22 " 35 "
13. Longitude of highest point of structure: 95 ° 51 ' 38 " 19 "
14. Datum: X NAD 83 ___NAD 27 ___Other

TYPE OF IMPROVEMENT: (Please mark all that apply)

_____ New Building
_____ Antenna Structure
_____ Alteration to Existing Building
_____ Tree/Vegetation
X Other - Describe: Wind Turbine PC2183

X PRIVATE (Individual, corporation, nonprofit institution, etc.)

_____ PUBLIC (Federal, state or local government)

ATTACH SURVEY/DRAWING/DEPICTION/MAP OF THE PROPERTY AND PROPOSED IMPROVEMENT

DESCRIPTION OF IMPROVEMENT OR PROJECT AND INTENDED USE OF LAND(ATTACH SEPARATE SHEETS IF NEEDED)

Install Wind Turbine Generator - PC2183

Will the property be used for any of the following purposes:

- Residential? (Y/N): N
- Educational (including child care and vocational)? (Y/N): N
- Medical, Institutional, Convalescent, or Rehabilitative Care? (Y/N): N
- Nursing Homes? (Y/N): N

If you answered "Yes" to any of the above, please describe further the proposed use: _____

Will any improvement or use create or cause electrical interference with communications between aircrafts and the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use create or cause difficulty for pilots to distinguish aircraft and the proposed improvement or the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use result in glare in the eyes of pilots or otherwise impair visibility in the vicinity of the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use increase the likelihood of bird strikes? (Y/N): N

If "Yes," explain: _____

Will any improvement or use endanger or interfere with the landing, taking off, or maneuvering of aircraft? (Y/N): N

If "Yes," explain: _____

Yes, increase take-off minimums & obstacle departure procedures

FAA AIRSPACE REVIEW:

Does this project require an airspace review by the FAA? Yes: X No: _____

Date FAA Form 7460-1 Submitted*: 5/19/2022

*Please contact the Airport Manager at (979) 323-1115, for assistance completing FAA Form 7460-1

Date Determination Letter received from FAA: 3/15/2023
(If received please attach a copy to this application)

NOTICE

I hereby certify that I have read and examined this application and know the same to be true and correct. The granting of a permit does not presume to give authority to violate or cancel any other Federal, State or local law regulating construction or the performance of construction.

DocuSigned by:
Richard Saunders
Applicant's Signature

Richard Saunders
Print Name

Date: 3/5/2024

Return completed Application to:

Airport Manager
Bay City Regional Airport
3598 FM 2540 N
Bay City, Texas 77414
(979) 244-5037
airport@cityofbaycity.org

Should you have any questions please contact the Aviation Director at (979) 244-5037 or email at airport@cityofbaycity.org

For Office Use Only:

Date Application Received: 3/11/24

Is project consistent with the Airport Zoning Regulation: Yes _____ No X

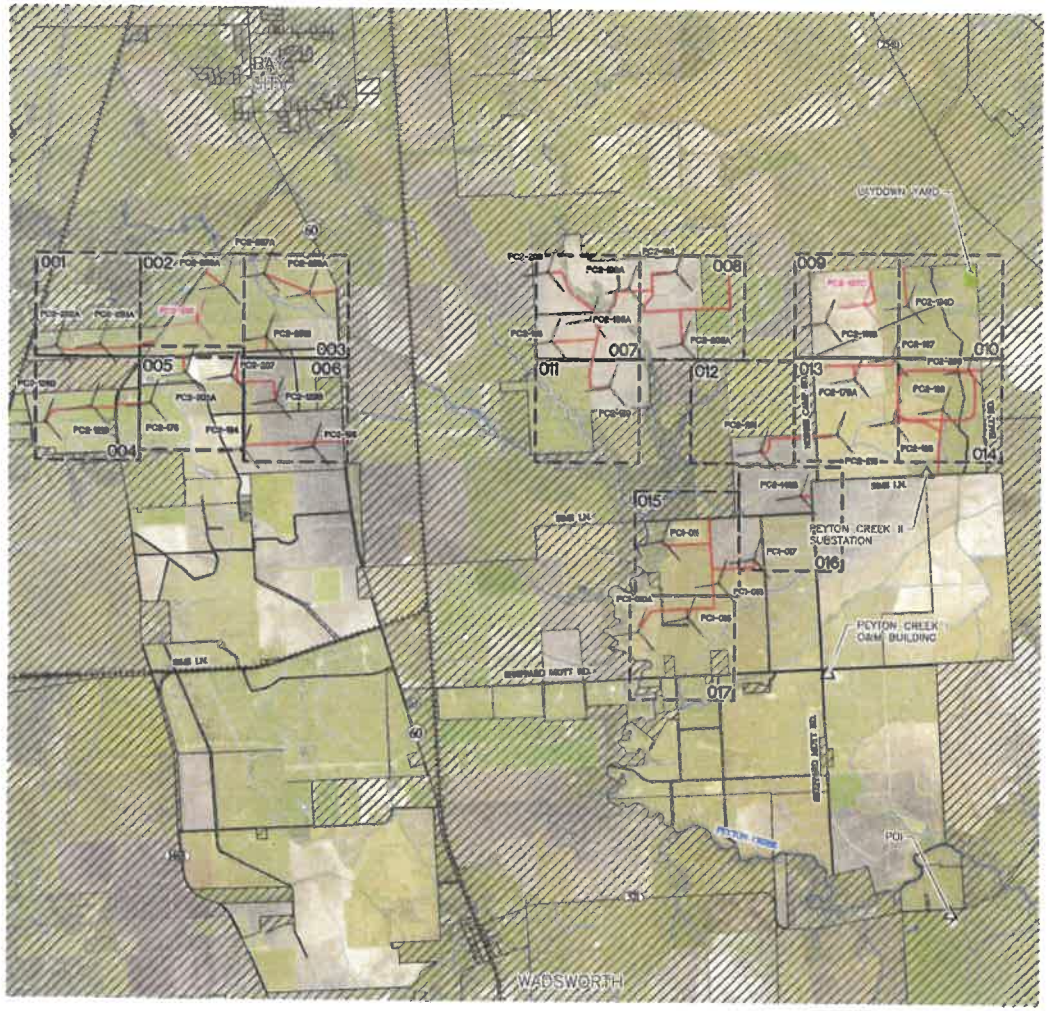
Reason for project not being considered consistent with zoning regulation:
INCREASE TAKE-OFF MINIMUMS & OBSTACLE DEPARTURE PROCEDURES

Airport Director Signature: _____

Date Application Considered by Administrative Agency Court.: _____

Permit Approved: Yes _____ No X

Permit Returned to Applicant 3/12/24 via Mail Selected



1 PLAN: OVERALL SITE PLAN - WEST

0 3000 6000

SCALE IN FEET

2 PLAN: OVERALL SITE PLAN - EAST

0 3000 6000

SCALE IN FEET

LEGEND

- EXISTING ROAD
- EXISTING RAILROAD
- NHD WATERCOURSES
- WATERBODIES
- NON-PARTICIPATING/BOUNDARY
- PROPOSED ACCESS ROAD
- PCX-XXX VESTAS V163 TURBINE (PRIMARY)
- PCX-XXX VESTAS V163 NW TURBINE (ALTERNATE)

90% DESIGN
NOT FOR CONSTRUCTION
09/29/2023

NO	BY	CHK	APP	DATE	REVISION DESCRIPTION
E	MMT	JMB	CMB2	09/29/2023	90% UPDATED DESIGN
D	JMB	CMB2	CMB2	11/15/2021	90% UPDATED DESIGN
C	JMB	CMB2	CMB2	08/24/2021	30% UPDATED TURBINE ARRAY
B	JMB	CMB2	CMB2	7/16/2021	30% REVIEW COMMENTS

RELEASED TO/FOR: 30% DESIGN | 60% DESIGN | 90% DESIGN | IFC | RECORD

DATE RELEASED: A | B | C | D | E | 0 | 1

BARR

Project Office
BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
Suite 200
MINNEAPOLIS, MN 55435
Ph. 1-952-832-2771
Fax (952) 832-2601

Corporate Headquarters
Minneapolis, Minnesota
Ph. 1-800-632-2277

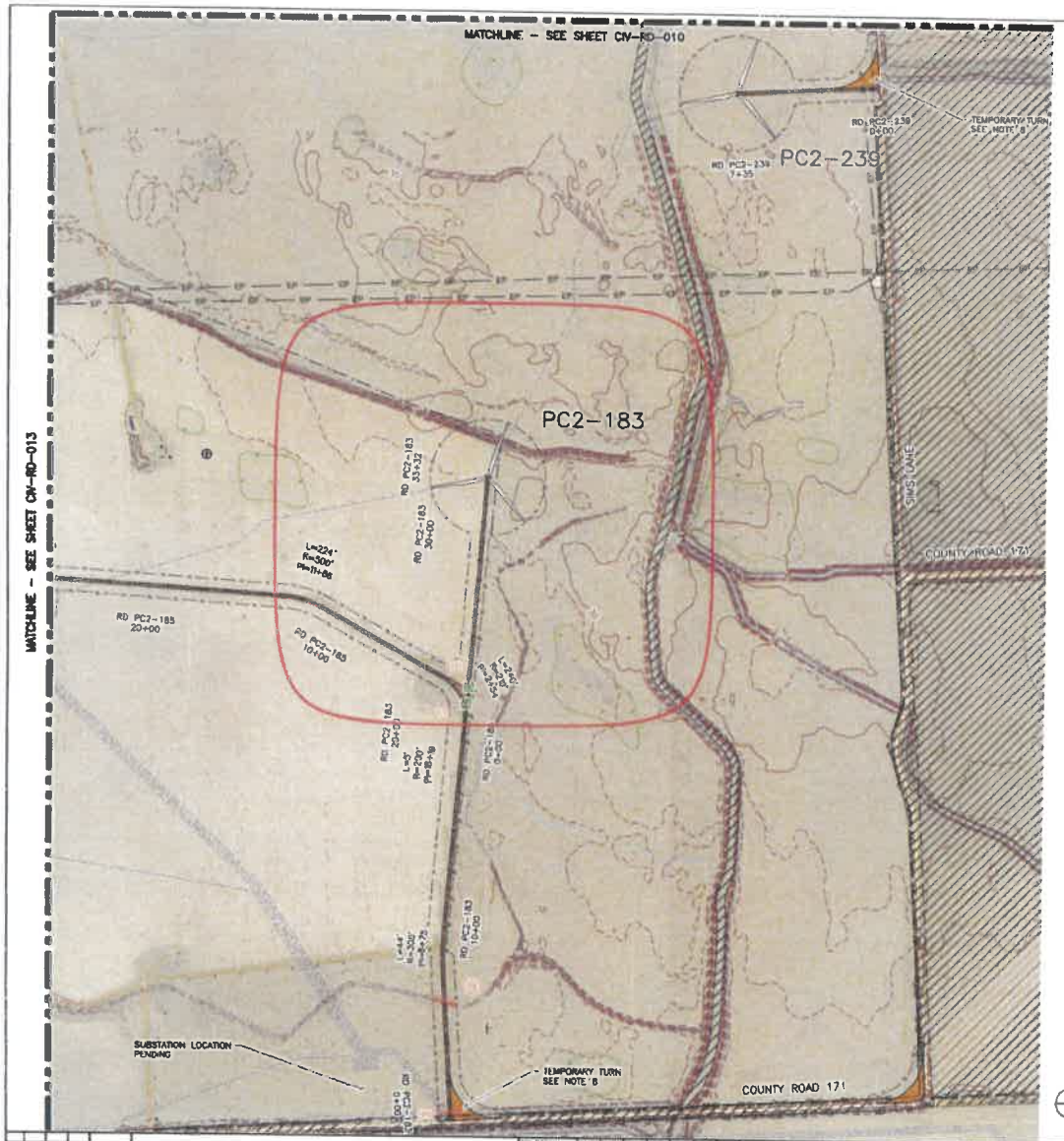
Scale	AS SHOWN
Date	05/18/21
Drawn	RLB2
Checked	CMB2
Designed	BARR
Approved	CMB2

RWE

PEYTON CREEK II WIND FARM
MATAGORDA COUNTY, TEXAS

OVERALL SITE PLAN
AND SHEET LAYOUT

BARR PROJECT No. 43M21003.00
CLIENT PROJECT No. -
DWG. No. CIV-GE-004
REV. No. E



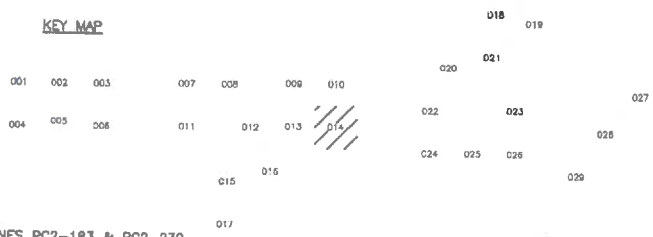
LEGEND

- PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING FENCE
- EXISTING PIPELINE
- EXISTING OVERHEAD POWER LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING GAS LINE
- EXISTING PUBLIC ROAD
- EXISTING GRAVEL
- EXISTING DITCH
- EXISTING CULVERT
- EXISTING BRIDGE
- EXISTING RAILROAD
- EXISTING EASEMENT
- EXISTING FREE LINE
- EXISTING WATER BODY
- NHD WATERCOURSES
- IDNR DESIGNATED RIVER
- WETLAND
- NWI WETLAND
- FEMA DELINEATED FLOOD ZONE A
- FEMA DELINEATED FLOOD ZONE A2
- FEMA DELINEATED FLOOD ZONE B
- NON-PARTICIPATING/BOUNDARY
- CEMETERY
- EXISTING CONCRETE
- COLUMBIA BOTTOMLAND HARDWOODS
- BUILDING
- PROPOSED ACCESS ROAD
- PROPOSED TEMPORARY TURN
- PROPOSED COLLECTION LINE (BY OTHERS)
- DISTURBANCE LIMITS
- EXISTING WELL
- EXISTING POWER POLE
- FENCE CROSSING LOCATION
- UTILITY CROSSING LOCATION
- PCX-XXX
- VESTAS V163 TURBINE (PRIMARY)
- VESTAS V163 TURBINE (ALTERNATE)
- PROPOSED CULVERT LOCATION
- PROPOSED LOW WATER CROSSING LOCATION

NOTES:

1. PRELIMINARY ROADS SHOWN. LOCATION OF ROADS TO BE DEFINED DURING FINAL DESIGN.
2. LOCATION OF ALL CULVERTS AND LOW WATER CROSSINGS SHOWN FOR PLANNING PURPOSES ONLY. FINAL LOCATION & SIZE TO BE DETERMINED DURING FINAL DESIGN.
3. CULVERTS AT INTERSECTIONS WITH PUBLIC ROADS TO FOLLOW TxDOT OR LOCAL AGENCY REQUIREMENTS.
4. EROSION CONTROL FEATURES NOT SHOWN. CONTRACTOR TO INSTALL EROSION CONTROL PER PROJECT SWPPP.
5. UNDERGROUND COLLECTION LINES NOT SHOWN. SEE ELECTRICAL CONSULTANT PLANS FOR CONSTRUCTION DETAILS, INCLUDING EROSION CONTROL DETAILS.
6. UTILITY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE UTILITY CROSSING AGREEMENTS.
7. CONTRACTOR TO FIELD ADJUST ROADS TO MINIMIZE TREE CLEARING REQUIREMENTS UPON APPROVAL FROM THE OWNER.
8. TEMPORARY TURNS BASED ON STANDARD TEMPLATES. SEE CIV-GE-009.
9. EXISTING CULVERTS SHALL BE PROTECTED, EXTENDED AND/OR REPLACED AS REQUIRED
10. RAISED ACCESS ROADS SHALL BE RAISED A MINIMUM OF 36" ABOVE EXISTING GROUND. SEE CIV-GE-007.
11. COORDINATE WITH RWE'S SITE REPRESENTATIVE AND LANDOWNER FOR REQUIREMENTS/SCHEDULE FOR IRRIGATION LINE WORK.

KEY MAP



1 PLAN: TURBINES PC2-183 & PC2-239

0 300 600

SCALE IN FEET

90% DESIGN
NOT FOR CONSTRUCTION
09/29/2023

NO	BY	CHK	APP	DATE	REVISION DESCRIPTION
E					ROX UPDATED DESIGN
D					ROX UPDATED DESIGN
C					ROX UPDATED TURBINE ARRAY
B					ROX REVIEW COMMENTS

RELEASED FOR/FOR A B C D E 0 1

DATE RELEASED

BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
Suite 200
MINNEAPOLIS, MN 55435

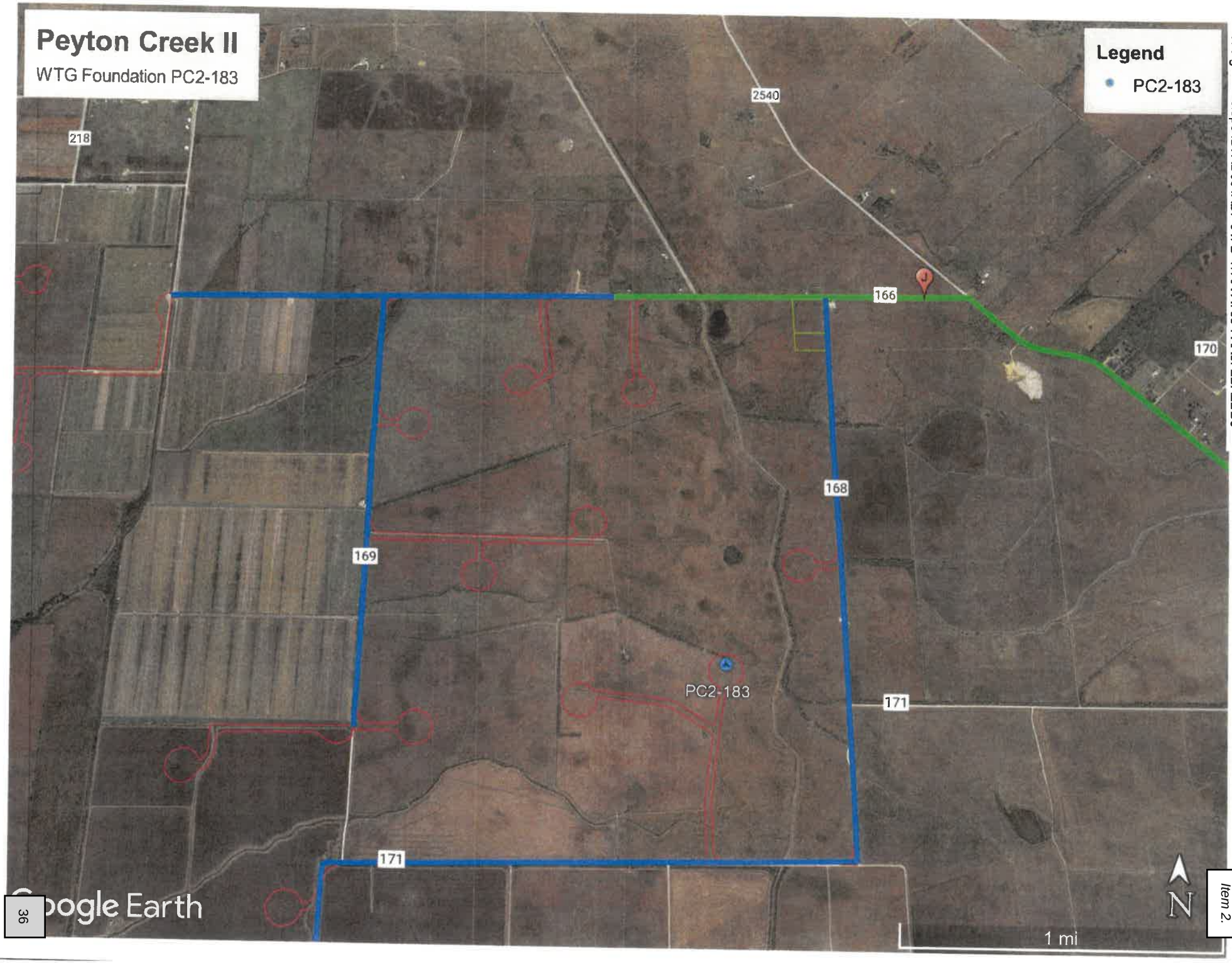
Scale	AS SHOWN
Date	05/16/21
Drawn	R.B2
Checked	CMB2
Designed	BARR
Approved	CMB2

RWE

PEYTON CREEK II WIND FARM
MATAGORDA COUNTY, TEXAS

TURBINES PC2-183 & PC2-239
ROADS RD PC2-183, RD PC2-185 & RD PC2-239

BARR PROJECT NO. 43M21003.00
CLIENT PROJECT No. -
DWG. No. CIV-RD-014
REV No. E



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-WTW-3558-OE

Issued Date: 03/15/2023

Rich Saunders
Peyton Creek II
701 Brazos St
Suite 1400
Austin, TX 78701

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine PC2183
Location:	Bay City, TX
Latitude:	28-54-22.35N NAD 83
Longitude:	95-51-38.19W
Heights:	43 feet site elevation (SE)
	656 feet above ground level (AGL)
	699 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/synchronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 09/15/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before April 14, 2023. In the event an interested party files a petition for review, it must contain a full statement of the basis upon which the petition is made. Petitions can be submitted to the Manager of the Rules and Regulations Group via e-mail at OEPetitions@faa.gov, via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, Room 425, 800 Independence Ave, SW, Washington, DC 20591, or via facsimile (202) 267-9328. FAA encourages the use of email to ensure timely processing.

This determination becomes final on April 24, 2023 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should

be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Kieffer, at (816) 329-2526, or bill.kieffer@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-WTW-3558-OE.

Signature Control No: 531743780-576371868 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2022-WTW-3558-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts.

A list of commonly used acronyms and abbreviations is available at the end of this document. A full list is available at the FAA's public website at https://oeaaa.faa.gov/oeaaa/downloads/external/content/FAA_Acronyms.pdf.

1. PROPOSAL DESCRIPTION

Proposed are 77 wind turbines for a project that lies approximately 5.4 NM east extending clockwise to points 3.4 NM south through 8 NM southwest of the airport reference point for the Bay City Regional Airport (BYY), Bay City, Texas.

For the sake of efficiency, all of the wind turbines in this project that have similar impacts are included in this narrative.

The proposed wind turbines' described heights and locations are expressed in Above Ground Level (AGL) height, Above Mean Sea Level (AMSL) height and latitude (LAT)/longitude (LONG).

