CITY COUNCIL STAFF REPORT

DATE: February 15, 2017 NEW BUSINESS

SUBJECT: ADMINISTRATIVE ANALYSIS AND CONFORMITY REPORT FOR A PROPOSED 3.0 MEGAWATT WIND ENERGY CONVERSION SYSTEM ("WECS") ON TRIBAL TRUST LAND LOCATED TO THE SOUTHEAST OF THE INTERSECTION OF HIGHWAY 111 AND THE I-10 FREEWAY, O-5 (OPEN LAND) ZONE (CASE 5.1406).

FROM: David H. Ready, City Manager

BY: Department of Planning Services

SUMMARY:

Under the Tribal/City Land Use Review Agreement ("Agreement"), the City is to prepare an Administrative Analysis and Conformity Report for proposed projects on reservation lands owned by the Agua Caliente Band of Cahuilla Indians ("Tribe"). A proposal has been submitted to construct a 3.0 MW wind turbine on an undeveloped parcel owned by the Tribe, located near the intersection of Highway 111 and the 1-10 freeway. The tower will be 279 feet tall, as measured to the hub; the rotor will have a diameter of 337 feet, and the overall height will be up to 448 feet as measured to the top of the blade in the 12 o'clock position.

RECOMMENDATION:

Adopt Resolution No. ____, "A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALM SPRINGS APPROVING A CONFORMITY REPORT FOR A PROPOSED 3.0 MEGAWATT WIND ENERGY CONVERSION SYSTEM ("WECS") ON TRIBAL TRUST LAND LOCATED TO THE SOUTHEAST OF THE INTERSECTION OF HIGHWAY 111 AND THE I-10 FREEWAY (CASE 5.1406)."

BACKGROUND:

The City and the Tribe entered into an Agreement on December 15, 1998, to facilitate an expedited process for the City to review and comment on development projects located on land owned directly by the Tribe. The Agreement identifies a schedule for project review; in order to comply with the Agreement, the following schedule has been prepared:

Item	Timeline Required	Timeline
1. Pre-Submittal	N/A	December 21, 2016

ITEM NO. 5.C.

Item	Timeline Required	Timeline
2. Submission of Project Report	90 days prior to Tribal approval	December 21, 2016
3. Administrative Review	CC review 30 days after submission of Project Report	February 15, 2017[1]
4. Conformity Report	CC adopts within 30 days of receiving Administrative Review	February 15, 2017[1]
5. Joint Meeting[2]	City and Tribal Councils within 30 days of adopting Conformity Report	March 17, 2017
6. Final Tribal Action	90 days after submission of Project Report	No sooner than March 21, 2017

[1]*The Administrative Review and adoption of the Conformity Report by the City Council may be consolidated into a single review per Section 7 of the Agreement.*
[2]*Joint meeting of Tribal Council and City Council may be waived.*

PROPOSED PROJECT:

Foundation Windpower is proposing to construct and operate a single 3.0 MW wind energy conversion system ("WECS") on property owned by the Tribe. The wind turbine will be up to 448 feet in overall height, as measured from the ground to the top of the blade at the 12 o'clock position, with a rotor diameter of 337 feet. The steel tubular tower will measure 279 feet from the ground to the center of the hub. The tower will connect to the power grid north of the 1-10 freeway at the existing Poppet Flats Circuit, located approximately 3,000 feet northwest of the project site. The electrical transmission lines connecting the turbine to the Poppet Flats Circuit will be located primarily underground within existing public rights-of-way or private utility easements. The project will also include a temporary construction laydown area next to the turbine tower location for the delivery and temporary storage of the turbine components.

ANALYSIS – ADMINISTRATIVE REVIEW:

The purpose of the Administrative Review is to determine the adequacy of police and fire safety services, and any other services of the City necessary for the project; any health, safety or welfare concerns; compatibility of the project with surrounding properties; and the fiscal impact of the project. The Project Report has been circulated to Police, Fire, Community & Economic Development, Building & Safety, and the Engineering Services departments. The following summary details the comments received from the various City departments:

- Streets and Utilities: The Engineering Services Department has reviewed the Project Report and noted that general infrastructure improvements in the area are adequate to serve the proposed turbine tower. A list of standard conditions has been prepared for the project and is included as an attachment to this report.

- Public Safety: The Fire Department has noted that the project will have minimal impact to the provision of emergency services. It has been requested that street identification signage be installed adjacent to the site (on Wendy Road and Tipton Road) to assist emergency personnel in responding to incidents at the site, both during construction and planned operations.
- Building Permit/Impact Fees: Tribal projects are exempt from permit review fees, as the Tribe conducts its own permit review process. In addition, the City will not be collecting any impact fees for the proposed development. The Building & Safety Department has provided an analysis of the fees that would typically be charged for similar projects.
- Taxes and Revenue: Tribal projects are exempt from the collection of standard taxes and fees that would typically be collected for similar projects. Business license fees may be collected for contractors working on the project, but the impact to the City would be minimal.
- Economic Development: Based on the location of the proposed turbine, the construction of the project is not expected to result in any significant impacts on the local economy. The project is not projected to bring any new commercial business to the area, and would have minimal economic impact on the city.

ANALYSIS – CONFORMITY REPORT:

Per the Agreement, the Conformity Report shall detail the conformance of the project to existing City rules and regulations, and the compatibility of the project with surrounding properties. The following tables and discussion provide an analysis of the project relative to the requirements of the Palm Springs Zoning Code (PSZC).

Site Area	
Gross Acres	79.96 Acres; wind turbine proposed to occupy a smaller 3-acre portion of the parcel.

Surrounding Property	*Existing Land Use Per Chapter 92*	*Existing General Plan Designation*	*Existing Zoning Designation*
Subject Property	Undeveloped, Off-Premise Signs (Billboards)	Desert	O-5
North	I-10 Freeway, Undeveloped	Open Space (Unincorporated Riverside County)	RR (Unincorporated Riverside County)
South	Undeveloped, Union Pacific Railroad	Desert	O-5
East	Undeveloped, I-10 Rest Area	Desert	O-5

West	Highway 111, Undeveloped	Open Space (Unincorporated Riverside County)	RR (Unincorporated Riverside County)

Pursuant to PSZC Section 92.21.03, the following standards apply:

Standard	*Required/ Allowed*	*Provided*	*Compliance*
Min. Lot Size	5 Acres	79.96 Acres	Y
Min. Lot Width	250 Feet	Approx. 1,410 Feet	Y
Min. Lot Depth	250 Feet	Feet	Y
Min. Setbacks			
• Front (west)	50 Feet	1,504 Feet	Y
• Front (north)	50 Feet	1,152 Feet	Y
• Side (south)	50 Feet	382 Feet	Y
• Rear (east)	50 Feet	620 Feet	Y
Max. Lot Coverage	10%	<1%	Y

Pursuant to PSZC Section 93.23.07, the following standards specific to Commercial Wind Energy Conversion Systems (WECS) shall apply:

Standard	*Required/ Allowed*	*Provided*	*Compliance*
Zoning District	W, O-5, E-I, M-2	O-5	Y
Height Limit	300 Feet (12 o'clock position)	448 Feet (12 o'clock position)	N
Setback – To Lot Line	1.25 times the total WECS height (560 Feet)	382 Feet to abutting Tribal parcel; 780 to nearest non-Tribal parcel	Y[1]
Setback – To Residence, Hotel, Hospital, Etc.	1,200 Feet	No residences, hotels, hospitals, etc. within 1,200 feet	Y
Setback – Public Highway, Road, Railroad, Off-Site Building	1.25 times the total WECS height (560 Feet)	652 Feet	Y
Setback – Overhead Transmission Line	1.25 times the total WECS height (560 Feet)	Approx. 1,375 Feet	Y

Standard	*Required/ Allowed*	*Provided*	*Compliance*
Wind Access Setback	5 rotor diameters (1,685 Feet)	Approx. 1,410 Feet (Wendy Road)	N
Scenic Setback – Hwy. 62 & Whitewater River	1,315 Feet	Over 1,315 Feet	Y
Scenic Setback – Indian Canyon	500 Feet	Over 500 Feet	Y
Scenic Setback – I-10	500 Feet	1,152 Feet	Y
Scenic Setback – Hwy. 111	3,472 Feet	1,504 Feet	N
Scenic Setback – Dillon Road	1.25 times the total WECS height (560 Feet)	Over 560 Feet	Y
Fencing	Required around WECS tower	Not indicated	Not indicated
Lowest Extension of Rotor Blade	25 Feet from Ground (Min.)	Approx. 110 Feet	Y
Color/Finish	Light environmental colors (off-white, gray, etc.) or darker fully-saturated colors	Not indicated; the photo simulations depict an off-white color	Not indicated

[1] *PSZC Section 93.23.07(E)(3)(d) allows the Planning Commission to approve a lesser setback where topography or other conditions eliminate or substantially reduce potential safety hazards.*

Based on the analysis above, the following compliance issues are recommended to be addressed by the Tribal Council in their consideration of the proposed project:

- Height: The proposed turbine exceeds the maximum 300-foot height limit by 148 feet (49%). As indicated in the Project Report, the City has approved other facilities in excess of 300 feet with the submittal of a Variance application and making the associated findings. The rationale for the additional height is partly based on the topography of the site and elevation of Highway 111 to the west, which is identified as an upwind barrier to the operation of the turbine. Another rationale cited in the Project Report for the additional height is that the fewer towers are needed to generate the same amount of energy.
- Wind Access Setback: PSZC Section 93.23.07(E)(4) requires that the center of the WECS tower be located a distance of 5 rotor diameters (1,685 feet) from any lot lines that are within 45 degrees of perpendicular to and downwind of the dominant wind direction. Figure 2 of the Project Report depicts the downwind setback for the proposed tower, which shows that several property lines

encroach into the downwind setback field. One of the parcels is the Whitewater Rest Stop, which is owned by the State of California; the other parcels are owned directly by the Tribe. PSZC Section 93.23.07(E)(4) allows for the setback encroachment upon entering into an agreement with the adjacent landowner.

- Scenic Setback – Highway 111: PSZC Section 93.23.07(E)(5) requires a 3,472-foot setback from Highway 111; the tower as proposed will be 1,504 feet from the highway. The zoning code states that the setbacks may be reduced by the Planning Commission if a determination is made that the characteristics of the surrounding property eliminate or substantially reduce considerations of scenic value. The Project Report states that the property is surrounded by uses that substantially reduce its scenic value; the presence of off-premise advertising signs (billboards) currently located on the site also reduce its scenic value. Furthermore, the area is already highly developed with many other WECS towers, which are clearly visible from the subject site and Highway 111. Visual simulations of the proposed tower are included in the Project Report, and an assessment of the scenic impact is addressed in the Environmental Assessment for the project.
- Fencing: PSZC Section 93.23.07(E)(6) states that fencing or other security measures are required to prevent unauthorized access to the WECS tower. The Project Report does not identify if fencing or other measures are proposed for the site; a condition of approval has been added to address the requirement.
- Color/Finish: PSZC Section 93.23.07(E)(20) requires that all WECS towers shall be either light environmental colors (off-white, gray, beige or tan) or darker fully-saturated colors (dark blue, dark green, maroon, or rust red). The visual simulations depict the tower as being off-white in color, but no sample has been provided; a condition of approval has been added to specify this requirement.

CRITERIA – CONDITIONAL USE PERMIT:

The Agreement requires that proposed project be evaluated for compatibility with surrounding properties and conformance to code requirements; the following analysis evaluates the project against the criteria contained in PSZC Section 94.02.00 for Conditional Use Permit applications.

1. *That the use applied for at the location set forth in the application is properly one for which a conditional use permit is authorized by this Zoning Code.*

   The subject property is zoned O-5 (Open Space); PSZC Section 93.23.07(B) allows for the construction of WECS facilities in the O-5 zone upon the approval of a Conditional Use Permit. Therefore, the proposed use is authorized at the subject site upon approval of a Conditional Use Permit.

2. *That the use is necessary or desirable for the development of the community, is in harmony with the various elements or objectives of the general plan, and is not*

detrimental to existing uses or to future uses specifically permitted in the zone in which the proposed use is to be located.

The proposed project is generally in conformance to the Desert land use designation specified by the General Plan, in that it proposes a public utility use for the property. The project is also in conformance with Policy RC8.1, Policy RC8.2, and Policy 8.12 of the Recreation, Open Space & Conservation Element of the General Plan relative to the development of sustainable energy sources. It should be noted that the proposed WECS facility is not within the boundaries of the Wind Energy Overlay area identified in the General Plan. However, the use is consistent with existing and future uses specified in the zone in which the use is to be located, and is also consistent with the pattern of wind energy uses is the northernmost area of the City.

3. *That the site for the intended use is adequate in size and shape to accommodate such use, including yards, setbacks, walls or fences, landscaping and other features required in order to adjust such use to those existing or permitted future uses of land in the neighborhood.*

The overall parcel is 79.96 acres in area, which is can easily accommodate the proposed use. The placement of the turbine tower does not meet the Wind Access Setback requirement, but may be approved if the abutting property owner is in agreement with the encroachment.

4. *That the site for the proposed use relates to the streets and highways properly designed and improved to carry the type and quantity of traffic to be generated by the proposed use.*

The proposed use will generate a modest amount of traffic during the construction phase, and will only generate minimal traffic during the operational phase. Surround streets and highways are adequate to support the proposed use with no degradation in service.

5. *That the conditions to be imposed and shown on the approved site plan are deemed necessary to protect the public health, safety and general welfare and may include minor modification of the zone's property development standards.*

Recommended Project conditions are included as an attachment to this report, and are intended to address issues of public health, safety and welfare. Per the Agreement, the Tribal Council may consider the proposed conditions, but may approve or modify the Project in any way it deems appropriate.

CONCLUSION:

The proposed project is consistent with many of the development standards identified in the Palm Springs Zoning Code for WECS facilities, but exceeds the height limit and certain setback requirements. The project is also generally consistent with the Land Use Element of the General Plan, and is consistent with the goals of the Recreation, Open Space & Conservation Element relative to the development of sustainable energy sources. Conditions of approval are suggested for consideration by the Tribal Council in their review of the project, and are included as an attachment to this report.

Flinn Fagg, AICP
Director of Planning Services

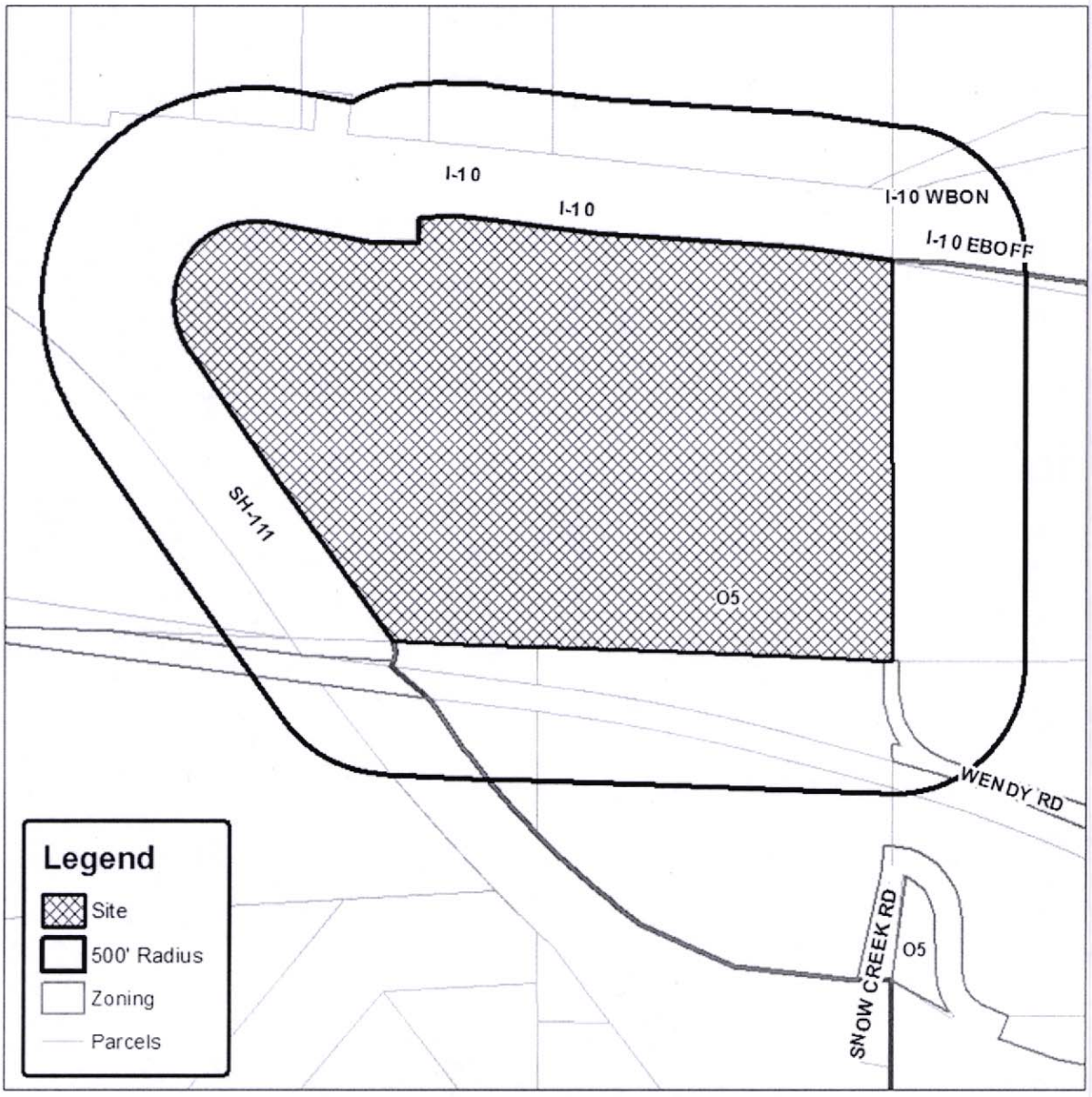
Marcus L. Fuller, MPA, P.E., P.L.S.
Assistant City Manager/City Engineer

David H. Ready, Esq., Ph.D.
City Manager

Attachments:

1. Vicinity Map
2. Draft Resolution with Recommended Conditions of Approval
3. Building & Safety Department Fee Summary
4. Tribal/City Land Use Coordination Agreement
5. Whitewater Ranch Wind Project Report

Department of Planning Services
Vicinity Map



CITY OF PALM SPRINGS

CASE # 5.1406

Conformity Report: Whitewater Ranch

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALM SPRINGS APPROVING A CONFORMITY REPORT FOR A PROPOSED 3.0 MEGAWATT WIND ENERGY CONVERSION SYSTEM ("WECS") ON TRIBAL TRUST LAND LOCATED TO THE SOUTHEAST OF THE INTERSECTION OF HIGHWAY 111 AND THE I-10 FREEWAY (CASE 5.1406).

The City Council of the City of Palm Springs finds:

A. On December 15, 1998, the City Council of the City of Palm Springs ("City") and the Tribal Council of the Agua Caliente Band of Cahuilla Indians ("Tribe") entered into a Land Use Coordination Agreement which provides for City review and comment on projects outside of the Land Use Agreement of 1977, while retaining the Tribe's final approval and authority over projects on Tribal Land.

B. On February 3, 1999, the City and the Tribe amended the Land Use Agreement of 1977 with Supplement No. 5, which exempted all Tribal lands from the Land Use Agreement of 1977 subject to the aforementioned Land Use Coordination Agreement.

C. Pursuant to Section 7 of said Agreement, the City Council and the Tribal Council may wiave procedural requirements of the Agreement, as follows:

> *7. Waiver. With the approval of both parties, any part of the foregoing process may be waived if the Project is not deemed significant or if the project is found to be conforming, or if due to the exigencies of time the normal process cannot be accommodated.*

D. On December 21, 2016, the Tribe submitted to the City a Project Report for a 3.0 megawatt WECS facility to be developed on 79.96 acres of Tribal Trust land near the intersection of Highway 111 and the I-10 freeway.