ASN / AGL / AMSL / LAT / LONG

2022-WTW-3511-OE / 656 / 684 / 28-49-03.24N / 95-59-25.94W
2022-WTW-3512-OE / 656 / 685 / 28-49-04.46N / 95-59-01.66W
2022-WTW-3513-OE / 656 / 684 / 28-49-09.81N / 95-58-33.76W
2022-WTW-3514-OE / 656 / 689 / 28-49-09.90N / 95-58-09.58W
2022-WTW-3515-OE / 656 / 695 / 28-49-43.99N / 95-57-03.53W
2022-WTW-3516-OE / 656 / 695 / 28-49-44.33N / 95-57-44.50W
2022-WTW-3517-OE / 656 / 695 / 28-50-15.14N / 95-57-44.79W
2022-WTW-3518-OE / 656 / 696 / 28-50-16.97N / 95-57-16.52W
2022-WTW-3519-OE / 656 / 692 / 28-50-17.26N / 95-56-47.57W
2022-WTW-3520-OE / 656 / 696 / 28-50-35.11N / 95-58-48.34W
2022-WTW-3521-OE / 656 / 695 / 28-50-37.45N / 95-58-08.58W
2022-WTW-3522-OE / 656 / 698 / 28-50-44.02N / 95-57-39.74W
2022-WTW-3523-OE / 656 / 697 / 28-50-51.44N / 95-57-18.78W
2022-WTW-3524-OE / 656 / 694 / 28-50-54.85N / 95-56-47.66W
2022-WTW-3525-OE / 656 / 697 / 28-51-06.40N / 95-58-18.47W
2022-WTW-3526-OE / 656 / 696 / 28-51-07.06N / 95-58-50.43W
2022-WTW-3527-OE / 656 / 699 / 28-52-35.42N / 95-58-10.45W
2022-WTW-3528-OE / 656 / 700 / 28-52-46.99N / 95-58-49.48W
2022-WTW-3529-OE / 656 / 696 / 28-52-52.29N / 95-50-43.85W
2022-WTW-3530-OE / 656 / 698 / 28-53-09.82N / 95-57-45.01W
2022-WTW-3531-OE / 656 / 703 / 28-53-18.36N / 95-59-13.14W
2022-WTW-3532-OE / 656 / 695 / 28-53-23.71N / 95-50-19.59W
2022-WTW-3533-OE / 656 / 681 / 28-53-24.65N / 95-46-44.84W

2022-WTW-3534-OE / 656 / 701 / 28-53-30.68N / 95-58-50.54W
2022-WTW-3535-OE / 656 / 695 / 28-53-32.17N / 95-50-50.37W
2022-WTW-3536-OE / 656 / 697 / 28-53-37.93N / 95-57-34.82W
2022-WTW-3537-OE / 656 / 691 / 28-53-39.98N / 95-53-00.18W
2022-WTW-3538-OE / 656 / 680 / 28-53-40.00N / 95-46-25.00W
2022-WTW-3539-OE / 656 / 702 / 28-53-42.09N / 95-58-01.32W
2022-WTW-3540-OE / 656 / 693 / 28-53-45.02N / 95-49-48.22W
2022-WTW-3541-OE / 656 / 683 / 28-53-54.17N / 95-47-55.81W
2022-WTW-3542-OE / 656 / 695 / 28-53-55.29N / 95-50-12.51W
2022-WTW-3543-OE / 656 / 680 / 28-53-55.51N / 95-46-06.73W
2022-WTW-3544-OE / 656 / 701 / 28-54-00.09N / 95-58-40.28W
2022-WTW-3545-OE / 656 / 692 / 28-54-01.71N / 95-49-30.52W
2022-WTW-3546-OE / 656 / 691 / 28-54-02.77N / 95-53-22.81W
2022-WTW-3547-OE / 656 / 682 / 28-54-03.38N / 95-47-32.67W
2022-WTW-3548-OE / 656 / 682 / 28-54-06.61N / 95-47-06.89W
2022-WTW-3549-OE / 656 / 693 / 28-54-08.35N / 95-56-54.67W
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2022-WTW-3551-OE / 656 / 697 / 28-54-09.07N / 95-57-38.10W
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2022-WTW-3554-OE / 656 / 692 / 28-54-10.67N / 95-52-38.56W
2022-WTW-3555-OE / 656 / 680 / 28-54-12.98N / 95-46-28.70W
2022-WTW-3556-OE / 656 / 680 / 28-54-16.20N / 95-45-48.58W
2022-WTW-3557-OE / 656 / 697 / 28-54-16.38N / 95-52-06.76W
2022-WTW-3558-OE / 656 / 699 / 28-54-22.35N / 95-51-38.19W
2022-WTW-3559-OE / 656 / 691 / 28-54-25.59N / 95-56-27.82W
2022-WTW-3560-OE / 656 / 694 / 28-54-26.46N / 95-50-05.29W
2022-WTW-3561-OE / 656 / 691 / 28-54-29.01N / 95-55-34.20W
2022-WTW-3562-OE / 656 / 690 / 28-54-29.64N / 95-56-01.93W
2022-WTW-3563-OE / 656 / 706 / 28-54-31.45N / 95-59-44.40W
2022-WTW-3564-OE / 656 / 702 / 28-54-32.76N / 95-59-10.74W
2022-WTW-3565-OE / 656 / 691 / 28-54-36.61N / 95-54-48.20W
2022-WTW-3566-OE / 656 / 692 / 28-54-39.44N / 95-49-42.28W
2022-WTW-3567-OE / 656 / 680 / 28-54-41.47N / 95-46-41.64W
2022-WTW-3568-OE / 656 / 702 / 28-54-45.79N / 95-58-24.32W
2022-WTW-3569-OE / 656 / 698 / 28-54-46.79N / 95-57-53.91W
2022-WTW-3570-OE / 656 / 700 / 28-54-47.17N / 95-50-49.99W
2022-WTW-3571-OE / 656 / 704 / 28-54-47.66N / 95-58-50.23W
2022-WTW-3572-OE / 656 / 698 / 28-54-48.92N / 95-52-06.22W
2022-WTW-3573-OE / 656 / 686 / 28-54-50.31N / 95-47-35.04W
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2022-WTW-3580-OE / 656 / 694 / 28-55-11.25N / 95-50-26.07W
2022-WTW-3581-OE / 656 / 699 / 28-55-14.93N / 95-51-56.84W
2022-WTW-3582-OE / 656 / 697 / 28-55-16.47N / 95-52-22.14W
2022-WTW-3583-OE / 656 / 693 / 28-55-26.00N / 95-54-36.08W

2022-WTW-3584-OE / 656 / 692 / 28-55-34.21N / 95-54-09.21W
2022-WTW-3585-OE / 656 / 695 / 28-55-35.01N / 95-55-22.26W
2022-WTW-3587-OE / 656 / 688 / 28-56-14.97N / 95-46-26.39W
2022-WTW-3588-OE / 656 / 691 / 28-56-37.14N / 95-46-13.44W
2022-WTW-3589-OE / 656 / 688 / 28-56-50.79N / 95-45-51.83W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1): Exceeds a height of 499 feet AGL at the site of the object exceeds this standard by 157 feet.

b. Section 77.17(a)(2): a height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 NM miles of the established reference point of BYY, and that height increases in the proportion of 100 feet for each additional NM from the airport up to a maximum of 499 feet. The following would exceed by:

2022-WTW-3548-OE / Exceeds by 144 ft.
2022-WTW-3567-OE / Exceeds by 154 ft.
2022-WTW-3547-OE / Exceeds by 166 ft.
2022-WTW-3541-OE / Exceeds by 176 ft.
2022-WTW-3559-OE / Exceeds by 178 ft.
2022-WTW-3529-OE / Exceeds by 193 ft.
2022-WTW-3589-OE / Exceeds by 200 ft.
2022-WTW-3562-OE / Exceeds by 208 ft.
2022-WTW-3587-OE / Exceeds by 226 ft.
2022-WTW-3588-OE / Exceeds by 226 ft.
2022-WTW-3573-OE / Exceeds by 229 ft.
2022-WTW-3532-OE / Exceeds by 235 ft.
2022-WTW-3561-OE / Exceeds by 236 ft.
2022-WTW-3540-OE / Exceeds by 253 ft.
2022-WTW-3535-OE / Exceeds by 259 ft.
2022-WTW-3537-OE / Exceeds by 263 ft.
2022-WTW-3545-OE / Exceeds by 268 ft.
2022-WTW-3542-OE / Exceeds by 283 ft.
2022-WTW-3565-OE / Exceeds by 287 ft.
2022-WTW-3577-OE / Exceeds by 290 ft.
2022-WTW-3546-OE / Exceeds by 291 ft.
2022-WTW-3554-OE / Exceeds by 321 ft.
2022-WTW-3553-OE / Exceeds by 322 ft.
2022-WTW-3579-OE / Exceeds by 325 ft.
2022-WTW-3560-OE / Exceeds by 327 ft.
2022-WTW-3574-OE / Exceeds by 327 ft.
2022-WTW-3552-OE / Exceeds by 330 ft.
2022-WTW-3585-OE / Exceeds by 331 ft.
2022-WTW-3566-OE / Exceeds by 332 ft.
2022-WTW-3557-OE / Exceeds by 341 ft.
2022-WTW-3575-OE / Exceeds by 348 ft.
2022-WTW-3558-OE / Exceeds by 353 ft.
2022-WTW-3583-OE / Exceeds by 365 ft.

2022-WTW-3570-OE / Exceeds by 386 ft.
2022-WTW-3572-OE / Exceeds by 396 ft.
2022-WTW-3584-OE / Exceeds by 399 ft.
2022-WTW-3580-OE / Exceeds by 408 ft.
2022-WTW-3578-OE / Exceeds by 413 ft.
2022-WTW-3582-OE / Exceeds by 437 ft.
2022-WTW-3581-OE / Exceeds by 441 ft.

c. Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

The following proposals would increase TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES for RWY 13 at BYY. The increase would be from standard (200/1 ceiling/visibility) to standard with a minimum climb gradient of between 207-285 ft. per NM until reaching 1000 ft. AMSL depending on the location of each individual structure.

2022-WTW-3552-OE
2022-WTW-3553-OE
2022-WTW-3558-OE
2022-WTW-3560-OE
2022-WTW-3566-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3574-OE
2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1): the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules.

At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of potential VFR Routes as defined by FAA Order 7400.2, Section 6-3-8. The turbines within 2 SM of a VFR Route would have an adverse effect upon VFR air navigation.

The following proposed turbines would lie within the lateral boundaries and exceed traffic pattern airspace (TPA) for CAT D aircraft at BYY (aircraft with approach speeds between 141-165 knots):

2022-WTW-3552-OE
2022-WTW-3554-OE
2022-WTW-3557-OE
2022-WTW-3558-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3575-OE
2022-WTW-3578-OE

2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE
2022-WTW-3583-OE
2022-WTW-3584-OE

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

The project was circularized under ASN 2022-WTW-3546-OE on 07/22/2022, to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. There were two commenters received during the public comment period as a result of the circularization. They are summarized below.

Comment:
The commenter had concerns about the increase to the RWY 13 Departure Procedure and impacts to the RNAV (GPS) LNAV RWY 31 approach at BYY.

Response:
The aeronautical study determined that although there are a few turbines that are close to affecting the LNAV RWY 31 approach that they in fact do not impact this approach. Minimums will not change for the LNAV RWY 31 approach. The sponsor agreed to terminate turbine 2022-WTW-3586-OE although internal review determined that this turbine would not affect the minimums to the LNAV RWY 31 approach. The impact to the departure procedure are considered minimal, there were no comments received nor did flight standards believe that the increase would affect the departure capacity of BYY.

Comment:
The commenter wanted to ensure the structures were appropriately marked/lighted.

Response:
The structures will, as a condition to their determination, recommended to be marked/lighted IAW the current Advisory Circular.

Comment:
The commenter had concern over traffic pattern penetrations for CAT C and D aircraft that may utilize BYY.

Response:
The sponsor agreed to terminate the one turbine that penetrated CAT C traffic pattern airspace into BYY. Further study indicated that there was not a substantial amount (if any) CAT D operations for the previous 12 months into BYY nor are there any plans on file to improve the RWY at BYY to accommodate a substantial amount of CAT D aircraft. Therefore the project would not interfere with normal traffic pattern operations at BYY.

Comment:
The commenter was concerned about the effects to a private airport close or within the project area.

Response:
The FAA recognizes that obstructions can and do have impacts to privately owned private use airports. However, within the scope of a 14 CFR Part 77 study, the VFR effects to private use airports are not considered when determining the impacts of an obstruction to the national airspace system.

Comment:
The commenter responded that they support green energy, however the project would render many aspects of aviation nearly impossible. Agricultural, off shore aviation, tourist aviation and hunting including feral hog control.

Response:
A structure that has an adverse effect would have a substantial adverse effect if there is a significant volume of aircraft effected. Further study included a yearly traffic count over the area and along possible VFR flyways in or near the project and found that it would not affect a significant volume of traffic along any identified flyways. Agricultural aircraft, although may be effected, while operating under Part 137 are not considered within the scope of a 14 CFR Part 77 study.

Comment:
The commenter was concerned over the turbulence of the blades, the visual and noise effects, the effects to local people, birds, and cattle.

Response:
Aeronautical studies are only looking at direct effects to the national airspace system. The visual and noise effects to people or animals are not considered under an aeronautical study but may be considered under a different study, for example an environmental impact study if required. Wake turbulence caused by wind turbines is currently not within the scope of an aeronautical study under 14 CFR Part 77.

5. BASIS FOR DETERMINATION

IFR EFFECTS

The aeronautical study identified an IFR effect for the RWY 13 instrument departure procedure at BYY. Further study concluded that the effects were minimal and would not impact the departure capacity for normal aircraft departing RWY 13 at BYY.

The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

VFR EFFECTS

The aeronautical study identified no substantial adverse effect on any existing or proposed VFR arrival or departure operations. A portion of the proposals would be located within CAT D traffic pattern airspace but beyond the normally utilized traffic pattern airspace for BYY or any other known public use or military airports. At 656 feet AGL, the structures would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. Therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations.

CHARTING AND CUMULATIVE EFFECT

The proposed structures would be charted on VFR sectional aeronautical charts and appropriately obstruction marked/lighted to make them more conspicuous to airmen should circumnavigation be necessary.

The cumulative impact of the proposed structure(s), when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose a substantial adverse effect on existing or proposed public-use or military airports, nor does the proposal(s) affect the capacity of any known existing or planned public-use or military airport. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no substantial adverse effects on any airspace and routes used by the military.

6. DETERMINATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

7. CONDITIONS

The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, ten days prior to beginning construction for the following ASN's, at the OE/AAA website (http://oeaaa.faa.gov).

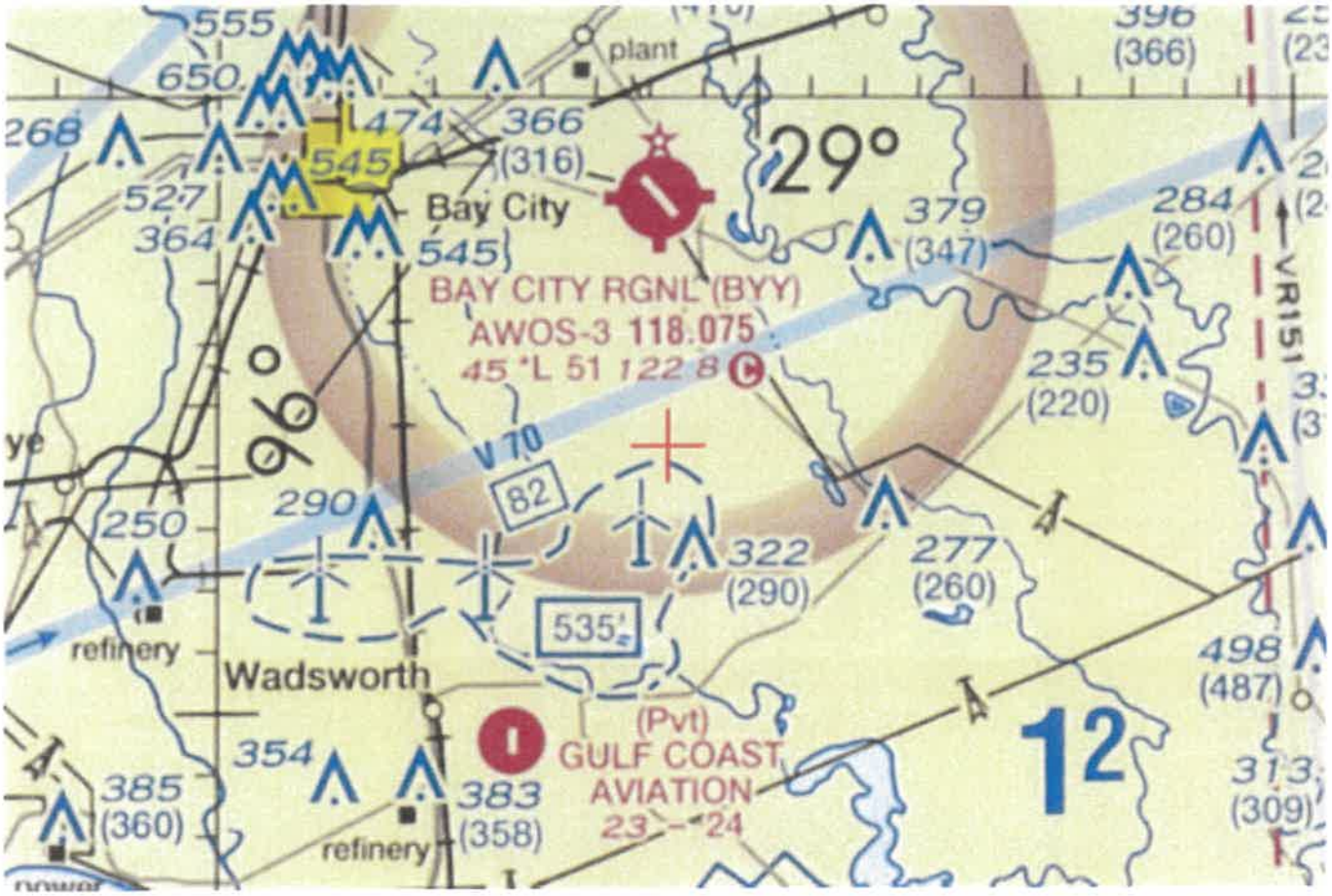
2022-WTW-3552-OE
2022-WTW-3553-OE
2022-WTW-3558-OE
2022-WTW-3560-OE
2022-WTW-3566-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3574-OE
2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE

ACRONYMS & ABBREVIATIONS
AGL, Above Ground Level
AMSL, Above Mean Sea Level
ARP, Airport Reference Point
ARSR, Air Route Surveillance Radar
ARTCC, Air Route Traffic Control Center
ASN, Aeronautical Study Number
ASR, Airport Surveillance Radar
ATC, Air Traffic Control
ATCT, Air Traffic Control Tower
CARSR, Common Air Route Surveillance Radar
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System

IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude
NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway

VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2022-WTW-3558-OE



814 Thornwick Drive
Houston, TX 77079
www.Civil-PEs.com

March 11, 2024

James Mason, CM, A.C.E.
Bay City Regional Airport
3598 FM 2540 North
Bay City, Texas 77414

Permit Application Technical Review: Permit Application: Structure PC2167 – Wind Turbine

Transmitted via email to jmason@cityofbaycity.org *on March 11, 2024*

Dear James.

We have completed a review of the structure reference above. This structure was previously studied under FAA's airspace review as study 2022-WTW-3572-OE. This review is organized around the following sections of the ordinance:

Zoning Ordinance Section 18-41 – Height Limitations
Subsection: N/A
Reasons: We have no objection to the proposed structure based on the Part 77 surfaces identified in this Section.

Zoning Ordinance Section 18-42 – Compatible Land Use Area
Subsection: N/A
Reasons: We have no objection to the proposed structure based on noise compatibility requirements in this Section.

Zoning Ordinance Section 18-44 – Other Use Restrictions
Subsection: (1) Airport Safety
Reasons: This section does not permit use of land or water in the entirety of Matagorda County that might impair visibility in the vicinity of the airport, or otherwise in any way endanger or interfere with the landing, taking off, or maneuvering of aircraft intending to use the airport. This proposed item will affect taking off from the airport:

1. This proposed structure is located 3.32 nm from the end of Runway 31, its departure end. This structure is within the "Diverse Departure Assessment Area" as defined under FAA Order 8260.3D and may require an Obstacle Departure Procedure. For southbound departures from the runway toward the proposed structure, the climb gradient needed to provide proper clearance over the structure will exceed the standard climb gradient; this has been noted in the airspace determination letter of March 15, 2023. Such a requirement interferes with operating out of the airport compared to the operating requirements today.

Based on the information provided above, we find this proposed structure to be contradictory to the zoning ordinance and hereby do not recommend approval of this structure.

Civil PEs, LLC

Thomas D Dodson, PE
Project Leader

Bay City REGIONAL AIRPORT

www.FlyBayCity.com

3598 FM 2540 N Bay City, Texas 77414

(979) 244-5037

Airport Hazard and Land Use Permit

In accordance with Texas Local Government Code, Chapter 241, also known as the Airport Zoning Act, the Consolidated Hazard Area and Compatible Land Use Zoning Regulations have been revised by the Bay City Regional Airport Zoning Board. Revisions now include maps which allow for timelier identification of real properties within hazard and zoning areas.

The Airport Zoning Act found that airport hazards and obstructions have the potential for endangering the lives and property of users of Bay City Regional Airport and property or occupants of land it its vicinity. Obstructions may impact the size of areas available for the landing, taking off and maneuvering of aircraft and may affect aircraft instrument approach minimums.

The real property for which you are submitting a permit application is located within the Compatible Land Use Area and/or Hazard Area of the Bay City Regional Airport. Applications for building, electrical, plumbing, or mechanical permit(s) within these areas require an "Airport Hazard and Land Use Permit" be approved before any other permit will be issued. Airport Hazard and Land Use permits may restrict some aspects of the potential use, size, height, lighting, glare potential or construction of your building.

Any cost associated with a permit that requires the assistance of any person not employed by the City of Bay City or the County of Matagorda shall be paid by the permittee. The permit fee shall be calculated by the Bay City Regional Airport Manager and shall be paid before the permit will be reviewed or issued.

Please complete the attached permit application and submit to the Bay City Regional Airport in person or by mail or email (contact information below). The Bay City Regional Airport shall consider and provide an approval or denial within a reasonable period of time.

Bay City Regional Airport
Attention: Airport Manager
3598 FM 2540 N
Bay City, TX 77414
Airport@cityofbaycity.org
(979) 244-5037

The Consolidated Hazard Area and Compatible Land Use Zoning Regulations can be found in the *City of Bay City Municipal Code of Ordinances, Chapter 18 – Aviation*.

Bay City
REGIONAL AIRPORT

Airport Hazard and Land Use Permit Application

APPLICANT CONTACT INFORMATION:

1. Property Owner's Name: Peyton Creek Wind Farm II, LLC
2. Mailing Address: 353 N. Clark St., Chicago, IL 60654
3. Daytime Telephone: 512-461-9747 Alternate Telephone: _____
4. Email address: richard.saunders@rwe.com

PROPERTY INFORMATION:

5. 911 Site Address: 851 CR 169, Bay City, TX 77414
6. Property ID Number from Matagorda County Appraisal District: 20584
7. Total Size of Site (Square Feet): 606.11 acres
8. Size of Improvements (Square Footage): _____
9. Site Elevation (Above Mean Sea level): 42'
10. Total Structure Height (Above Ground Level): 656'
11. Overall Height (No.9 + No. 10) above Mean Sea Level: 698'
12. Latitude of highest point of structure: 28 ° 54 ' 48 " 92 "
13. Longitude of highest point of structure: 95 ° 52 ' 06 " 22 "
14. Datum: X NAD 83 ___NAD 27 ___Other

TYPE OF IMPROVEMENT: (Please mark all that apply)

_____ New Building
_____ Antenna Structure
_____ Alteration to Existing Building
_____ Tree/Vegetation
X Other - Describe: Wind Turbine PC2167

X PRIVATE (Individual, corporation, nonprofit institution, etc.)

_____ PUBLIC (Federal, state or local government)

ATTACH SURVEY/DRAWING/DEPICTION/MAP OF THE PROPERTY AND PROPOSED IMPROVEMENT

DESCRIPTION OF IMPROVEMENT OR PROJECT AND INTENDED USE OF LAND(ATTACH SEPARATE SHEETS IF NEEDED)

Install Wind Turbine Generator - PC2167

Will the property be used for any of the following purposes:

- Residential? (Y/N): N
- Educational (including child care and vocational)? (Y/N): N
- Medical, Institutional, Convalescent, or Rehabilitative Care? (Y/N): N
- Nursing Homes? (Y/N): N

If you answered "Yes" to any of the above, please describe further the proposed use: _____

Will any improvement or use create or cause electrical interference with communications between aircrafts and the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use create or cause difficulty for pilots to distinguish aircraft and the proposed improvement or the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use result in glare in the eyes of pilots or otherwise impair visibility in the vicinity of the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use increase the likelihood of bird strikes? (Y/N): N

If "Yes," explain: _____

Will any improvement or use endanger or interfere with the landing, taking off, or maneuvering of aircraft? (Y/N): N

If "Yes," explain: _____

Yes, Evidence to the contrary

FAA AIRSPACE REVIEW:

Does this project require an airspace review by the FAA? Yes: X No: _____

Date FAA Form 7460-1 Submitted*: 5/19/2022
*Please contact the Airport Manager at (979) 323-1115, for assistance completing FAA Form 7460-1

Date Determination Letter received from FAA: 3/15/2023
(If received please attach a copy to this application)

NOTICE

I hereby certify that I have read and examined this application and know the same to be true and correct. The granting of a permit does not presume to give authority to violate or cancel any other Federal, State or local law regulating construction or the performance of construction.

DocuSigned by:
Richard Saunders

Applicant's Signature

Richard Suanders

Print Name

Date: 3/5/2024

Return completed Application to:

Airport Manager
Bay City Regional Airport
3598 FM 2540 N
Bay City, Texas 77414
(979) 244-5037
airport@cityofbaycity.org

Should you have any questions please contact the Aviation Director at (979) 244-5037 or email at airport@cityofbaycity.org

For Office Use Only:

Date Application Received: 3/11/24

Is project consistent with the Airport Zoning Regulation: Yes _____ No X

Reason for project not being considered consistent with zoning regulation:
INCREASE TWR-44 HEIGHTS & OBSTACLE DEPICTIONS INCORRECT

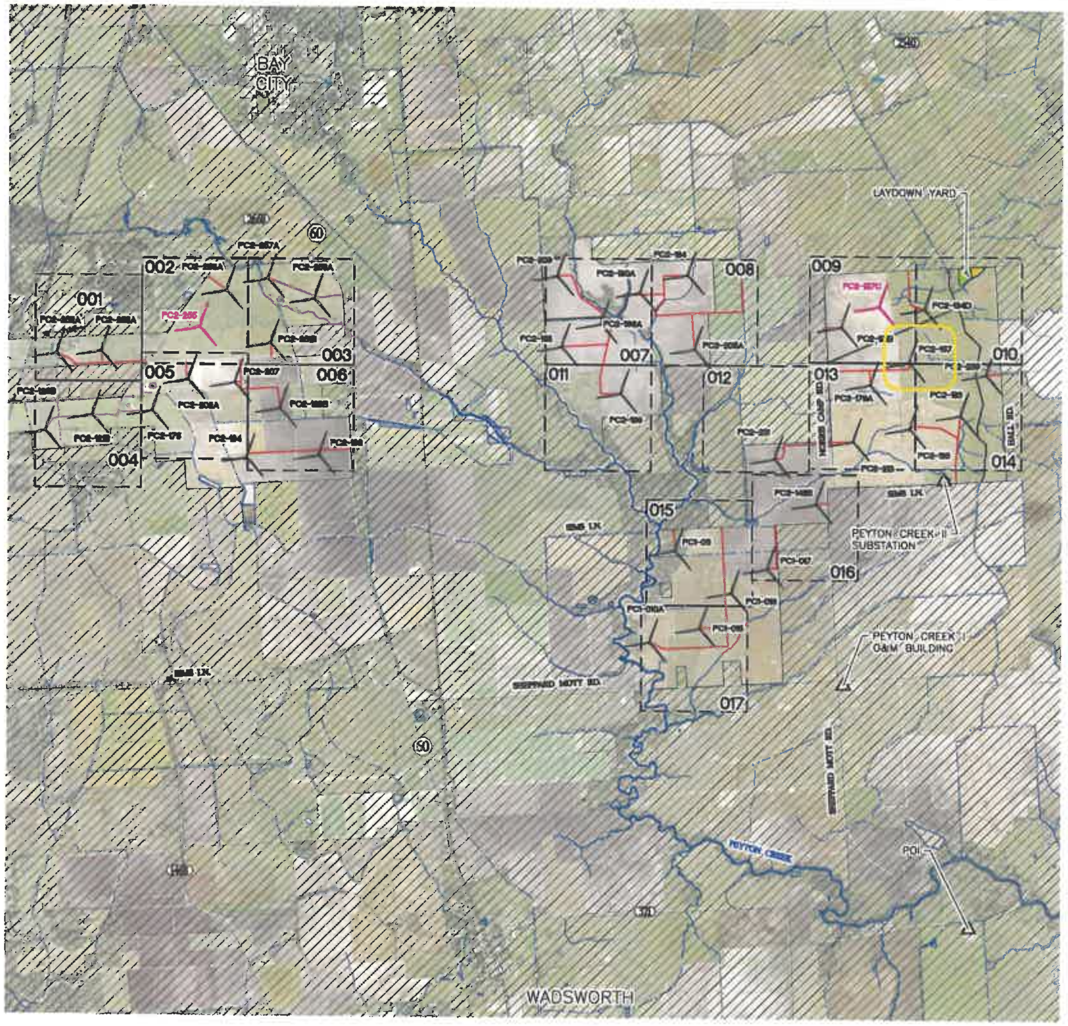
Airport Director Signature: _____

Date Application Considered by Administrative Agency Court.: _____

Permit Approved: Yes _____ No X

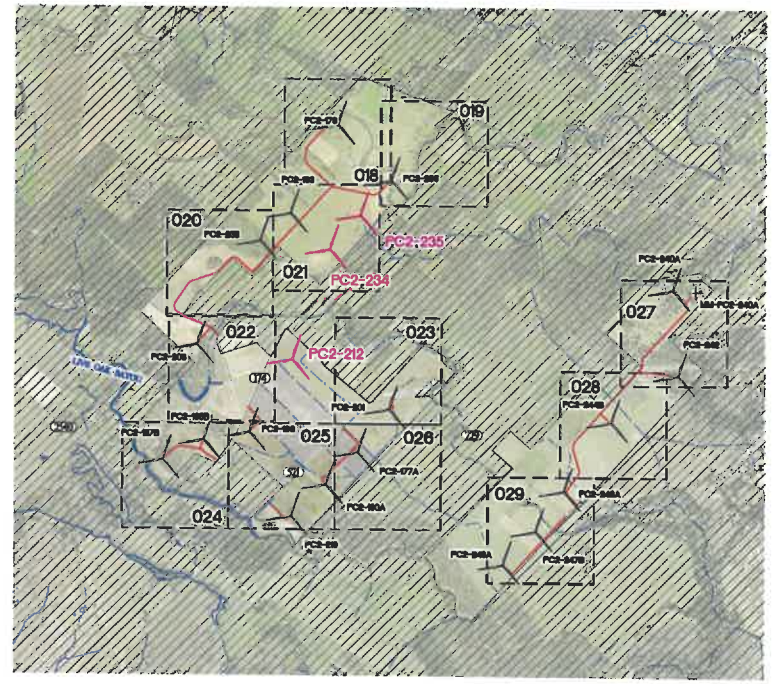
Permit Returned to Applicant 3/12/24 Via Mail Service.

Item 2.



① PLAN: OVERALL SITE PLAN - WEST

0 3000 6000
SCALE IN FEET



② PLAN: OVERALL SITE PLAN - EAST

0 3000 6000
SCALE IN FEET

LEGEND

- EXISTING ROAD
- EXISTING RAILROAD
- NHD WATERCOURSES
- WATERBODIES
- NON-PARTICIPATING BOUNDARY
- PROPOSED ACCESS ROAD
- PCX-XXX VESTAS V163 TURBINE (PRIMARY)
- PCX-XXX VESTAS V163 TURBINE (ALTERNATE)

STATE OF TEXAS
CARLOS M. BALLINAS
130735
LICENSED PROFESSIONAL ENGINEER
BARR ENGINEERING CO. F-3656

ISSUED FOR CONSTRUCTION
12/20/2023

NO	BY	CHK	APP.	DATE	REVISION DESCRIPTION
0	RLF	JAMS	CMB2	12/20/2023	ISSUED FOR CONSTRUCTION
E	MMY	JAMS	CMB2	09/20/2023	90% UPDATED DESIGN
D	JAMS	CMB2	CMB2	11/16/2022	90% UPDATED DESIGN
C	JAMS	CMB2	CMB2	08/24/2022	30% UPDATED TURBINE ARRAY
B	RLB2	CMB2	CMB2	7/16/2021	30% REVIEW COMMENTS

RELEASED TO/FOR: 30% DESIGN, 60% DESIGN, 90% DESIGN, IFC, RECORD — A B C D E 0 1 — DATE RELEASED

BARR
Project Office:
BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
Suite 200
MINNEAPOLIS, MN 55435
Ph: 1-800-632-2277
Fax: (952) 832-2601
www.barr.com

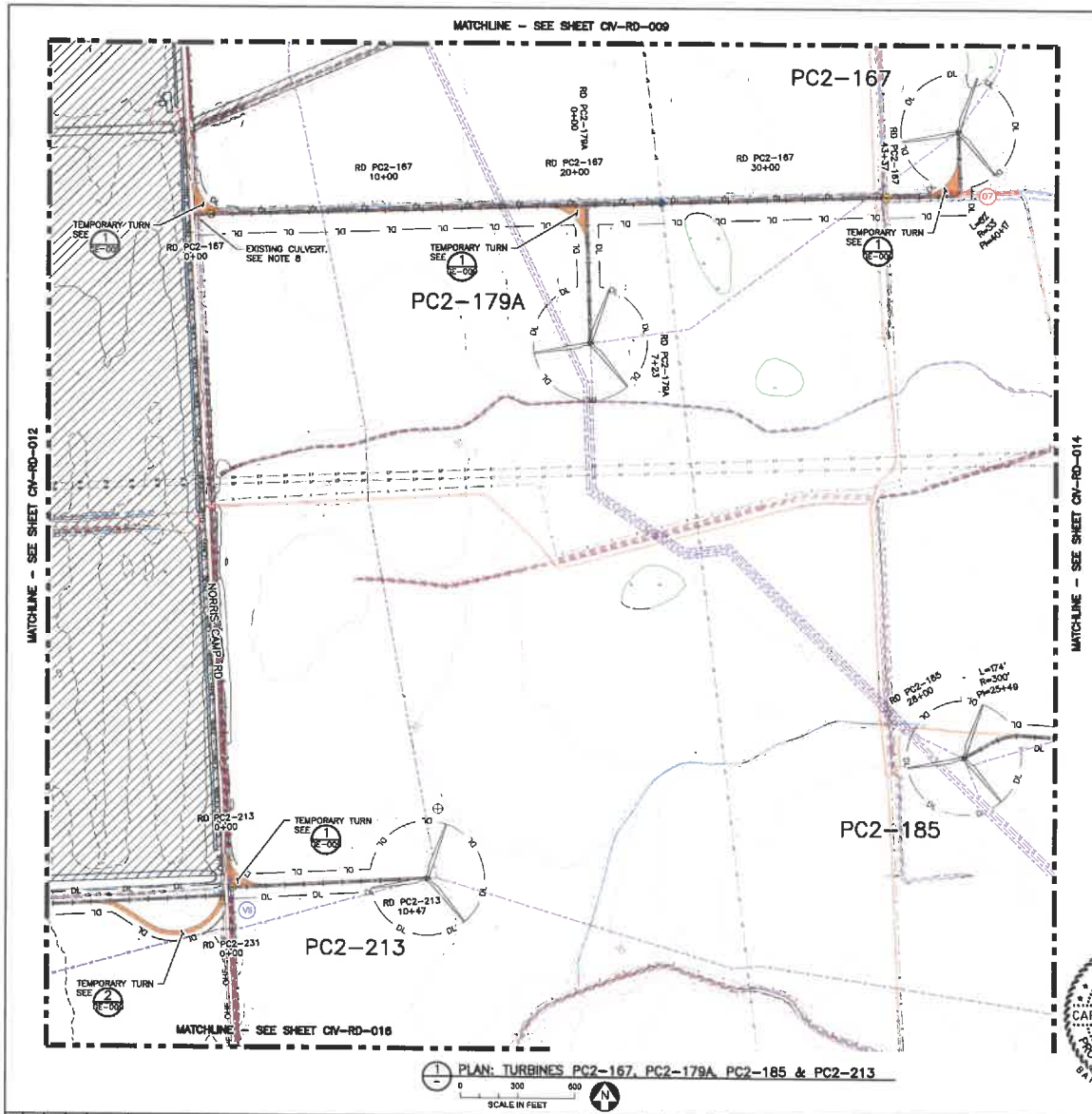
Scale	AS SHOWN
Date	05/18/21
Drawn	RLB2
Checked	CMB2
Designed	BARR
Approved	CMB2

RWE

PEYTON CREEK II WIND FARM
MATAGORDA COUNTY, TEXAS

OVERALL SITE PLAN
AND SHEET LAYOUT

BARR PROJECT No. 43M21003.00
CLIENT PROJECT No. -
DWG. No. CIV-GE-004
REV. No. 0



1 PLAN: TURBINES PC2–167, PC2–179A, PC2–185 & PC2–213

0 300 600

SCALE IN FEET

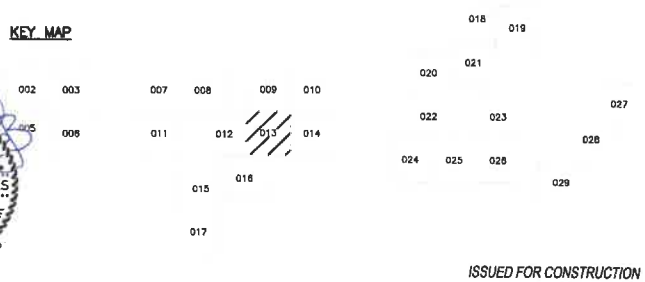
LEGEND

- PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING FENCE
- EXISTING PIPELINE
- EXISTING OVERHEAD POWER LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING GAS LINE
- EXISTING PUBLIC ROAD
- EXISTING GRAVEL
- EXISTING DITCH
- EXISTING CULVERT
- EXISTING BRIDGE
- EXISTING RAILROAD
- EXISTING EASEMENT
- EXISTING TREE LINE
- EXISTING WATER BODY
- NHD WATERCOURSES
- IDNR DESIGNATED RIVER
- WETLAND
- NWI WETLAND
- FEMA DELINEATED FLOOD ZONE A
- FEMA DELINEATED FLOOD ZONE A2
- FEMA DELINEATED FLOOD ZONE B
- NON–PARTICIPATING/BOUNDARY
- REC 250' BUFFER ZONE
- CEMETERY
- EXISTING CONCRETE
- COLUMBIA BOTTOMLAND HARDWOODS
- BUILDING
- PROPOSED ACCESS ROAD
- PROPOSED TEMPORARY TURN
- PROPOSED COLLECTION LINE (BY OTHERS)
- DISTURBANCE LIMITS
- EXISTING WELL
- EXISTING POWER POLE
- FENCE CROSSING LOCATION
- UTILITY CROSSING LOCATION
- PCX–XXX VESTAS V163 TURBINE (PRIMARY)
- PCX–XXX VESTAS V163 TURBINE (ALTERNATE)
- PROPOSED PRIVATE CULVERT LOCATION
- PROPOSED PUBLIC CULVERT LOCATION
- PROPOSED LOW WATER CROSSING LOCATION

NOTES:

1. FIELD VERIFY LOCATION OF ALL CULVERTS AND LOW WATER CROSSINGS SHOWN.
2. CULVERTS AT INTERSECTIONS WITH PUBLIC ROADS TO FOLLOW TxDOT OR LOCAL AGENCY REQUIREMENTS.
3. EROSION CONTROL FEATURES NOT SHOWN. CONTRACTOR TO INSTALL EROSION CONTROL PER PROJECT SWPPP.
4. UNDERGROUND COLLECTION LINES SHOWN FOR REFERENCE ONLY. SEE ELECTRICAL CONSULTANT PLANS FOR CONSTRUCTION DETAILS, INCLUDING EROSION CONTROL DETAILS.
5. UTILITY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE UTILITY CROSSING AGREEMENTS.
6. CONTRACTOR TO FIELD ADJUST ROADS TO MINIMIZE TREE CLEARING REQUIREMENTS UPON APPROVAL FROM THE OWNER.
7. TEMPORARY TURNS BASED ON STANDARD TEMPLATES. SEE CIV–GE–009.
8. EXISTING CULVERTS SHALL BE PROTECTED, EXTENDED AND/OR REPLACED AS REQUIRED.
9. RAISED ACCESS ROADS SHALL BE RAISED A MINIMUM OF 12" ABOVE EXISTING GROUND UNLESS OTHERWISE NOTED, OR AS DIRECTED PER RWE'S ON–SITE REPRESENTATIVE. SEE SHEET CIV–GE–007.
10. COORDINATE WITH RWE'S SITE REPRESENTATIVE AND LANDOWNER FOR REQUIREMENTS/SCHEDULE FOR IRRIGATION LINE WORK.
11. CONSTRUCTION OUTSIDE DISTURBANCE LIMITS, WITHIN NON–PARTICIPATING PARCELS, OR WITHIN REC AREAS, IS NOT ALLOWED UNLESS OTHERWISE DIRECTED IN WRITING BY RWE.

KEY MAP



STATE OF TEXAS
CARLOS M. BALLINAS
130735
LICENSED PROFESSIONAL ENGINEER
BARR ENGINEERING CO.
F-3654

ISSUED FOR CONSTRUCTION
12/20/2023

NO.	BY	CHK	APP	DATE	REVISION DESCRIPTION
D	PLF	JAW	CMB2	12/20/2023	ISSUED FOR CONSTRUCTION
E	MMY	JAW	CMB2	09/29/2023	90% UPDATED DESIGN
D	JAW	CMB2	CMB2	11/16/2022	90% UPDATED DESIGN
C	JAW	CMB2	CMB2	06/24/2022	50% UPDATED TURBINE ARRAY
B	RLB1	CMB2	CMB2	07/16/2021	50% REVIEW COMMENTS

90% DESIGN | 90% DESIGN | 50% DESIGN | IFC | RECORD | RELEASED TO/FOR | A B C D E 01 | DATE RELEASED

BARR
Project Office: BARR ENGINEERING CO. 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55436 Ph: 1-800-632-2277 Fax: (952) 832-2601 www.barr.com
Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277

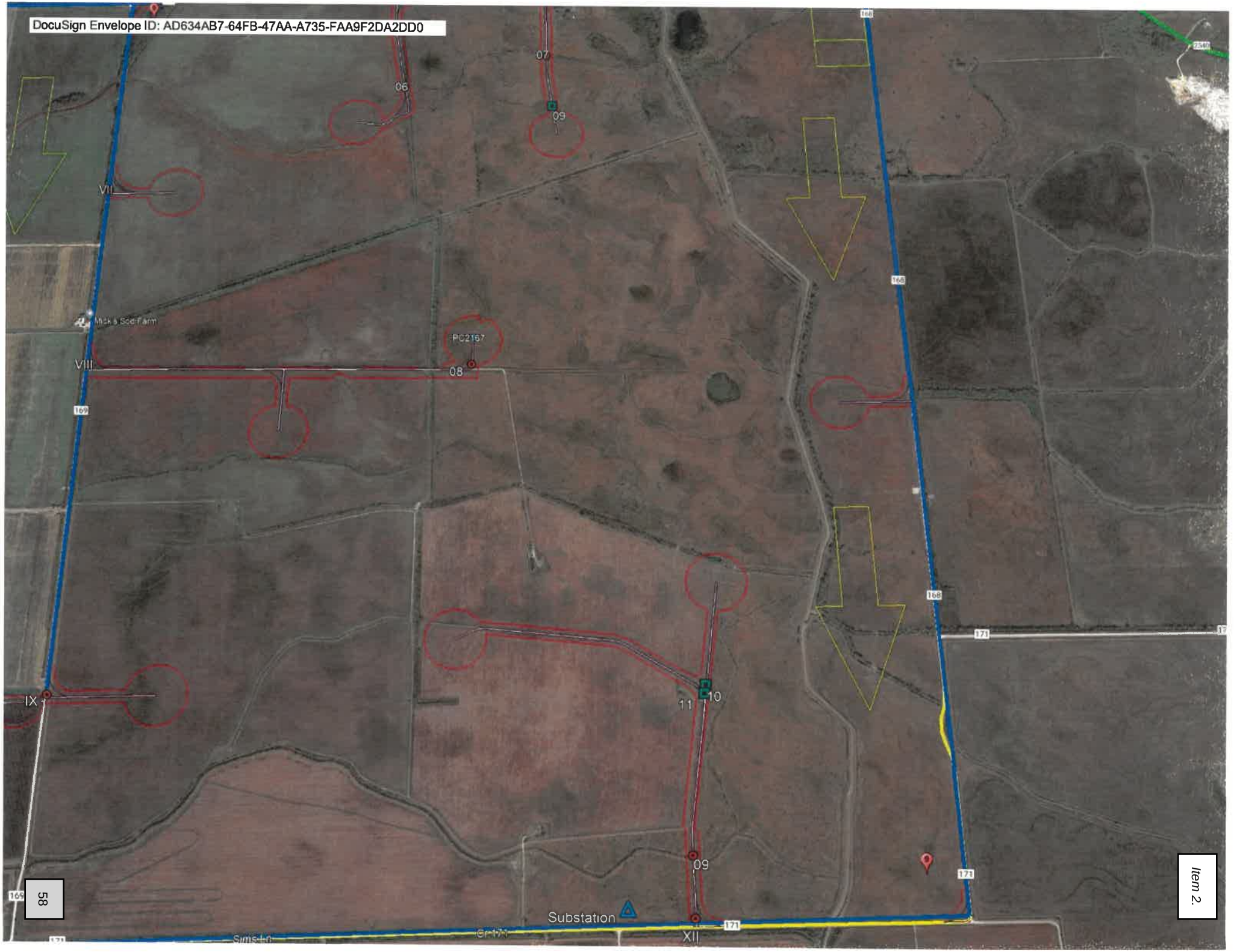
Scale	AS SHOWN
Date	05/18/21
Drawn	RLB2
Checked	CMB2
Designed	BARR
Approved	CMB2

RWE

PEYTON CREEK II WIND FARM
MATAGORDA COUNTY, TEXAS

TURBINES PC2–167, PC2–179A, PC2–185 & PC2–213
ROADS RD PC2–167, RD PC2–179A, RD PC2–185, RD PC2–213 & PC2–231

BARR PROJECT No. 43M21003.00
CLIENT PROJECT No. –
DWG. No. CIV–RD–013
REV. No. –



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-WTW-3572-OE

Issued Date: 03/15/2023

Rich Saunders
Peyton Creek II
701 Brazos St
Suite 1400
Austin, TX 78701

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine PC2167
Location:	Bay City, TX
Latitude:	28-54-48.92N NAD 83
Longitude:	95-52-06.22W
Heights:	42 feet site elevation (SE)
	656 feet above ground level (AGL)
	698 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/synchronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before April 14, 2023. In the event an interested party files a petition for review, it must contain a full statement of the basis upon which the petition is made. Petitions can be submitted to the Manager of the Rules and Regulations Group via e-mail at OEPetitions@faa.gov, via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, Room 425, 800 Independence Ave, SW, Washington, DC 20591, or via facsimile (202) 267-9328. FAA encourages the use of email to ensure timely processing.