E. The Project Report was transmitted to the City for review and comment under the terms of the Agreement. In order to adhere to the review timeline specified by the Agreement, the City and the Tribe have agreed to a combined Administrative Review and Conformity Report in accordance with Section 7 of the Agreement.

F. On February 15, 2017, the City Council conducted a public meeting and considered the matter, including the Project Report, the Administrative Review, the Conformity Report, and related exhibits.

G. The City Council has concluded that the proposed WECS facility is generally consistent with the goals of the City of Palm Springs General Plan, generally consistent with the development standards of the Palm Springs Zoning Code, and is generally consistent with the height of other WECS facilities previously approved in the City of

Palm Springs.

THE CITY COUNCIL OF THE CITY OF PALM SPRINGS DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. The Conformity Report, dated February 15, 2017, including the suggested conditions contained in Exhibit "A" attached and made a part thereto, is hereby approved and staff is directed to transmit the Conformity Report to the Tribe.

SECTION 2. The following requirement for a joint meeting of the City Council and the Tribal Council to discuss the project (Case 5.1406) as outlined in the Agreement for Tribal/City Land Use Coordination on Certain Parcels, is hereby waived:

Section 5. Joint Meeting.

> *"...Within thirty (30) days* (of the City Council's adoption of the Conformity Report), *the Tribal Council and the City Council shall schedule a Joint Meeting to discuss the Conformity Report and whether any measures should be taken to make the project ;more conforming with the rules, regulations, and ordinance of both the City and the Tribe."*

SECTION 4. The last section is always followed by the following verbiage:

ADOPTED THIS 15TH DAY OF FEBRUARY, 2017.

David H. Ready, Esq., Ph.D.
City Manager

ATTEST:

Kathleen D. Hart, MMC
Interim City Clerk

CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF RIVERSIDE) ss.
CITY OF PALM SPRINGS)

I, KATHLEEN D. HART, Interim City Clerk of the City of Palm Springs, hereby certify that Resolution No. ____ is a full, true and correct copy, and was duly adopted at a regular meeting of the City Council of the City of Palm Springs on _____, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Kathleen D. Hart, MMC
Interim City Clerk

RESOLUTION NO._____

EXHIBIT A

Case 5.1406 – Conformity Report

Southeast Corner of Highway 111 and the I-10 Freeway

February 15, 2017

CONDITIONS OF APPROVAL

The recommended conditions below are provided by the Director of Planning Services, the Director of the Building & Safety Department, the Fire Chief, and the City Engineer or their designee, depending on which department recommended the condition.

PLANNING DEPARTMENT CONDITIONS

PLN 1. Height. The Tribal Council shall make findings that the height of the proposed WECS facility is justified by special circumstances relative to the topography, location, or surroundings of the subject site; does not constitute a grant of special privilege inconsistent with the limitations upon other properties in the vicinity and zone in which the property is situated; and that the height will not be materially detrimental to the public health, safety, convenience, or welfare.

PLN 2. Setbacks. The Tribal Council shall make a determination that the reduced setback from Highway 111 ("Scenic Setback") does not substantially eliminate or reduce considerations of scenic value. In addition, the applicant is encouraged to obtain Wind Access Waivers from any affected adjoining property owners.

PLN 3. Noise. A WECS facility shall not be operated inconsistent with the provisions of Chapter 11.74 (Noise Ordinance) of the Palm Springs Municipal Code.

PLN 4. Water Efficient Landscaping Conformance. The following restrictions are encouraged relative to the occupancy and use of the subject property:

a. Any outside lighting shall be hooded and directed so as not to shine directly upon adjoining properties or public rights-of-way.

b. No building or structure shall be closer than fifty (50) feet from any road right-of-way or lot line and no building or structure shall exceed thirty (30) feet in total height, with the exception of the WECS facility.

c. No advertising sign or logo shall be placed or painted on any equipment. No more than one (1) unlighted advertising sign relating to the development shall be located on the project site.

d. The applicant is encouraged to monitor the environmental impacts of the WECS facility, including, but not limited to, noise, hydrogen production, safety maintenance, and sightings of threatened or endangered species.

PLN 5. Paint Color. The color and finish of the WECS facility shall be either light environmental colors (such as off-white, gray, beige or tan) or darker fully-saturated colors (such as dark blue or green, maroon, or rust red) or galvanized. All WECS facilities shall have a matte or galvanized finish.

PLN 6. Fencing. Fencing, or other appropriate measures, shall be required to prevent unauthorized access to the WECS facility. Legible signs warning of electrical and other hazards shall be posted at any gated entry points to the project site at a height of three to five feet above ground.

PLN 7. Transmission Lines. All new transmission lines connecting the turbine wind generator shall be undergrounded by an underground cable system.

PLN 8. Removal. Any unsafe or inoperable WECS facility which has not generated power for twelve (12) consecutive months is declared to be a public nuisance which shall be abated by repair, rehabilitation, demolition or removal.

ENGINEERING DEPARTMENT CONDITIONS

STREETS

ENG 1. It is recommended that the applicant shall obtain State permits and approval of plans for any work done on State Highway 111.

ENG 2. It is recommended that upon completion of that upon completion of required improvements by the applicant, the applicant shall prepare and submit to the Bureau of Indian Affairs an Affidavit of Completion in accordance with Section 169.16, Title 25, of the Code of Federal Regulations, for the off-site debris basin improvements constructed by the applicant for which the easement was dedicated through the Bureau of Indian Affairs. The applicant shall be responsible for obtaining the necessary form for the Affidavit of Completion from the Palm Springs Agency of the Bureau of Indian Affairs, and for having it completed as necessary by the applicant's Engineer of Record.

GRADING

ENG 3. It is recommended that a Precise Grading Plan Precise Grading Plan prepared by a California registered Civil engineer be submitted to the Agua Caliente Band of Cahuilla Indians (ACBCI) Engineering Division for review and approval. It is recommended that the Grading Plan be approved by the Agua Caliente Band of Cahuilla Indians (ACBCI) prior to issuance of grading permit.

ENG 4. It is recommended that a Geotechnical/Soils Report prepared by a California registered Geotechnical Engineer shall be required for and incorporated as an integral part of the grading plan for the proposed development. A copy of the Geotechnical/Soils Report shall be submitted to the Agua Caliente Band of Cahuilla Indians (ACBCI) Engineering Division with the first submittal of a grading plan.

ENG 5. It is recommended that the applicant provide all necessary geotechnical/soils inspections and testing in accordance with the Geotechnical/Soils Report prepared for the project. All backfill, compaction, and other earthwork shown on the approved grading plan shall be certified by a California registered geotechnical or civil engineer, certifying that all grading was performed in accordance with the Geotechnical/Soils Report prepared for the project. It is recommended that no certificate of occupancy be issued until the required certification is provided to the Agua Caliente Band of Cahuilla Indians (ACBCI).

ENG 6. It is recommended that a mylar copy of the approved Grading Plan be provided to the City Engineering Division for the City's information, use and files.

GENERAL

ENG 7. It is recommended that all proposed utility lines shall be installed underground.

ENG 8. It is recommended that all existing utilities shall be shown on the improvement plans if required for the project. The existing and proposed service laterals shall be shown from the main line to the property line.

ENG 9. It is recommended that the applicant shall become a part of Underground Service Alert (USA) so that it can be included in the USA Alert database of underground facilities in the general area, so that others can be notified of their existence prior to their excavation activities.

FIRE DEPARTMENT CONDITIONS

FID 1. It is recommended that the applicant work with the City of Palm Springs to install street identification blade signage on Wendy Road and Tipton Road to assist emergency personnel in responding to any calls for service at the site.

END OF CONDITIONS

Valuation: $ 5,300,000 Installation of one wind turbine.

SqFt Values:: Finished: 0 Unfinished: 0 TotalFinUnfin: 0 Sprinkled: 0 Acc Heated: 0 Acc Unheated: 0 Acc Total: 0 TotalFinUnfinAcc: 0

SqFt Values:: Porch/Deck: 0 Pavement: 0 TotalFinUnfinAccPorchDeck: 0

R = Required, S = Status, O = Order

R	S	Status Date	O	Invoice #	Fee Cat	Description	Calc Method	Calc Data	Min Fee	SubTotal
Yes	New	12/27/2016	6		001-37112	SMIP2	Valuation		0.50	530.00
Yes	New	12/27/2016	7		001-34308	Microfilm	Fixture		2.00	91.54
Yes	New	12/27/2016	16		001-32219	S.B. 1473	Valuation		0.00	212.00
Yes	New	12/27/2016	17		261-32214	Technology Fee	Valuation		0.00	8003.00
Yes	New	12/27/2016	18		001-34210	Fire Dept. Plan Check	Fixture		0.00	277.00
Yes	New	12/27/2016	19		001-34210	Fire Inspection Fees	Fixture		0.00	293.00
Yes	New	12/27/2016	24		150-34390	Public Art	% of Valuation	0.500000	0.00	26500.00
Yes	New	12/27/2016	25		001-34310	General Plan Maint.	Valuation		0.00	3551.00
Yes	New	12/27/2016	28		001-33117	CVMSHCP Fee	Fixture		0.00	5451.00 per acre
Yes	New	12/27/2016	32		001-34303	Planning Plan Check Fee	Fixture		0.00	1240.00
Yes	New	12/27/2016	33		261-32214	Planning Technology Fee	Valuation		0.00	4611.00
Yes	New	12/27/2016	34		261-32214	Engineering Technology Fee	Valuation		0.00	4611.00
Yes	New	12/27/2016	37		001-32201	COMMERCIALNEWCONSTRUCTION	Fixture		0.00	1657.76
Yes	New	12/27/2016	51		001-32204	PERMITPROCESSINGFEE	FlatRate	34.32	0.00	34.32
Yes	New	12/27/2016	52		001-34301	Plan Check Fee	Manual		0.00	161.20 per hour
Yes	New	12/27/2016	53		134-33110	TUMF	Manual		0.00	1031.56

Valuation: $ 5,300,000

SqFt Values:: Finished: 0 Unfinished: 0 TotalFinUnfin: 0 Sprinkled: 0 Acc Heated: 0 Acc Unheated: 0 Acc Total: 0 TotalFinUnfinAcc: 0

SqFt Values:: Porch/Deck: 0 Pavement: 0 TotalFinUnfinAccPorchDeck: 0

R = Required, S = Status, O = Order

R	S	Status Date	O	Invoice #	Fee Cat	Description	Calc Method	Calc Data	Min Fee	SubTotal
Yes	New	12/27/2016	54		001-32201	Commercial MEP complex	Manual		0.00	328.64

APPENDIX 4 AGREEMENT FOR TRIBAL CITY TRIBAL/CITY LAND COORDINATION ON CERTAIN PARCELS AGREEMENT #1324A R19450, 1-6-99

THIS AGREEMENT FOR TRIBAL CITY LAND USE REVIEW ON CERTAIN PARCELS ("Agreement") is made this 15th day of December, 1998 by and between the AGUA CALIENTE BAND OF CAHUILLA INDIANS, acting through its Tribal. Council (the "Tribe"), and the CITY OF PALM SPRINGS, CALIFORNIA, acting through its City Council, a municipal corporation (the City). This Agreement is made with reference to the following:

RECITALS:

A. WHEREAS, the Tribe is a federally recognized Indian tribe which exercises its sovereign authority over the lands of the Agua Caliente Indian Reservation according to a constitution approved by the Commissioner of Indian Affairs, as well as applicable federal law, with portions of the City of Palm Springs located within the boundaries of federal Indian reservation; and

B. WHEREAS, the city of Palm Springs is a charter city, possessing lull powers with respect to municipal affairs to regulate the territory under its jurisdiction and in accordance with the California Constitution, its Charter and State law. The trust land of the Agua Caliente Indian Reservation are interspersed in a checkerboard pattern within that portion of the City located within the Reservation; and

C. WHEREAS, both the Tribe and the City wish to cooperate in promoting the orderly and expeditious use and development of all lands of the Agua Caliente Indian Reservation to their highest and best use consistent with principles of sound planning and the sovereignty of the tribe; and

D. WHEREAS, on July 26, 1977. the Tribe and the City entered into that certain Agreement No. 1324 (hereinafter the "Land Use Agreement"), adopted by city Council Resolution No. 12298. Pursuant to that Agreement, the parties agreed that applications for issuance of permits and development pertaining to any Trust lands would initially be processed through the City, with the City collecting its normal fees and charges. Any party aggrieved by an action of the City Council in any such planning and zoning matters was given the right to appeal any action of the City to the Tribal Council with the Tribal Council having the ability, following a noticed hearing, to affirm, reverse, or modify any decision of the City Council on any matter affecting Indian Trust Lands, with the decision of the Tribal Council being final, after consideration of the recommendation of the Indian Planning Commission, as well as applicable federal and tribal law; and

E. WHEREAS, the Land Use Agreement has been amended from lime to time, by Supplements 2, 3, and 4, and most recently by Supplement No. 5. which would exempt all land acquired by the Tribe from regulation by the City, including: Application of all laws, ordinances, and codes; application of all fees, including drainage, sewer, school, Uniform Transportation Mitigation fees, building and other fees. The taking of title to parcels into trust by the United States for the tribe would exempt such property from regular City taxes such as property taxes, sales taxes, transient occupancy taxes, and others; and

F. WHEREAS, the Tribe has generally supported development consistent with the City's General Plan and other ordinances and regulations but has the authority to adopt its own land use plan and policies; and

G. WHEREAS, the Tribe has commenced a program, when economically feasible, to reacquire any Trust Land which has been sold in fee. To facilitate Indian development on such Land, the Tribe would like to have an expedited process for City review and comment on said projects. The Tribe is willing to consider such review and comment if given in a timely manner. The City believes that the opportunity to provide review and comment, but not approval, of such projects would be valuable to assure that such projects are integrated with surrounding development and to assure that the City's and the Tribe's normal development standards are maintained insofar as possible. In addition, both parties believe that all development throughout the City on both Tribal and non-Tribal land should make a fairshare contribution in exaction, fees or other consideration to pay for the burdens imposed by the development on the City or for the benefits received by the development from the City.

IN CONSIDERATION OF THE FOREGOING, THE PARTIES HEREBY AGREE AS FOLLOWS: 18

1. Pre-Submittal.

Prior to the initiation of a Project on Tribal Land and initiation of the process detailed below, the Tribe, where feasible, will consult with the City to determine the scope and significance of the Project and its appropriate level of review. This consultation will normally, but not necessarily, be satisfied by a meeting between the Tribal Planning Department and City Department of Planning and Building.

2. Submission of Report.

When any new development or substantial expansion or renovation of a project is proposed on land located within the Reservation and has been acquired by the Tribe, at least ninety (90) days prior to Tribal approval of the project including preliminary or schematic design, the Tribe shall submit to the City a report on the Project ("Project Report"). As used herein, "Reservation" means those lands whose legal description is set forth in Exhibit A hereto. The Project Report shall include a description of the Project, the preliminary or schematic plans and drawings for the Project, environmental documents per NEPA, if any, or any equivalent Tribal document, an analysis of the compatibility of the proposed Project with the City's and the Tribe's development standards, an analysis of the fiscal impact of the Project and a statement identifying any manner in which the Project would be exempt from, or not conform to, any ordinance, rule, regulation, or standards of the City or of the Tribe. The Tribe shall provide any explanation of any of the foregoing, as they shall deem reasonable or necessary. The Indian Planning Commission, and other Tribal bodies, will develop this report in accordance with applicable federal and Tribal law. The level of detail provided in the Project Report should be as follows: if a minor project, then similar to the level of detail normally required by the City for architectural review; if a major project, then similar to the level of detail which would be required by the City for Planned Development District permit. The determination of whether a project is major or minor shall require the agreement of the chief staff planning official of each party but, in the event of a disagreement, the opinion of the Tribe's planning official shall govern. It is the intent of the parties that this process be undertaken, not at the point at which the land is acquired by the Tribe, but when development is contemplated, and when the development is contemplated, and when the development can be described and its impacts forecast.

3. Administrative Review.

Upon receipt of a Project Report, the City Manager shall distribute the Project Report to appropriate departments, including Police, Fire, Finance, Public Works, Planning and Building and such other departments as the City Manager shall deem relevant, such as Parks and Recreation, Tourism, Economic Development, and so forth. It shall be the purpose of this administrative review to determine how well the Project conforms with the City's existing rules and regulations; any health and safety, or welfare concerns; the adequacy of police and fire safety services, and other services of the city necessary for the Project; compatibility of the project with surrounding properties; and the fiscal impact of the Project. The purpose of the fiscal impact analysis shall be to determine whether the Project will pay the normal City fees, taxes charges, and assessments; to the extent that any of such revenues will not accrue to the city, what will be the resulting financial impact therefrom; what other direct and indirect financial impacts, negative or positive, will result and what the overall economic impact will be of the Project on the city. Within thirty (30) days of the City Manager's receipt of the Report from the Tribe, the City shall prepare the "Administrative Analysis" of the foregoing information and shall submit the Administrative Analysis to the City Council for its review and approval.

4. City Council Conformity Report.

The City Council shall have thirty (30) days from the submission of the Administrative Analysis to prepare the City Council's Conformity Report ("Conformity Report"). The Conformity Report shall be adopted by the City Council at a public meeting. At the same time that the City Manager submits the Administrative Report to the City Council, a copy of the same shall be submitted to the Tribe. The Tribe shall have ten (10) days to prepare its comments on the Administrative Analysis for submission to the City Council to be considered at the time the City Council determines the Conformity Report. The Conformity Report shall contain the same subject matter as the Administrative Analysis.

5. Joint Meeting.

Upon the City Council's adoption of the Conformity Report, the Project Report shall be immediately submitted to the Tribal Council. Within thirty(30)days, the Tribal Council and the City Council shall schedule a Joint Meeting to discuss the Conformity Report and whether any measures should be taken to make the Project more conforming with the rules, regulations, and ordinances of both the City and the Tribe.

6. Final Tribal Action.

At the Joint Meeting, or following the Joint Meeting, the Tribal Council may take any action authorized by its Constitution, Bylaws, rules, and ordinances concerning the Project. The Tribal Council shall be free to disregard any or all comments in the Conformity Report or otherwise made by the City Council and may approve or modify the Project in any way the Tribal Council deems appropriate. It is expressly understood by the parties hereto that the Tribal Council retains full and complete sovereignty to administer Tribal lands in accordance with the Constitution, Bylaws, and Ordinances of the Tribe and applicable federal law. This Agreement deals solely with the consultation process in which the City is being given the opportunity to review and comment on certain projects being undertaken by the Tribe, and the Tribal Council retains full and complete authority to make final decisions concerning the development of Tribal Land under its Constitution and applicable federal and Tribal law.

7. Waiver.

With the approval of both parties, any portion of the foregoing process may be waived if the Project is not deemed significant, if the Project is found to be conforming, or if due to the exigencies of time the normal process cannot be accommodated.

8. Amendments.

This Agreement maybe amended by mutual agreement by the parties, provided that neither party may terminate this Agreement, without prejudice to any legal position thereafter asserted, upon thirty (30) days written notice to the other party.

9. Approval.

This Agreement shall be approved by Resolutions of the Tribal Council and the City Council.

10. Lands Located Inside Reservation and Owned in Fee by Parties Other than the Tribe.

This Agreement will not affect, alter, increase, or decrease in any way the jurisdiction that either the City or the Tribe may have over the use or development of parcels of land located within the Reservation, which are owned in fee by parties other than the Tribe. The parties recognize that federal law already allocates such jurisdiction over such parcels.

11. Lands Located Outside Reservation.

The parties recognize that federal law provides to the City notice and an opportunity to express its views on the subject of the proposed taking of title into trust for the Tribe of parcels located outside the Reservation but within the city limits of the City in 25 CFR. § 151.11(d), as well as time in which to challenge such a proposed action before it occurs, in 25 C.R.F. § 151.12(b). Otherwise, this Agreement will not affect, alter, increase, or decrease in any way the jurisdiction that either the City or the Tribe may have over the use or development of such parcels of land. The parties recognize that federal law already allocates such jurisdiction over such parcels.