This determination becomes final on April 24, 2023 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should

be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods w they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Kieffer, at (816) 329-2526, or bill.kieffer@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-WTW-3572-OE.

Signature Control No: 531743931-576371867 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts.

A list of commonly used acronyms and abbreviations is available at the end of this document. A full list is available at the FAA's public website at https://oeaaa.faa.gov/oeaaa/downloads/external/content/FAA_Acronyms.pdf.

1. PROPOSAL DESCRIPTION

Proposed are 77 wind turbines for a project that lies approximately 5.4 NM east extending clockwise to points 3.4 NM south through 8 NM southwest of the airport reference point for the Bay City Regional Airport (BYY), Bay City, Texas.

For the sake of efficiency, all of the wind turbines in this project that have similar impacts are included in this narrative.

The proposed wind turbines' described heights and locations are expressed in Above Ground Level (AGL) height, Above Mean Sea Level (AMSL) height and latitude (LAT)/longitude (LONG).

ASN / AGL / AMSL / LAT / LONG

2022-WTW-3511-OE / 656 / 684 / 28-49-03.24N / 95-59-25.94W
2022-WTW-3512-OE / 656 / 685 / 28-49-04.46N / 95-59-01.66W
2022-WTW-3513-OE / 656 / 684 / 28-49-09.81N / 95-58-33.76W
2022-WTW-3514-OE / 656 / 689 / 28-49-09.90N / 95-58-09.58W
2022-WTW-3515-OE / 656 / 695 / 28-49-43.99N / 95-57-03.53W
2022-WTW-3516-OE / 656 / 695 / 28-49-44.33N / 95-57-44.50W
2022-WTW-3517-OE / 656 / 695 / 28-50-15.14N / 95-57-44.79W
2022-WTW-3518-OE / 656 / 696 / 28-50-16.97N / 95-57-16.52W
2022-WTW-3519-OE / 656 / 692 / 28-50-17.26N / 95-56-47.57W
2022-WTW-3520-OE / 656 / 696 / 28-50-35.11N / 95-58-48.34W
2022-WTW-3521-OE / 656 / 695 / 28-50-37.45N / 95-58-08.58W
2022-WTW-3522-OE / 656 / 698 / 28-50-44.02N / 95-57-39.74W
2022-WTW-3523-OE / 656 / 697 / 28-50-51.44N / 95-57-18.78W
2022-WTW-3524-OE / 656 / 694 / 28-50-54.85N / 95-56-47.66W
2022-WTW-3525-OE / 656 / 697 / 28-51-06.40N / 95-58-18.47W
2022-WTW-3526-OE / 656 / 696 / 28-51-07.06N / 95-58-50.43W
2022-WTW-3527-OE / 656 / 699 / 28-52-35.42N / 95-58-10.45W
2022-WTW-3528-OE / 656 / 700 / 28-52-46.99N / 95-58-49.48W
2022-WTW-3529-OE / 656 / 696 / 28-52-52.29N / 95-50-43.85W
2022-WTW-3530-OE / 656 / 698 / 28-53-09.82N / 95-57-45.01W
2022-WTW-3531-OE / 656 / 703 / 28-53-18.36N / 95-59-13.14W
2022-WTW-3532-OE / 656 / 695 / 28-53-23.71N / 95-50-19.59W
2022-WTW-3533-OE / 656 / 681 / 28-53-24.65N / 95-46-44.84W

2022-WTW-3534-OE / 656 / 701 / 28-53-50.68N / 95-58-50.54W
2022-WTW-3535-OE / 656 / 695 / 28-53-32.17N / 95-50-50.37W
2022-WTW-3536-OE / 656 / 697 / 28-53-37.93N / 95-57-34.82W
2022-WTW-3537-OE / 656 / 691 / 28-53-39.98N / 95-53-00.18W
2022-WTW-3538-OE / 656 / 680 / 28-53-40.00N / 95-46-25.00W
2022-WTW-3539-OE / 656 / 702 / 28-53-42.09N / 95-58-01.32W
2022-WTW-3540-OE / 656 / 693 / 28-53-45.02N / 95-49-48.22W
2022-WTW-3541-OE / 656 / 683 / 28-53-54.17N / 95-47-55.81W
2022-WTW-3542-OE / 656 / 695 / 28-53-55.29N / 95-50-12.51W
2022-WTW-3543-OE / 656 / 680 / 28-53-55.51N / 95-46-06.73W
2022-WTW-3544-OE / 656 / 701 / 28-54-00.09N / 95-58-40.28W
2022-WTW-3545-OE / 656 / 692 / 28-54-01.71N / 95-49-30.52W
2022-WTW-3546-OE / 656 / 691 / 28-54-02.77N / 95-53-22.81W
2022-WTW-3547-OE / 656 / 682 / 28-54-03.38N / 95-47-32.67W
2022-WTW-3548-OE / 656 / 682 / 28-54-06.61N / 95-47-06.89W
2022-WTW-3549-OE / 656 / 693 / 28-54-08.35N / 95-56-54.67W
2022-WTW-3550-OE / 656 / 703 / 28-54-08.71N / 95-58-18.58W
2022-WTW-3551-OE / 656 / 697 / 28-54-09.07N / 95-57-38.10W
2022-WTW-3552-OE / 656 / 700 / 28-54-09.92N / 95-51-09.23W
2022-WTW-3553-OE / 656 / 699 / 28-54-10.32N / 95-50-40.68W
2022-WTW-3554-OE / 656 / 692 / 28-54-10.67N / 95-52-38.56W
2022-WTW-3555-OE / 656 / 680 / 28-54-12.98N / 95-46-28.70W
2022-WTW-3556-OE / 656 / 680 / 28-54-16.20N / 95-45-48.58W
2022-WTW-3557-OE / 656 / 697 / 28-54-16.38N / 95-52-06.76W
2022-WTW-3558-OE / 656 / 699 / 28-54-22.35N / 95-51-38.19W
2022-WTW-3559-OE / 656 / 691 / 28-54-25.59N / 95-56-27.82W
2022-WTW-3560-OE / 656 / 694 / 28-54-26.46N / 95-50-05.29W
2022-WTW-3561-OE / 656 / 691 / 28-54-29.01N / 95-55-34.20W
2022-WTW-3562-OE / 656 / 690 / 28-54-29.64N / 95-56-01.93W
2022-WTW-3563-OE / 656 / 706 / 28-54-31.45N / 95-59-44.40W
2022-WTW-3564-OE / 656 / 702 / 28-54-32.76N / 95-59-10.74W
2022-WTW-3565-OE / 656 / 691 / 28-54-36.61N / 95-54-48.20W
2022-WTW-3566-OE / 656 / 692 / 28-54-39.44N / 95-49-42.28W
2022-WTW-3567-OE / 656 / 680 / 28-54-41.47N / 95-46-41.64W
2022-WTW-3568-OE / 656 / 702 / 28-54-45.79N / 95-58-24.32W
2022-WTW-3569-OE / 656 / 698 / 28-54-46.79N / 95-57-53.91W
2022-WTW-3570-OE / 656 / 700 / 28-54-47.17N / 95-50-49.99W
2022-WTW-3571-OE / 656 / 704 / 28-54-47.66N / 95-58-50.23W
2022-WTW-3572-OE / 656 / 698 / 28-54-48.92N / 95-52-06.22W
2022-WTW-3573-OE / 656 / 686 / 28-54-50.31N / 95-47-35.04W
2022-WTW-3574-OE / 656 / 692 / 28-54-51.26N / 95-49-11.96W
2022-WTW-3575-OE / 656 / 690 / 28-54-57.63N / 95-54-06.33W
2022-WTW-3577-OE / 656 / 694 / 28-55-00.16N / 95-55-20.76W
2022-WTW-3578-OE / 656 / 694 / 28-55-07.10N / 95-52-43.78W
2022-WTW-3579-OE / 656 / 693 / 28-55-11.02N / 95-54-58.39W
2022-WTW-3580-OE / 656 / 694 / 28-55-11.25N / 95-50-26.07W
2022-WTW-3581-OE / 656 / 699 / 28-55-14.93N / 95-51-56.84W
2022-WTW-3582-OE / 656 / 697 / 28-55-16.47N / 95-52-22.14W
2022-WTW-3583-OE / 656 / 693 / 28-55-26.00N / 95-54-36.08W

2022-WTW-3584-OE / 656 / 692 / 28-55-34.21N / 95-54-09.21W
2022-WTW-3585-OE / 656 / 695 / 28-55-35.01N / 95-55-22.26W
2022-WTW-3587-OE / 656 / 688 / 28-56-14.97N / 95-46-26.39W
2022-WTW-3588-OE / 656 / 691 / 28-56-37.14N / 95-46-13.44W
2022-WTW-3589-OE / 656 / 688 / 28-56-50.79N / 95-45-51.83W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1): Exceeds a height of 499 feet AGL at the site of the object exceeds this standard by 157 feet.

b. Section 77.17(a)(2): a height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 NM miles of the established reference point of BYY, and that height increases in the proportion of 100 feet for each additional NM from the airport up to a maximum of 499 feet. The following would exceed by:

2022-WTW-3548-OE / Exceeds by 144 ft.
2022-WTW-3567-OE / Exceeds by 154 ft.
2022-WTW-3547-OE / Exceeds by 166 ft.
2022-WTW-3541-OE / Exceeds by 176 ft.
2022-WTW-3559-OE / Exceeds by 178 ft.
2022-WTW-3529-OE / Exceeds by 193 ft.
2022-WTW-3589-OE / Exceeds by 200 ft.
2022-WTW-3562-OE / Exceeds by 208 ft.
2022-WTW-3587-OE / Exceeds by 226 ft.
2022-WTW-3588-OE / Exceeds by 226 ft.
2022-WTW-3573-OE / Exceeds by 229 ft.
2022-WTW-3532-OE / Exceeds by 235 ft.
2022-WTW-3561-OE / Exceeds by 236 ft.
2022-WTW-3540-OE / Exceeds by 253 ft.
2022-WTW-3535-OE / Exceeds by 259 ft.
2022-WTW-3537-OE / Exceeds by 263 ft.
2022-WTW-3545-OE / Exceeds by 268 ft.
2022-WTW-3542-OE / Exceeds by 283 ft.
2022-WTW-3565-OE / Exceeds by 287 ft.
2022-WTW-3577-OE / Exceeds by 290 ft.
2022-WTW-3546-OE / Exceeds by 291 ft.
2022-WTW-3554-OE / Exceeds by 321 ft.
2022-WTW-3553-OE / Exceeds by 322 ft.
2022-WTW-3579-OE / Exceeds by 325 ft.
2022-WTW-3560-OE / Exceeds by 327 ft.
2022-WTW-3574-OE / Exceeds by 327 ft.
2022-WTW-3552-OE / Exceeds by 330 ft.
2022-WTW-3585-OE / Exceeds by 331 ft.
2022-WTW-3566-OE / Exceeds by 332 ft.
2022-WTW-3557-OE / Exceeds by 341 ft.
2022-WTW-3575-OE / Exceeds by 348 ft.
2022-WTW-3558-OE / Exceeds by 353 ft.
2022-WTW-3583-OE / Exceeds by 365 ft.

2022-WTW-3570-OE / Exceeds by 386 ft.
2022-WTW-3572-OE / Exceeds by 396 ft.
2022-WTW-3584-OE / Exceeds by 399 ft.
2022-WTW-3580-OE / Exceeds by 408 ft.
2022-WTW-3578-OE / Exceeds by 413 ft.
2022-WTW-3582-OE / Exceeds by 437 ft.
2022-WTW-3581-OE / Exceeds by 441 ft.

c. Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

The following proposals would increase TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES for RWY 13 at BYY. The increase would be from standard (200/1 ceiling/visibility) to standard with a minimum climb gradient of between 207-285 ft. per NM until reaching 1000 ft. AMSL depending on the location of each individual structure.

2022-WTW-3552-OE
2022-WTW-3553-OE
2022-WTW-3558-OE
2022-WTW-3560-OE
2022-WTW-3566-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3574-OE
2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1): the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules.

At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of potential VFR Routes as defined by FAA Order 7400.2, Section 6-3-8. The turbines within 2 SM of a VFR Route would have an adverse effect upon VFR air navigation.

The following proposed turbines would lie within the lateral boundaries and exceed traffic pattern airspace (TPA) for CAT D aircraft at BYY (aircraft with approach speeds between 141-165 knots):

2022-WTW-3552-OE
2022-WTW-3554-OE
2022-WTW-3557-OE
2022-WTW-3558-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3575-OE
2022-WTW-3578-OE

2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE
2022-WTW-3583-OE
2022-WTW-3584-OE

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

The project was circularized under ASN 2022-WTW-3546-OE on 07/22/2022, to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. There were two commenters received during the public comment period as a result of the circularization. They are summarized below.

Comment:
The commenter had concerns about the increase to the RWY 13 Departure Procedure and impacts to the RNAV (GPS) LNAV RWY 31 approach at BYY.

Response:
The aeronautical study determined that although there are a few turbines that are close to affecting the LNAV RWY 31 approach that they in fact do not impact this approach. Minimums will not change for the LNAV RWY 31 approach. The sponsor agreed to terminate turbine 2022-WTW-3586-OE although internal review determined that this turbine would not affect the minimums to the LNAV RWY 31 approach. The impact to the departure procedure are considered minimal, there were no comments received nor did flight standards believe that the increase would affect the departure capacity of BYY.

Comment:
The commenter wanted to ensure the structures were appropriately marked/lighted.

Response:
The structures will, as a condition to their determination, recommended to be marked/lighted IAW the current Advisory Circular.

Comment:
The commenter had concern over traffic pattern penetrations for CAT C and D aircraft that may utilize BYY.

Response:
The sponsor agreed to terminate the one turbine that penetrated CAT C traffic pattern airspace into BYY. Further study indicated that there was not a substantial amount (if any) CAT D operations for the previous 12 months into BYY nor are there any plans on file to improve the RWY at BYY to accommodate a substantial amount of CAT D aircraft. Therefore the project would not interfere with normal traffic pattern operations at BYY.

Comment:
The commenter was concerned about the effects to a private airport close or within the project area.

Response:
The FAA recognizes that obstructions can and do have impacts to privately owned private use airports. However, within the scope of a 14 CFR Part 77 study, the VFR effects to private use airports are not considered when determining the impacts of an obstruction to the national airspace system.

Comment:
The commenter responded that they support green energy, however the project would render many aspects of aviation nearly impossible. Agricultural, off shore aviation, tourist aviation and hunting including feral hog control.

Response:
A structure that has an adverse effect would have a substantial adverse effect if there is a significant volume of aircraft effected. Further study included a yearly traffic count over the area and along possible VFR flyways in or near the project and found that it would not affect a significant volume of traffic along any identified flyways. Agricultural aircraft, although may be effected, while operating under Part 137 are not considered within the scope of a 14 CFR Part 77 study.

Comment:
The commenter was concerned over the turbulence of the blades, the visual and noise effects, the effects to local people, birds, and cattle.

Response:
Aeronautical studies are only looking at direct effects to the national airspace system. The visual and noise effects to people or animals are not considered under an aeronautical study but may be considered under a different study, for example an environmental impact study if required. Wake turbulence caused by wind turbines is currently not within the scope of an aeronautical study under 14 CFR Part 77.

5. BASIS FOR DETERMINATION

IFR EFFECTS

The aeronautical study identified an IFR effect for the RWY 13 instrument departure procedure at BYY. Further study concluded that the effects were minimal and would not impact the departure capacity for normal aircraft departing RWY 13 at BYY.

The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

VFR EFFECTS

The aeronautical study identified no substantial adverse effect on any existing or proposed VFR arrival or departure operations. A portion of the proposals would be located within CAT D traffic pattern airspace but beyond the normally utilized traffic pattern airspace for BYY or any other known public use or military airports. At 656 feet AGL, the structures would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. Therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations.

CHARTING AND CUMULATIVE EFFECT

The proposed structures would be charted on VFR sectional aeronautical charts and appropriately obstruction marked/lighted to make them more conspicuous to airmen should circumnavigation be necessary.

The cumulative impact of the proposed structure(s), when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose a substantial adverse effect on existing or proposed public-use or military airports, nor does the proposal(s) affect the capacity of any known existing or planned public-use or military airport. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no substantial adverse effects on any airspace and routes used by the military.

6. DETERMINATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

7. CONDITIONS

The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, ten days prior to beginning construction for the following ASN's, at the OE/AAA website (http://oeaaa.faa.gov).

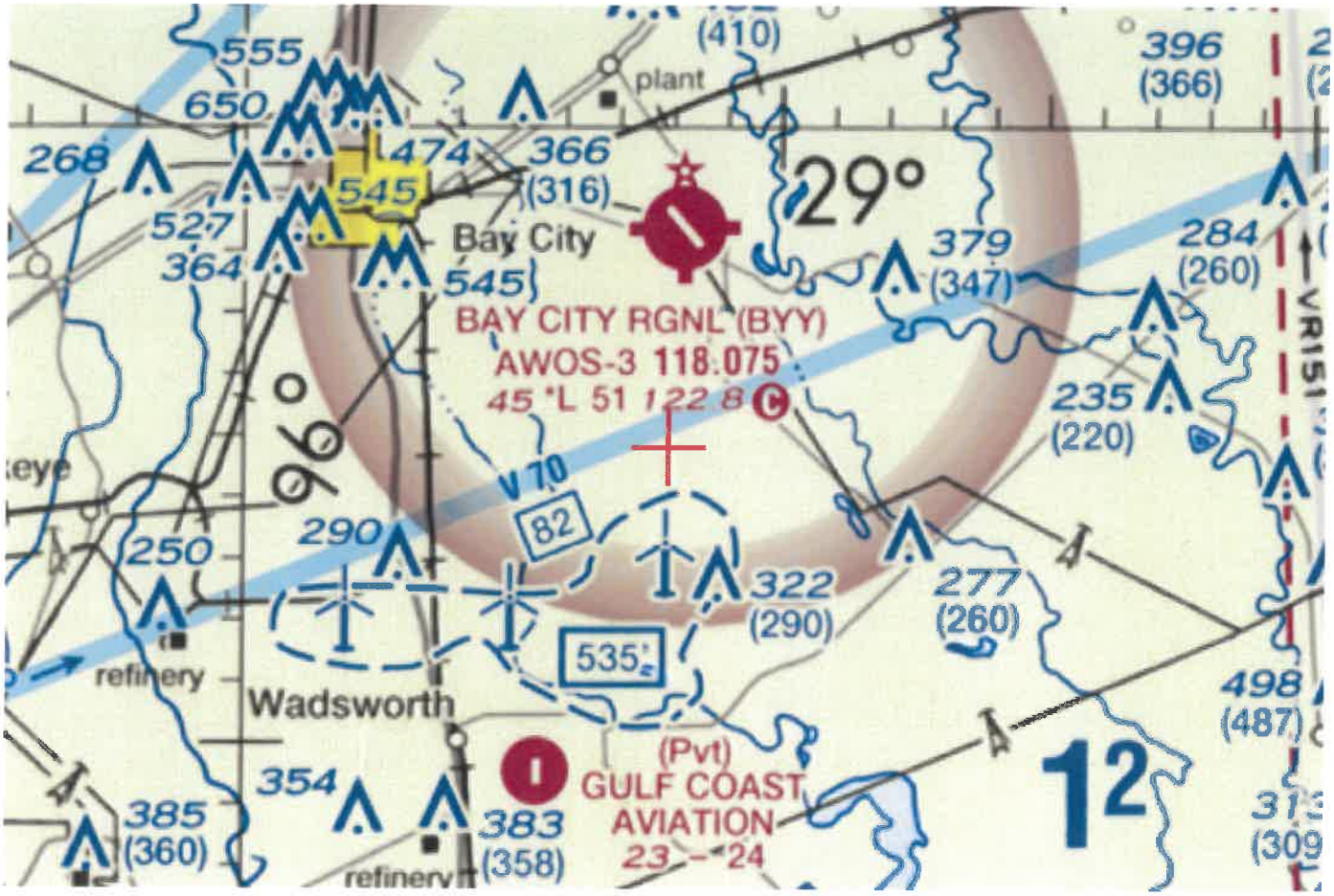
2022-WTW-3552-OE
2022-WTW-3553-OE
2022-WTW-3558-OE
2022-WTW-3560-OE
2022-WTW-3566-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3574-OE
2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE

ACRONYMS & ABBREVIATIONS
AGL, Above Ground Level
AMSL, Above Mean Sea Level
ARP, Airport Reference Point
ARSR, Air Route Surveillance Radar
ARTCC, Air Route Traffic Control Center
ASN, Aeronautical Study Number
ASR, Airport Surveillance Radar
ATC, Air Traffic Control
ATCT, Air Traffic Control Tower
CARSR, Common Air Route Surveillance Radar
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System

IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude
NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway

VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2022-WTW-3572-OE



814 Thornwick Drive
Houston, TX 77079
www.Civil-PEs.com

March 11, 2024

James Mason, CM, A.C.E.
Bay City Regional Airport
3598 FM 2540 North
Bay City, Texas 77414

Permit Application Technical Review: Permit Application: Structure PC2134D – Wind Turbine

Transmitted via email to jmason@cityofbaycity.org *on March 11, 2024*

Dear James.

We have completed a review of the structure reference above. This structure was previously studied under FAA's airspace review as study 2022-WTW-3581-OE. This review is organized around the following sections of the ordinance:

Zoning Ordinance Section 18-41 – Height Limitations
Subsection: N/A
Reasons: We have no objection to the proposed structure based on the Part 77 surfaces identified in this Section.

Zoning Ordinance Section 18-42 – Compatible Land Use Area
Subsection: N/A
Reasons: We have no objection to the proposed structure based on noise compatibility requirements in this Section.

Zoning Ordinance Section 18-44 – Other Use Restrictions
Subsection: (1) Airport Safety
Reasons: This section does not permit use of land or water in the entirety of Matagorda County that might impair visibility in the vicinity of the airport, or otherwise in any way endanger or interfere with the landing, taking off, or maneuvering of aircraft intending to use the airport. This proposed item will affect taking off from the airport:

1. This proposed structure is located 2.88 nm from the end of Runway 31, its departure end. This structure is within the "Diverse Departure Assessment Area" as defined under FAA Order 8260.3D and may require an Obstacle Departure Procedure. For southbound departures from the runway toward the proposed structure, the climb gradient needed to provide proper clearance over the structure will exceed the standard climb gradient; this has been noted in the airspace determination letter of March 15, 2023. Such a requirement interferes with operating out of the airport compared to the operating requirements today.

Based on the information provided above, we find this proposed structure to be contradictory to the zoning ordinance and hereby do not recommend approval of this structure.

Civil PEs, LLC
Thomas D Dodson, PE
Project Leader

Bay City
REGIONAL AIRPORT

www.FlyBayCity.com

3598 FM 2540 N Bay City, Texas 77414 (979) 244-5037

Airport Hazard and Land Use Permit

In accordance with Texas Local Government Code, Chapter 241, also known as the Airport Zoning Act, the Consolidated Hazard Area and Compatible Land Use Zoning Regulations have been revised by the Bay City Regional Airport Zoning Board. Revisions now include maps which allow for timelier identification of real properties within hazard and zoning areas.

The Airport Zoning Act found that airport hazards and obstructions have the potential for endangering the lives and property of users of Bay City Regional Airport and property or occupants of land it its vicinity. Obstructions may impact the size of areas available for the landing, taking off and maneuvering of aircraft and may affect aircraft instrument approach minimums.

The real property for which you are submitting a permit application is located within the Compatible Land Use Area and/or Hazard Area of the Bay City Regional Airport. Applications for building, electrical, plumbing, or mechanical permit(s) within these areas require an "Airport Hazard and Land Use Permit" be approved before any other permit will be issued. Airport Hazard and Land Use permits may restrict some aspects of the potential use, size, height, lighting, glare potential or construction of your building.

Any cost associated with a permit that requires the assistance of any person not employed by the City of Bay City or the County of Matagorda shall be paid by the permittee. The permit fee shall be calculated by the Bay City Regional Airport Manager and shall be paid before the permit will be reviewed or issued.

Please complete the attached permit application and submit to the Bay City Regional Airport in person or by mail or email (contact information below). The Bay City Regional Airport shall consider and provide an approval or denial within a reasonable period of time.

Bay City Regional Airport
Attention: Airport Manager
3598 FM 2540 N
Bay City, TX 77414
Airport@cityofbaycity.org
(979) 244-5037

The Consolidated Hazard Area and Compatible Land Use Zoning Regulations can be found in the *City of Bay City Municipal Code of Ordinances, Chapter 18 – Aviation.*

Bay City
REGIONAL AIRPORT

Airport Hazard and Land Use Permit Application

APPLICANT CONTACT INFORMATION:

1. Property Owner's Name: Peyton Creek Wind Farm II, LLC
2. Mailing Address: 353 N. Clark St., Chicago, IL 60654
3. Daytime Telephone: 512-461-9747 Alternate Telephone: _____
4. Email address: richard.saunders@rwe.com

PROPERTY INFORMATION:

5. 911 Site Address: 7568 CR 166, Bay City, TX 77414
6. Property ID Number from Matagorda County Appraisal District: 17560
7. Total Size of Site (Square Feet): 546.42 acres
8. Size of Improvements (Square Footage): _____
9. Site Elevation (Above Mean Sea level): 43'
10. Total Structure Height (Above Ground Level): 656'
11. Overall Height (No.9 + No. 10) above Mean Sea Level: 699'
12. Latitude of highest point of structure: 28 ° 55 ' 14 " 93 "
13. Longitude of highest point of structure: 95 ° 51 ' 56 " 84 "
14. Datum: X NAD 83 ___NAD 27 ___Other

TYPE OF IMPROVEMENT: (Please mark all that apply)

_____ New Building
_____ Antenna Structure
_____ Alteration to Existing Building
_____ Tree/Vegetation
X Other - Describe: Wind Turbine PC2134D

X PRIVATE (Individual, corporation, nonprofit institution, etc.)

_____ PUBLIC (Federal, state or local government)

ATTACH SURVEY/DRAWING/DEPICTION/MAP OF THE PROPERTY AND PROPOSED IMPROVEMENT

DESCRIPTION OF IMPROVEMENT OR PROJECT AND INTENDED USE OF LAND(ATTACH SEPARATE SHEETS IF NEEDED)

Install Wind Turbine Generator - PC2134D

Will the property be used for any of the following purposes:

- Residential? (Y/N): N
- Educational (including child care and vocational)? (Y/N): N
- Medical, Institutional, Convalescent, or Rehabilitative Care? (Y/N): N
- Nursing Homes? (Y/N): N

If you answered "Yes" to any of the above, please describe further the proposed use: _____

Will any improvement or use create or cause electrical interference with communications between aircrafts and the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use create or cause difficulty for pilots to distinguish aircraft and the proposed improvement or the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use result in glare in the eyes of pilots or otherwise impair visibility in the vicinity of the Airport? (Y/N): N

If "Yes," explain: _____

Will any improvement or use increase the likelihood of bird strikes? (Y/N): N

If "Yes," explain: _____

Will any improvement or use endanger or interfere with the landing, taking off, or maneuvering of aircraft? (Y/N): N

If "Yes," explain: _____

YES, THIS WILL ENCROACH TAKE OFF MINIMUMS & OBSTACLE DEPARTURE PROCEDURES.

FAA AIRSPACE REVIEW:

Does this project require an airspace review by the FAA? Yes: X No: _____

Date FAA Form 7460-1 Submitted*: 5/19/2022

*Please contact the Airport Manager at (979) 323-1115, for assistance completing FAA Form 7460-1

Date Determination Letter received from FAA: 3/15/2023
(If received please attach a copy to this application)

NOTICE

I hereby certify that I have read and examined this application and know the same to be true and correct. The granting of a permit does not presume to give authority to violate or cancel any other Federal, State or local law regulating construction or the performance of construction.

DocuSigned by:
Richard Saunders
Applicant's Signature

Richard Saunders
Print Name

Date: 3/5/2024

Return completed Application to:

Airport Manager
Bay City Regional Airport
3598 FM 2540 N
Bay City, Texas 77414
(979) 244-5037
airport@cityofbaycity.org

Should you have any questions please contact the Aviation Director at (979) 244-5037 or email at airport@cityofbaycity.org

For Office Use Only:

Date Application Received: 3/11/24

Is project consistent with the Airport Zoning Regulation: Yes _____ No X

Reason for project not being considered consistent with zoning regulation:
INCREASE TAKE-OFF MINIMUMS & OBSTACLE DEPARTURE PROCEDURES

Airport Director Signature: _____

Date Application Considered by Administrative Agency Court.: _____

Permit Approved: Yes _____ No X

Permit Returned to Applicant 3/12/24 via Mail Service

1 PLAN: OVERALL SITE PLAN - WEST

0 3000 6000
SCALE IN FEET

2 PLAN: OVERALL SITE PLAN - EAST

0 3000 6000
SCALE IN FEET

LEGEND

- EXISTING ROAD
- EXISTING RAILROAD
- NHD WATERCOURSES
- WATERBODIES
- NON-PARTICIPATING BOUNDARY
- PROPOSED ACCESS ROAD
- PCX-XXX — VESTAS V163 TURBINE (PRIMARY)
- VESTAS V163 MW TURBINE (ALTERNATE)

90% DESIGN
NOT FOR CONSTRUCTION
09/29/2023

NO.	BY	CHK	APP	DATE	REVISION DESCRIPTION
4	MAP	JAM	CMB	09/29/2023	90% UPDATED DESIGN
3	JAM	CMB	CMB	11/18/2022	90% UPDATED DESIGN
2	JAM	CMB	CMB	08/24/2022	90% UPDATED TURBINE ARRAY
1	RLB	CMB	CMB	7/19/2021	90% REVIEW COMMENTS

90% DESIGN
50% DESIGN
30% DESIGN
RECORD
RELEASED TO PDR

DATE RELEASED: A B C D E 0 1

BARR

Prime Office
BARR ENGINEERING CO
4300 MARKETPOINTE DRIVE
Suite 200
MINNEAPOLIS MN 55435
Ph 1-800-632-2277
Fax (952) 832-2601
www.barr.com

Corporate Headquarters
Minneapolis Minnesota
Ph 1-952-832-2277

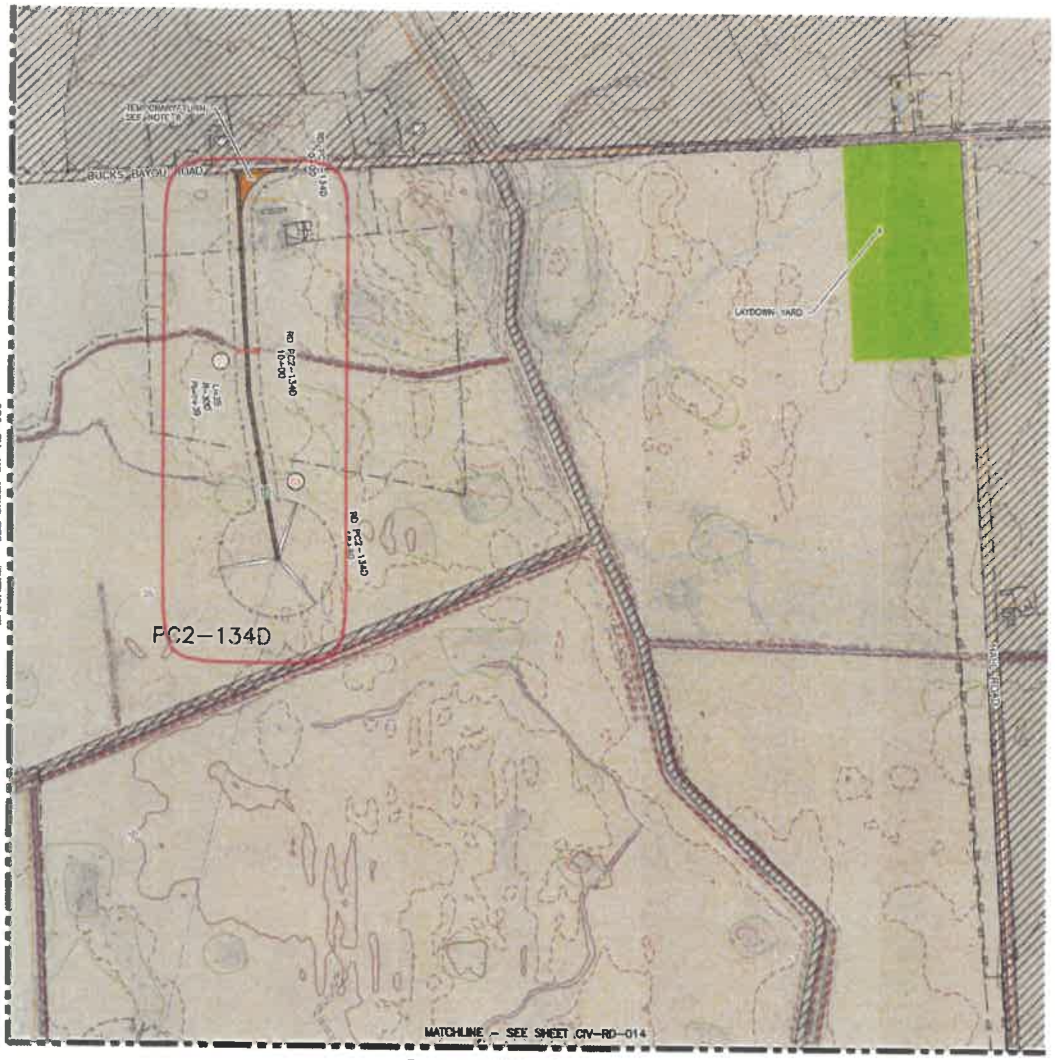
Scale	AS SHOWN
Date	05/18/21
Drawn	RLB2
Checked	CMB2
Designed	BARR
Approved	CMB2

RWE

PEYTON CREEK II WIND FARM
MATAGORDA COUNTY, TEXAS

OVERALL SITE PLAN
AND SHEET LAYOUT

BARR PROJECT No.: 43M21003.00
CLIENT PROJECT No.: -
DWG. No.: CIV-GE-004
REV. No.: E



1 PLAN: TURBINE PC2-134D

0 300 600 SCALE IN FEET

LEGEND

- PROPERTY LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING FENCE
- EXISTING PIPELINE
- EXISTING OVERHEAD POWER LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING GAS LINE
- EXISTING PUBLIC ROAD
- EXISTING GRAVEL
- EXISTING DITCH
- EXISTING CULVERT
- EXISTING BRIDGE
- EXISTING RAILROAD
- EXISTING EASEMENT
- EXISTING TREE LINE
- EXISTING WATER BODY
- NHD WATERCOURSES
- IDNR DESIGNATED RIVER
- WETLAND
- NWI WETLAND
- FEMA DELINEATED FLOOD ZONE A
- FEMA DELINEATED FLOOD ZONE A2
- FEMA DELINEATED FLOOD ZONE B
- NON-PARTICIPATING/BOUNDARY
- CEMETERY
- EXISTING CONCRETE
- COLUMBIA BOTTOMLAND HARDWOODS
- BUILDING
- PROPOSED ACCESS ROAD
- PROPOSED TEMPORARY TURN
- PROPOSED COLLECTION LINE (BY OTHERS)
- DISTURBANCE LIMITS
- EXISTING WELL
- EXISTING POWER POLE
- FENCE CROSSING LOCATION
- UTILITY CROSSING LOCATION
- PCX-XXX VESTAS V163 TURBINE (PRIMARY)
- VESTAS V163 TURBINE (ALTERNATE)
- PROPOSED CULVERT LOCATION
- PROPOSED LOW WATER CROSSING LOCATION

NOTES:

1. PRELIMINARY ROADS SHOWN. LOCATION OF ROADS TO BE DEFINED DURING FINAL DESIGN.
2. LOCATION OF ALL CULVERTS AND LOW WATER CROSSINGS SHOWN FOR PLANNING PURPOSES ONLY. FINAL LOCATION & SIZE TO BE DETERMINED DURING FINAL DESIGN.
3. CULVERTS AT INTERSECTIONS WITH PUBLIC ROADS TO FOLLOW TxDOT OR LOCAL AGENCY REQUIREMENTS.
4. EROSION CONTROL FEATURES NOT SHOWN. CONTRACTOR TO INSTALL EROSION CONTROL PER PROJECT SWPPP.
5. UNDERGROUND COLLECTION LINES NOT SHOWN. SEE ELECTRICAL CONSULTANT PLANS FOR CONSTRUCTION DETAILS, INCLUDING EROSION CONTROL DETAILS.
6. UTILITY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE UTILITY CROSSING AGREEMENTS.
7. CONTRACTOR TO FIELD ADJUST ROADS TO MINIMIZE TREE CLEARING REQUIREMENTS UPON APPROVAL FROM THE OWNER.
8. TEMPORARY TURNS BASED ON STANDARD TEMPLATES. SEE CIV-GE-009.
9. EXISTING CULVERTS SHALL BE PROTECTED, EXTENDED AND/OR REPLACED AS REQUIRED.
10. RAISED ACCESS ROADS SHALL BE RAISED A MINIMUM OF 36" ABOVE EXISTING GROUND. SEE CIV-GE-007.
11. COORDINATE WITH RWE'S SITE REPRESENTATIVE AND LANDOWNER FOR REQUIREMENTS/SCHEDULE FOR IRRIGATION LINE WORK.

KEY MAP

001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 023 024 025 026 027 028 029

90% DESIGN
NOT FOR CONSTRUCTION
09/29/2023

NO.	BY	CHK	APP	DATE	REVISION DESCRIPTION
C					60% UPDATED DESIGN
D					60% UPDATED DESIGN
E					90% UPDATED TURBINE ARRAY
0					90% REVIEW COMMENTS

RELEASED TO/FOR: 30% DESIGN, 60% DESIGN, 90% DESIGN, IFC, RECORD — A B C D E 0 1 — DATE RELEASED

BARR
Project Office: BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
Suite 200
MINNEAPOLIS, MN 55435

Scale	AS SHOWN
Date	05/14/21
Drawn	RLEC
Checked	CMBJ
Designed	BARR
Approved	CMB7

RWE

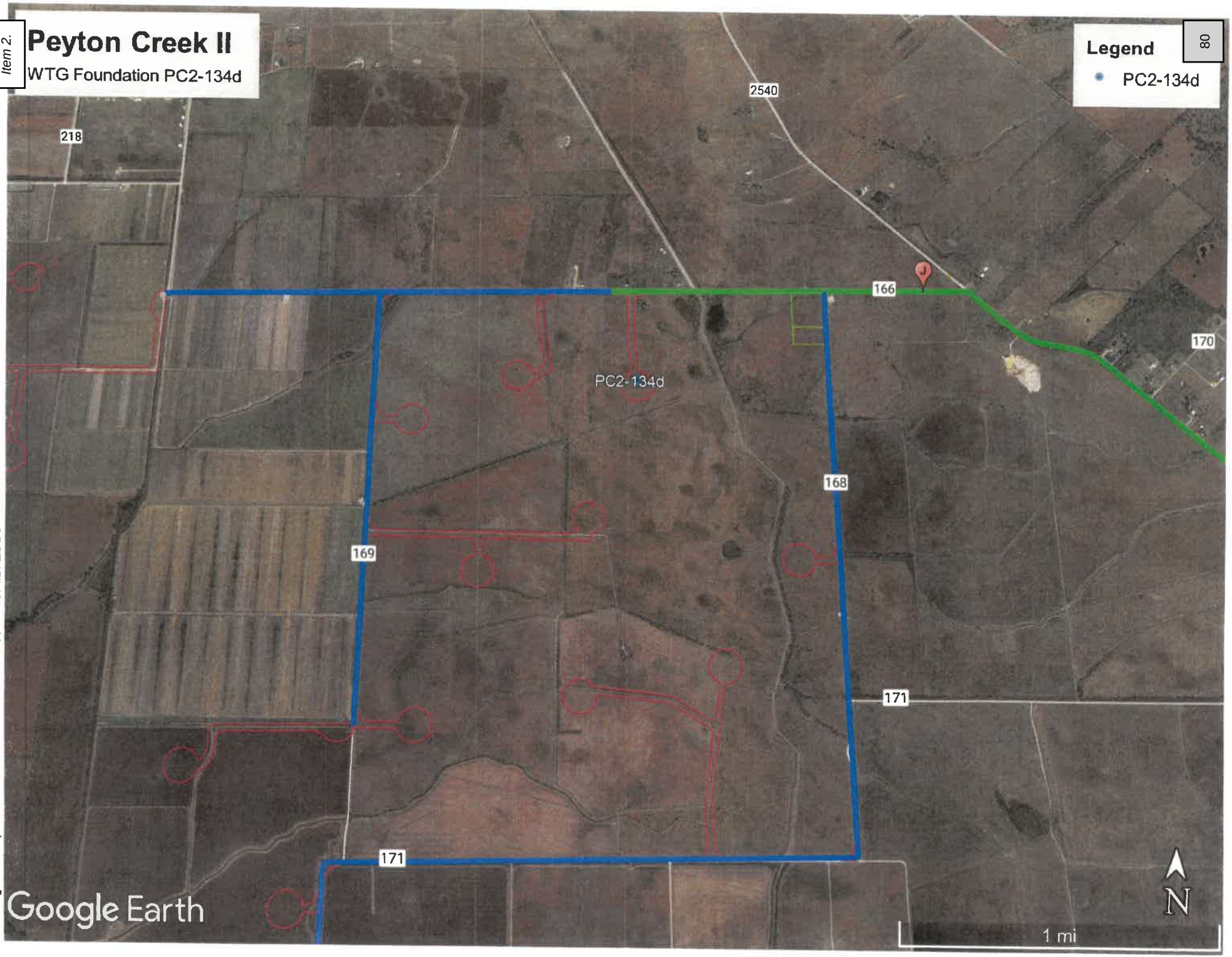
PEYTON CREEK II WIND FARM
MATAGORDA COUNTY, TEXAS

TURBINE PC2-134D
ROAD RD PC2-134D

BARR PROJECT No. 43M21003.00
CLIENT PROJECT No.
DWG. No. CIV-RD-010
REV. No. E

Peyton Creek II

WTG Foundation PC2-134d



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-WTW-3581-OE

Issued Date: 03/15/2023

Rich Saunders
Peyton Creek II
701 Brazos St
Suite 1400
Austin, TX 78701

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine PC2134D
Location:	Bay City, TX
Latitude:	28-55-14.93N NAD 83
Longitude:	95-51-56.84W
Heights:	43 feet site elevation (SE)
	656 feet above ground level (AGL)
	699 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/synchronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

This determination expires on 09/15/2024 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before April 14, 2023. In the event an interested party files a petition for review, it must contain a full statement of the basis upon which the petition is made. Petitions can be submitted to the Manager of the Rules and Regulations Group via e-mail at OEPetitions@faa.gov, via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, Room 425, 800 Independence Ave, SW, Washington, DC 20591, or via facsimile (202) 267-9328. FAA encourages the use of email to ensure timely processing.

This determination becomes final on April 24, 2023 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should

be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Kieffer, at (816) 329-2526, or bill.kieffer@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-WTW-3581-OE.

Signature Control No: 531743962-576371872 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2022-WTW-3581-OE

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts.

A list of commonly used acronyms and abbreviations is available at the end of this document. A full list is available at the FAA's public website at https://oeaaa.faa.gov/oeaaa/downloads/external/content/FAA_Acronyms.pdf.

1. PROPOSAL DESCRIPTION

Proposed are 77 wind turbines for a project that lies approximately 5.4 NM east extending clockwise to points 3.4 NM south through 8 NM southwest of the airport reference point for the Bay City Regional Airport (BYY), Bay City, Texas.

For the sake of efficiency, all of the wind turbines in this project that have similar impacts are included in this narrative.

The proposed wind turbines' described heights and locations are expressed in Above Ground Level (AGL) height, Above Mean Sea Level (AMSL) height and latitude (LAT)/longitude (LONG).