IN WITNESS WHEREOF, the parties have executed this Agreement by their respective authorized officers on the day and year first above written.

CITY OF PALM SPRINGS, CALIFORNIA

a municipal corporation.

Will Kleindienst, Mayor

Attest:

Judith Sumich, City Clerk

Approved as to form:

David Aleshire, City Attorney

Approved by the City Council

By Res. No. 19450, 1-6-99, A1324-A

AGUA CALIENTE BAND OF CAHUILLA INDIANS,

a federally-recognized Indian tribe

By:

Richard M. Milanovich, Chairman

Approved as to form:

Art Bunce, Tribal Attorney

View the mobile version.

WHITEWATER RANCH WIND PROJECT

PROJECT REPORT

December 20, 2016

Prepared by:

AGUA CALIENTE BAND OF CAHUILLA INDIANS
5401 Dinah Shore Drive
Palm Springs, CA 92264

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ATTACHMENTS

SECTION 1: INTRODUCTION

1.1 Project Background and Purpose

In August of 2005, the Agua Caliente Band of Cahuilla Indians ("Tribe") was awarded a grant under the U.S. Department of Energy's (DOE) Tribal Energy Program to engage in a process that would result in the development of a comprehensive Tribal energy plan. The grant, awarded under DOE's First Steps program, supported the development of a strategic energy plan designed to integrate with the Tribe's overall planning and economic development goals, and align with the Tribal cultural, social, political, and spiritual values.

Since development of the Agua Caliente Strategic Energy Plan, in addition to making use of energy efficiency measures, the Tribe has reviewed, researched, and developed renewable energy on the Agua Caliente Indian Reservation ("Reservation") as part of its overall energy strategy. Development of the Whitewater Ranch Wind Project ("Project") will support the Tribe's continuing goal for renewable energy development and energy self-sufficiency.

1.2 Tribal/City Land Use Agreements

As part of the project approval process and pursuant to the terms of the *Agreement for Tribal/City Land Use Coordination on Certain Parcels* with the City of Palm Springs ("City") dated December 15, 1998, the Tribe has prepared this report on the Whitewater Ranch Wind Project ("Project Report") for the City's administrative review. The following key Tribal and/or City actions establish the project approval process for Tribal lands:

1. On July 26, 1977, the Tribe and the City entered into Agreement No. 1324 (hereinafter, the "Land Use Agreement") adopted by City Council Resolution No. 12298. Pursuant to the Land Use Agreement, the parties agreed that applications for issuance of permits and development pertaining to any Trust lands would initially be processed through the City, with the City collecting its normal fees and charges. Any party aggrieved by an action of the City Council in any such planning and zoning matters was given the right to appeal any action of the City to the Tribal Council, with the Tribal Council having the ability, following a noticed hearing, to affirm, reverse, or modify any decision of the City Council on any matter affecting Indian Trust lands, with the decision of the Tribal Council being final, after considering the recommendation of the Indian Planning Commission, as well as applicable Federal and Tribal law.

2. On December 15, 1998, the Tribe and City entered into a "Land Use Coordination Agreement" which provides for City review and comment on projects outside of the Land Use Agreement, while retaining the Tribe's final approval and authority over projects on Tribal land.

3. On February 3, 1999, the City and the Tribe amended the Land Use Agreement with Supplement No. 5, which exempted all Tribal lands from the Land Use Agreement subject to the aforementioned Land Use Coordination Agreement.

This Project Report serves as an expanded project description and goes "hand in hand" with other submittal documents including site plans, technical reports, and other pertinent information. These documents have been prepared to correspond in most material respects with the Conditional Use Permit (CUP) process outlined in Section 93.23.07 of the Palm Springs Municipal Code.

SECTION 2: PROJECT DESCRIPTION

2.1 Project Location and Existing Conditions

The proposed Project is located west of Tipton Road, between Interstate 10 to the north, Whitewater Ranch to the east, Highway 111 to the west, and the Union Pacific Railroad to the south, on approximately 3 acres of vacant Tribal Trust land located within Section 9, Township 3 South, Range 3 East, of the San Bernardino Base and Meridian ("Project Site," see Figures 1 and 2); nine outdoor advertising displays are currently situated along the northern and western edges of the greater Tribal Parcel on which the Project Site is located.

2.2 Project Description

Foundation Windpower, LLC. ("Project Proponent"), is proposing to construct and operate one (1) 3.0 MW General Electric wind turbine mounted on a steel tubular-shaped tower. The wind turbine will be up to 448 feet in overall height, as measured from the ground to the top of the blade at the 12 o'clock position, with a rotor diameter of 337 feet. The proposed location of the wind turbine is depicted on Figure 2.

The point of interconnection to the power grid will be north of I-10 at the existing Poppet Flats Circuit located approximately 3,000 feet northwest of the Project Site. The electrical transmission lines connecting the wind turbine to the Poppet Flats Circuit will primarily be located underground within existing public rights of way or private utility easements (see Figure 2). The Poppet Flats Circuit currently serves the area north of I-10 and has sufficient capacity for this Project.

The Project will also include a temporary construction laydown area next to the wind turbine location for the delivery and temporary storage of the wind turbine components (tower, nacelle, blades, etc.).

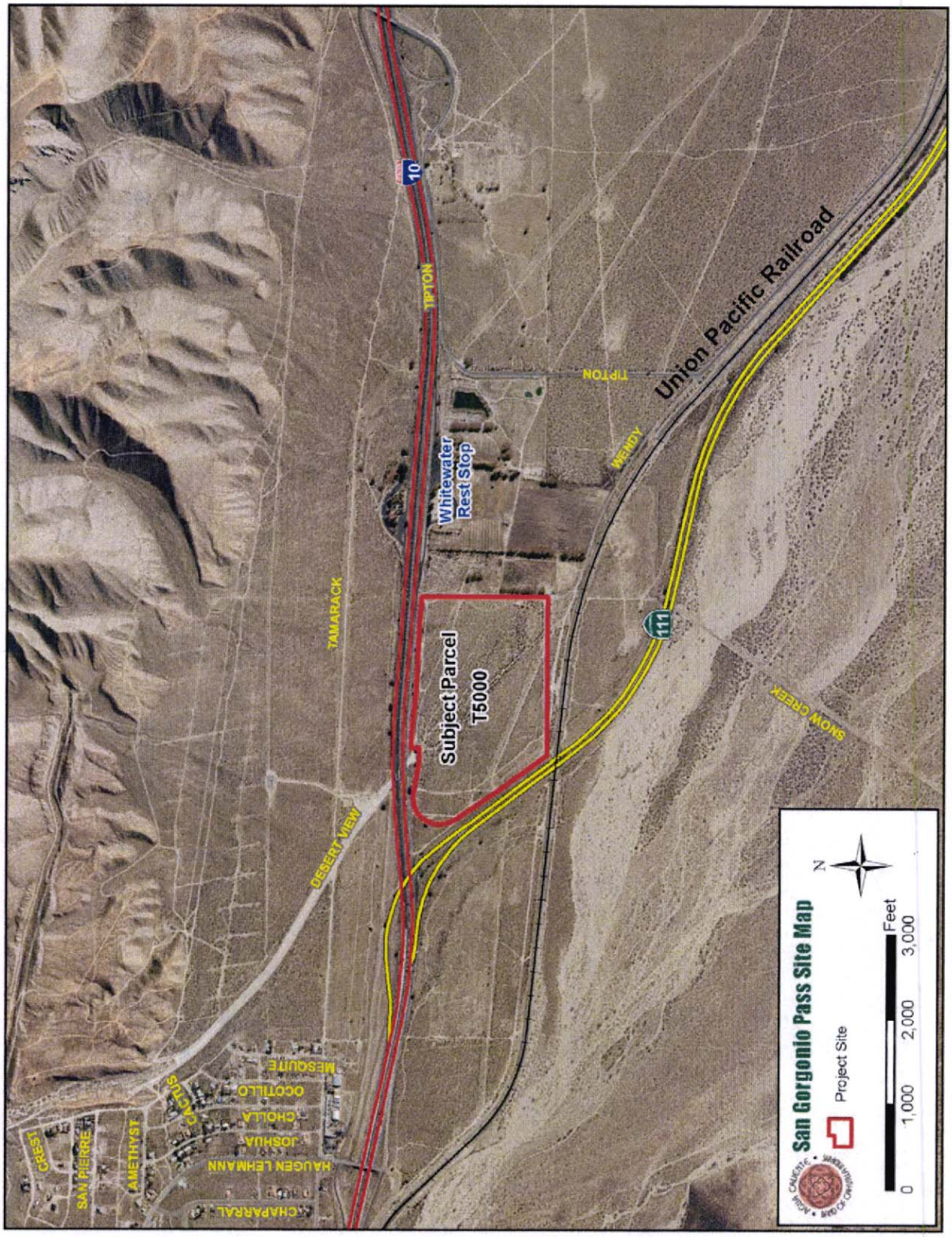


Figure 1 Project Vicinity Map

Figure 2 Project Site Location

SECTION 3: PROJECT ANALYSIS

3.1 Land Use

The Tribal Land Use Ordinance designates the Project Site as Tribal Enterprise, a land use designation intended to support the economic development of the Tribe. The Project is situated within a proven wind energy resource area and it is not located inside any of the conservation areas established by the Tribal Habitat Conservation Plan (THCP). Under the Palm Springs General Plan, the Project Site is designated Desert, which allows one (1) residential unit per 10 acres. Other permitted uses include "public facilities that comply with the intent of the goals and policies of the General Plan."

Since the Project will provide a direct economic benefit to the Tribe and its members, the proposed wind turbine is considered a public facility. As a public facility, the proposed wind turbine meets the intent of the following Palm Springs General Plan Recreation, Open Space & Conservation Element Goals and Policies:

Goal RC8	Employ the efficient, sustainable, and environmentally appropriate use and management of energy and mineral resources to ensure their availability for future generations.
Policy RC8.1	Facilitate the orderly and efficient development of wind energy resources and regulate their location, operation, and management through the Wind Energy Conversion Systems Development Agreement, conditional-use permit process, and appropriate environmental clearance.
Policy RC8.2	Support and encourage the use of alternative energy sources, such as cogeneration, solar, wind, ethanol and natural gas, fuel cell technologies, and other alternative and sustainable fuel sources and generating industries to provide more reliability in the supply of electricity to the City and to promote the development of clean, sustainable, and alternative energy industries in the City. The use of alternative energy sources should also be encouraged in the construction of new buildings and retrofit of existing buildings.
Policy RC8.12	Make all practical use of indigenous wind resources.

Except for the height limit and certain setback requirements, the proposed Whitewater Ranch Wind Project complies with a majority of the City's Wind Energy Conversion Systems (WECS) Ordinance standards and development criteria. The following subsections provide an analysis of these exceptions.

3.1.1 Wind Turbine Height Limit

The Agreement for Tribal/City Land Use Coordination on Certain Parcels states that the Project Report shall include "[a]n analysis of the compatibility of the proposed Project with the City's...development standards." The City's WECS Ordinance (Section 93.23.07(E)(1)(a) of the Palm Springs Municipal Code) states that "[n]o commercial WECS shall exceed three hundred (300) feet in height, measured at the top of the blade in the '12 o'clock position.'" At 448 feet, the proposed wind turbine would exceed this limit by 148 feet (49%). However, as permitted by the WECS Ordinance, the

City has granted height variances for wind projects with commercial WECS in excess of 300 feet.

The most recent height variance example would be the WKN Wagner, LLC Project ("WKN Project," Case No. 5.1268 – CUP and 6.525 – VAR) located northwest of the Indian Avenue/I-10 Interchange, where the City approved a height variance of 110 feet (37%) to allow two (2) 3.0 MW Vestas V90 wind turbines with heights up to 410 feet. In order to grant the height variance, the City had to make findings per Section 94.06.00(B.). If the findings contained in Section 94.06.00(B) applied to the Whitewater Ranch Wind Project, then the following analysis would justify a height variance for the Project:

1. *Because of special circumstances applicable to subject property, including size, shape, topography, location or surroundings, the strict application of the Zoning Code would deprive subject property of privileges enjoyed by other properties in the vicinity and under identical zone classification.*

   The wind conditions at the Project Site are impacted by Highway 111 to the west, which is upwind barrier elevated an average of 45 feet above the ground level of the actual wind turbine location. According to the American Wind Energy Association (AWEA), for optimal performance the bottom tips of the wind turbine's blades should pass three times above the tallest upwind barrier, or at least 25-30 feet above any physical wind barriers within 300-500 feet of the tower. With a hub height of 279 feet and a rotor diameter of 337 feet, the bottom tips of the blades at the 6 o'clock position will be passing approximately 111 feet above ground level at the wind turbine location. This height would put the bottom tips of the blades at an average of 66 feet above the elevation of Highway 111, and above AWEA's minimum recommended height clearance.

   Since no other parcels capable of commercial wind energy development in the vicinity of the Project are impacted by the elevated portion of Highway 111, the strict application of the height limit would deprive the Tribal property of privileges enjoyed by other properties in the vicinity and under identical zone classification.

2. *Any variance granted shall be subject to such conditions as will assure that the adjustment thereby authorized shall not constitute a grant of special privilege inconsistent with the limitations upon other properties in the vicinity and zone in which subject property is situated.*

   The increased height of the wind turbine will not constitute a grant of special privilege since existing wind projects in the vicinity have been granted similar height variances. The positive trade-off for this increase in height is that fewer wind turbines are needed to generate the same amount of energy, which has been supported by the City for similar wind projects.

3. *The granting of the variance will not be materially detrimental to the public health, safety, convenience or welfare or injurious to property and improvements in the same vicinity and zone in which subject property is situated.*

The Whitewater Ranch Wind Project is located within an area that is primarily used for wind energy development. The Project's wind turbine is more energy-efficient than older models and requires additional height for optimal performance; all necessary precautions such as safety and fire protection setbacks have been taken into consideration in the layout of the Project Site. Therefore, the granting of the height variance will not be detrimental to the public health, safety, convenience or welfare, or be injurious to property and improvements in the vicinity of the Project.

4. *The granting of such variance will not adversely affect the general plan of the city.*

The Project Site is designated Desert under the Palm Springs General Plan, which allows public facilities that comply with the intent of its goals and policies. The General Plan encourages the expansion of wind, solar, and other renewable sources, and as described in the beginning of this Section, granting the height variance will not adversely affect the Project's consistency with the General Plan's goals and policies.

3.1.2 Wind Turbine Setbacks

With the exception of the HWY 111 scenic setback, the Whitewater Ranch Wind Project meets all of the other WECS Ordinance setback requirements shown in Table 1.

TABLE 1: WECS ORDINANCE SETBACK EXCEPTIONS

WECS Development Standard	Required Setbacks	Proposed Setbacks
Public Road/Railroad Setback	1.25 x overall height = 560'	652'
Lot Line Setback	1.25 x overall height = 560'	780'
Downwind Setback	Five (5) rotor diameters = 1,685'	>1,690'
Interstate 10 Scenic Setback	500'	1,152'
HWY 111 Scenic Setback	2/3 mile (3,472')	1,504'

Public Road/Railroad Setback
As shown on Figure 2, the wind turbine would be located 652 feet (1.5 times its overall height) from the northern boundary of the Union Pacific rail line. The WECS Ordinance prohibits locating wind turbines "where the center of the tower is within a distance of 1.25 times the total WECS height from any public highway or road, railroad or off-site building...as measured from the boundary of the public right-of-way or railroad right-of-way."

Lot Line Setback
The wind turbine would be located approximately 780 feet (1.7 times its overall height) to the southwest from the closest non-Tribal property. The WECS Ordinance prohibits locating wind turbines "where the center of the tower is within a distance of 1.25 times the total WECS height from any lot line."

Downwind Setback
The WECS Ordinance includes a "Downwind Setback" requirement that prohibits locating wind turbines "where the center of the tower is within a distance of five (5)

rotor diameters from a lot line that is perpendicular to and downwind of, or within forty-five (45) degrees of perpendicular to and downwind of, the dominant wind direction." At 337 feet, the rotor diameter of the proposed wind turbine would require a Downwind Setback of 1,685 feet.
As shown on Figure 2, a small portion of the Downwind Setback encroaches on undeveloped land that is part of the Whitewater Rest Area south of Interstate 10, along a small portion of the Union Pacific rail line, and on portions of Wendy Road.

Interstate 10 and Highway 111 Scenic Setbacks
Two major regional thoroughfares, Interstate 10 and Highway 111, bound the north and west sides of the Project Site. The proposed wind turbine is located 1,152 feet from Interstate 10 and 1,504 feet from Highway 111. The WECS Ordinance prohibits locating wind turbines "where the center of the tower is within five hundred (500) feet of Interstate 10," and "where the center of the tower is within three thousand four hundred seventy-two (3,472) feet (two-thirds (2/3) mile) of State Highway 111."

The WECS Ordinance allows these scenic setbacks to be reduced, however, if "the characteristics of the surrounding property eliminate or substantially reduce considerations of scenic value." The Project Site is currently surrounded by uses that substantially reduce its scenic value. Visual simulations have been completed for the Project from multiple vantage points. The visual simulations confirm that the surrounding area is already highly developed with similar wind turbines and the eligible scenic highways in the area would not be adversely impacted by the incremental addition of one wind turbine. See the Project's Environmental Assessment for a more detailed analysis of the Project's potential impacts to scenic vistas or scenic highways.

SECTION 4: ENVIRONMENTAL AND CULTURAL RESOURCES

An Environmental Assessment (EA) has been prepared for the Whitewater Ranch Wind Project and is included as Attachment A. The EA analyzed the potential effects of the proposed Project including impacts related to aesthetics, air quality, biological resources, cultural resources, geology/soils, land use, noise, parking, population and housing, public safety, public utilities, traffic and circulation, and water quality and drainage. Based on the analysis contained in the EA and the mitigation measures it incorporates into the proposed Project, no adverse impacts to environmental or cultural resources are anticipated.

SECTION 5: FISCAL IMPACT ANALYSIS

The Project proponent shall be responsible for all costs associated with the off-site utility infrastructure improvements required for the proposed Project. No traffic related fiscal impacts are anticipated, and as described in the EA, the proposed Project may generate additional demand for fire and police protection services; however, such demand is expected to be minimal and not require additional emergency services beyond those that currently exist.

ATTACHMENT A

(Whitewater Ranch Wind Project Environmental Assessment)

AGUA CALIENTE BAND OF CAHUILLA INDIANS
ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Whitewater Ranch Wind Project

2. **Contact/Phone No:** Margaret E. Park, Director of Planning & Natural Resources (760) 883-1326

3. **Project Location:** The proposed Whitewater Ranch Wind Project ("Project") is located west of Tipton Road, between Interstate 10 to the north, an active ranch to the east, Highway 111 to the west, and the Union Pacific Railroad to the south, on approximately 83 acres of primarily vacant Tribal Trust land located within Section 9, Township 3 South, Range 3 East, of the San Bernardino Base and Meridian ("Project Site," see Exhibits A and B); nine outdoor advertising displays are currently situated along the northern and western edges of the Project Site.

4. **Assessor's Parcel Number: 516-070-022**

5. **Address:** 13-941 Tipton Rd, Whitewater, CA 92282

6. **General Plan Designation:** Desert (1 du/10 ac), Palm Springs General Plan

7. **Zoning:** Tribal Enterprise, Agua Caliente Band of Cahuilla Indians ("Tribe") Land Use Ordinance

8. **Description of Project:** The Project consists of the construction and operation of one (1) 3.0 MW General Electric wind turbine mounted on a steel tubular-shaped tower. The wind turbine will be up to 448 feet in overall height, as measured from the ground to the top of the blade at the 12 o'clock position, with a rotor diameter of 338 feet. The proposed location of the turbine is depicted on Exhibit B.