ASN / AGL / AMSL / LAT / LONG

2022-WTW-3511-OE / 656 / 684 / 28-49-03.24N / 95-59-25.94W
2022-WTW-3512-OE / 656 / 685 / 28-49-04.46N / 95-59-01.66W
2022-WTW-3513-OE / 656 / 684 / 28-49-09.81N / 95-58-33.76W
2022-WTW-3514-OE / 656 / 689 / 28-49-09.90N / 95-58-09.58W
2022-WTW-3515-OE / 656 / 695 / 28-49-43.99N / 95-57-03.53W
2022-WTW-3516-OE / 656 / 695 / 28-49-44.33N / 95-57-44.50W
2022-WTW-3517-OE / 656 / 695 / 28-50-15.14N / 95-57-44.79W
2022-WTW-3518-OE / 656 / 696 / 28-50-16.97N / 95-57-16.52W
2022-WTW-3519-OE / 656 / 692 / 28-50-17.26N / 95-56-47.57W
2022-WTW-3520-OE / 656 / 696 / 28-50-35.11N / 95-58-48.34W
2022-WTW-3521-OE / 656 / 695 / 28-50-37.45N / 95-58-08.58W
2022-WTW-3522-OE / 656 / 698 / 28-50-44.02N / 95-57-39.74W
2022-WTW-3523-OE / 656 / 697 / 28-50-51.44N / 95-57-18.78W
2022-WTW-3524-OE / 656 / 694 / 28-50-54.85N / 95-56-47.66W
2022-WTW-3525-OE / 656 / 697 / 28-51-06.40N / 95-58-18.47W
2022-WTW-3526-OE / 656 / 696 / 28-51-07.06N / 95-58-50.43W
2022-WTW-3527-OE / 656 / 699 / 28-52-35.42N / 95-58-10.45W
2022-WTW-3528-OE / 656 / 700 / 28-52-46.99N / 95-58-49.48W
2022-WTW-3529-OE / 656 / 696 / 28-52-52.29N / 95-50-43.85W
2022-WTW-3530-OE / 656 / 698 / 28-53-09.82N / 95-57-45.01W
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2022-WTW-3537-OE / 656 / 691 / 28-53-39.98N / 95-53-00.18W
2022-WTW-3538-OE / 656 / 680 / 28-53-40.00N / 95-46-25.00W
2022-WTW-3539-OE / 656 / 702 / 28-53-42.09N / 95-58-01.32W
2022-WTW-3540-OE / 656 / 693 / 28-53-45.02N / 95-49-48.22W
2022-WTW-3541-OE / 656 / 683 / 28-53-54.17N / 95-47-55.81W
2022-WTW-3542-OE / 656 / 695 / 28-53-55.29N / 95-50-12.51W
2022-WTW-3543-OE / 656 / 680 / 28-53-55.51N / 95-46-06.73W
2022-WTW-3544-OE / 656 / 701 / 28-54-00.09N / 95-58-40.28W
2022-WTW-3545-OE / 656 / 692 / 28-54-01.71N / 95-49-30.52W
2022-WTW-3546-OE / 656 / 691 / 28-54-02.77N / 95-53-22.81W
2022-WTW-3547-OE / 656 / 682 / 28-54-03.38N / 95-47-32.67W
2022-WTW-3548-OE / 656 / 682 / 28-54-06.61N / 95-47-06.89W
2022-WTW-3549-OE / 656 / 693 / 28-54-08.35N / 95-56-54.67W
2022-WTW-3550-OE / 656 / 703 / 28-54-08.71N / 95-58-18.58W
2022-WTW-3551-OE / 656 / 697 / 28-54-09.07N / 95-57-38.10W
2022-WTW-3552-OE / 656 / 700 / 28-54-09.92N / 95-51-09.23W
2022-WTW-3553-OE / 656 / 699 / 28-54-10.32N / 95-50-40.68W
2022-WTW-3554-OE / 656 / 692 / 28-54-10.67N / 95-52-38.56W
2022-WTW-3555-OE / 656 / 680 / 28-54-12.98N / 95-46-28.70W
2022-WTW-3556-OE / 656 / 680 / 28-54-16.20N / 95-45-48.58W
2022-WTW-3557-OE / 656 / 697 / 28-54-16.38N / 95-52-06.76W
2022-WTW-3558-OE / 656 / 699 / 28-54-22.35N / 95-51-38.19W
2022-WTW-3559-OE / 656 / 691 / 28-54-25.59N / 95-56-27.82W
2022-WTW-3560-OE / 656 / 694 / 28-54-26.46N / 95-50-05.29W
2022-WTW-3561-OE / 656 / 691 / 28-54-29.01N / 95-55-34.20W
2022-WTW-3562-OE / 656 / 690 / 28-54-29.64N / 95-56-01.93W
2022-WTW-3563-OE / 656 / 706 / 28-54-31.45N / 95-59-44.40W
2022-WTW-3564-OE / 656 / 702 / 28-54-32.76N / 95-59-10.74W
2022-WTW-3565-OE / 656 / 691 / 28-54-36.61N / 95-54-48.20W
2022-WTW-3566-OE / 656 / 692 / 28-54-39.44N / 95-49-42.28W
2022-WTW-3567-OE / 656 / 680 / 28-54-41.47N / 95-46-41.64W
2022-WTW-3568-OE / 656 / 702 / 28-54-45.79N / 95-58-24.32W
2022-WTW-3569-OE / 656 / 698 / 28-54-46.79N / 95-57-53.91W
2022-WTW-3570-OE / 656 / 700 / 28-54-47.17N / 95-50-49.99W
2022-WTW-3571-OE / 656 / 704 / 28-54-47.66N / 95-58-50.23W
2022-WTW-3572-OE / 656 / 698 / 28-54-48.92N / 95-52-06.22W
2022-WTW-3573-OE / 656 / 686 / 28-54-50.31N / 95-47-35.04W
2022-WTW-3574-OE / 656 / 692 / 28-54-51.26N / 95-49-11.96W
2022-WTW-3575-OE / 656 / 690 / 28-54-57.63N / 95-54-06.33W
2022-WTW-3577-OE / 656 / 694 / 28-55-00.16N / 95-55-20.76W
2022-WTW-3578-OE / 656 / 694 / 28-55-07.10N / 95-52-43.78W
2022-WTW-3579-OE / 656 / 693 / 28-55-11.02N / 95-54-58.39W
2022-WTW-3580-OE / 656 / 694 / 28-55-11.25N / 95-50-26.07W
2022-WTW-3581-OE / 656 / 699 / 28-55-14.93N / 95-51-56.84W
2022-WTW-3582-OE / 656 / 697 / 28-55-16.47N / 95-52-22.14W
2022-WTW-3583-OE / 656 / 693 / 28-55-26.00N / 95-54-36.08W

2022-WTW-3584-OE / 656 / 692 / 28-55-34.21N / 95-54-09.21W
2022-WTW-3585-OE / 656 / 695 / 28-55-35.01N / 95-55-22.26W
2022-WTW-3587-OE / 656 / 688 / 28-56-14.97N / 95-46-26.39W
2022-WTW-3588-OE / 656 / 691 / 28-56-37.14N / 95-46-13.44W
2022-WTW-3589-OE / 656 / 688 / 28-56-50.79N / 95-45-51.83W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1): Exceeds a height of 499 feet AGL at the site of the object exceeds this standard by 157 feet.

b. Section 77.17(a)(2): a height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 NM miles of the established reference point of BYY, and that height increases in the proportion of 100 feet for each additional NM from the airport up to a maximum of 499 feet. The following would exceed by:

2022-WTW-3548-OE / Exceeds by 144 ft.
2022-WTW-3567-OE / Exceeds by 154 ft.
2022-WTW-3547-OE / Exceeds by 166 ft.
2022-WTW-3541-OE / Exceeds by 176 ft.
2022-WTW-3559-OE / Exceeds by 178 ft.
2022-WTW-3529-OE / Exceeds by 193 ft.
2022-WTW-3589-OE / Exceeds by 200 ft.
2022-WTW-3562-OE / Exceeds by 208 ft.
2022-WTW-3587-OE / Exceeds by 226 ft.
2022-WTW-3588-OE / Exceeds by 226 ft.
2022-WTW-3573-OE / Exceeds by 229 ft.
2022-WTW-3532-OE / Exceeds by 235 ft.
2022-WTW-3561-OE / Exceeds by 236 ft.
2022-WTW-3540-OE / Exceeds by 253 ft.
2022-WTW-3535-OE / Exceeds by 259 ft.
2022-WTW-3537-OE / Exceeds by 263 ft.
2022-WTW-3545-OE / Exceeds by 268 ft.
2022-WTW-3542-OE / Exceeds by 283 ft.
2022-WTW-3565-OE / Exceeds by 287 ft.
2022-WTW-3577-OE / Exceeds by 290 ft.
2022-WTW-3546-OE / Exceeds by 291 ft.
2022-WTW-3554-OE / Exceeds by 321 ft.
2022-WTW-3553-OE / Exceeds by 322 ft.
2022-WTW-3579-OE / Exceeds by 325 ft.
2022-WTW-3560-OE / Exceeds by 327 ft.
2022-WTW-3574-OE / Exceeds by 327 ft.
2022-WTW-3552-OE / Exceeds by 330 ft.
2022-WTW-3585-OE / Exceeds by 331 ft.
2022-WTW-3566-OE / Exceeds by 332 ft.
2022-WTW-3557-OE / Exceeds by 341 ft.
2022-WTW-3575-OE / Exceeds by 348 ft.
2022-WTW-3558-OE / Exceeds by 353 ft.
2022-WTW-3583-OE / Exceeds by 365 ft.

2022-WTW-3570-OE / Exceeds by 386 ft.
2022-WTW-3572-OE / Exceeds by 396 ft.
2022-WTW-3584-OE / Exceeds by 399 ft.
2022-WTW-3580-OE / Exceeds by 408 ft.
2022-WTW-3578-OE / Exceeds by 413 ft.
2022-WTW-3582-OE / Exceeds by 437 ft.
2022-WTW-3581-OE / Exceeds by 441 ft.

c. Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

The following proposals would increase TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES for RWY 13 at BYY. The increase would be from standard (200/1 ceiling/visibility) to standard with a minimum climb gradient of between 207-285 ft. per NM until reaching 1000 ft. AMSL depending on the location of each individual structure.

2022-WTW-3552-OE
2022-WTW-3553-OE
2022-WTW-3558-OE
2022-WTW-3560-OE
2022-WTW-3566-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3574-OE
2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1): the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules.

At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of potential VFR Routes as defined by FAA Order 7400.2, Section 6-3-8. The turbines within 2 SM of a VFR Route would have an adverse effect upon VFR air navigation.

The following proposed turbines would lie within the lateral boundaries and exceed traffic pattern airspace (TPA) for CAT D aircraft at BYY (aircraft with approach speeds between 141-165 knots):

2022-WTW-3552-OE
2022-WTW-3554-OE
2022-WTW-3557-OE
2022-WTW-3558-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3575-OE
2022-WTW-3578-OE

2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE
2022-WTW-3583-OE
2022-WTW-3584-OE

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

The project was circularized under ASN 2022-WTW-3546-OE on 07/22/2022, to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. There were two commenters received during the public comment period as a result of the circularization. They are summarized below.

Comment:
The commenter had concerns about the increase to the RWY 13 Departure Procedure and impacts to the RNAV (GPS) LNAV RWY 31 approach at BYY.

Response:
The aeronautical study determined that although there are a few turbines that are close to affecting the LNAV RWY 31 approach that they in fact do not impact this approach. Minimums will not change for the LNAV RWY 31 approach. The sponsor agreed to terminate turbine 2022-WTW-3586-OE although internal review determined that this turbine would not affect the minimums to the LNAV RWY 31 approach. The impact to the departure procedure are considered minimal, there were no comments received nor did flight standards believe that the increase would affect the departure capacity of BYY.

Comment:
The commenter wanted to ensure the structures were appropriately marked/lighted.

Response:
The structures will, as a condition to their determination, recommended to be marked/lighted IAW the current Advisory Circular.

Comment:
The commenter had concern over traffic pattern penetrations for CAT C and D aircraft that may utilize BYY.

Response:
The sponsor agreed to terminate the one turbine that penetrated CAT C traffic pattern airspace into BYY. Further study indicated that there was not a substantial amount (if any) CAT D operations for the previous 12 months into BYY nor are there any plans on file to improve the RWY at BYY to accommodate a substantial amount of CAT D aircraft. Therefore the project would not interfere with normal traffic pattern operations at BYY.

Comment:
The commenter was concerned about the effects to a private airport close or within the project area.

Response:
The FAA recognizes that obstructions can and do have impacts to privately owned private use airports. However, within the scope of a 14 CFR Part 77 study, the VFR effects to private use airports are not considered when determining the impacts of an obstruction to the national airspace system.

Comment:
The commenter responded that they support green energy, however the project would render many aspects of aviation nearly impossible. Agricultural, off shore aviation, tourist aviation and hunting including feral hog control.

Response:
A structure that has an adverse effect would have a substantial adverse effect if there is a significant volume of aircraft effected. Further study included a yearly traffic count over the area and along possible VFR flyways in or near the project and found that it would not affect a significant volume of traffic along any identified flyways. Agricultural aircraft, although may be effected, while operating under Part 137 are not considered within the scope of a 14 CFR Part 77 study.

Comment:
The commenter was concerned over the turbulence of the blades, the visual and noise effects, the effects to local people, birds, and cattle.

Response:
Aeronautical studies are only looking at direct effects to the national airspace system. The visual and noise effects to people or animals are not considered under an aeronautical study but may be considered under a different study, for example an environmental impact study if required. Wake turbulence caused by wind turbines is currently not within the scope of an aeronautical study under 14 CFR Part 77.

5. BASIS FOR DETERMINATION

IFR EFFECTS

The aeronautical study identified an IFR effect for the RWY 13 instrument departure procedure at BYY. Further study concluded that the effects were minimal and would not impact the departure capacity for normal aircraft departing RWY 13 at BYY.

The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

VFR EFFECTS

The aeronautical study identified no substantial adverse effect on any existing or proposed VFR arrival or departure operations. A portion of the proposals would be located within CAT D traffic pattern airspace but beyond the normally utilized traffic pattern airspace for BYY or any other known public use or military airports. At 656 feet AGL, the structures would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. Therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations.

CHARTING AND CUMULATIVE EFFECT

The proposed structures would be charted on VFR sectional aeronautical charts and appropriately obstruction marked/lighted to make them more conspicuous to airmen should circumnavigation be necessary.

The cumulative impact of the proposed structure(s), when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose a substantial adverse effect on existing or proposed public-use or military airports, nor does the proposal(s) affect the capacity of any known existing or planned public-use or military airport. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no substantial adverse effects on any airspace and routes used by the military.

6. DETERMINATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

7. CONDITIONS

The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, ten days prior to beginning construction for the following ASN's, at the OE/AAA website (http://oeaaa.faa.gov).

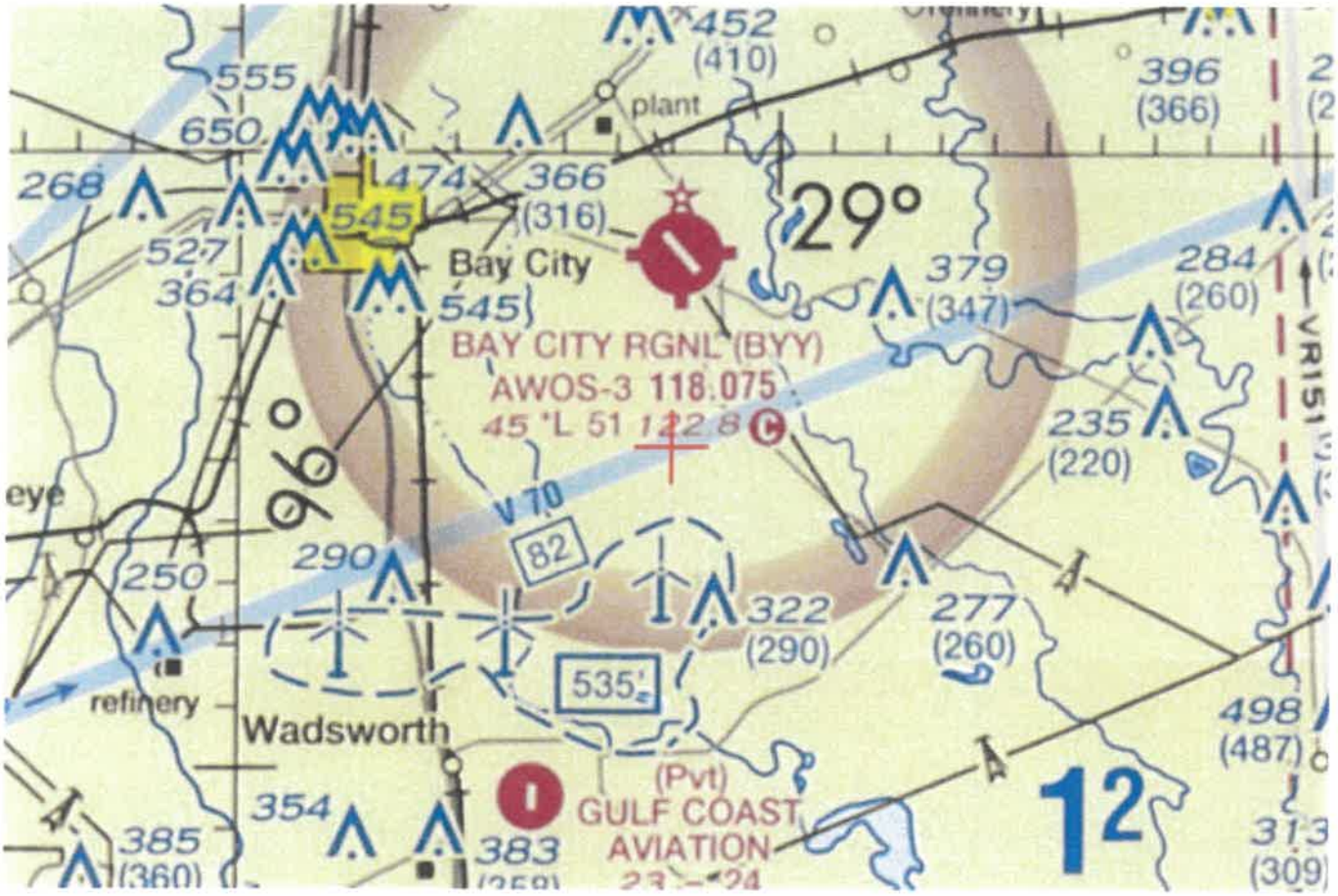
2022-WTW-3552-OE
2022-WTW-3553-OE
2022-WTW-3558-OE
2022-WTW-3560-OE
2022-WTW-3566-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3574-OE
2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE

ACRONYMS & ABBREVIATIONS
AGL, Above Ground Level
AMSL, Above Mean Sea Level
ARP, Airport Reference Point
ARSR, Air Route Surveillance Radar
ARTCC, Air Route Traffic Control Center
ASN, Aeronautical Study Number
ASR, Airport Surveillance Radar
ATC, Air Traffic Control
ATCT, Air Traffic Control Tower
CARSR, Common Air Route Surveillance Radar
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System

IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude
NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway

VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2022-WTW-3581-OE



814 Thornwick Drive
Houston, TX 77079
www.Civil-PEs.com

March 11, 2024

James Mason, CM, A.C.E.
Bay City Regional Airport
3598 FM 2540 North
Bay City, Texas 77414

Permit Application Technical Review: Permit Application: Structure PC2137C – Wind Turbine

Transmitted via email to jmason@cityofbaycity.org *on March 11, 2024*

Dear James.

We have completed a review of the structure reference above. This structure was previously studied under FAA's airspace review as study 2022-WTW-3582-OE. This review is organized around the following sections of the ordinance:

Zoning Ordinance Section 18-41 – Height Limitations
Subsection: N/A
Reasons: We have no objection to the proposed structure based on the Part 77 surfaces identified in this Section.

Zoning Ordinance Section 18-42 – Compatible Land Use Area
Subsection: N/A
Reasons: We have no objection to the proposed structure based on noise compatibility requirements in this Section.

Zoning Ordinance Section 18-44 – Other Use Restrictions
Subsection: (1) Airport Safety
Reasons: This section does not permit use of land or water in the entirety of Matagorda County that might impair visibility in the vicinity of the airport, or otherwise in any way endanger or interfere with the landing, taking off, or maneuvering of aircraft intending to use the airport. This proposed item will affect taking off from the airport:

1. This proposed structure is located 2.92 nm from the end of Runway 31, its departure end. This structure is within the "Diverse Departure Assessment Area" as defined under FAA Order 8260.3D and may require an Obstacle Departure Procedure. For southbound departures from the runway toward the proposed structure, the climb gradient needed to provide proper clearance over the structure will exceed the standard climb gradient; this has been noted in the airspace determination letter of March 15, 2023. Such a requirement interferes with operating out of the airport compared to the operating requirements today.

Based on the information provided above, we find this proposed structure to be contradictory to the zoning ordinance and hereby do not recommend approval of this structure.

Civil PEs, LLC

Thomas D Dodson, PE
Project Leader

Bay City
REGIONAL AIRPORT

www.FlyBayCity.com

3598 FM 2540 N Bay City, Texas 77414

(979) 244-5037

Airport Hazard and Land Use Permit

In accordance with Texas Local Government Code, Chapter 241, also known as the Airport Zoning Act, the Consolidated Hazard Area and Compatible Land Use Zoning Regulations have been revised by the Bay City Regional Airport Zoning Board. Revisions now include maps which allow for timelier identification of real properties within hazard and zoning areas.

The Airport Zoning Act found that airport hazards and obstructions have the potential for endangering the lives and property of users of Bay City Regional Airport and property or occupants of land it its vicinity. Obstructions may impact the size of areas available for the landing, taking off and maneuvering of aircraft and may affect aircraft instrument approach minimums.

The real property for which you are submitting a permit application is located within the Compatible Land Use Area and/or Hazard Area of the Bay City Regional Airport. Applications for building, electrical, plumbing, or mechanical permit(s) within these areas require an "Airport Hazard and Land Use Permit" be approved before any other permit will be issued. Airport Hazard and Land Use permits may restrict some aspects of the potential use, size, height, lighting, glare potential or construction of your building.

Any cost associated with a permit that requires the assistance of any person not employed by the City of Bay City or the County of Matagorda shall be paid by the permittee. The permit fee shall be calculated by the Bay City Regional Airport Manager and shall be paid before the permit will be reviewed or issued.

Please complete the attached permit application and submit to the Bay City Regional Airport in person or by mail or email (contact information below). The Bay City Regional Airport shall consider and provide an approval or denial within a reasonable period of time.

Bay City Regional Airport
Attention: Airport Manager
3598 FM 2540 N
Bay City, TX 77414
Airport@cityofbaycity.org
(979) 244-5037

The Consolidated Hazard Area and Compatible Land Use Zoning Regulations can be found in the *City of Bay City Municipal Code of Ordinances, Chapter 18 – Aviation*.

Bay City REGIONAL AIRPORT

Airport Hazard and Land Use Permit Application

APPLICANT CONTACT INFORMATION:

1. Property Owner's Name: Peyton Creek Wind Farm II, LLC
2. Mailing Address: 353 N. Clark St., Chicago, IL 60654
3. Daytime Telephone: 512-461-9747 Alternate Telephone: _____
4. Email address: richard.saunders@rwe.com

PROPERTY INFORMATION:

5. 911 Site Address: 331 CR 169, Bay City, TX 77414
6. Property ID Number from Matagorda County Appraisal District: 17387
7. Total Size of Site (Square Feet): 122.89 acres
8. Size of Improvements (Square Footage): _____
9. Site Elevation (Above Mean Sea level): 41'
10. Total Structure Height (Above Ground Level): 656'
11. Overall Height (No.9 + No. 10) above Mean Sea Level: 697'
12. Latitude of highest point of structure: 28 ° 55 ' 16 " 47 "
13. Longitude of highest point of structure: 95 ° 52 ' 22 " 14 "
14. Datum: X NAD 83 ___NAD 27 ___Other

TYPE OF IMPROVEMENT: (Please mark all that apply)

_____ New Building _____ Antenna Structure

_____ Alteration to Existing Building _____ Tree/Vegetation

X Other - Describe: Wind Turbine PC2137C

X_______ PRIVATE (Individual, corporation, nonprofit institution, etc.)

________ PUBLIC (Federal, state or local government)

ATTACH SURVEY/DRAWING/DEPICTION/MAP OF THE PROPERTY AND PROPOSED IMPROVEMENT

DESCRIPTION OF IMPROVEMENT OR PROJECT AND INTENDED USE OF LAND(ATTACH SEPARATE SHEETS IF NEEDED)

Install Wind Turbine Generator - PC2137C

Will the property be used for any of the following purposes:

- Residential? (Y/N): N
- Educational (including child care and vocational)? (Y/N): N
- Medical, Institutional, Convalescent, or Rehabilitative Care? (Y/N): N
- Nursing Homes? (Y/N): N

If you answered "Yes" to any of the above, please describe further the proposed use: ______

Will any improvement or use create or cause electrical interference with communications between aircrafts and the Airport? (Y/N): N

If "Yes," explain: __________

Will any improvement or use create or cause difficulty for pilots to distinguish aircraft and the proposed improvement or the Airport? (Y/N): N

If "Yes," explain: __________

Will any improvement or use result in glare in the eyes of pilots or otherwise impair visibility in the vicinity of the Airport? (Y/N): N

If "Yes," explain: __________

Will any improvement or use increase the likelihood of bird strikes? (Y/N): N

If "Yes," explain: __________

Will any improvement or use endanger or interfere with the landing, taking off, or maneuvering of aircraft? (Y/N): N

If "Yes," explain: __________

YES, TAKE-OFF & DEPARTURE PROCEDURES. [signature]

FAA AIRSPACE REVIEW:

Does this project require an airspace review by the FAA? Yes: X No: _____

Date FAA Form 7460-1 Submitted*: 5/19/2022

*Please contact the Airport Manager at (979) 323-1115, for assistance completing FAA Form 7460-1

Date Determination Letter received from FAA: 3/15/2023

(If received please attach a copy to this application)

NOTICE

I hereby certify that I have read and examined this application and know the same to be true and correct. The granting of a permit does not presume to give authority to violate or cancel any other Federal, State or local law regulating construction or the performance of construction.

DocuSigned by:

Richard Saunders

Applicant's Signature

Richard Saunders

Print Name

Date: 3/5/2024

Return completed Application to:

Airport Manager
Bay City Regional Airport
3598 FM 2540 N
Bay City, Texas 77414
(979) 244-5037
airport@cityofbaycity.org

Should you have any questions please contact the Aviation Director at (979) 244-5037 or email at airport@cityofbaycity.org

For Office Use Only:

Date Application Received: 3/11/24

Is project consistent with the Airport Zoning Regulation: Yes ______ No X

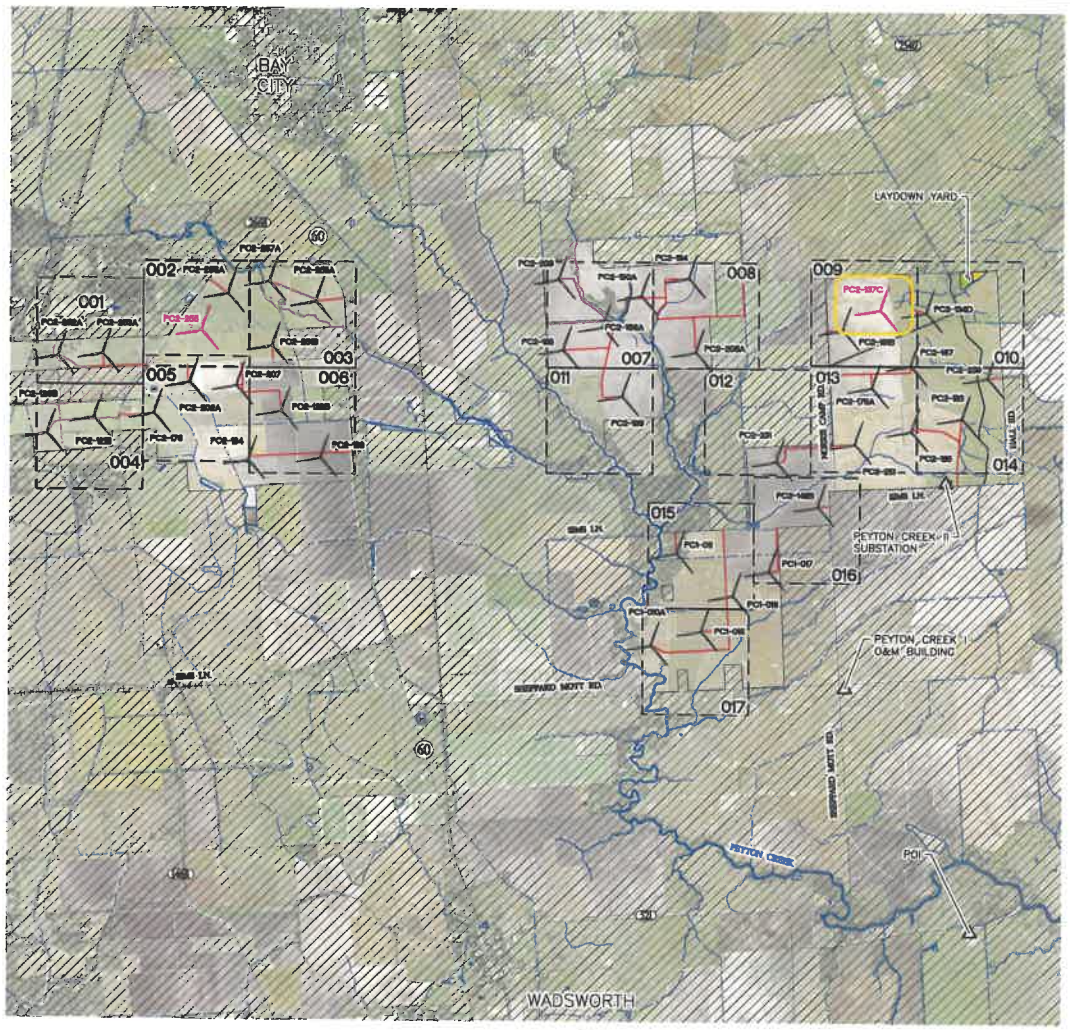
Reason for project not being considered consistent with zoning regulation:
INCREASE TAKE-OFF MINIMUMS & OBSTACLE DEPARTURE PROCEDURES.

Airport Director Signature: [signature]

Date Application Considered by Administrative Agency Court.: ______________

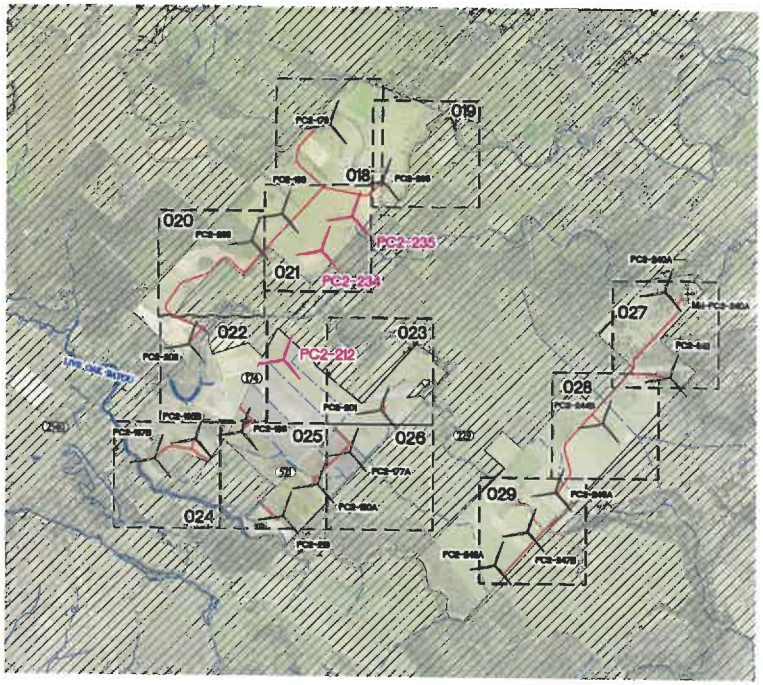
Permit Approved: Yes ______ No X

Permit Returned to Applicant 3/12/24 VIA MAIL SERVICE



1 PLAN: OVERALL SITE PLAN - WEST

0 3000 6000
SCALE IN FEET



2 PLAN: OVERALL SITE PLAN - EAST

0 3000 6000
SCALE IN FEET

LEGEND

- EXISTING ROAD
- EXISTING RAILROAD
- NHD WATERCOURSES
- WATERBODIES
- NON-PARTICIPATING/BOUNDARY
- PROPOSED ACCESS ROAD
- PCX-XXX — VESTAS V163 TURBINE (PRIMARY)
- PCX-XXX — VESTAS V163 TURBINE (ALTERNATE)

STATE OF TEXAS
CARLOS M. BALLINAS
130735
LICENSED PROFESSIONAL ENGINEER
BARR ENGINEERING CO
F-3654

ISSUED FOR CONSTRUCTION
12/20/2023

NO	BY	CHK	APP.	DATE	REVISION DESCRIPTION
0	PLF	JAM6	CMB2	12/20/2023	ISSUED FOR CONSTRUCTION
E	MAY	JAM6	CMB2	09/29/2023	90% UPDATED DESIGN
D	JAM6	CMB2	CMB2	11/16/2022	90% UPDATED DESIGN
C	JAM6	CMB2	CMB2	06/24/2022	30% UPDATED TURBINE ARRAY
B	RLB2	CMB2	CMB2	7/16/2021	30% REVIEW COMMENTS

RELEASED TO/FOR: 30% DESIGN | 90% DESIGN | IFC | RECORD
DATE RELEASED: A | B | C | D | E | 0 | 1

BARR
Project Office:
BARR ENGINEERING CO.
4300 MARKETPOINTE DRIVE
Suite 200
MINNEAPOLIS, MN 55435
Ph: 1-608-833-2077
Fax: (952) 832-2601
www.barr.com

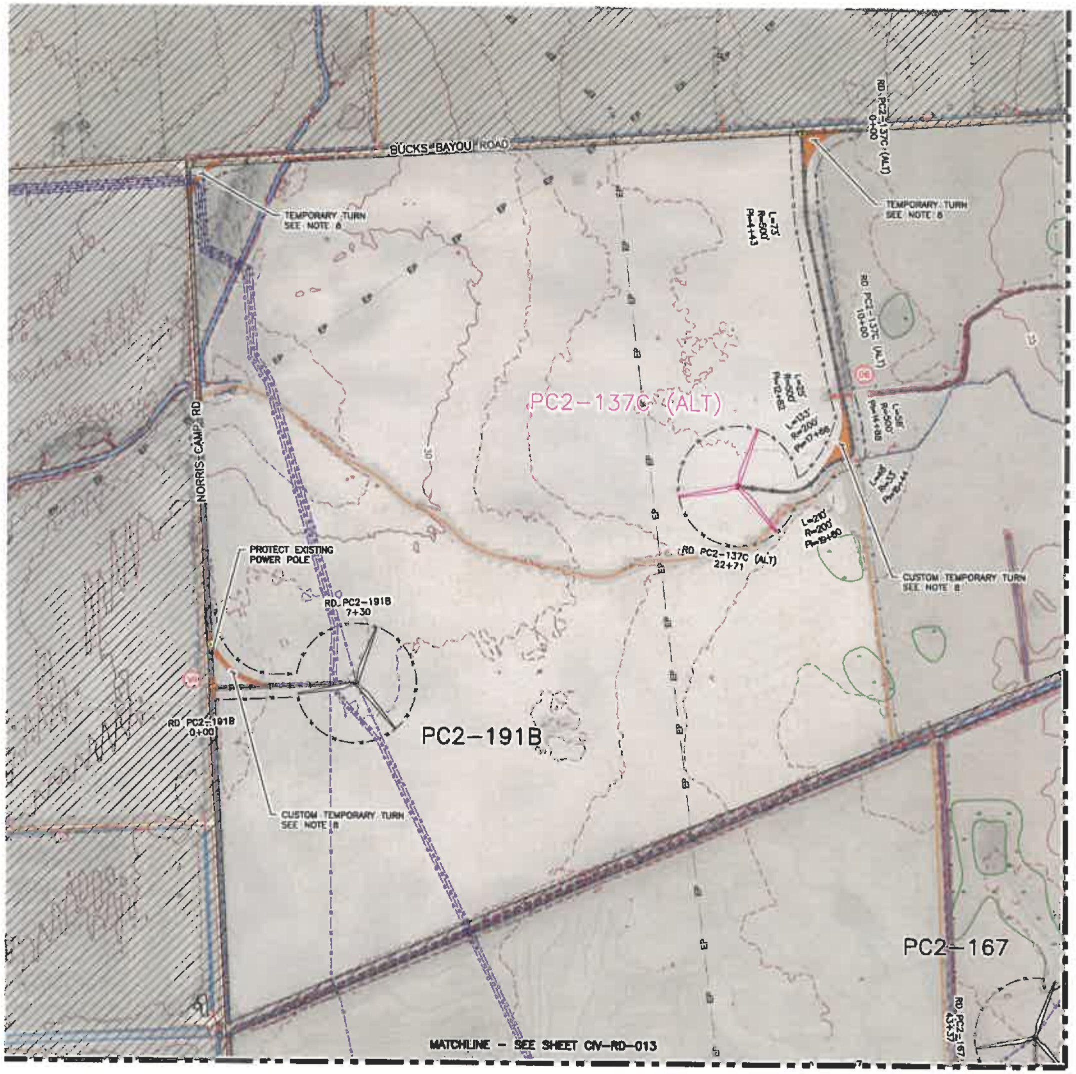
Scale	AS SHOWN
Date	06/16/21
Drawn	RLB2
Checked	CMB2
Designed	BARR
Approved	CMB2

RWE

PEYTON CREEK II WIND FARM
MATAGORDA COUNTY, TEXAS

OVERALL SITE PLAN
AND SHEET LAYOUT

BARR PROJECT No. 43M21003.00
CLIENT PROJECT No.
DWG. No. CIV-GE-004
REV. No.



PLAN: TURBINES PC2-137C (ALT), PC2-167 & PC2-191B

0 300 600 SCALE IN FEET

LEGEND

	PROPERTY LINE		NON-PARTICIPATING/BOUNDARY
5'	EXISTING MAJOR CONTOUR		CEMETERY
	EXISTING MINOR CONTOUR		EXISTING CONCRETE
X	EXISTING FENCE		COLUMBIA BOTTOMLAND HARDWOODS
EP	EXISTING PIPELINE		BUILDING
OHE — OHE	EXISTING OVERHEAD POWER LINE		PROPOSED ACCESS ROAD
UGT	EXISTING UNDERGROUND TELEPHONE LINE		PROPOSED TEMPORARY TURN
G — G — G	EXISTING GAS LINE		PROPOSED COLLECTION LINE (BY OTHERS)
	EXISTING PUBLIC ROAD	DL — DL	DISTURBANCE LIMITS
	EXISTING GRAVEL		EXISTING WELL
	EXISTING DITCH		EXISTING POWER POLE
	EXISTING CULVERT		FENCE CROSSING LOCATION
	EXISTING BRIDGE		UTILITY CROSSING LOCATION
	EXISTING RAILROAD	PCX-XXX	VESTAS V163 TURBINE (PRIMARY)
	EXISTING EASEMENT	PCX-XXX	VESTAS V163 TURBINE (ALTERNATE)
	EXISTING TREE LINE	(XX)	PROPOSED CULVERT LOCATION
	EXISTING WATER BODY	(XX)	PROPOSED LOW WATER CROSSING LOCATION
	NHD WATERCOURSES		
	IDNR DESIGNATED RIVER		
	WETLAND		
	NWI WETLAND		
	FEMA DELINEATED FLOOD ZONE A		
	FEMA DELINEATED FLOOD ZONE A2		
	FEMA DELINEATED FLOOD ZONE B		

NOTES:

1. PRELIMINARY ROADS SHOWN. LOCATION OF ROADS TO BE DEFINED DURING FINAL DESIGN.
2. LOCATION OF ALL CULVERTS AND LOW WATER CROSSINGS SHOWN FOR PLANNING PURPOSES ONLY. FINAL LOCATION & SIZE TO BE DETERMINED DURING FINAL DESIGN.
3. CULVERTS AT INTERSECTIONS WITH PUBLIC ROADS TO FOLLOW TxDOT OR LOCAL AGENCY REQUIREMENTS.
4. EROSION CONTROL FEATURES NOT SHOWN. CONTRACTOR TO INSTALL EROSION CONTROL PER PROJECT SWPPP.
5. UNDERGROUND COLLECTION LINES NOT SHOWN. SEE ELECTRICAL CONSULTANT PLANS FOR CONSTRUCTION DETAILS, INCLUDING EROSION CONTROL DETAILS.
6. UTILITY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE UTILITY CROSSING AGREEMENTS.
7. CONTRACTOR TO FIELD ADJUST ROADS TO MINIMIZE TREE CLEARING REQUIREMENTS UPON APPROVAL FROM THE OWNER.
8. TEMPORARY TURNS BASED ON STANDARD TEMPLATES. SEE CIV-GE-009.
9. EXISTING CULVERTS SHALL BE PROTECTED, EXTENDED AND/OR REPLACED AS REQUIRED
10. RAISED ACCESS ROADS SHALL BE RAISED A MINIMUM OF 36" ABOVE EXISTING GROUND. SEE CIV-GE-007.
11. COORDINATE WITH RWE'S SITE REPRESENTATIVE AND LANDOWNER FOR REQUIREMENTS/SCHEDULE FOR IRRIGATION LINE WORK.

KEY MAP

001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 023 024 025 026 027 028 029

90% DESIGN
NOT FOR CONSTRUCTION
09/29/2023

NO.	BY	CHK	APP	DATE	REVISION DESCRIPTION
E	MMY	JAMS	CMB2	09/29/2023	90% UPDATED DESIGN
D	JAMS	CMB2	CMB2	11/18/2022	60% UPDATED DESIGN
C	JAMS	CMB2	CMB2	06/24/2022	30% UPDATED TURBINE ARRAY
B	RLB2	CMB2	CMB2	07/16/2021	30% REVIEW COMMENTS

RELEASED TO/FOR: 30% DESIGN, 60% DESIGN, 90% DESIGN, IFC, RECORD — A B C D E 0 1 — DATE RELEASED

BARR — Project Office: BARR ENGINEERING CO. 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55435

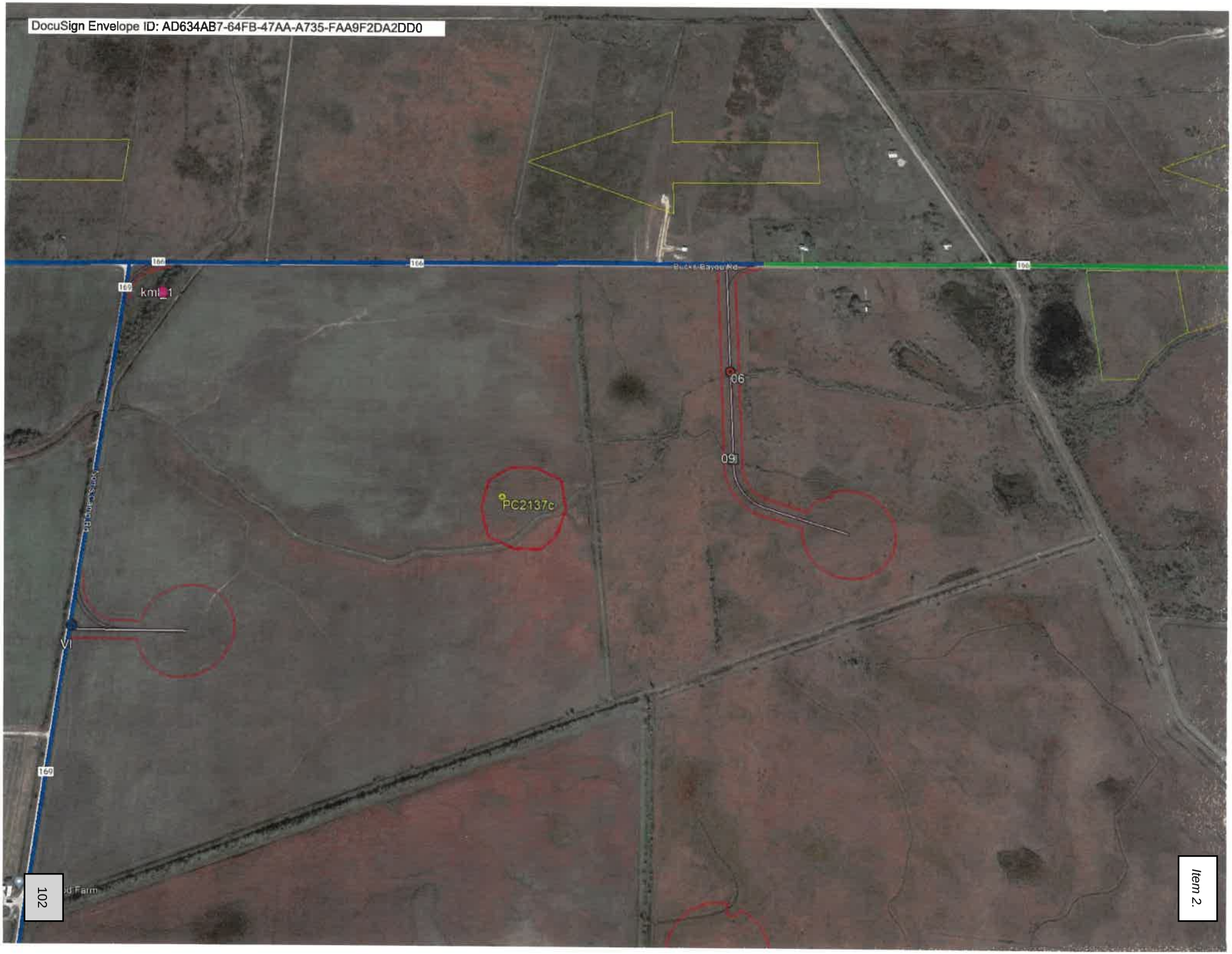
Scale	AS SHOWN
Date	05/18/21
Drawn	RLB2
Checked	CMB2
Designed	BARR
Approved	CMB2

RWE

PEYTON CREEK II WIND FARM
MATAGORDA COUNTY, TEXAS

TURBINES PC2-137C (ALT), PC2-167 & PC2-191B
ROADS RD PC2-137C (ALT), RD PC2-167 & RD PC2-191B

BARR PROJECT No. 43M21003.00
CLIENT PROJECT No.
DWG. No. CIV-RD-009
REV. No. E



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-WTW-3582-OE

Issued Date: 03/15/2023

Rich Saunders
Peyton Creek II
701 Brazos St
Suite 1400
Austin, TX 78701

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine PC2137C
Location:	Bay City, TX
Latitude:	28-55-16.47N NAD 83
Longitude:	95-52-22.14W
Heights:	41 feet site elevation (SE)
	656 feet above ground level (AGL)
	697 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, white paint/synchronized red lights-Chapters 4,13(Turbines),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

__X__ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

See attachment for additional condition(s) or information.