   The point of interconnection to the power grid will be at the existing Poppet Flats Circuit located north of Interstate 10 from the Project Site. The electrical transmission lines connecting the wind turbine to Poppet Flat Circuit will be located primarily underground, within existing public rights-of-way or private utility easements (see Exhibit B). The Poppet Flats Circuit currently serves the area north of I-10 and has sufficient reserve capacity for this Project.

   The Project will also include a temporary construction laydown area next to the turbine and the delivery and temporary storage of the turbine components (towers, nacelles, blades, etc.).

9. **Surrounding Land Uses & Setting:** The Project Site is situated on vacant Tribal Trust land within the City of Palm Springs. Surrounding land uses consist of vacant land, the Union Pacific Railroad and regional electrical transmission lines to the south, vacant and ranch land to the east, Highway 111 and vacant land to the west, and Interstate 10 and vacant land to the north.

10. **Other Public Agencies whose approval is required (e.g., permits, financing approval, or participation agreement):** Bureau of Indian Affairs, California Department of Transportation, Federal Aviation Administration, and Riverside County Flood Control District.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would potentially be affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- ☐ Aesthetics
- ☐ Air Quality
- ☐ Biological Resources
- ☐ Cultural Resources
- ☐ Geological Problems
- ☐ Hazards
- ☐ Land Use & Planning
- ☐ Mineral Resources
- ☐ Mandatory Findings of Significance
- ☐ Noise
- ☐ Population & Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation/Circulation
- ☐ Utilities & Service Systems
- ☐ Water

DETERMINATION:

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a FINDING OF NO SIGNIFICANT IMPACT (FONSI) will be prepared. ☐

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on the attached form have been added to the project. A FINDING OF NO SIGNIFICANT IMPACT (FONSI) will be prepared. ☑

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT STATEMENT (EIS) is required. ☐

I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect; 1) has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on the attached form, if the effect is a "potentially significant impact" or "potentially significant if not mitigated". An ENVIRONMENTAL IMPACT STATEMENT (EIS) is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIS, pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIS, including revisions or mitigation measures that are proposed upon the proposed project. ☐

Margaret Park
Signature

12.20.16
Date

MARGARET PARK
Printed Name

EVALUATION OF ENVIRONMENTAL IMPACTS:

ISSUES AND SUPPORTING INFORMATION SOURCES:

		POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
I.	**AESTHETICS** **Would the proposal:**				
a)	Affect a scenic vista or scenic highway?	☐	☐	☒	☐
b)	Have a demonstrable negative aesthetic affect?	☐	☐	☒	☐
c)	Create light or glare?	☐	☐	☒	☐

I-10 and HWY 111 are listed as "State Eligible" scenic highways per the Palm Springs and Riverside County General Plans. Visual simulations have been completed for the Project from multiple vantage points (see Exhibit C). These depict the Project using standard methods of estimation for size and perspective of the turbine. The Project will have one red flashing light on the top of the Wind Turbine pursuant to Federal Aviation Administration (FAA) requirements. The visual simulations confirm that the surrounding area is already highly developed with similar wind turbines and the eligible scenic highways in this area will not be adversely impacted by the incremental addition of one wind turbine.

II.	**AIR QUALITY** **Would the proposal:**				
a)	Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☒	☐	☐
b)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
c)	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

Environmental Setting

Regional Air Quality

Project Site is located at the eastern edge of the San Gorgonio Pass area, an area that is known for having high sustained winds and a prime location for wind energy development. This area is also part of the Salton Sea Air Basin (SSAB), within the South Coast Air Quality Management District (SCAQMD). Air quality conditions in the area are monitored by a SCAQMD monitoring station located at 590 East Racquet Club Road, Palm Springs, California, approximately nine miles east of the Project Site.

Regional and Federal Standards

The State of California and the U.S. Environmental Protection Agency (EPA) have established ambient air quality standards (AAQS) for seven air pollutants based on their health impacts. The seven air pollutants are: ground-level ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter with a diameter of 10 microns or less (PM_{10}), particulate matter less than 2.5 microns ($PM_{2.5}$), and lead (Pb). The State of California has also set limits for four additional pollutants: sulfates, hydrogen sulfide (H_2S), vinyl chloride, and visibility-reducing particles. All of the state and federal standards are designed to protect the health and welfare of the general population with a reasonable margin of safety.

The EPA is responsible for the implementation of the Clean Air Act on Tribal lands; state and local agencies, such as the California Air Resources Board (CARB), SCAQMD, and the Coachella Valley Association of Governments (CVAG), do not

have jurisdiction. However, although not required to do so for this Project, the Tribe will voluntarily comply with SCAQMD air quality regulations. This voluntary compliance does not include submission of the Tribe to SCAQMD authority or the payment of any fees to SCAQMD.

Regional Meteorology

Air quality in the Coachella Valley is also affected by atmospheric conditions, such as wind speed, wind direction, temperature, and rainfall. The climate in the Coachella Valley is largely caused by its terrain and geographical location, which is characterized by hot summer days and mild winters with low average precipitation. The Coachella Valley is bordered by the San Jacinto, Santa Rosa, and San Bernardino Mountains and is part of the Whitewater River watershed that drains into the Salton Sea. The highest peaks in the surrounding mountains are Mt. San Jacinto at 10,804 feet and Mt. San Gorgonio at 11,499 feet. Elevations on the valley floor range from 1,600 feet above sea level at the west end of the valley near Palm Springs, down to 250 feet below sea level at the Salton Sea.

Annual temperature variation in the Coachella Valley is extreme, with occasional winter lows in the mid-20's (in degrees Fahrenheit), and occasional summer highs in the mid-120s; the mean annual temperature is 74°F. The closest climatological station is located at the Palm Springs International Airport. The monthly average maximum temperature recorded at this station ranges from 69.6°F in January to 108.3°F in July, with an annual average maximum of 88.7°F. The monthly average minimum temperature recorded at this station ranges from 42.1°F in January to 74.8°F in July with an annual average minimum of 57.0°F.

Rainfall is extremely limited, with average annual precipitation rates of one to two inches. Most rainfall occurs during the winter months, although there is a monsoonal season during mid-summer that can result in high-intensity rains, producing flash floods and severe erosion. Average monthly rainfall at the Palm Springs International Airport monitoring station varied from 1.14 inches in January to 0.20 inches in July and September, with an average annual total of only 5.53 inches.

Seasonal winds can also be a concern in some regions of the Coachella Valley. Windstorms most frequently occur in the late spring and can cause extensive damage to unprotected soils, plants, structures, and vehicles. Airborne dust carried by these winds can compromise air quality and respiratory health; as a result, SCAQMD has implemented special rules for dust control in the Coachella Valley (Rule 430.1: Fugitive Dust Control Requirements For Coachella Valley Sources) that protects the public health from the effects of airborne dust while still considering the natural windstorms that occur frequently.

Regional Air Quality Management Plan

SCAQMD and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the SSAB. About every four years, SCAQMD prepares a new AQMP, updating the previous plan and its 20-year horizon. SCAQMD adopted the current 2012 AQMP on December 7, 2012, and describes it as a regional and multiagency effort (i.e., involving the SCAQMD Governing Board, CARB, SCAG, and EPA). State and federal planning requirements include developing control strategies, attainment demonstration, reasonable further progress, and maintenance plans. The 2012 AQMP also contains "an update on the air quality status of the Salton Sea Air Basin ... in the Coachella Valley, a discussion of the emerging issues of ultrafine particle and near-roadway exposures, an analysis of the energy supply and demand issues that face the Basin and their relationship to air quality" (SQAQMD, 2012). CARB approved the 2012 AQMP and incorporated it into its State Implementation Plan (SIP) on January 25, 2013.

Methodology and Analysis

The guidelines and emissions thresholds established by SCAQMD in its California Environmental Quality Act (CEQA) Air Quality Handbook are based on the attainment status of the SSAB with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set by the EPA at a level that protects public health with an adequate margin of safety, these emissions thresholds are regarded as conservative and may overstate an individual project's contribution to health risks.

The following table shows the emissions thresholds for each of the criteria pollutants that SCAQMD has established for the SSAB:

Table 1, SCAQMD Mass Daily Emissions Thresholds

Air Pollutant	Construction Phase	Operational Phase
ROCs	75 lbs/day	55 lbs/day
CO	550 lbs/day	550 lbs/day
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
Lead	3 lbs/day	3 lbs/day

Source: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf

Greenhouse Gasses

Greenhouse gases (GHG), including CO_2, methane (CH_4), nitrous oxide (N_2O), and O_3, are released during the combustion of fossil fuels, land clearing, agriculture, etc., and lead to an increase in the GHG effect. GHGs are present in the atmosphere naturally, released by natural sources or formed by secondary chemical reactions taking place in the atmosphere. However, in the last 200 years, substantial quantities of GHGs have been released into the atmosphere due to human activities. These extra emissions are increasing GHG concentrations in the atmosphere, enhancing the natural GHG effect, which is believed to be causing global warming.

Appendix G of the CEQA Checklist includes the following questions pertaining to GHG emissions on a project-specific level. They state:

> "Would the project:
>
> a) Generate greenhouse gas emission, either directly or indirectly, that may have a significant impact on the environment?
>
> b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?"

The nature of this Project implies that there is no impact for either of these questions. The construction equipment utilized for the installation of the wind turbine does generate GHG emissions; however, these are short-lived and on a small scale, and the end result is the installation of alternative energy sources that will contribute to a continued reduction of the use of fossil fuels in electricity generation. In addition, the installation of the wind turbine does not conflict with any state plans to reduce GHG. This Project would actually contribute to the implementation of these plans including the state mandate that 33 percent of electricity in California must come from renewable sources by 2020.

Impacts

Approximately three (3) acres will be disturbed during the construction of the wind turbine and local access roads. The Project was analyzed using CalEEMod (http://www.caleemod.com/CalEEMod), a standardized program that is widely accepted to determine air quality impacts under CEQA, which calculated expected Project emissions with mitigation measures. Most of the Project Site will remain open space, only a 30 foot diameter area and a small 10x10 foot pad will be installed for the wind turbine resulting in a very small area (less than 0.05 acre) covered by permanent structures.

Table 2 shows the emissions calculated by the CalEEMod program using the above acreages and the following construction schedule:

- Road Installation and pad grading: February 1, 2017 through March 30, 2017;
- Turbine construction: April 1, 2017 through August 30, 2017; and
- Final road restoration and grading: September 1, 2017 through December 30, 2017

Table 2 Project Estimated Emissions

Source	Pollutant Emissions, lbs/day						
	CO	ROC	NO_x	SO_2	PM_{10}	$PM_{2.5}$	CO_2
Project Construction Emissions, Unmitigated	2.8	0.44	3.9	0.004	0.37	0,04	361
Project Construction Emissions, Mitigated	2.8	0.44	3.9	0,004	0.37	0.04	361
SCAQMD Construction Thresholds	**550**	**75**	**100**	**150**	**150**	**55**	**No Threshold**
Significant Construction Emissions?	No	No	No	No	No	No	
Project Operation	0.0	0.0	0.0	0.00	0.0	0.0	0.0
SCAQMD Operation Thresholds	**550**	**55**	**55**	**150**	**150**	**55**	**No Threshold**
Significant Operational Emissions?	No	No	No	No	No	No	

With the incorporation of certain mitigation measures such as water applications and adherence to the Coachella Valley Fugitive Dust Control Rule 403.1, the Project does not exceed SCAQMD construction thresholds (see Exhibit E, CalEEMod run).

Mitigation
The following mitigation measures were included in CalEEMod to limit particulate matter emissions during construction:

- Water exposed surfaces at least three (3) times per day;
- Limit vehicle speeds on unpaved roadways; and
- Manage dust at each entry to the site.

The following mitigation measure is intended to reduce NO_2 emissions from the equipment used during construction:

- Restrict idling time to 15 minutes or less.

Table 2 and Exhibit E shows that the mitigated Project construction emissions will not exceed the SCAQMD construction threshold in any of the seven air pollutant categories. Therefore, with the implementation of the above mitigation measures, which are more completely described in Section XVIII, no adverse impacts on air quality are anticipated.

ISSUES AND SUPPORTING INFORMATION SOURCES:

	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
III. BIOLOGICAL RESOURCES **Would the proposal result in impacts to:**				
a) Endangered, threatened or rare species or their habitats (including, but not limited to plants, fish, insects, animals and birds)?	☐	☒	☐	☐

b) Locally designated, native species (e.g. palm trees, mesquite, etc)?	☐	☐	☐	☒
c) Locally designated natural communities (e.g. palm, cacti or creosote oasis, etc.)?	☐	☐	☒	☐
d) Wetland habitat (e.g. marsh, riparian and vernal pool)?	☐	☐	☐	☒
e) Wildlife dispersal or migration corridors?	☐	☐	☐	☒

Environmental Setting

The vegetation community occurring within the Project Site has been mapped as Sonoran creosote brush scrub, the most widespread vegetation type in the Colorado Desert, and it is specifically comprised of medium- and large-sized creosote (*Larrea tridentata*) shrubs with little vegetation in between. The Project Site contains low quality habitat in an area that has experienced extensive fragmentation due to Interstate 10, Highway 111, regional electrical transmission lines, and the Union Pacific Railroad. It has been impacted by occasional off-road vehicle activity and there are several dirt roads that provide access to the nine outdoor advertising displays situated along its northern and western edges. A 20-inch underground petroleum pipeline crosses the southern portion of the Project Site from southeast to northwest, and two underground natural gas lines cross the northern portion from southeast to northwest.

The Project Site is located at the eastern edge of the San Gorgonio Pass area, an acknowledged wildlife corridor between the Peninsular and Transverse mountain ranges, where wildlife are known to use the underpasses below Interstate 10 and Highway 111 to migrate between the two. Located directly north of the Project Site is an underpass below Interstate 10 for Cottonwood Canyon Wash; however, this underpass is unlikely to be used as a wildlife corridor because Cottonwood Canyon Wash terminates at the Project Site, which has been cutoff and isolated from the rest of the San Gorgonio Pass area by Union Pacific Railroad to the south, Highway 111 to the west, and Whitewater Ranch to the east (see Exhibit D). Conversely, the Whitewater and Stubbe Canyon Washes located approximately one to two miles east and west of the Project Site provide clear and unobstructed connectivity between the two mountain ranges.

Cottonwood Canyon Wash is a desert ephemeral tributary that has been improved by the Riverside County Flood Control District with a concrete channel beginning approximately one mile north of Interstate 10. This channel carries stormwater runoff under the Interstate and onto the Project Site where it terminates. Cottonwood Canyon Wash is a first-order stream located within the Whitewater River watershed; however, there is no riparian vegetation associated with it, and because it terminates at the Project Site, this wash does not impact the chemical, physical, or biological integrity of the closest Traditional Navigable Waterway (Salton Sea). Lacking a significant nexus, Cottonwood Canyon Wash does not qualify as a Water of the United States based on the criteria established by the U.S. Army Corps of Engineers; therefore, a Clean Water Act Section 404 Permit and Section 401 Water Quality Certification are not required for this Project.

Since the Project is located on Tribal Trust land, it is subject to the requirements of the Tribal Habitat Conservation Plan (THCP). The Project Site is located within the Valley Floor Planning Area (VFPA) and the following THCP covered species have the potential to occur: Desert Tortoise (Federal Threatened), Burrowing owl (Bird of Conservation Concern), Palm Springs pocket mouse, Palm Springs ground squirrel (Federal Candidate for Listing), Coachella Valley Jerusalem cricket, Coachella Valley Milk-vetch (Federal Endangered), and Le Conte's Thrasher (Bird of Conservation Concern). In lieu of focused species surveys, presence will be assumed for all covered species that have potential to occur within the Project Site.

In addition to the species covered by the THCP, the U.S. Fish and Wildlife Service (USFWS) identified concerns in a comment letter dated June 17, 2011, about the potential for the proposed wind turbine to affect Golden Eagles (*Aquila chrysaetos*) and migratory birds. Subsequently, the USFWS released voluntary Land-Based Wind Energy Guidelines ("Guidelines," dated March 23, 2012) in response to increasing wind energy development United States, which "use a 'tiered approach' for assessing potential adverse effects to species of concern and their habitat" (USFWS, 2012). The

following paragraphs address the concerns raised in the USFWS comment letter and the issues/questions identified under Tiers 1 and 2 of the Guidelines.

The Bald and Golden Eagle Protection Act (BGEPA) prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" golden eagles, including their parts, nests, or eggs. The BGEPA defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." This species is known to occur in woodlands, savannahs, agricultural lands, and at the edge of desert habitats, where it preys primarily on large rodents and lagomorphs. Golden eagles produce between 1-3 eggs during their breeding season, which occurs from late January through August. (CDFW, 2016).

During field surveys conducted by Philip Unitt, Curator, Department of Birds and Mammals, San Diego Natural History Museum and others from December 6 through December 10, 2010, a pair of Golden Eagles were seen near the Whitewater Rest Stop. An email correspondence from Mr. Unitt dated May 31, 2011, indicated they most likely drifted over from nearby Chino Canyon, where Jeff Lincer, Research Director, Wildlife Research Institute, Inc. told Mr. Unitt the pair nests. There are two other known occurrences of Golden Eagles approximately five miles northeast of the Project Site. California Natural Diversity Database (CNDDB) occurrence # 9 is near the Whitewater Trout Farm; this sighting was recorded in 1987. The second CNDDB occurrence (occurrence # 267) is located near Windy Point, about 2 miles south of Whitewater Hill (CNDDB, 2016).

Under the Migratory Bird Treaty Act (MBTA), it is illegal for people to "take" migratory birds, their eggs, feathers or nests. Take is defined in the MBTA to include any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing or transporting any migratory bird, nest, egg, or part thereof. Studies by McCrary et al. in 1983 and 1984 estimated that 69 million birds migrate through the Coachella Valley annually. The study by McCray et al. in 1983 identified that the mean altitude above ground level of all passerine migratory flights in the Whitewater area was 380 meters (1,247 feet) above ground level. The filed surveys conducted by Mr. Unitt in December 2010 identified "one flock of Canada Geese and a few flocks of California Gulls high overhead flying west," supporting the migratory altitudes recorded in the 1983 McCrary et al. study.

The study by McCrary et al. in 1986 estimated that 6,800 birds were killed annually at the San Gorgonio Pass Wind Resource Area (WRA) based on 38 dead birds (passerines) found while monitoring nocturnal migrants. Considering the high number of passerines migrating through the area relative to the numer of passerine fatalities, the authors of the 1986 study concluded that this level of fatality was biologically insignificant (McCrary et al., 1986).

Studies conducted by Mudry (2006), Anderson et al. (2005), and Chatfield et al. (2009), provide information about impacts to birds from other wind farms in the area. The results of these studies indicate that avian impacts, especially towards raptors, have been low in the San Gorgonio Pass WRA compared to other WRAs in California (e.g. Altamont Pass). Anderson et al. (2005) conducted an analysis of avian activity patterns and mortality in the San Gorgonio Pass WRA and estimated an unadjusted raptor fatality rate of 0.006 fatalities per turbine per year, and noted that this is significantly lower than estimated rates from the Altamont Pass and Tehachapi Pass WRAs.

Avian and bat mortality studies conducted at the Dillon Wind Energy Facility containing 45 wind turbines, located north of Interstate 10 and east of Highway 62, identified 45 bird fatalities comprising 24 species and 21 bat fatalities comprising five species during 471 standard carcass surveys (Chatfield et al., 2009). The authors of this study estimated a mortality rate of 4.71 fatalities per turbine per year; however, contrary to the results of Anderson et al. (2005), no raptor mortalities were observed. Based on the results of the above mentioned surveys, the most likely birds to be impacted by the proposed Project are songbird species migrating during the spring and fall.

Impacts

The development of the Project Site will result in the loss of three (3) acre of Sonoran creosote brush scrub, which is not considered significant. Other direct impacts include construction related activities that would disturb wildlife in the vicinity of the Project. Generally, these temporary impacts are also considered less than significant; however, during bird nesting

season construction has the potential to disrupt nesting activities. Disruption of actively nesting Golden Eagles and migratory bird species could occur unless preventive mitigation measures are implemented.

Even though the wind turbine proposed to be constructed as part of this Project will have similar blade tip speeds compared to the smaller turbines in the vicinity, the wind turbine will have fewer rotations per minute. Lower rotation rates may be partly responsible for the lower raptor collision rates observed at most wind facilities where larger turbine have been installed (NAS, 2007). Additionally, the turbine will be well below the average passerine migratory flight altitude in the Whitewater area; therefore, based on previous bird and bat surveys in the San Gorgonio Pass WRA, up to five fatalities per turbine per year could be expected during the operation of the Project. Given the large number of birds and bats in the San Gorgonio Pass WRA, this rate of mortality is not expected to be significant.

Mitigation
Impacts to sensitive species will be mitigated in accordance with the requirements of the THCP. Projects in the VFPA are also required to pay the THCP Mitigation Fee that will be used to acquire and manage Habitat Preserve lands. To prevent the take of nesting Golden Eagles and migratory bird species, bird nesting surveys in accordance with U.S. Fish and Wildlife Service protocols shall be conducted prior to any clearing or grubbing activity. With the implementation of these mitigation measures, which are more completely described in Section XVIII, impacts to biological resources are not expected to be significant.

ISSUES AND SUPPORTING INFORMATION SOURCES:	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
IV. CULTURAL RESOURCES **Would the proposal:**				
a) Disturb paleontological resources?	☐	☐	☐	☒
b) Disturb archaeological resources?	☐	☒	☐	☐
c) Affect historical resources?	☐	☐	☐	☒
d) Have the potential to cause a physical change, which would affect unique ethnic cultural values?	☐	☐	☐	☒
e) Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☐	☒

The Project Site is located on Tribal Trust land, on the south half of the southeast quarter of Section 9, Township 3 South, Range 3 East, of the San Bernardino Base and Meridian. Surrounding land uses consist of vacant land, the Union Pacific Railroad and regional electrical transmission lines to the south, vacant and ranch land to the east, Highway 111 and vacant land to the west, and Interstate 10 and vacant land to the north.

A search of the Tribal Historic Preservation Office (THPO) Registry indicated one archaeological assessment has been conducted on the Project Site and one cultural resource has been identified on the subject property. Located within one mile of the Project area there are 23 previously recorded cultural resources and 33 previous field investigations. Considering the above information, the THPO has recommended mitigation measures to avoid potentially significant impacts to cultural resources; these mitigation measures are included in Section XVIII.

V. GEOLOGY AND SOILS

Would the proposal result in or expose people to potential impacts involving:

a) Fault rupture?	☐	☐	☐	☒
b) Seismic ground shaking?	☐	☐	☐	☒
c) Seismic ground failure, including liquefaction?	☐	☐	☐	☒
d) Landslides or mudflows?	☐	☐	☐	☒
e) Erosion, changes in topography or unstable soil conditions from excavation, grading or fill?	☐	☐	☐	☒
f) Subsidence of the land?	☐	☐	☐	☒
g) Expansive soils?	☐	☐	☐	☒
h) Unique geologic or physical features?	☐	☐	☐	☒

Environmental Setting

The Project Site is located in the San Gorgonio Pass area, an east-west trending topographically low-lying area between the San Bernardino and San Jacinto mountains at the western edge of the Coachella Valley. Located at the northernmost extent of the Salton Trough, the Coachella Valley is an active rift valley. Formed by rifting along the East Pacific Rise, the structure of the Salton Trough today is largely a product of the ongoing tectonic activity within the San Andreas Fault system, which is located approximately six miles to the northeast of the Project Site.

Fault Rupture

Fault rupture refers to the fissuring and offset of the ground surface along a rupturing fault during an earthquake (City of Palm Springs General Plan EIR, 2007). The Alquist-Priolo Act was enacted in 1972 and set forth fault zones where development constraints are implemented in an effort to minimize impacts from fault rupture. The Project Site is not located within an Alquist-Priolo Earthquake Fault Zone and no mapped faults or lineaments possibly associated with active faulting have been identified within or trending toward the property.

Strong Seismic Ground Shaking

The Project could experience strong seismic ground shaking associated with the San Andreas fault and regional active faults such as the San Jacinto fault. The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no mapped faults or lineaments possibly associated with active faulting have been identified within or trending toward the property.

Liquefaction

Liquefaction typically occurs within the upper 50 feet of the surface, when saturated, loose, fine-to-medium grained soils (sand and silt) are present. Earthquake shaking suddenly increases pressure in the water that fills the pores between soil grains, causing the soil to lose strength and behave as a liquid (City of Palm Springs General Plan EIR, 2007). According Figure 5.6-4 of the General Plan EIR and the Geotechnical Engineering Report prepared for the Project Site by Earth Systems Global, Inc. dated July 12, 2011, the potential for liquefaction to occur at the Project Site is considered low as groundwater depths in this area are greater than 50 feet.

Landslides
The potential for landslides (slope failure) at the Project Site would be considered low, since it is relatively flat and not in close proximity to any steep slopes.

Subsidence
Ground subsidence is the gradual settling or sinking of the ground surface with little or no horizontal movement. This phenomenon is associated with the over-extraction of groundwater in the Coachella Valley. The prevention of this type of subsidence has been implemented in water management plans of water districts in the valley. Considering the management of groundwater conservation and recharge that is implemented by the Coachella Valley Water District, the potential for this type of subsidence at the Project Site is low.

Soils
Soils at the Project Site are alluvial sand and gravel, which typically decrease in grain size with distance from the mouth of canyons (City of Palm Springs General Plan EIR, 2007). Alluvial sediments found in the valley and canyon areas of the City, similar to those at the Project Site, are largely composed of granular soils such as silty sand, sand, gravel and boulders. These soils are also typically in the "very low" to "low" range of expansion potential (City of Palm Springs General Plan EIR, 2007).

Impacts
Because the Project is a wind power generation facility in a thinly populated area exhibiting low relief, and not a more critical structure such as a petroleum pipeline or an earth dam, the risks to human safety related to seismic hazards, such as a tower collapse or a landslide, are minimal. The Project will adhere to the recommendations made in the Geotechnical Engineering Report prepared by Earth Systems Global, and the construction of the wind turbine will be subject to Tribal Building Code standards. The Project's Storm Water Pollution Prevention Plan will also address soil erosion and incorporate erosion control measures.

ISSUES AND SUPPORTING INFORMATION SOURCES:	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
VI. HAZARDS **Would the proposal involve:**				
a) Possible interference with an emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) The creation of any health hazard or potential health hazard?	☐	☐	☐	☒
c) Exposure of people to existing sources of potential health hazards?	☐	☐	☐	☒
d) Increased fire hazard in areas with flammable brush?	☐	☐	☒	☐

Environmental Setting
The Project Site is open desert terrain with nine outdoor advertising displays situated along its northern and western edges. A 20-inch underground petroleum pipeline crosses the southern portion of the Project Site from southeast to northwest, and two underground natural gas lines cross the northern portion from southeast to northwest. Surrounding uses include Interstate 10 to the North, an active ranch to the west containing no habitable dwellings, the Union Pacific Railroad to the South, and Highway 111 to the west.

According to the California Department of Toxic Substances Control's Envirostor database, the Project is not located on a hazardous materials site and is not located near any such sites. A Phase I Environmental Site Assessment (ESA) Report was prepared by Earth Systems Southwest (ESSW) on July 12, 2011, that evaluated the Project Site for the presence of Recognized Environmental Conditions (REC) related to current or past uses, handling, storage, or disposal of hazardous materials or petroleum products on or near the Project Site. The ESA Report found no evidence of on-site manufacture, storage, or disposal of hazardous materials or RECs other than minor amounts and concentrations of common debris along the perimeter of the Project Site. Since no RECs were identified, the ESA Report determined that further investigations were not warranted (ESSW, 2011).

Impacts

During construction of the Project, small quantities of hazardous and potentially hazardous chemicals will be used including gasoline, diesel fuel, motor oil, hydraulic fluid, solvents, cleaners, sealants, welding flux, various lubricants, paint, and paint thinner. Construction personnel will be trained to handle these materials properly; however, small spills may inadvertently occur. The potential environmental effects from any spill are expected to be limited to small areas of contaminated soil. If a spill occurs, any contaminated soil will be placed into barrels or trucks for offsite disposal as a hazardous waste.

During operation of the Project, the turbine lubricants used in the turbine gearbox may be potentially hazardous; however, the gearbox will be sealed to prevent lubricant leakage and it will be sampled periodically and tested to confirm that gearbox lubricant retains adequate lubricating properties. When lubricants have degraded to the point where they no longer contain sufficient lubricating properties, the gearbox will be drained and new lubricant will be added. The sealed transformers also contain oil for heat dissipation; however, they will not be subject to periodic inspection and the oil does not need replacement.

Construction equipment and operation/maintenance vehicles will be properly maintained at all times to minimize leaks of motor oils, hydraulic fluids, and fuels. To minimize the potential for harmful releases through spills or contaminated runoff, chemicals will be stored in tanks or drums located within secondary containment areas. Use of extremely hazardous materials is not anticipated. Storage and use of hazardous materials will be subject to a Hazardous Waste Management Plan approved by the Tribe, and additional spill control and cleanup requirements will be specified in the Project's Storm Water Pollution Prevention and Spill Prevention Control and Countermeasures Plans.

Upon installation, the turbine will be setback at least 1.25 times its overall height from Interstate 10, Highway 111, and the Union Pacific Railroad, and outside of the easements/safety setbacks established for the underground petroleum pipeline and two underground natural gas lines. In the unlikely event that the wind turbine suffers a catastrophic event and collapse, the 1.25 safety setback is intended to protect the adjacent roadways and railroad from being impacted. Being underground, both the petroleum pipeline and two natural gas lines would be shielded from such an event.

The closest facility where people could be exposed to any potential health hazard from the Project is a freeway rest stop located approximately 1,700 feet to the northeast of the proposed turbine location. The nearest residences are located over 5,000 feet away, separated from the Project Site by Interstate 10 and Highway 111. Given these distances, neither the rest stop nor the residences will be exposed to potential health hazards as a result of the Project.

Since the proposed wind turbine is over 200 feet high, the Project will also be subject to review by the Federal Aviation Administration (FAA). Through its Notice of Proposed Construction or Alteration (Form 7460.1), the FAA will review the Project prior to construction and it is expected that a Determination of No Hazard to Air Navigation will be issued by that agency.

VII. LAND USE AND PLANNING

Would the proposal:

a) Conflict with general plan designation or zoning?	☐	☐	☐	☒
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	☐	☐	☐	☒
c) Be incompatible with existing land use in the vicinity?	☐	☐	☐	☒
d) Affect agricultural resources or operations (e.g. impacts to soils or farmlands, or impacts from incompatible land uses)?	☐	☐	☐	☒

Environmental Setting

The Project is situated within a proven wind energy resource area on undeveloped land bounded by the Interstate 10 Freeway, Highway 111, the Union Pacific Railroad, and an active ranch. The closest residential community is located over 5,000 feet away, north of Interstate 10, and there are other wind farms located north, east, and west of the Project Site. The Tribal Land Use Ordinance designates the Project Site as Tribal Enterprise, a land use designation intended to support the economic development of the Tribe. The Project Site is not located inside any of the conservation areas established by the THCP.

Impacts

The proposed Project would not conflict with the Tribal Land Use Ordinance or THCP, and it is compatible with existing land uses in the vicinity which include wind farms.

ISSUES AND SUPPORTING INFORMATION SOURCES:

VIII. MINERAL RESOURCES

Would the proposal:

	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
b) Result in the loss of availability of any known mineral resource that would be a future value to the region and residents of the community?	☐	☐	☐	☒

Environmental Setting

The California Geological Survey Mineral Resources Project classifies lands throughout the state that contain regionally significant mineral resources. The classification of mineral resources is based on geologic factors and requires that the State Geologist classify mineral resources areas as Mineral Resource Zones (MRZ's), Scientific Resource Zones or Identified Resource Areas. The Project Site is located within the MRZ-3 Zone, which is an area where the significance of mineral deposits cannot be determined from the available data (City of Palm Springs General Plan, 2007).

Impacts
The proposed Project would not result in the loss of any known mineral resources given the small area of disturbance associated with the construction of the wind turbine. The Project is also not located near any locally-important mineral resource recovery sites and would not interfere with any such mining operations.

IX. NOISE

Would the proposal result in:

a) Increases in existing noise levels?	☐	☐	☒	☐
b) Exposure of people to severe noise levels?	☐	☐	☐	☒

Environmental Setting
The Project Site is bounded by Interstate 10 to the north, the Union Pacific Railroad to the south, Highway 111 to the west, and an active ranch to the east; the ranch contains no habitable dwellings. Most of the ambient noise in the Project vicinity is generated by the high winds in the San Gorgonio Pass area, traffic along Interstate 10 and Highway 111, and frequent trains traveling along the Union Pacific Railroad. The closest facility where people would be exposed to any potential noise generated from the Project is a freeway rest stop located approximately 1,700 feet to the northeast of the proposed turbine location. The closest sensitive noise receptor to the Project Site is a small residential community located to the northwest with the closest residence located over 5,000 feet away, separated from the proposed wind turbine by Interstate 10 and Highway 111.

Being located adjacent to the south and north sides of Interstate 10, and less than a quarter mile from a heavily traveled railroad track, the rest stop and the residential community nearest to the Project Site are exposed to significant traffic and railroad noise. The noise contour maps included in the Noise Element of the Palm Spring General Plan indicate that traffic and/or railroad noise levels are above 65 dB CNEL at the rest stop and the nearest residence to the Project Site.

Impacts
Noise during construction would be generated by equipment and vehicles necessary for the installation of the wind turbine. The construction period is expected to last only a couple of weeks and construction activity would be limited to 7:00 am to 7:00 pm, Monday through Saturday. The following guidelines will be followed during construction to minimize short-term noise impacts:

- All noise-producing construction and operation equipment and vehicles using internal combustion engines shall be equipped with mufflers in good operating condition that meet or exceed original factory specification; and
- The use of horns, whistles, electronic alarms, sirens or alarm bells shall be for safety warning purposes only.

The maximum noise level that will be generated the wind turbine is calculated to be 105 dBA (at the Nacelle) operating in the highest noise emission level mode. At this maximum sound level, noise emanating from the wind turbine would be approximately 40 dBA at the rest stop and 31 dBA at the nearest residence, which levels are equivalent to a quiet office or suburban residential area. However, this additional noise generated by the wind turbine would likely be drowned out by the adjacent freeway and railroad; therefore, the Project is not expected to significantly impact existing noise levels.

X. POPULATION AND HOUSING

Would the proposal:

a) Cumulatively exceed official regional or local population projections?	☐	☐	☐	☒

b)	Include substantial growth in an area either directly or indirectly (e.g. through projects in an underdeveloped area or extension of a major infrastructure)?	☐	☐	☐	☒
c)	Displace any existing housing, especially affordable housing?	☐	☐	☐	☒

Environmental Setting
The proposed Project involves the construction and operation of a wind turbine on undeveloped land within a proven wind energy resource area. It is anticipated that approximately 15 workers per day will be required, on average, for construction of the Project over a four week period. It is anticipated that construction workers would be hired from the local area. Up to two employees will work at the Project Site as needed to maintain the turbine during the life of the Project. These positions are specialized and would not necessarily be filled from the local work force.

Impacts
Because the Project is not residential in nature, does not improve or create any new public roads, and a majority of its employees would be hired from the local workforce, the Project would not induce population growth in the area. The Project would result in additional electricity supplied to the power grid; however, this increase is in response to Riverside County's growing demand for power and the state mandate that 33 percent of electricity in California must come from renewable sources by 2020. The Project would not displace any housing or people.

ISSUES AND SUPPORTING INFORMATION SOURCES:		POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
XI.	**PUBLIC SERVICES** **Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:**				
a)	Fire Protection?	☐	☐	☒	☐
b)	Police Protection?	☐	☐	☒	☐
c)	Tribal Rangers?	☐	☐	☐	☒
d)	Tour Groups?	☐	☐	☐	☒
e)	Schools?	☐	☐	☐	☒
f)	Maintenance of public facilities, including roads?	☐	☐	☒	☐
g)	Other governmental services?	☐	☐	☐	☒

Environmental Setting
The Project Site is currently served by the Palm Springs Fire (PSFD) and Police (PSPD) Departments. Access to the Project Site during construction and operation would be from Wendy Road via Tipton Road, and either Interstate 10 and/or Highway 111.

The PSFD provides fire, paramedic, and emergency services within the corporate boundaries of the City, and the nearest station to the Project Site is Station #3, located at 590 E. Racquet Club. Station #3 has one 1,500 gpm (gallons per minute) engine and one 1,500 gpm reserve engine that are regularly staffed (Blumberg, 2016). The PSFD is an

emergency response force with capabilities to provide fire and rescue operations, paramedic emergency medical service, Aircraft rescue firefighting, swift water rescue, trench rescue, low angle rescue, and hazardous materials incident response (PSFD, 2016). Additionally, the City maintains mutual and automatic aid agreements with other local jurisdictions such as Riverside County and Cathedral City (City of Palm Springs General Plan, 2007).

Located at 200 South Civic Street, the PSPD would serve the Project with police services. The PSPD approximately 90 sworn police officer positions, which includes the Chief and two Area Lieutenants (City of Palm Springs, 2014). Desired response times for emergency calls and non-emergency calls are 5 minutes and 30 minutes, respectively, and the PSPD maintains mutual aid agreements with other local law enforcement agencies in the event of a major incident that exceeds PSPD's resources (City of Palm Springs General Plan, 2007).

Impacts
The wind turbine to be constructed as part of the proposed Project would be free-standing, painted steel, conical-type (tubular) structures which is not habitable. Additionally, the turbine is equipped with a central Supervisory Control and Data Acquisition system. In the event of a fire fault or excess vibration or temperature, the turbine(s) will be halted immediately, and an alarm condition will be activated in the control system, which will notify first responders. With the incorporation of these fire safety measures, the Project is not expected to significantly impact fire protection services.

The proposed Project is not anticipated to increase service calls to the PSPD. It is located on Tribal Trust property and includes the installation of a gated entry point, and access to the Project Site will be restricted to authorized personnel only.

Construction activities are expected to take a period of four weeks, during which the Project would generate additional traffic on local access roads as construction workers commute to and from the Project Site. Several large transport trucks will deliver the wind turbine and crane to the Project Site. These construction related vehicle trips would be short term in nature and are not expected to significantly impact local roads. Operation and maintenance activities on the wind turbine would require, on average, less than one daily trip to and from the Project Site and are also not expected to significantly impact local roads.

XII. RECREATION

Would the proposal result in:

a) Increase the demand for other recreational facilities?	☐	☐	☐	☒
b) Affect existing recreational opportunities?	☐	☐	☐	☒

The proposed Project involves the construction and operation of a wind turbine on undeveloped land within a proven wind energy resource area. The Project is not residential and does not include any recreational facilities. Because the Project is not residential and no substantial permanent employment would be generated, it will not substantially increase the demand for recreational facilities or affect existing recreational opportunities.

XIII. TRANSPORTATION / CIRCULATION

Would the proposal result in:

a) Increased vehicle trips or traffic congestion?	☐	☐	☒	☐
b) Hazards to safety from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☒
c) Inadequate emergency access or access to nearby uses?	☐	☐	☐	☒

d)	Insufficient parking capacity on or off-site?	☐	☐	☐	☒
e)	Hazards or barriers for pedestrians, hikers, bicyclists or equestrian traffic?	☐	☐	☐	☒
f)	Conflicts with adopted policies supporting alternative transportation (e.g. bus turn-outs, jeep tours, hikers, equestrians)?	☐	☐	☐	☒
g)	Other traffic impacts?	☐	☐	☒	☐

Environmental Setting

The Project Site is bounded by Interstate 10 to the north, the Union Pacific Railroad to the south, Highway 111 to the west, and Whitewater Ranch to the east. Access to the Project Site is provided by Wendy Road via Tipton Road, and either Interstate 10 or Highway 111. Wendy and Tipton Roads are lightly traveled paved undivided two-way roads. Wendy Road is a dead end street that connects the Project Site to Tipton Road, which provides access to Interstate-10 via the Whitewater Interchange, and Highway 111 via an at-grade crossing of the Union Pacific Railroad just north of the highway.