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is subject to review if an interested party files a petition that is received by the FAA on or before April 14, 2023. In the event an interested party files a petition for review, it must contain a full statement of the basis upon which the petition is made. Petitions can be submitted to the Manager of the Rules and Regulations Group via e-mail at OEPetitions@faa.gov, via mail to Federal Aviation Administration, Air Traffic Organization, Rules and Regulations Group, Room 425, 800 Independence Ave, SW, Washington, DC 20591, or via facsimile (202) 267-9328. FAA encourages the use of email to ensure timely processing.

This determination becomes final on April 24, 2023 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

This determination is based, in part, on the foregoing description which includes specific coordinates and heights. This determination is valid for coordinates within one (1) second latitude/longitude and up to the approved AMSL height listed above. If a certified 1A or 2C accuracy survey was required to mitigate an adverse effect, any change in coordinates or increase in height will require a new certified accuracy survey and may require a new aeronautical study.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. All information from submission of Supplemental Notice (7460-2 Part 2) will be considered the final data (including heights) for this structure. Any future construction or alteration, including but not limited to changes in heights, requires separate notice to the FAA.

Obstruction marking and lighting recommendations for wind turbine farms are based on the scheme for the entire project. ANY change to the height, location or number of turbines within this project will require a reanalysis of the marking and lighting recommendation for the entire project. In particular, the removal of previously planned or built turbines/turbine locations from the project will often result in a change in the marking/lighting recommendation for other turbines within the project. It is the proponent's responsibility to contact the FAA to discuss the process for developing a revised obstruction marking and lighting plan should this occur.

In order to ensure proper conspicuity of turbines at night during construction, all turbines should be lit with temporary lighting once they reach a height of 200 feet or greater until such time the permanent lighting configuration is turned on. As the height of the structure continues to increase, the temporary lighting should

be relocated to the uppermost part of the structure. The temporary lighting may be turned off for periods w they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. An FAA Type L-810 steady red light fixture shall be used to light the structure during the construction phase. If power is not available, turbines shall be lit with self-contained, solar powered LED steady red light fixture that meets the photometric requirements of an FAA Type L-810 lighting system. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level. The use of a NOTAM (D) to not light turbines within a project until the entire project has been completed is prohibited.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

If we can be of further assistance, please contact Bill Kieffer, at (816) 329-2526, or bill.kieffer@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-WTW-3582-OE.

Signature Control No: 531743965-576371863 (DNH -WT)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Map(s)

All FAA determinations and circularized cases are public record and available at the FAA's public website; https://oeaaa.faa.gov. The distribution for proposals circularized for public comments includes all "known" aviation interested persons and those who do not have an aeronautical interest but may become involved with specific aeronautical studies. Notification includes both postcard mailers and email notifications to those with registered FAA accounts.

A list of commonly used acronyms and abbreviations is available at the end of this document. A full list is available at the FAA's public website at https://oeaaa.faa.gov/oeaaa/downloads/external/content/FAA_Acronyms.pdf.

1. PROPOSAL DESCRIPTION

Proposed are 77 wind turbines for a project that lies approximately 5.4 NM east extending clockwise to points 3.4 NM south through 8 NM southwest of the airport reference point for the Bay City Regional Airport (BYY), Bay City, Texas.

For the sake of efficiency, all of the wind turbines in this project that have similar impacts are included in this narrative.

The proposed wind turbines' described heights and locations are expressed in Above Ground Level (AGL) height, Above Mean Sea Level (AMSL) height and latitude (LAT)/longitude (LONG).

ASN / AGL / AMSL / LAT / LONG

2022-WTW-3511-OE / 656 / 684 / 28-49-03.24N / 95-59-25.94W
2022-WTW-3512-OE / 656 / 685 / 28-49-04.46N / 95-59-01.66W
2022-WTW-3513-OE / 656 / 684 / 28-49-09.81N / 95-58-33.76W
2022-WTW-3514-OE / 656 / 689 / 28-49-09.90N / 95-58-09.58W
2022-WTW-3515-OE / 656 / 695 / 28-49-43.99N / 95-57-03.53W
2022-WTW-3516-OE / 656 / 695 / 28-49-44.33N / 95-57-44.50W
2022-WTW-3517-OE / 656 / 695 / 28-50-15.14N / 95-57-44.79W
2022-WTW-3518-OE / 656 / 696 / 28-50-16.97N / 95-57-16.52W
2022-WTW-3519-OE / 656 / 692 / 28-50-17.26N / 95-56-47.57W
2022-WTW-3520-OE / 656 / 696 / 28-50-35.11N / 95-58-48.34W
2022-WTW-3521-OE / 656 / 695 / 28-50-37.45N / 95-58-08.58W
2022-WTW-3522-OE / 656 / 698 / 28-50-44.02N / 95-57-39.74W
2022-WTW-3523-OE / 656 / 697 / 28-50-51.44N / 95-57-18.78W
2022-WTW-3524-OE / 656 / 694 / 28-50-54.85N / 95-56-47.66W
2022-WTW-3525-OE / 656 / 697 / 28-51-06.40N / 95-58-18.47W
2022-WTW-3526-OE / 656 / 696 / 28-51-07.06N / 95-58-50.43W
2022-WTW-3527-OE / 656 / 699 / 28-52-35.42N / 95-58-10.45W
2022-WTW-3528-OE / 656 / 700 / 28-52-46.99N / 95-58-49.48W
2022-WTW-3529-OE / 656 / 696 / 28-52-52.29N / 95-50-43.85W
2022-WTW-3530-OE / 656 / 698 / 28-53-09.82N / 95-57-45.01W
2022-WTW-3531-OE / 656 / 703 / 28-53-18.36N / 95-59-13.14W
2022-WTW-3532-OE / 656 / 695 / 28-53-23.71N / 95-50-19.59W
2022-WTW-3533-OE / 656 / 681 / 28-53-24.65N / 95-46-44.84W

2022-WTW-3534-OE / 656 / 701 / 28-53-30.68N / 95-58-50.54W
2022-WTW-3535-OE / 656 / 695 / 28-53-32.17N / 95-50-50.37W
2022-WTW-3536-OE / 656 / 697 / 28-53-37.93N / 95-57-34.82W
2022-WTW-3537-OE / 656 / 691 / 28-53-39.98N / 95-53-00.18W
2022-WTW-3538-OE / 656 / 680 / 28-53-40.00N / 95-46-25.00W
2022-WTW-3539-OE / 656 / 702 / 28-53-42.09N / 95-58-01.32W
2022-WTW-3540-OE / 656 / 693 / 28-53-45.02N / 95-49-48.22W
2022-WTW-3541-OE / 656 / 683 / 28-53-54.17N / 95-47-55.81W
2022-WTW-3542-OE / 656 / 695 / 28-53-55.29N / 95-50-12.51W
2022-WTW-3543-OE / 656 / 680 / 28-53-55.51N / 95-46-06.73W
2022-WTW-3544-OE / 656 / 701 / 28-54-00.09N / 95-58-40.28W
2022-WTW-3545-OE / 656 / 692 / 28-54-01.71N / 95-49-30.52W
2022-WTW-3546-OE / 656 / 691 / 28-54-02.77N / 95-53-22.81W
2022-WTW-3547-OE / 656 / 682 / 28-54-03.38N / 95-47-32.67W
2022-WTW-3548-OE / 656 / 682 / 28-54-06.61N / 95-47-06.89W
2022-WTW-3549-OE / 656 / 693 / 28-54-08.35N / 95-56-54.67W
2022-WTW-3550-OE / 656 / 703 / 28-54-08.71N / 95-58-18.58W
2022-WTW-3551-OE / 656 / 697 / 28-54-09.07N / 95-57-38.10W
2022-WTW-3552-OE / 656 / 700 / 28-54-09.92N / 95-51-09.23W
2022-WTW-3553-OE / 656 / 699 / 28-54-10.32N / 95-50-40.68W
2022-WTW-3554-OE / 656 / 692 / 28-54-10.67N / 95-52-38.56W
2022-WTW-3555-OE / 656 / 680 / 28-54-12.98N / 95-46-28.70W
2022-WTW-3556-OE / 656 / 680 / 28-54-16.20N / 95-45-48.58W
2022-WTW-3557-OE / 656 / 697 / 28-54-16.38N / 95-52-06.76W
2022-WTW-3558-OE / 656 / 699 / 28-54-22.35N / 95-51-38.19W
2022-WTW-3559-OE / 656 / 691 / 28-54-25.59N / 95-56-27.82W
2022-WTW-3560-OE / 656 / 694 / 28-54-26.46N / 95-50-05.29W
2022-WTW-3561-OE / 656 / 691 / 28-54-29.01N / 95-55-34.20W
2022-WTW-3562-OE / 656 / 690 / 28-54-29.64N / 95-56-01.93W
2022-WTW-3563-OE / 656 / 706 / 28-54-31.45N / 95-59-44.40W
2022-WTW-3564-OE / 656 / 702 / 28-54-32.76N / 95-59-10.74W
2022-WTW-3565-OE / 656 / 691 / 28-54-36.61N / 95-54-48.20W
2022-WTW-3566-OE / 656 / 692 / 28-54-39.44N / 95-49-42.28W
2022-WTW-3567-OE / 656 / 680 / 28-54-41.47N / 95-46-41.64W
2022-WTW-3568-OE / 656 / 702 / 28-54-45.79N / 95-58-24.32W
2022-WTW-3569-OE / 656 / 698 / 28-54-46.79N / 95-57-53.91W
2022-WTW-3570-OE / 656 / 700 / 28-54-47.17N / 95-50-49.99W
2022-WTW-3571-OE / 656 / 704 / 28-54-47.66N / 95-58-50.23W
2022-WTW-3572-OE / 656 / 698 / 28-54-48.92N / 95-52-06.22W
2022-WTW-3573-OE / 656 / 686 / 28-54-50.31N / 95-47-35.04W
2022-WTW-3574-OE / 656 / 692 / 28-54-51.26N / 95-49-11.96W
2022-WTW-3575-OE / 656 / 690 / 28-54-57.63N / 95-54-06.33W
2022-WTW-3577-OE / 656 / 694 / 28-55-00.16N / 95-55-20.76W
2022-WTW-3578-OE / 656 / 694 / 28-55-07.10N / 95-52-43.78W
2022-WTW-3579-OE / 656 / 693 / 28-55-11.02N / 95-54-58.39W
2022-WTW-3580-OE / 656 / 694 / 28-55-11.25N / 95-50-26.07W
2022-WTW-3581-OE / 656 / 699 / 28-55-14.93N / 95-51-56.84W
2022-WTW-3582-OE / 656 / 697 / 28-55-16.47N / 95-52-22.14W
2022-WTW-3583-OE / 656 / 693 / 28-55-26.00N / 95-54-36.08W

2022-WTW-3584-OE / 656 / 692 / 28-55-34.21N / 95-54-09.21W
2022-WTW-3585-OE / 656 / 695 / 28-55-35.01N / 95-55-22.26W
2022-WTW-3587-OE / 656 / 688 / 28-56-14.97N / 95-46-26.39W
2022-WTW-3588-OE / 656 / 691 / 28-56-37.14N / 95-46-13.44W
2022-WTW-3589-OE / 656 / 688 / 28-56-50.79N / 95-45-51.83W

2. TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

a. Section 77.17(a)(1): Exceeds a height of 499 feet AGL at the site of the object exceeds this standard by 157 feet.

b. Section 77.17(a)(2): a height that is 200 feet AGL, or above the established airport elevation, whichever is higher, within 3 NM miles of the established reference point of BYY, and that height increases in the proportion of 100 feet for each additional NM from the airport up to a maximum of 499 feet. The following would exceed by:

2022-WTW-3548-OE / Exceeds by 144 ft.
2022-WTW-3567-OE / Exceeds by 154 ft.
2022-WTW-3547-OE / Exceeds by 166 ft.
2022-WTW-3541-OE / Exceeds by 176 ft.
2022-WTW-3559-OE / Exceeds by 178 ft.
2022-WTW-3529-OE / Exceeds by 193 ft.
2022-WTW-3589-OE / Exceeds by 200 ft.
2022-WTW-3562-OE / Exceeds by 208 ft.
2022-WTW-3587-OE / Exceeds by 226 ft.
2022-WTW-3588-OE / Exceeds by 226 ft.
2022-WTW-3573-OE / Exceeds by 229 ft.
2022-WTW-3532-OE / Exceeds by 235 ft.
2022-WTW-3561-OE / Exceeds by 236 ft.
2022-WTW-3540-OE / Exceeds by 253 ft.
2022-WTW-3535-OE / Exceeds by 259 ft.
2022-WTW-3537-OE / Exceeds by 263 ft.
2022-WTW-3545-OE / Exceeds by 268 ft.
2022-WTW-3542-OE / Exceeds by 283 ft.
2022-WTW-3565-OE / Exceeds by 287 ft.
2022-WTW-3577-OE / Exceeds by 290 ft.
2022-WTW-3546-OE / Exceeds by 291 ft.
2022-WTW-3554-OE / Exceeds by 321 ft.
2022-WTW-3553-OE / Exceeds by 322 ft.
2022-WTW-3579-OE / Exceeds by 325 ft.
2022-WTW-3560-OE / Exceeds by 327 ft.
2022-WTW-3574-OE / Exceeds by 327 ft.
2022-WTW-3552-OE / Exceeds by 330 ft.
2022-WTW-3585-OE / Exceeds by 331 ft.
2022-WTW-3566-OE / Exceeds by 332 ft.
2022-WTW-3557-OE / Exceeds by 341 ft.
2022-WTW-3575-OE / Exceeds by 348 ft.
2022-WTW-3558-OE / Exceeds by 353 ft.
2022-WTW-3583-OE / Exceeds by 365 ft.

2022-WTW-3570-OE / Exceeds by 380 ft.
2022-WTW-3572-OE / Exceeds by 396 ft.
2022-WTW-3584-OE / Exceeds by 399 ft.
2022-WTW-3580-OE / Exceeds by 408 ft.
2022-WTW-3578-OE / Exceeds by 413 ft.
2022-WTW-3582-OE / Exceeds by 437 ft.
2022-WTW-3581-OE / Exceeds by 441 ft.

c. Section 77.17(a)(3): A height that increases a minimum instrument flight altitude within a terminal area (TERPS criteria).

The following proposals would increase TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES for RWY 13 at BYY. The increase would be from standard (200/1 ceiling/visibility) to standard with a minimum climb gradient of between 207-285 ft. per NM until reaching 1000 ft. AMSL depending on the location of each individual structure.

2022-WTW-3552-OE
2022-WTW-3553-OE
2022-WTW-3558-OE
2022-WTW-3560-OE
2022-WTW-3566-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3574-OE
2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE

3. TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

a. Section 77.29 (a)(1): the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules.

At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and may be located within 2 statute miles (SM) of potential VFR Routes as defined by FAA Order 7400.2, Section 6-3-8. The turbines within 2 SM of a VFR Route would have an adverse effect upon VFR air navigation.

The following proposed turbines would lie within the lateral boundaries and exceed traffic pattern airspace (TPA) for CAT D aircraft at BYY (aircraft with approach speeds between 141-165 knots):

2022-WTW-3552-OE
2022-WTW-3554-OE
2022-WTW-3557-OE
2022-WTW-3558-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3575-OE
2022-WTW-3578-OE

2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE
2022-WTW-3583-OE
2022-WTW-3584-OE

4. TITLE 14 CFR PART 77 - FURTHER STUDY AND PUBLIC COMMENTS

The project was circularized under ASN 2022-WTW-3546-OE on 07/22/2022, to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. There were two commenters received during the public comment period as a result of the circularization. They are summarized below.

Comment:
The commenter had concerns about the increase to the RWY 13 Departure Procedure and impacts to the RNAV (GPS) LNAV RWY 31 approach at BYY.

Response:
The aeronautical study determined that although there are a few turbines that are close to affecting the LNAV RWY 31 approach that they in fact do not impact this approach. Minimums will not change for the LNAV RWY 31 approach. The sponsor agreed to terminate turbine 2022-WTW-3586-OE although internal review determined that this turbine would not affect the minimums to the LNAV RWY 31 approach. The impact to the departure procedure are considered minimal, there were no comments received nor did flight standards believe that the increase would affect the departure capacity of BYY.

Comment:
The commenter wanted to ensure the structures were appropriately marked/lighted.

Response:
The structures will, as a condition to their determination, recommended to be marked/lighted IAW the current Advisory Circular.

Comment:
The commenter had concern over traffic pattern penetrations for CAT C and D aircraft that may utilize BYY.

Response:
The sponsor agreed to terminate the one turbine that penetrated CAT C traffic pattern airspace into BYY. Further study indicated that there was not a substantial amount (if any) CAT D operations for the previous 12 months into BYY nor are there any plans on file to improve the RWY at BYY to accommodate a substantial amount of CAT D aircraft. Therefore the project would not interfere with normal traffic pattern operations at BYY.

Comment:
The commenter was concerned about the effects to a private airport close or within the project area.

Response:
The FAA recognizes that obstructions can and do have impacts to privately owned private use airports. However, within the scope of a 14 CFR Part 77 study, the VFR effects to private use airports are not considered when determining the impacts of an obstruction to the national airspace system.

Comment:
The commenter responded that they support green energy, however the project would render many aspects of aviation nearly impossible. Agricultural, off shore aviation, tourist aviation and hunting including feral hog control.

Response:
A structure that has an adverse effect would have a substantial adverse effect if there is a significant volume of aircraft effected. Further study included a yearly traffic count over the area and along possible VFR flyways in or near the project and found that it would not affect a significant volume of traffic along any identified flyways. Agricultural aircraft, although may be effected, while operating under Part 137 are not considered within the scope of a 14 CFR Part 77 study.

Comment:
The commenter was concerned over the turbulence of the blades, the visual and noise effects, the effects to local people, birds, and cattle.

Response:
Aeronautical studies are only looking at direct effects to the national airspace system. The visual and noise effects to people or animals are not considered under an aeronautical study but may be considered under a different study, for example an environmental impact study if required. Wake turbulence caused by wind turbines is currently not within the scope of an aeronautical study under 14 CFR Part 77.

5. BASIS FOR DETERMINATION

IFR EFFECTS

The aeronautical study identified an IFR effect for the RWY 13 instrument departure procedure at BYY. Further study concluded that the effects were minimal and would not impact the departure capacity for normal aircraft departing RWY 13 at BYY.

The proposed structures would have no effect on any other existing or proposed arrival, departure, or en route IFR operations or procedures.

VFR EFFECTS

The aeronautical study identified no substantial adverse effect on any existing or proposed VFR arrival or departure operations. A portion of the proposals would be located within CAT D traffic pattern airspace but beyond the normally utilized traffic pattern airspace for BYY or any other known public use or military airports. At 656 feet AGL, the structures would be located within the altitudes commonly used for en route VFR flight. In coordination with ATC, an analysis of potential VFR Routes and available traffic data indicated that an average of less than one VFR aircraft per day may be affected by the proposed wind farm. Therefore, it is determined they will not have a substantial adverse effect on en route VFR flight operations.

CHARTING AND CUMULATIVE EFFECT

The proposed structures would be charted on VFR sectional aeronautical charts and appropriately obstruction marked/lighted to make them more conspicuous to airmen should circumnavigation be necessary.

The cumulative impact of the proposed structure(s), when combined with other proposed and existing structures, is not considered to be significant. Study did not disclose a substantial adverse effect on existing or proposed public-use or military airports, nor does the proposal(s) affect the capacity of any known existing or planned public-use or military airport. There are no substantial physical or electromagnetic effects on the operation of air navigation and communications facilities and there are no substantial adverse effects on any airspace and routes used by the military.

6. DETERMINATION

It is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation providing the conditions set forth in this determination are met.

7. CONDITIONS

The proponent is required to file FAA form 7460-2, part 1, Notice of Actual Construction or Alteration, ten days prior to beginning construction for the following ASN's, at the OE/AAA website (http://oeaaa.faa.gov).

2022-WTW-3552-OE
2022-WTW-3553-OE
2022-WTW-3558-OE
2022-WTW-3560-OE
2022-WTW-3566-OE
2022-WTW-3570-OE
2022-WTW-3572-OE
2022-WTW-3574-OE
2022-WTW-3580-OE
2022-WTW-3581-OE
2022-WTW-3582-OE

ACRONYMS & ABBREVIATIONS
AGL, Above Ground Level
AMSL, Above Mean Sea Level
ARP, Airport Reference Point
ARSR, Air Route Surveillance Radar
ARTCC, Air Route Traffic Control Center
ASN, Aeronautical Study Number
ASR, Airport Surveillance Radar
ATC, Air Traffic Control
ATCT, Air Traffic Control Tower
CARSR, Common Air Route Surveillance Radar
CAT, Category
CFR, Code of Federal Regulations
CG, Climb Gradient
DA, Decision Altitude
DME, Distance Measuring Equipment
FAA, Federal Aviation Administration
FUS, Fusion
GPS, Global Positioning System

IAF, Initial Approach Fix
IAP, Instrument Approach Procedure
ICA, Initial Climb Area
IFR, Instrument Flight Rules
INT, Intersection
LAT, Latitude
LNAV, Lateral Navigation
LOC, Localizer
LONG, Longitude
LP, Localizer Performance
LPV, Localizer Performance with Vertical Guidance
MDA, Minimum Descent Altitude
MEA, Minimum En route Altitude
MET, Meteorological Evaluation Tower
MIA, Minimum IFR Altitude
Min, Minimum
MOCA, Minimum Obstruction Clearance Altitude
MSA, Minimum Safe Altitude
MSL, Mean Sea Level
MVA, Minimum Vectoring Altitude
NA, Not Authorized
NAS, National Airspace System
NAVAID, Navigational Aid
NDB, Non-Directional Radio Beacon
NEH, No Effect Height
NM, Nautical Mile
NOTAM, Notice to Airmen
NPF, Notice of Preliminary Findings
OCS, Obstacle Clearance Surface
OE, Obstruction Evaluation
OEG, Obstruction Evaluation Group
Part 77 - Title 14 Code of Federal Regulations (CFR) Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace.
P-NOTAM, Permanent Notice to Airmen
RLOS, Radar Line of Sight
RNAV, Area Navigation
RNP, Required Navigation Performance
RWY, Runway
S-, Straight-in
SE, Site Elevation
S-LOC, Straight-in Localizer
SM, Statute Miles
Std., Standard
TAA, Terminal Arrival Area
TACAN, Tactical Air Navigation System
TERPS, Terminal Instrument Procedures
TPA, Traffic Pattern Airspace
TRACON, Terminal Radar Approach Control
V, Victor Airway

VFR, Visual Flight Rules
VHF, Very High Frequency
VOR, VHF Omnidirectional Radio Range System
VORTAC, VOR/TACAN System
WTE, Wind Turbine East
WTW, Wind Turbine West

Sectional Map for ASN 2022-WTW-3582-OE