Interstate 10 is an eight-lane freeway under the jurisdiction of the California Department of Transportation (Caltrans) providing regional access and the movement of goods and vehicles through the Coachella Valley. The freeway currently carries up to 109,000 vehicles per day northwest of Highway 111 and up to 95,000 trips southeast of Highway 111 (Caltrans, 2014). These traffic volumes indicated that the Interstate is operating at Levels of Services A and B, northwest and southeast of the Highway 111. Highway 111 is a four-lane expressway currently carrying 18,000 peak vehicle trips per day south of Interstate 10 at Tramway Drive (Caltrans, 2014). Based on Riverside County standards for a four lane expressway, Highway 111 is currently operating at LOS A south of Interstate 10.

Impacts

Construction Related

Construction activities are estimated to span a period of four weeks starting in early 2017. During the construction period, the Project would generate additional traffic on local roads as construction workers commute to and from the Project Site, construction equipment and building materials are delivered to the Project Site, and the crane and turbine components are delivered for assembly on-site. Internal trips would also be generated as workers utilize the various pieces of construction equipment to improve the proposed access roads to the wind turbine, clear temporary work areas, dig trenches for electrical collection cables, excavate the areas to be used for the foundation, backfill and compact the excavated areas, pour the reinforced concrete footings, construct the concrete pedestals, attach the towers to support the turbine and restore temporary work areas.

The Project is expected to generate up to 33 peak hour vehicle trips (or 168 daily trips) to and from the Project Site during peak construction activities, which are only expected to occur four days out of the four week construction interval. Heavy-truck deliveries would most likely arrive at the site, off-load, and depart throughout the day. The delivery of the crane and the wind turbine will also require oversized load permits from Caltrans and the City of Palm Springs. Overall, these construction related vehicle trips would be short term in nature and are not expected to impact local or regional traffic.

Additional internal truck trips are expected to occur within the Project Site during the various construction activities. These truck trips would involve the movement of cranes, construction and trade vehicles, dump trucks, concrete trucks, and water trucks used to control fugitive dust generated by travel over unimproved surfaces. As these trips would remain entirely within the Project Site, they would not adversely impact roadways in the vicinity of the Project.

Operational Traffic
The Project would require up to two employees on an as needed basis for the operation and maintenance of the proposed wind turbine, which on average is expected to generate less than one daily trip. As a result, Project-related operational traffic impacts are expected to be less than significant.

ISSUES AND SUPPORTING INFORMATION SOURCES:

	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
XIV. UTILITIES & SERVICE SYSTEMS				
a) Power or natural gas?	☐	☐	☐	☒
b) Communications systems?	☐	☐	☐	☒
c) Local or regional water treatment or distribution facilities	☐	☐	☐	☒
d) Sewer or septic tanks?	☐	☐	☐	☒
e) Storm water drainage?	☐	☐	☒	☐
f) Solid waste disposal?	☐	☐	☒	☐
g) Local or regional water supplies?	☐	☐	☐	☒

Environmental Setting
The proposed Project involves the construction and operation of a 3.0 MW wind turbine on undeveloped land within a proven wind energy resource area. The point of interconnection to the power grid will be at the existing Poppet Flats Circuit, a short distance to the north of Whitewater Ranch and I-10.

There is no infrastructure on the Project Site or in the immediate vicinity for natural gas, water, or sewer service connections. An improved Riverside County Flood Control District stormwater channel located to the north channels stormwater runoff from Cottonwood Canyon Wash, a desert ephemeral tributary, under Interstate 10 onto the Project Site where it terminates. Palm Springs Disposal Services (PSDS) is the authorized waste hauler for the City of Palm Springs. PSDS provides complete residential, commercial and roll-off trash services as well as recycling services for commercial, industrial, construction and residential customers.

Impacts
The Project would result in additional electricity supplied to the power grid at the Poppet Flats Circuit, which has sufficient capacity. This additional supply of clean power would help the state meet its mandate that 33 percent of electricity in California must come from renewable sources by 2020. The electrical transmission line(s) connecting the wind turbine to the Poppet Flats Circuit will be located underground, either in public right-of-way or in private utility easements.

During construction, minimal water will be needed for dust control and other on-site construction uses. No wells will be drilled for the Project, nor will it require the construction of new or expansion of existing water facilities. All water will be provided from existing facilities at Whitewater Ranch, which has sufficient capacity and is owned and operated by the Tribe. During Project operations, water use would be limited to maintenance related activities such as dust control. Water trucks would be used for these dust control activities.

The Project will not require the use of sewer services and would not result in the construction or expansion of wastewater treatment facilities. Development of the Project would not significantly increase the amount of impervious surfaces since onsite access roads would be gravel surfaced allowing percolation and infiltration of storm water. Less than 10 percent of Project Site would be covered with structures and/or gravel roads. The Project would not require the construction of new or the expansion of existing storm water facilities.

The Project would generate minimal solid waste during its construction and operation, and it will comply with any applicable federal, state, or local regulations regarding solid waste disposal.

XV. WATER

Would the proposal result in:

a) Exposure of people or property to water related hazards, such as flooding?	☐	☐	☐	☒
b) Discharge into surface water or other alteration of surface water quality (e.g. temperature, dissolved oxygen or turbidity)?	☐	☐	☐	☒
c) Changes in the amount of surface water in any water body?	☐	☐	☐	☒
d) Changes in currents, or the course direction of water movements?	☐	☐	☐	☒
e) Change in quantity of ground water, through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?	☐	☐	☒	☐
f) Altered direction or flow rate of groundwater?	☐	☐	☐	☒
g) Impacts on the groundwater quality?	☐	☐	☐	☒
h) Substantial reduction in the amount of groundwater otherwise available for public water supplies?	☐	☐	☐	☒

Environmental Setting

The Project Site is open desert terrain with nine outdoor advertising displays situated along its northern and western edges. There are no wells or active streams on the Project Site, and it is not located in a Federal Emergency Management Agency designated 100 or 500 year flood plain.

Impacts

The proposed Project involves the construction and operation of a 3.0 MW wind turbine on undeveloped land within a proven wind energy resource area. During construction, water will be needed for dust control and other on-site construction uses. No wells will be drilled for the Project, nor will it require the construction of new or expansion of existing water facilities. All water will be provided from the existing facilities at Whitewater Ranch, which has sufficient capacity and is owned and operated by the Tribe. During Project operations, water use would be limited to maintenance related activities such as dust control. Water trucks would be used for these dust control activities.

XVI. PRIOR STUDIES, REPORTS, REVIEWS, ENVIRONMENTAL ASSESSMENTS, ENVIRONMENTAL IMPACT REPORTS, ETC.:

N/A

ISSUES AND SUPPORTING INFORMATION SOURCES:	POTENTIALLY SIGNIFICANT IMPACT	POTENTIALLY SIGNIFICANT UNLESS MITIGATION INCORPORATED	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
XVII. MANDATORY FINDINGS OF SIGNIFICANCE Does the project:				
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a wildlife species, cause a wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plant or animal species or eliminate important examples of the major proceeds of native history?	☐	☐	☒	☐
b) Have the potential to achieve short-term, to the disadvantage of long-term environmental goals?	☐	☐	☐	☒
c) Have impacts that are individually limited, but cumulatively considerable? (i.e. the incremental effects of the project are considerable when viewed in connection with the effects of past projects, current projects and/or probable future projects).	☐	☐	☐	☒
d) Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

The proposed wind turbine development is consistent with other uses currently operating within the San Gorgonio Pass. The addition of one wind turbine to the area is not expected to have a significant impact to the quality of the environment, substantially reduce the habitat of a wildlife species, cause a wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community. To avoid potentially significant or adverse impacts to the quality of the environment, the mitigation measures identified in Section XVII will be implemented.

XVIII. Discussion of Impacts and Recommended Mitigation Measures.

AQ1 Construction Grading: Grading activities shall comply with the SIP for PM_{10} in the Coachella Valley and SCAQMD Rules 403, Fugitive Dust and 403.1, Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources. Control measures include, but are not limited to, watering active grading areas, suspending grading activities when winds exceed 25 miles per hour, and preventing the deposit of soil and sand on public roadways.

AQ2 Soil Stabilization: exposed surfaces shall be watered at least three times per day.

AQ3 Vehicle Speed: Vehicle speed on unpaved surfaces shall be limited to 15 mph.

AQ4 Diesel Anti-Idling: Idling of diesel engines shall be restricted to 15 minutes or less.

B1 THCP Mitigation Fee: Prior to issuance of grading permits, the Project proponent shall pay the THCP Mitigation Fee that will be used to acquire and manage Habitat Preserve lands.

B2 Desert Tortoise and Burrowing Owl Surveys: Prior to any ground or habitat disturbance associated with the proposed Project, the Project proponent shall conduct protocol survey(s) of the Project Site in accordance with the requirements of the Field Survey Protocol for Preparing for Any Action That May Occur Within the Range of the Desert Tortoise, US. Fish and Wildlife Service (2010 Field Season), and the standards contained in CDFW Staff Report on Burrowing Owl Mitigation (2012).

B3 Bird Nesting Season: Prior to any ground or habitat disturbance associated with the proposed Project, the Project proponent shall conduct protocol survey(s) of the Project Site in accordance with the requirements of the Interim Golden Eagle Inventory and Monitoring Protocols; and other Recommendations, USFWS (2010) to prevent the take of nesting Golden Eagles and migratory bird species.

C1 Cultural Resource Monitor(s): An Approved Cultural Resource Monitor(s) shall be present during any survey and/or any ground disturbing activities. Should buried cultural deposits be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a Qualified (Secretary of the Interior's Standards and Guidelines) Archaeologist to investigate and, if necessary, prepare a mitigation plan for submission to the THPO. Please contact the THPO for further information about Approved Cultural Resource Monitors.

C2 Treatment of Human Remains Policy: Any discoveries of human remains will be subject to the Tribe's "Treatment of Human Remains Policy" (Tribal Historic Preservation Organization and Policies, June 8, 2004).

XIX. List of Standard Source Materials Referenced in Preparation of the Checklist.

Anderson, R., J. Tom, N. Newmann, W.P. Erickson, M.D. Strickland, M. Bourassa, K.J. Bay, and J. Sernka. 2005. Avian Monitoring and Risk Assessment at the Sand Gorgonio Wind Resource Area.

Agua Caliente Band of Cahuilla Indians. Land Use Ordinance. 2013.

Agua Caliente Band of Cahuilla Indians. Tribal Habitat Conservation Plan. 2010.

Baldwin, B. G. [ed], Goldman, D. . [ed], Keil, D. J., Patterson, R. [ed], Rosatti, T. J. [ed], Wilken, D. [ed], 2012. The Jepson Manual: Vascular Plants of California: Second EditionUniversity of California Press. Berkeley and Los Angeles, CA.

California Department of Fish and Wildlife (CDFW); formerly California Department of Fish and Game). 2016. California Department of Fish and Game Natural Diversity Database. California Department of Fish and Game, Sacramento, CA.

CDFW, Biogeographic Data Branch, "California Wildlife Habitat Relationship (CWHR) Life History Accounts and Range Maps". These life history accounts and range maps represent updated versions of the species

information in the three-volume set "California's Wildlife" edited by Zeiner, D.C. et al 1988-1990. Accessed: October 2016. <http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx>

California Department of Fish and Game (CDFG). Bald Eagles in California. Available at: https://www.wildlife.ca.gov/Conservation/Birds/Bald-Eagle. Accessed November 8, 2016.

California Department of Transportation (Caltrans). 20014 Traffic Counts. Available at: http://www.dot.ca.gov/trafficops/census/2014all/. Accessed October 11, 2016.

California Natural Diversity Database (CNDDB). November 16, 2016. California Department of Fish and Wildlife.

City of Palm Springs. 2007. Palm Springs General Plan.

City of Palm Springs. 2007. Palm Springs General Plan Environmental Impact Report (EIR).

City of Palm Springs. 2014. Palm Springs Police Department Service Report 2014.

City of Palm Springs. Wind Energy Conversion System (WECS) Ordinance. Available at: http://qcode.us/codes/palmsprings/view.php?topic=11-11_74-11_74_044&highlightWords=wecs&frames=on. Accessed October 3, 2016.

City of Palm Springs. Noise Ordinance. Available at: http://qcode.us/codes/palmsprings/view.php?topic=11-11_74&highlightWords=Noise&frames=on. Accessed October 3, 2016.

Chatfield, A, W. Erickson, and K. Bay. 2009. Avian and Bat Fatality Study, Dillon Wind-Energy Facility, Riverside County, California. Unpublished Technical Document Prepared for Iberdrola Renewables. Unpublished report prepared by Western EcoSystems Technology, Inc.

Earth Systems Southwest. 2011. Report of Phase I Environmental Site Assessment, APN 516-070-022, Whitewater Area, Riverside County California.

Judy Blumberg. "Info you Requested is all accurate." Received by John Pimentel, 24 Oct. 2016.

McCrary, M.D., R.L. McKernan, R.E. Landry, W.D. Wagner, and R.W. Schreiber. 1983. Nocturnal Avian Migration Assessment of the San Gorgonio Wind Resource Study Area, Spring 1982. Report prepared for Research and Development, Southern California Edison Company.

McCrary, M.D., R.L. McKernan, R.E. Landry, W.D. Wagner, and R.W. Schreiber. 1984. Nocturnal avian Migration Assessment of the San Gorgonio Wind Resource Study Area, Fall 1982. Report prepared for Research and Development, Southern California Edison Company.

McCrary, M.D., R.L. McKernan, and R.W. Schreiber. 1986. San Gorgonio Wind Resource Area: Impacts of Commercial Wind Turbine Generators on Birds, 1985 Data Report. Prepared by Los Angeles County Natural History Museum for Southern California Edison, Residential and Development, Rosemead.

NAS (National Academy of Sciences). 2007. Environmental Impacts of Wind-Energy Projects. The National Academies Press.

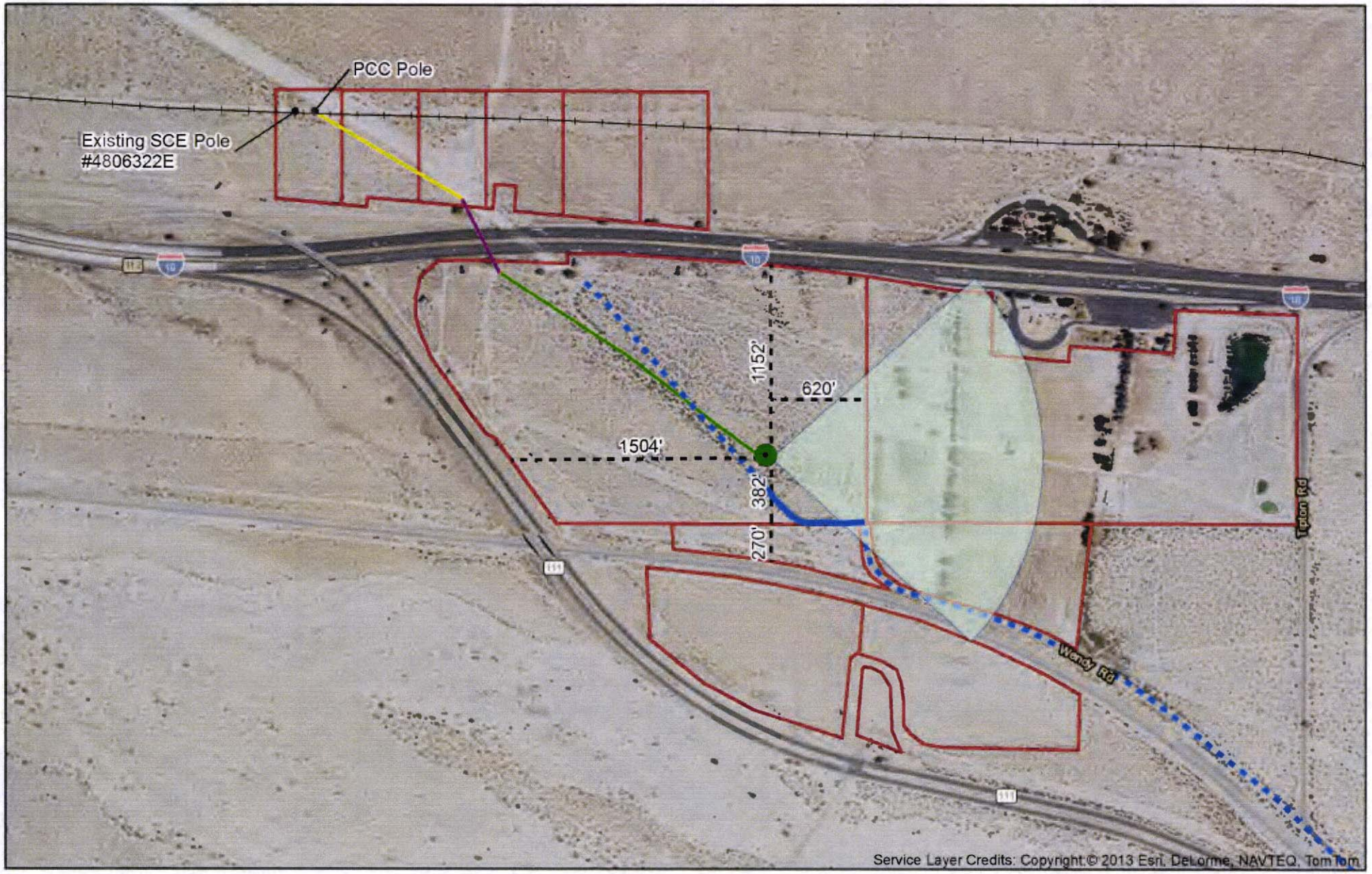
Palm Springs Fire Department (PSFD). Palm Springs Fire Department Homepage. 2016. Available at: http://www.palmspringsca.gov/government/departments/fire-department. Accessed November 16, 2016

South Coast Air Quality Management District (SCAQMD). 2012. Air Quality Management Plan.

U.S. Fish and Wildlife Service. 2012. Land-Based Wind Energy Guidelines.

EXHIBIT A

Document Path: L:\GIS1\GIS\Project_Files\Planning-General\mxds\SanGorgonio_Pass_SiteMap_20161205.mxd



Approximate Property Boundary
SCE 12KV Poppet Flats Circuit
800' O&M Roadway Improvements (12' Width, Gravel)
OH Conductors
UG Conductors
Proposed 500' Bore

Agua Caliente 3.0 MW Wind Turbine
Downwind Setback (1690')
Setback Distance (Feet to Property Boundary)
Turbine Access Road

BRC
BioResource Consultants Inc.

N

0 500 1,000 2,000 Feet

57 EXHIBIT B

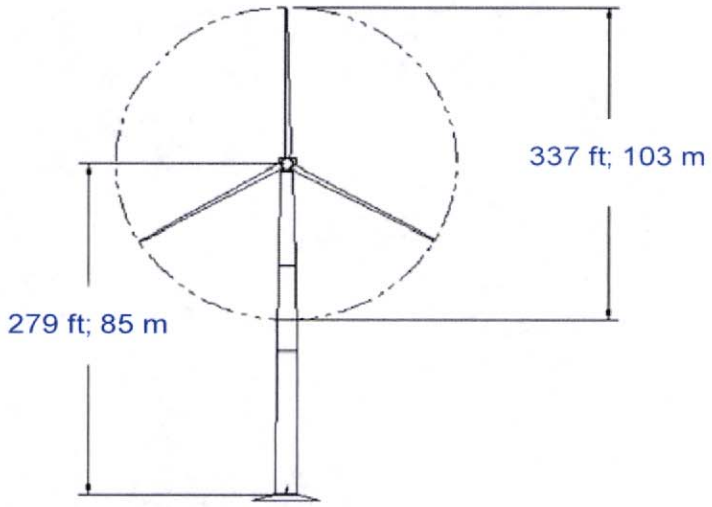
FOUNDATION WINDPOWER

Agua Caliente Wind Project Photo Simulations

505 Sansome Street, Suite 450, San Francisco, CA 94111

FOUNDATION WINDPOWER

GE 3.0 MW Wind Turbine



imagination at work

1 /

Photo #1 Tipton Road and I10

FOUNDATION WINDPOWER

Photo #2 Whitewater Rest Stop (Northside of I10)

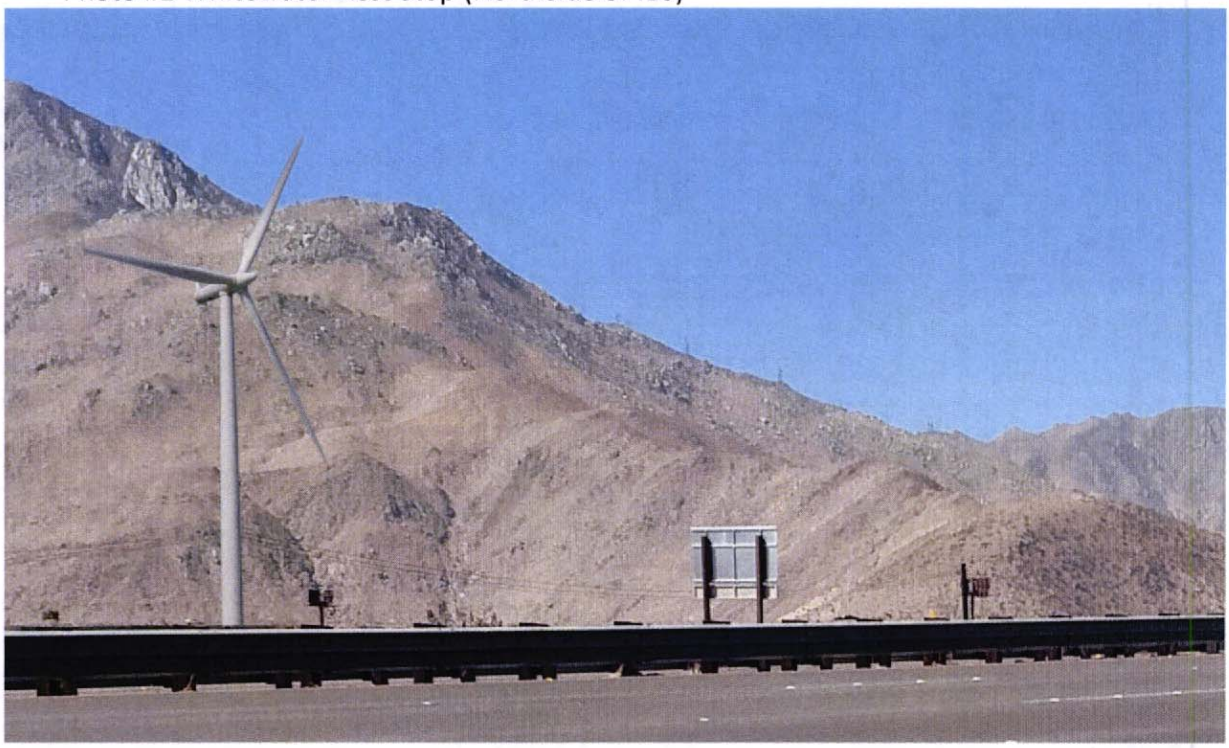


Photo #3 Tamarack Road and Mesquite Road

FOUNDATION WINDPOWER

Photo #4 Snow Creek Community

Photo #5 Snow Creek Road and 111

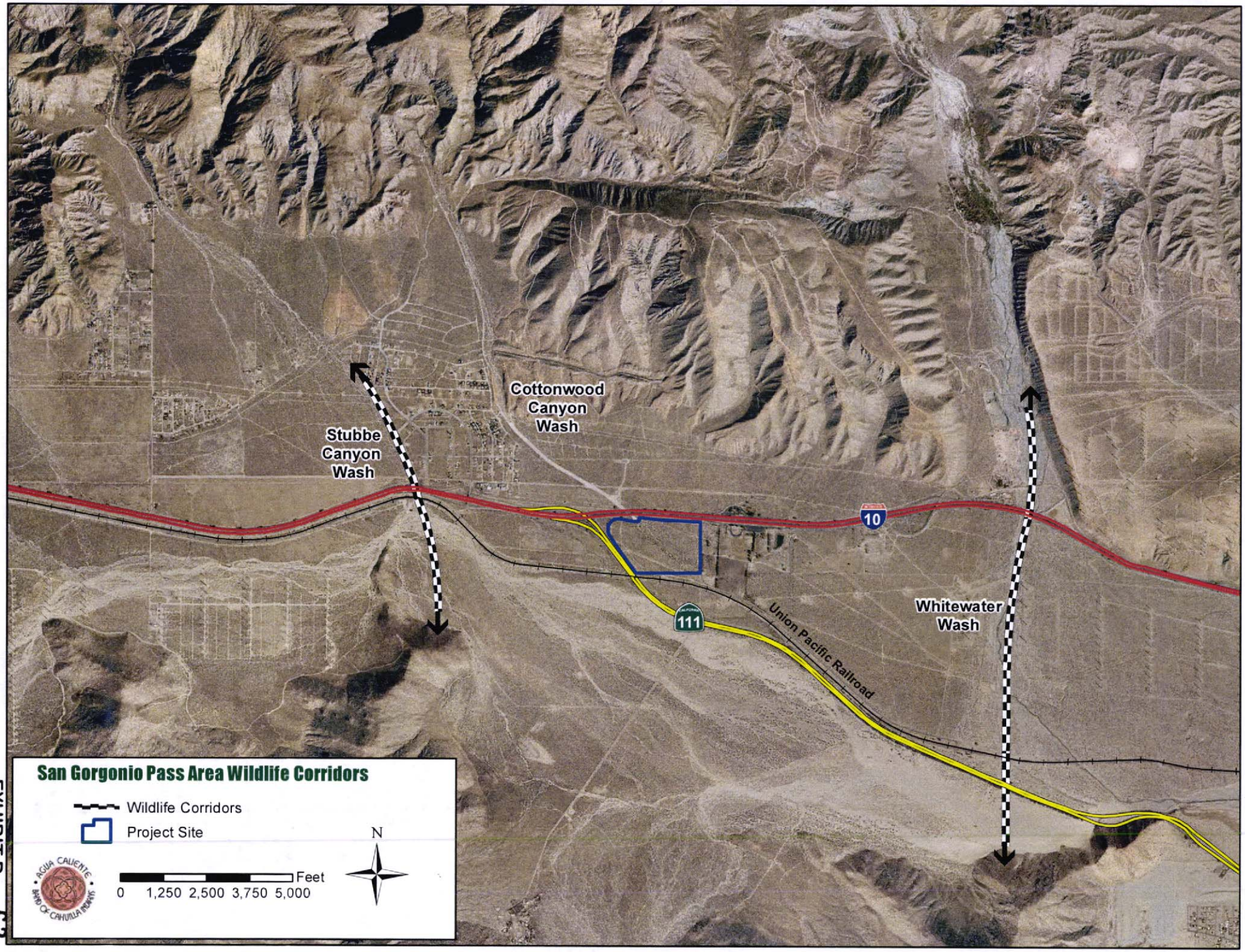

Stubbe Canyon Wash
Cottonwood Canyon Wash
10
111
Union Pacific Railroad
Whitewater Wash
San Gorgonio Pass Area Wildlife Corridors
Wildlife Corridors
Project Site
N
Feet
0 1,250 2,500 3,750 5,000
AGUA CALIENTE BAND OF CAHUILLA INDIANS

EXHIBIT D

Agua Caliente ReMat

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	4.00	2,500.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	15			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Wind Turbine on Uninhabited Lot

Construction Phase - General values from experience building single turbine project

Off-road Equipment - No Demolition Necessary

Trips and VMT - Typical Construction, Single Turbine

On-road Fugitive Dust - Paving right up to very end

Architectural Coating - No Coating

EXHIBIT E

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	0.00
tblLandUse	LandUseSquareFeet	0.00	2,500.00
tblLandUse	LotAcreage	0.00	4.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	HaulingPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblOnRoadDust	VendorPercentPave	100.00	99.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	20.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00
tblTripsAndVMT	HaulingTripNumber	0.00	100.00
tblTripsAndVMT	HaulingTripNumber	0.00	5.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4211	3.7170	2.6368	3.7700e-003	0.0954	0.2388	0.3342	0.0418	0.2238	0.2656	0.0000	337.6931	337.6931	0.0834	0.0000	339.4442
2018	0.0201	0.1838	0.1659	2.7000e-004	0.0175	0.0111	0.0286	2.2900e-003	0.0104	0.0127	0.0000	23.4327	23.4327	5.7600e-003	0.0000	23.5538
Total	**0.4411**	**3.9007**	**2.8027**	**4.0400e-003**	**0.1129**	**0.2498**	**0.3628**	**0.0441**	**0.2342**	**0.2782**	**0.0000**	**361.1257**	**361.1257**	**0.0892**	**0.0000**	**362.9980**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.4211	3.7170	2.6368	3.7700e-003	0.0779	0.2388	0.3167	0.0401	0.2238	0.2638	0.0000	337.6927	337.6927	0.0834	0.0000	339.4438
2018	0.0201	0.1838	0.1659	2.7000e-004	3.3700e-003	0.0111	0.0144	8.8000e-004	0.0104	0.0112	0.0000	23.4327	23.4327	5.7600e-003	0.0000	23.5537
Total	**0.4411**	**3.9007**	**2.8027**	**4.0400e-003**	**0.0813**	**0.2498**	**0.3311**	**0.0409**	**0.2342**	**0.2751**	**0.0000**	**361.1253**	**361.1253**	**0.0892**	**0.0000**	**362.9975**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	28.02	0.00	8.72	7.15	0.00	1.13	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0119	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0119**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0119	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0119**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2017	1/27/2017	5	20	
2	Site Preparation	Site Preparation	1/28/2017	2/3/2017	5	5	
3	Grading	Grading	2/4/2017	2/15/2017	5	8	
4	Building Construction	Building Construction	2/16/2017	1/3/2018	5	230	Foundaiton Pour, Turbine Assembly and Erection
5	Paving	Paving	1/4/2018	1/29/2018	5	18	
6	Architectural Coating	Architectural Coating	1/30/2018	2/22/2018	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,750; Non-Residential Outdoor: 1,250 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Grading	Excavators	1	8.00	162	0.38
Paving	Pavers	1	8.00	125	0.42
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Paving	Paving Equipment	2	6.00	130	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	20.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	10.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1.00	0.00	100.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	5.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8292
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**		**0.0213**	**0.0213**		**0.0198**	**0.0198**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8292**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	1.0500e-003	0.0108	3.0000e-005	2.2200e-003	2.0000e-005	2.2300e-003	5.9000e-004	2.0000e-005	6.0000e-004	0.0000	1.9864	1.9864	1.0000e-004	0.0000	1.9885
Total	**6.0000e-004**	**1.0500e-003**	**0.0108**	**3.0000e-005**	**2.2200e-003**	**2.0000e-005**	**2.2300e-003**	**5.9000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**1.9864**	**1.9864**	**1.0000e-004**	**0.0000**	**1.9885**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0405	0.4270	0.3389	4.0000e-004		0.0213	0.0213		0.0198	0.0198	0.0000	36.6182	36.6182	0.0101	0.0000	36.8291
Total	**0.0405**	**0.4270**	**0.3389**	**4.0000e-004**		**0.0213**	**0.0213**		**0.0198**	**0.0198**	**0.0000**	**36.6182**	**36.6182**	**0.0101**	**0.0000**	**36.8291**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-004	1.0500e-003	0.0108	3.0000e-005	2.2200e-003	2.0000e-005	2.2300e-003	5.9000e-004	2.0000e-005	6.0000e-004	0.0000	1.9864	1.9864	1.0000e-004	0.0000	1.9885
Total	**6.0000e-004**	**1.0500e-003**	**0.0108**	**3.0000e-005**	**2.2200e-003**	**2.0000e-005**	**2.2300e-003**	**5.9000e-004**	**2.0000e-005**	**6.0000e-004**	**0.0000**	**1.9864**	**1.9864**	**1.0000e-004**	**0.0000**	**1.9885**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0789	9.0789	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0452**	**6.8900e-003**	**0.0521**	**0.0248**	**6.3300e-003**	**0.0312**	**0.0000**	**9.0789**	**9.0789**	**2.7800e-003**	**0.0000**	**9.1373**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7000e-004	2.6500e-003	2.1100e-003	1.0000e-005	2.8600e-003	4.0000e-005	2.9000e-003	3.2000e-004	4.0000e-005	3.5000e-004	0.0000	0.6625	0.6625	0.0000	0.0000	0.6626
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	3.2000e-004	3.2500e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5959	0.5959	3.0000e-005	0.0000	0.5966
Total	**3.5000e-004**	**2.9700e-003**	**5.3600e-003**	**2.0000e-005**	**3.5200e-003**	**5.0000e-005**	**3.5700e-003**	**5.0000e-004**	**4.0000e-005**	**5.3000e-004**	**0.0000**	**1.2584**	**1.2584**	**3.0000e-005**	**0.0000**	**1.2591**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.1294	0.0985	1.0000e-004		6.8900e-003	6.8900e-003		6.3300e-003	6.3300e-003	0.0000	9.0788	9.0788	2.7800e-003	0.0000	9.1373
Total	**0.0121**	**0.1294**	**0.0985**	**1.0000e-004**	**0.0452**	**6.8900e-003**	**0.0521**	**0.0248**	**6.3300e-003**	**0.0312**	**0.0000**	**9.0788**	**9.0788**	**2.7800e-003**	**0.0000**	**9.1373**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7000e-004	2.6500e-003	2.1100e-003	1.0000e-005	1.7000e-004	4.0000e-005	2.1000e-004	5.0000e-005	4.0000e-005	8.0000e-005	0.0000	0.6625	0.6625	0.0000	0.0000	0.6626
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	3.2000e-004	3.2500e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.7000e-004	1.8000e-004	0.0000	1.8000e-004	0.0000	0.5959	0.5959	3.0000e-005	0.0000	0.5966
Total	**3.5000e-004**	**2.9700e-003**	**5.3600e-003**	**2.0000e-005**	**8.3000e-004**	**5.0000e-005**	**8.8000e-004**	**2.3000e-004**	**4.0000e-005**	**2.6000e-004**	**0.0000**	**1.2584**	**1.2584**	**3.0000e-005**	**0.0000**	**1.2591**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0138	0.1439	0.1015	1.2000e-004		8.1600e-003	8.1600e-003		7.5000e-003	7.5000e-003	0.0000	11.0447	11.0447	3.3800e-003	0.0000	11.1157
Total	**0.0138**	**0.1439**	**0.1015**	**1.2000e-004**	**0.0262**	**8.1600e-003**	**0.0344**	**0.0135**	**7.5000e-003**	**0.0210**	**0.0000**	**11.0447**	**11.0447**	**3.3800e-003**	**0.0000**	**11.1157**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	1.3200e-003	1.0500e-003	0.0000	1.4300e-003	2.0000e-005	1.4500e-003	1.6000e-004	2.0000e-005	1.8000e-004	0.0000	0.3312	0.3312	0.0000	0.0000	0.3313
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	4.2000e-004	4.3400e-003	1.0000e-005	8.9000e-004	1.0000e-005	8.9000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7945	0.7945	4.0000e-005	0.0000	0.7954
Total	**3.2000e-004**	**1.7400e-003**	**5.3900e-003**	**1.0000e-005**	**2.3200e-003**	**3.0000e-005**	**2.3400e-003**	**4.0000e-004**	**3.0000e-005**	**4.2000e-004**	**0.0000**	**1.1258**	**1.1258**	**4.0000e-005**	**0.0000**	**1.1267**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0138	0.1439	0.1015	1.2000e-004		8.1600e-003	8.1600e-003		7.5000e-003	7.5000e-003	0.0000	11.0447	11.0447	3.3800e-003	0.0000	11.1157
Total	**0.0138**	**0.1439**	**0.1015**	**1.2000e-004**	**0.0262**	**8.1600e-003**	**0.0344**	**0.0135**	**7.5000e-003**	**0.0210**	**0.0000**	**11.0447**	**11.0447**	**3.3800e-003**	**0.0000**	**11.1157**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	1.3200e-003	1.0500e-003	0.0000	9.0000e-005	2.0000e-005	1.0000e-004	2.0000e-005	2.0000e-005	4.0000e-005	0.0000	0.3312	0.3312	0.0000	0.0000	0.3313
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	4.2000e-004	4.3400e-003	1.0000e-005	8.9000e-004	1.0000e-005	8.9000e-004	2.4000e-004	1.0000e-005	2.4000e-004	0.0000	0.7945	0.7945	4.0000e-005	0.0000	0.7954
Total	**3.2000e-004**	**1.7400e-003**	**5.3900e-003**	**1.0000e-005**	**9.8000e-004**	**3.0000e-005**	**9.9000e-004**	**2.6000e-004**	**3.0000e-005**	**2.8000e-004**	**0.0000**	**1.1258**	**1.1258**	**4.0000e-005**	**0.0000**	**1.1267**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3521	2.9970	2.0577	3.0400e-003		0.2022	0.2022		0.1899	0.1899	0.0000	271.8088	271.8088	0.0669	0.0000	273.2136
Total	**0.3521**	**2.9970**	**2.0577**	**3.0400e-003**		**0.2022**	**0.2022**		**0.1899**	**0.1899**	**0.0000**	**271.8088**	**271.8088**	**0.0669**	**0.0000**	**273.2136**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.3000e-004	0.0131	0.0104	4.0000e-005	0.0143	2.0000e-004	0.0145	1.5800e-003	1.8000e-004	1.7600e-003	0.0000	3.2690	3.2690	2.0000e-005	0.0000	3.2695
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	8.0000e-004	8.2000e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5030	1.5030	8.0000e-005	0.0000	1.5046
Total	**1.2900e-003**	**0.0139**	**0.0186**	**6.0000e-005**	**0.0160**	**2.1000e-004**	**0.0162**	**2.0300e-003**	**1.9000e-004**	**2.2200e-003**	**0.0000**	**4.7720**	**4.7720**	**1.0000e-004**	**0.0000**	**4.7742**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3521	2.9970	2.0577	3.0400e-003		0.2022	0.2022		0.1899	0.1899	0.0000	271.8085	271.8085	0.0669	0.0000	273.2133
Total	**0.3521**	**2.9970**	**2.0577**	**3.0400e-003**		**0.2022**	**0.2022**		**0.1899**	**0.1899**	**0.0000**	**271.8085**	**271.8085**	**0.0669**	**0.0000**	**273.2133**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.3000e-004	0.0131	0.0104	4.0000e-005	6.5000e-004	2.0000e-004	1.0400e-003	2.3000e-004	1.8000e-004	4.1000e-004	0.0000	3.2690	3.2690	2.0000e-005	0.0000	3.2695
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	8.0000e-004	8.2000e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5030	1.5030	8.0000e-005	0.0000	1.5046
Total	**1.2900e-003**	**0.0139**	**0.0186**	**6.0000e-005**	**2.5300e-003**	**2.1000e-004**	**2.7300e-003**	**6.8000e-004**	**1.9000e-004**	**8.7000e-004**	**0.0000**	**4.7720**	**4.7720**	**1.0000e-004**	**0.0000**	**4.7742**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0000e-003	0.0349	0.0263	4.0000e-005		2.2400e-003	2.2400e-003		2.1100e-003	2.1100e-003	0.0000	3.5516	3.5516	8.7000e-004	0.0000	3.5698
Total	**4.0000e-003**	**0.0349**	**0.0263**	**4.0000e-005**		**2.2400e-003**	**2.2400e-003**		**2.1100e-003**	**2.1100e-003**	**0.0000**	**3.5516**	**3.5516**	**8.7000e-004**	**0.0000**	**3.5698**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	1.6000e-004	1.3000e-004	0.0000	0.0141	0.0000	0.0141	1.5000e-003	0.0000	1.5000e-003	0.0000	0.0425	0.0425	0.0000	0.0000	0.0425
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.0000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0191	0.0191	0.0000	0.0000	0.0191
Total	**2.0000e-005**	**1.7000e-004**	**2.3000e-004**	**0.0000**	**0.0141**	**0.0000**	**0.0141**	**1.5100e-003**	**0.0000**	**1.5100e-003**	**0.0000**	**0.0616**	**0.0616**	**0.0000**	**0.0000**	**0.0616**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0000e-003	0.0349	0.0263	4.0000e-005		2.2400e-003	2.2400e-003		2.1100e-003	2.1100e-003	0.0000	3.5515	3.5515	8.7000e-004	0.0000	3.5698
Total	**4.0000e-003**	**0.0349**	**0.0263**	**4.0000e-005**		**2.2400e-003**	**2.2400e-003**		**2.1100e-003**	**2.1100e-003**	**0.0000**	**3.5515**	**3.5515**	**8.7000e-004**	**0.0000**	**3.5698**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	1.6000e-004	1.3000e-004	0.0000	6.4000e-004	0.0000	6.5000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0425	0.0425	0.0000	0.0000	0.0425
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.0000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0191	0.0191	0.0000	0.0000	0.0191
Total	**2.0000e-005**	**1.7000e-004**	**2.3000e-004**	**0.0000**	**6.6000e-004**	**0.0000**	**6.7000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.0616**	**0.0616**	**0.0000**	**0.0000**	**0.0616**

3.6 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0127	0.1289	0.1104	1.7000e-004		7.4500e-003	7.4500e-003		6.8700e-003	6.8700e-003	0.0000	15.0641	15.0641	4.5600e-003	0.0000	15.1599
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0127**	**0.1289**	**0.1104**	**1.7000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8700e-003**	**6.8700e-003**	**0.0000**	**15.0641**	**15.0641**	**4.5600e-003**	**0.0000**	**15.1599**

3.6 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	6.1000e-004	5.2000e-004	0.0000	7.2000e-004	1.0000e-005	7.3000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.1629	0.1629	0.0000	0.0000	0.1629
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	1.1500e-003	0.0118	3.0000e-005	2.6600e-003	2.0000e-005	2.6800e-003	7.1000e-004	2.0000e-005	7.3000e-004	0.0000	2.2947	2.2947	1.1000e-004	0.0000	2.2970
Total	**6.9000e-004**	**1.7600e-003**	**0.0123**	**3.0000e-005**	**3.3800e-003**	**3.0000e-005**	**3.4100e-003**	**7.9000e-004**	**3.0000e-005**	**8.2000e-004**	**0.0000**	**2.4575**	**2.4575**	**1.1000e-004**	**0.0000**	**2.4599**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0127	0.1289	0.1104	1.7000e-004		7.4500e-003	7.4500e-003		6.8700e-003	6.8700e-003	0.0000	15.0641	15.0641	4.5600e-003	0.0000	15.1599
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0127**	**0.1289**	**0.1104**	**1.7000e-004**		**7.4500e-003**	**7.4500e-003**		**6.8700e-003**	**6.8700e-003**	**0.0000**	**15.0641**	**15.0641**	**4.5600e-003**	**0.0000**	**15.1599**

3.6 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	6.1000e-004	5.2000e-004	0.0000	4.0000e-005	1.0000e-005	5.0000e-005	1.0000e-005	1.0000e-005	2.0000e-005	0.0000	0.1629	0.1629	0.0000	0.0000	0.1629
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	1.1500e-003	0.0118	3.0000e-005	2.6600e-003	2.0000e-005	2.6800e-003	7.1000e-004	2.0000e-005	7.3000e-004	0.0000	2.2947	2.2947	1.1000e-004	0.0000	2.2970
Total	**6.9000e-004**	**1.7600e-003**	**0.0123**	**3.0000e-005**	**2.7000e-003**	**3.0000e-005**	**2.7300e-003**	**7.2000e-004**	**3.0000e-005**	**7.5000e-004**	**0.0000**	**2.4575**	**2.4575**	**1.1000e-004**	**0.0000**	**2.4599**

3.7 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3025
Total	**2.6900e-003**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3025**

3.7 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6900e-003	0.0181	0.0167	3.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	2.2979	2.2979	2.2000e-004	0.0000	2.3025
Total	**2.6900e-003**	**0.0181**	**0.0167**	**3.0000e-005**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**2.2979**	**2.2979**	**2.2000e-004**	**0.0000**	**2.3025**

3.7 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.512163	0.060173	0.180257	0.139094	0.042244	0.006664	0.016017	0.031880	0.001940	0.002497	0.004356	0.000592	0.002122

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0119	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	0.0119	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	**0.0119**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.9000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	9.0300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	**0.0119**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**3.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

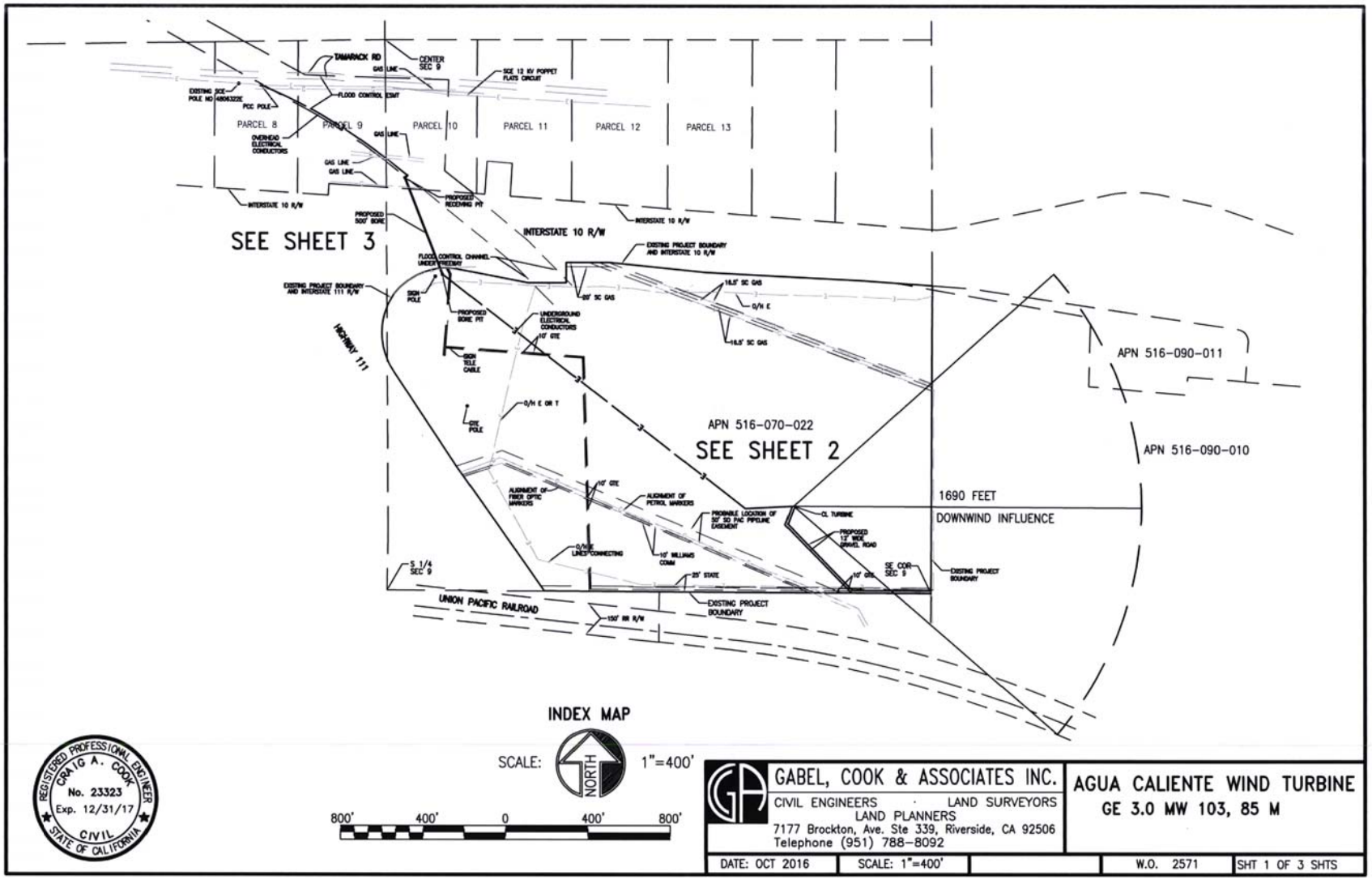
Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation



INDEX MAP

SCALE: 1"=400'

NORTH

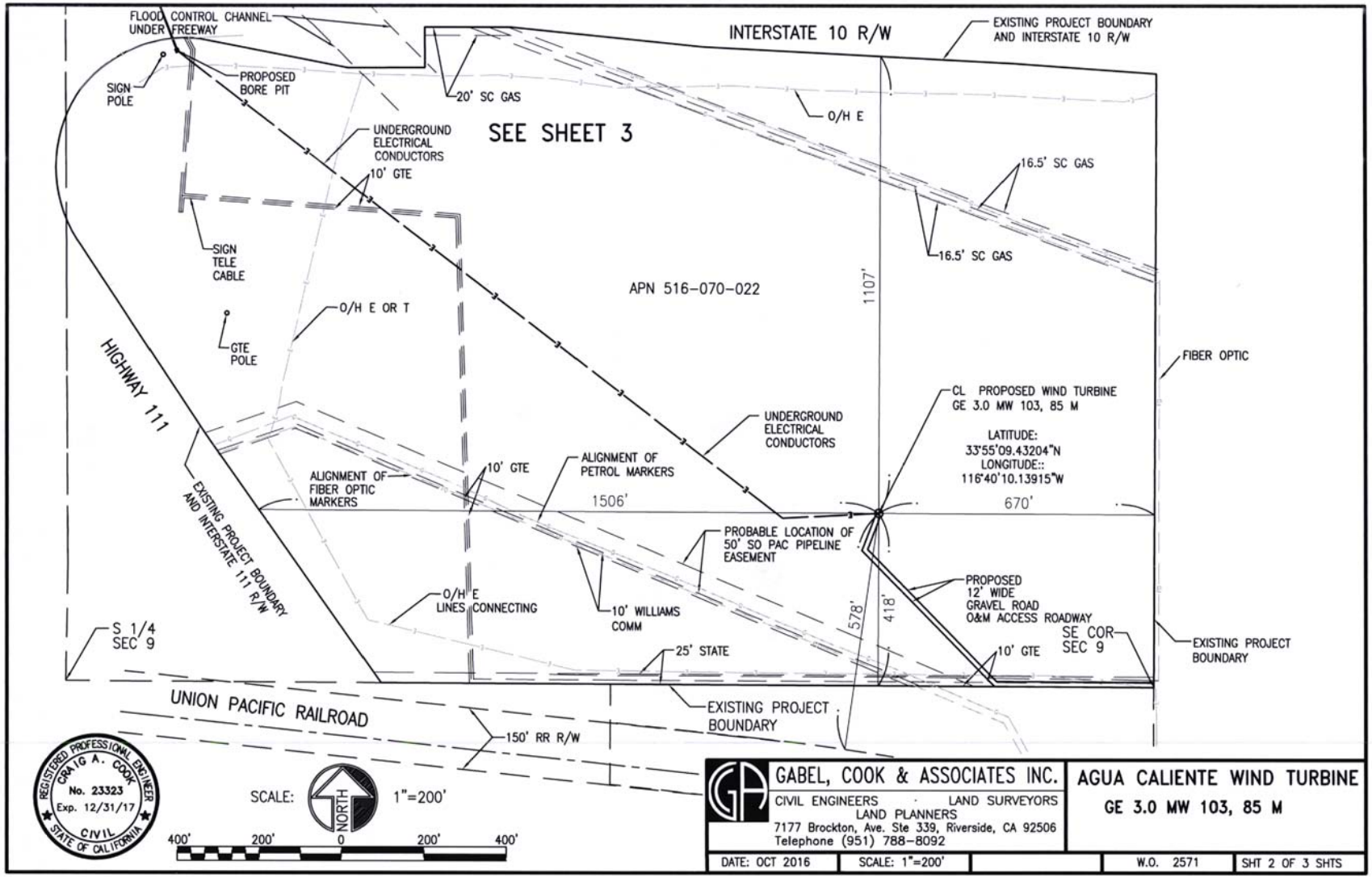
800' 400' 0 400' 800'

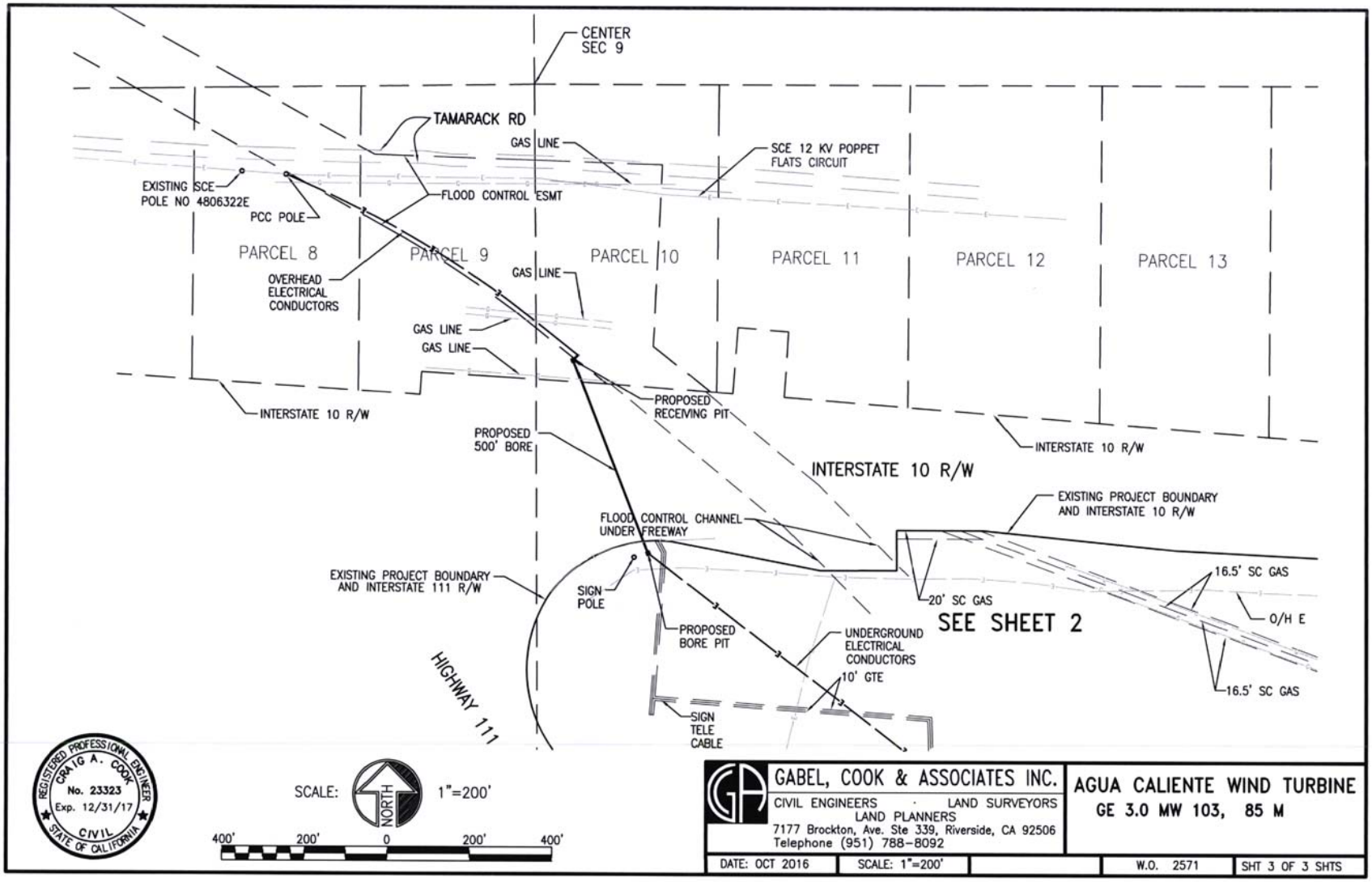
REGISTERED PROFESSIONAL ENGINEER
CRAIG A. COOK
No. 23323
Exp. 12/31/17
CIVIL
STATE OF CALIFORNIA

GABEL, COOK & ASSOCIATES INC.
CIVIL ENGINEERS · LAND SURVEYORS
LAND PLANNERS
7177 Brockton, Ave. Ste 339, Riverside, CA 92506
Telephone (951) 788-8092

AGUA CALIENTE WIND TURBINE
GE 3.0 MW 103, 85 M

DATE: OCT 2016	SCALE: 1"=400'		W.O. 2571	SHT 1 OF 3 SHTS


FLOOD CONTROL CHANNEL UNDER FREEWAY
INTERSTATE 10 R/W
EXISTING PROJECT BOUNDARY AND INTERSTATE 10 R/W
SIGN POLE
PROPOSED BORE PIT
20' SC GAS
O/H E
SEE SHEET 3
UNDERGROUND ELECTRICAL CONDUCTORS
10' GTE
16.5' SC GAS
16.5' SC GAS
SIGN TELE CABLE
APN 516-070-022
1107'
O/H E OR T
GTE POLE
FIBER OPTIC
HIGHWAY 111
CL PROPOSED WIND TURBINE GE 3.0 MW 103, 85 M
LATITUDE: 33°55'09.43204"N
LONGITUDE:: 116°40'10.13915"W
UNDERGROUND ELECTRICAL CONDUCTORS
ALIGNMENT OF FIBER OPTIC MARKERS
10' GTE
ALIGNMENT OF PETROL MARKERS
1506'
670'
EXISTING PROJECT BOUNDARY AND INTERSTATE 111 R/W
PROBABLE LOCATION OF 50' SO PAC PIPELINE EASEMENT
PROPOSED 12' WIDE GRAVEL ROAD O&M ACCESS ROADWAY
O/H E LINES CONNECTING
10' WILLIAMS COMM
578'
418'
S 1/4 SEC 9
25' STATE
10' GTE
SE COR SEC 9
EXISTING PROJECT BOUNDARY
UNION PACIFIC RAILROAD
EXISTING PROJECT BOUNDARY
150' RR R/W
REGISTERED PROFESSIONAL ENGINEER
CRAIG A. COOK
No. 23323
Exp. 12/31/17
CIVIL
STATE OF CALIFORNIA
SCALE:
NORTH
1"=200'
400' 200' 0 200' 400'
GABEL, COOK & ASSOCIATES INC.
CIVIL ENGINEERS · LAND SURVEYORS
LAND PLANNERS
7177 Brockton, Ave. Ste 339, Riverside, CA 92506
Telephone (951) 788-8092
AGUA CALIENTE WIND TURBINE
GE 3.0 MW 103, 85 M
DATE: OCT 2016
SCALE: 1"=200'
W.O. 2571
SHT 2 OF 3 SHTS



REGISTERED PROFESSIONAL ENGINEER
CRAIG A. COOK
No. 23323
Exp. 12/31/17
CIVIL
STATE OF CALIFORNIA

GABEL, COOK & ASSOCIATES INC.
CIVIL ENGINEERS · LAND SURVEYORS
LAND PLANNERS
7177 Brockton, Ave. Ste 339, Riverside, CA 92506
Telephone (951) 788-8092

AGUA CALIENTE WIND TURBINE
GE 3.0 MW 103, 85 M

DATE: OCT 2016	SCALE: 1"=200'		W.O. 2571	SHT 3 OF 3 SHTS